THE RECESSION’S IMPACT ON CANADA’S LABOUR MARKET

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SUMMARY
Canadians have heard concerns from news reports and economists that the last recession accelerated the rise of a contingent labour force made up of precarious part-time, contract, temporary or self-employed workers. But the evidence contradicts that. The share of those jobs has not increased significantly and, anyway, the vast majority of people who work part time do so voluntarily, not for lack of other options. Meanwhile, self-employment is growing as a lifestyle choice among older Canadians, especially in the strongest provincial economies. Given workers’ demand for part-time work and self-employment, we should worry not about the rise of these kinds of jobs, but whether the economy is creating enough of them to ensure maximum labour participation for the students and older workers who would prefer to have them. Currently, it is not.

Increasing labour force participation by youths poses unique challenges in Canada. In Ontario, youth unemployment has never been higher, while in recent years in Alberta, unemployment has never been lower. And yet, these underutilized workers are largely immobile: although, historically, Canada has had a remarkably mobile labour force, these youths seem lately unwilling to go to where the jobs are, reducing the efficiency of Canada’s labour market. In the meantime, while immigration has been a key part of replenishing our aging labour pool, immigrants still tend to migrate to Toronto and Montreal, while at the same time their workforce participation rates have diminished.

There is nothing to suggest that this regional employment imbalance will correct itself at a different point in the business cycle. Unlike in the U.S., manufacturing jobs are still a powerful force in the Central Canadian economy, but these jobs are not growing, and will likely not grow in the future, as manufacturers now rely more on automation and boosting productivity. What is more, evidence suggests that employers often do not regard today’s youths as reasonable substitutes for older workers approaching retirement. They are seen as lacking the right skills, which may indicate that our post-secondary system is not effectively serving the labour market.

In the meantime, Alberta and Saskatchewan have had to become more innovative in managing the reality of tighter labour markets. Those provinces now boast higher participation rates among older workers, and employees willing to work longer weeks than workers elsewhere. There still remain untapped labour pools among aboriginals, the disabled, and non-participating mothers, which Western businesses (and others) could and should find better ways to mobilize. Still, it is nevertheless alarming that, while the West continues to search for workers, young people in Central Canada sit unemployed, many of them not even adding greater skill development, while their futures become increasingly uncertain.
INTRODUCTION

Most research on recent labour market developments in Canada focuses on issues related to equity. This fixation with distributional outcomes in the labour market ignores what is most important to businesses in Canada, which is whether the labour market is operating efficiently in matching labour supply with demand. This depends on whether aggregate demand has recovered enough to justify more hiring, whether the labour force in Canada has the proper education and skills, and whether people are in the right place so that their skills can be employed.

This paper provides an overview of the recent evolution and functioning of Canada’s labour market, especially coming out of the 2008–09 recession. Its aim is to identify some issues that warrant further research. As such, the paper strives more to raise questions than to provide detailed answers.

It is somewhat misleading to talk about “Canada’s labour market” when there are clear differences among regions, industries, skill levels and age groups. High levels of unemployment in Central Canada, especially for youths and former factory workers, have coexisted with widespread complaints from employers in Western Canada before 2015 about the difficulty of finding qualified workers, especially in the resource sector.

However, there are advantages to examining Canada’s labour market as a whole. The global recession of 2008–09 affected every part of Canada. While there is evidence that the severe recession in the U.S. had a structural as well as a cyclical impact, Canada’s much milder recession meant that most of the effect was cyclical with markedly less hysteresis (lingering structural impacts) than the previous two recessions.

As well, some structural changes are affecting all industries and regions. A major structural shift in the labour market is the aging of the population. In 1997, only 9.8 per cent of workers in Canada were 55 years old or older; by 2013, their share had doubled to 19.5 per cent. At the same time, a record gap has appeared between the unemployment rate for youths and adults. With the population aging rapidly, this raises the question of whether employers regard youths as adequately prepared to replace their oldest workers.

The paper begins by examining the cyclical changes in Canada’s labour market during and after the recession. The recession was much less wrenching here than in the U.S., as reflected in much smaller increases in adult unemployment and the duration of unemployment and the absence of a shift to a contingent labour force. This examination is followed by a review of several structural issues that are more important to the efficient functioning of Canada’s labour market. More older workers are staying in the labour force, but increasingly only in small firms (including their own) and with flexible work arrangements. The high level of youth unemployment has accompanied a shift from community college schooling to university education, which raises questions about whether youths are acquiring needed skills. A related question is why youths are leading a drop in interprovincial migration. While high immigration keeps overall mobility rates high, immigration is not as efficient as interprovincial migration at responding to shifts in the domestic labour market. This is followed by a review of how employers have moved to entice more work from their existing labour force, and what groups could fill future gaps in the labour supply. Finally, the paper looks at the long-term shift to high-paying manufacturing jobs, which proved resilient to the forces that battered lower-paying factory jobs (notably global competition, a rising exchange rate, and the recession). This is important for the future of Canada’s labour market, as manufacturing remains the second-largest employer.
PART I. CYCLICAL CHANGES

The recession’s impact on the labour market

Since discussion of the current state of the labour market often starts with the 2008–09 recession and the ensuing slow recovery, it is worth reviewing some of the salient facts about the most recent cycle. To start, the recession was much less severe for Canada’s labour market than the recessions that began in 1981 or in 1990. In those two recessions, the unemployment rate rose above 11.0 per cent, compared with 8.3 per cent for all of 2009 (this paper mostly uses annual averages, which are more revealing of the structural changes being examined). As well, employers used hours worked (-4.1 per cent) more than employment (-1.5 per cent) to reduce their labour input during the recession (Figure 1). This differed from the previous two recessions, when employment and hours worked fell by the same amount.¹ Some of the labour hoarding was encouraged by work-sharing programs under the employment insurance system. By hoarding labour, employers did not need to hire workers during the recovery after 2009, meeting some of the increased demand by lengthening the workweek of their existing labour force. This dampened the initial upturn of employment during the recovery.

FIGURE 1    EMPLOYMENT AND TOTAL HOURS WORKED

![Graph showing employment and total hours worked](image)

It is not appreciated enough how different the severity of the recession was for the labour markets in Canada and the U.S. The U.S. unemployment rate reached 10 per cent, well above the 7.8 per cent high in 1992 and just shy of the postwar record of 10.8 per cent set in 1982. Other labour market indicators for the U.S. fared much worse than in previous recessions, notably sharp rises in both part-time jobs and long-term unemployment and a drop in labour-force participation from 66.0 to 62.9 per cent. The Council of Economic Advisors attributes about half of the decline to the impact of aging, and the bulk of the remainder to various cyclical impacts of the Great Recession.² In Canada, the participation rate

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¹ In 1982, employment dropped 3.2 versus 3.5 per cent for hours worked; in 1991–92, employment fell 2.7 per cent compared with 2.6 per cent for hours worked.

fell only 0.6 points from 67.1 per cent to 66.5 per cent despite a drag of three points exerted by its aging labour force,\(^3\) reflecting much smaller increases in unemployment and underemployment.

One myth about Canada’s current labour market is that people who became unemployed have remained in that state for an unusually long time. This misconception appears to have been imported wholesale from the U.S., where the average duration of unemployment reached a record 40 weeks in 2010, twice as high as in previous recessions, and remains elevated at 32.7 weeks.\(^4\) Ragan promulgates this myth for Canada by citing increases in unemployment duration and the share of long-term unemployment as examples of an unusually weak recovery. However, he only compares these variables to their level just before the recession, a period distorted by booming labour market conditions.\(^5\)

A longer-term perspective shows that Canada’s average unemployment duration of 18.4 weeks in 2013 is low for this point of the business cycle. While 4.8 weeks above its pre-recession low in 2008, this still compares quite favourably with the U.S. as well as Canada’s previous highs of 21.9 weeks and 25.2 weeks in the recessions of the early 1980s and 1990s, respectively.

Another way to show the shorter duration of unemployment spells in Canada in the current cycle is to separate the short-term and long-term unemployed, using 26 weeks of joblessness as the dividing line.

The result shows that the vast majority of the unemployed exit from that state in less than 26 weeks (see Figure 2). The unemployment rate for the long-term unemployed was only 1.4 per cent in 2013, after peaking at 1.7 per cent in 2010. This is half the highs of 3.4 per cent in 1982 and 3.5 per cent in 1993 and far below the 4.8 per cent in the U.S. who were unemployed for over a half a year. In fact, at 1.4 per cent, the unemployment rate of the long-term jobless is below the lows touched in every cycle until the unusually low rate of 0.8 per cent reached in 2007 and 2008. Short-term unemployment behaved in line with previous recessions, rising 1.8 points to 7.0 per cent in 2009, compared with increases of just over 2.0 points to about 8.0 per cent in the 1980s and the 1990s.

**FIGURE 2   UNEMPLOYMENT RATES**

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\(^3\) Wyman estimates that the effect of aging was to reduce the participation rate by three points between 1997 and 2011. See Diana Wyman, “Recent trends in Canada’s labour force participation rate,” *Canadian Economic Observer* 24, 12 (Statistics Canada Catalogue No 11-010-X, December 2011).

\(^4\) Note the mediation duration of unemployment in the U.S. is much shorter at 25 weeks, reflecting how the long-term unemployed increase the average.

A similar pattern emerges when comparing youth and adult unemployment. In the U.S., both rose sharply, with the adult unemployment rate rising from 3.5 to 8.6 per cent while youth unemployment nearly doubled from 10.0 to 19.5 per cent. In Canada, youth unemployment shot up during the recession, although not quite as much as in the previous two cycles. However, the increase in adult unemployment was quite small by comparison. This gap between youth and adult unemployment has persisted in the recovery.

The behaviour of youth unemployment in Canada during the last recession was not unusual; the increase to nearly 16 per cent in 2009 was only slightly less severe than the spikes in 1983 and 1992. What was different was the muted increase in adult unemployment. Instead of reaching 10 per cent as occurred in the 1980s and 1990s recessions, adult unemployment rose to just 7.1 per cent during the 2009 recession (Figure 3). Despite the weak recovery, joblessness among adults fell to 5.9 per cent, already lower than any adult unemployment rate recorded in the 1980s and 1990s and surpassed only during the cyclical peaks of the booms in 1999 and 2006–08. As a result, the ratio of the unemployment rate of youths to adults remains close to the record high set in 2012. Nor is this a new phenomenon; this ratio was consistently above 2.0 over the past decade, after staying below 2.0 for most of the 1980s and 1990s. Clearly, labour market outcomes for youths relative to adults have deteriorated in recent years.

FIGURE 3 UNEMPLOYMENT RATES BY AGE

It is not surprising that Canada’s labour market displays fewer signs of hysteresis from the last recession than the U.S.’s does. The U.S. recession originated in deep structural changes in its housing and financial sectors, which had no counterpart in Canada. Americans who lost their jobs in construction and finance did not see a recovery in these sectors for years, and evidently had great difficulty transferring their skills to other sectors. In Canada, the main structural impact of the global recession was on exports, which have been unusually weak during the recovery.\(^6\)

A contingent labour force doing precarious work?

Some analysts and labour advocates maintain that the recession accelerated Canada’s move towards a contingent labour force featuring precarious work that is “contract, part-time, self-employment

or temporary work.” There is little evidence to support this view. The upward trend in the share of workers in part-time positions ended in 1992, after which it oscillates with the business cycle (rising in recessions, falling in expansions) between 18 and 19 per cent (Figure 4). The liberalization of employment insurance rules to allow recipients to work part time had no discernible impact. Meanwhile, the share of workers that were self-employed peaked in 1997, followed by a slight downward trend (technically, there might be some double-counting by adding these two groups together, but most of the self-employed work full-time hours). Statistics Canada began separating employment into permanent versus temporary positions in 2000, with the latter including contract and seasonal work or jobs with a specific end date. However, the small increase in their numbers does not change the overall conclusion that Canada has not moved to a contingent labour force in the past two decades.

FIGURE 4 SHARE OF SELF-EMPLOYED, PART-TIME AND TEMPORARY WORKERS IN TOTAL EMPLOYMENT

![Graph showing share of self-employed, part-time, and temporary workers](image)

It is notable that no overall shift to these so-called contingent positions occurred during the 2008 recession. The recessions starting in 1981 and 1990 accelerated the shift to self-employment and part-time jobs, but the trend cannot be attributed primarily to recessions since they were part of an ongoing increase in these types of jobs, which had run its course by the mid-1990s.

Moreover, it is incorrect to assume that most people holding non-traditional jobs are doing so involuntarily. The vast majority (72.6 per cent) of people who work part time do so voluntarily, according to Statistics Canada’s classification. In particular, almost all students and many older workers only want part-time work. These two age groups account for over half of all part-time workers (youths represent one-third, with older workers another 22 per cent in 2013). The increase in self-employment in recent years in absolute terms (even as their share of employment fell) has been driven by older workers choosing to start a new career or business, and who represent over one-third of the self-employed. Meanwhile, just over one-quarter of temporary workers labour in seasonal jobs, presumably out of

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8 Not all temporary or contract work is short term. One public service union has complained that the federal government is awarding multi-year contracts to some IT workers. See Kathryn May, “Union wants probe of public service recruiting abuses,” Ottawa Citizen, October 31, 2014, A8.

9 Statistics Canada Cansim Table 282-0014.
choice (regular spells of not working are one of the attractions of these jobs). None of these groups can be regarded as the victim of poor business conditions.

Over the years, self-employment has been unfairly thought of as thinly disguised unemployment. A Statistics Canada study attributed the initial increase in self-employment in the 1990s to “increasing labour market slack.”\textsuperscript{10} The theory was that unemployed people are “pushed” into self-employment by a lack of paid employment or declare themselves self-employed to save the embarrassment of publicly admitting they are unemployed or working only intermittently. An alternative theory is that people are “pulled” to self-employment by its positive benefits. In Canada, the research strongly supports the “pull” theory, with important determinants being age and the presence of a role model of self-employment in the family. It is telling that “the provincial unemployment rate is not significant [which] suggests that this push hypothesis is not the case.”\textsuperscript{11}

It is also revealing that self-employment among older workers has increased the most in provinces where labour market conditions have improved the most since 2009, notably Alberta, Saskatchewan and Newfoundland and Labrador. Conversely, self-employment for people over 55 years old rose at a below-average clip in regions with soft labour market conditions, with increases of about five per cent in Central Canada and outright declines in the Maritime provinces. This regional pattern of self-employment growth is the exact opposite of what would be expected if people were being “pushed” into self-employment by a weak economy.

Age exerts a strong influence on whether people work part time or are self-employed. Self-employment has proved to be an effective way to keep older workers in the labour force. People over 55 years of age account for 20 per cent of all workers, but nearly 35 per cent of Canada’s self-employed (Figure 5). There has been a marked drop in the rate of self-employment of workers younger than 55 years old from 15.4 per cent in 1998 to 12.4 per cent in 2013 (less than half the rate of self-employment among older workers).

\textbf{FIGURE 5 \hspace{1em} SHARE OF 55-YEAR-OLD AND OVER IN EMPLOYMENT}

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The increase in older workers who are self-employed is important for several reasons. Obviously, it helps keep people in the labour force instead of retiring. The average age of retirement of the self-employed is 66.8 years, compared with 64.0 years for employees in the private sector and 61.1 years in the public sector. Nor is the shift of older workers into self-employment in recent years leading to a decline in the average age of retirement; their age at retirement in 2013 was the highest on record.

Older workers also prefer part-time jobs. Exactly two-thirds say it reflects their personal preference (this rises to 84 per cent for workers over 65 years old). Meanwhile, 72 per cent of youths between 15 and 24 years say they work part time because they are going to school. As for older workers, this reflects their own choices and priorities. Involuntary part-time employment is only an issue for people between 25 and 45 years of age, but they account for just one-quarter of all part-time work. This openly contradicts the notion that Canadians are being forced into precarious jobs by a weak labour market, especially prime-aged workers who need to support their family. Given the rapid aging of the labour force and their preference for self-employment and part-time work, the concern should be that the economy is not creating enough of these types of jobs to keep older people active in the labour force or provide youths the flexibility to work part time while studying.

The absence of a shift to part-time work in Canada is in marked contrast with some other countries. Most European countries, including Greece, Ireland, Italy and Spain, have seen declines of at least five percentage points in the share of full-time positions in total employment. In many instances, this is part of a welcome liberalizing of regulations on employment, which pushed the share of full-time jobs to artificially high levels (Greece was the best example, with full-time jobs accounting for 95.1 per cent of employment in 2001). Society’s goal is not to maximize full-time employment, but to create the maximum flexibility so employers have the incentive to hire the array of workers they need and allow workers the freedom to pursue the type of job that best suits their individual circumstances.

There has been a small increase in temporary jobs in recent years. Nearly half (49 per cent) are held by youths and people over 55 years old. It is also easy to exaggerate the distinction between permanent and temporary jobs. In a broad sense, all jobs are temporary: as argued by Matt Ridley, “firms are temporary aggregations of people to help them do their producing in such a way as to help others do their consuming.” Self-employed workers are free to work with clients of their choosing and at the time they prefer; this is a far cry from the world “of bosses and foremen, of meetings and appraisals, of time sheets and trade unions” that existed for many employees in traditional work.

Including the relatively small proportion of older workers in temporary jobs, people over 55 years of age account for nearly one-quarter (24.1 per cent) of employees in the “contingent” labour force, mostly by choice. Doing the same calculation for youths lifts the share of youths and older workers in the “contingency” labour force to 43 per cent (although there is some double-counting, so this is not a precise calculation). Therefore, their status cannot be regarded as something less than ideal, with an improvement contingent on better labour market conditions; people often choose to work part time or to start their own business.

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13 Cansim Table 282-0014.
14 Some large countries have had the same stability in the share of part-time work as Canada, notably the U.S. at about 13 per cent of total jobs and the U.K. at 25 per cent.
17 Ibid.
18 It is somewhat misleading to add up the total of self-employed, part-time and temporary workers, as one person could appear in two or even all three categories.
PART II. STRUCTURAL CHANGES

Keeping older workers in the labour force

Since the mid-1990s there has been a clear reversal of the trend to early retirement. For two decades, an increasing share of older workers has stayed active in the labour force. The desire to remain in the labour force is evident in other countries; an AARP survey in the U.S. found that 80 per cent of boomers say they plan or expect to work in retirement. One in five Canadians say they will never retire.

Older workers have a clear preference for working in small entities, not large corporations. Besides the self-employed, which by definition means working in a small family business or firm, 65 per cent of employees between 55 and 64 years old worked in firms with fewer than 100 employees (almost equally split between firms with less than and more than 20 employees). The preference for smaller firms increases with age; for people over 65 years old, 73 per cent work in firms with fewer than 100 employees, with a majority in the smallest firms of fewer than 20 employees. The only other age group with such an orientation to smaller firms is youths aged 15 to 24; 83 per cent work for firms with fewer than 100 employees (very few youths currently are self-employed, although a recent poll in the U.S. found growing interest among youths in starting their own firm, reflecting disillusionment with job security in large firms during the recent recession, as well as the success of young entrepreneurs such as the founders of Facebook and Twitter).

Workers over 55 years old want flexible work arrangements, including self-employment, part-time work and contracts. Given the rapid aging of our population, it is the very lack of a clear shift to work with more flexibility or autonomy, rather than traditional jobs, that is worrisome; the economy is not creating enough of these types of jobs that are the most attractive for older workers in the labour force. The notion that part-time work and self-employment reflect an undesirable trend to insecure “contingent” work reveals a mindset and values relevant to younger workers being imposed on an older generation, who clearly prefer the more flexible arrangements these jobs offer, even if earned income is lower.

An unknown factor in the Labour Force Survey (LFS) data is the role of the spouse in the decision to remain active: couples tend to retire at about the same time, but LFS data do not reveal what the spouse is doing. As well, the recent increase in participation rates coincides with the loosening of the age eligibility for the Canada Pension Plan, with workers receiving higher benefits if they delay retirement.

Why do older workers stay employed or start their own business when they could be retired? Keynes predicted that people would eventually stop working more than 15 hours a week, because the income effect of rising wages would lead to the substitution of leisure (supposedly a superior good) for labour. However, Keynes erred by ignoring “the role of innovations in imparting excitement and personal development to business careers.”

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21 Forty-three per cent of students between grades 5 and 12 plan to start their own business, according to a Gallup poll on the economy (January 22, 2013).
There are some reasons to believe that the secular increase in participation rates for people over 55 years has not reached its peak. Some of the recent increase partly originates in the ongoing impact of boomer women entering the over-55 age group. Much of the upward trend in the participation rate has been driven by a generational shift among women, from cohorts whose participation rates were just over half for prime-aged women in 1976, to cohorts whose participation rates reached 83 per cent. Most of this increase occurred in the 1970s and 1980s. Women 25 years old in 1984 are turning 55 years old in 2014. As these cohorts of women age, they will continue to replace the previous generation of older women whose participation rates were as low as 18 per cent after they turned 55 years old (Figure 6). Already, this effect has raised the participation rate of women 55 years and over from 17.7 to 32.0 per cent (although still 11.3 percentage points less than that of men of that age and whose participation rates also have risen from a low of 32 per cent in 1995).

The rapid growth in older people still in the labour force creates several topics to research. The increase in older workers retaining some link with the labour force is forcing statistical agencies to rethink what is meant by retirement. A 2008 study for the U.S. Bureau of Labor Statistics concluded that “for many older Americans, retirement is a process, not a single event. Only a minority of older Americans now retire all at once, with a one-time, permanent exit from the labour force.” However, while there are a myriad of statistics and studies of the transition from school into the labour force, there has been little study of the transition out of full-time work to retirement. Furthermore, while a few institutes in the U.S. study aging and retirement, they have no counterpart in Canada. This is a major gap in research, as older workers have the potential to change the labour force in the first-half of the 21st century as profoundly as women did in the second-half of the 20th century.

**FIGURE 6 PARTICIPATION RATES BY GENDER**

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25 Examples are the Sloan Center on Aging and Work at Boston College, the Center for Retirement Research at Boston College, The John J. Heldrich Center for Workforce Development at Rutgers University and the Stanford Center on Longevity at Stanford University. The closest counterpart in Canada is the University of Waterloo’s Research Institute for Aging, although its focus is limited to various aspects of health. The Canadian Centre for Elder Law focuses only on legal issues.
The aging of the labour force keeps many of its most productive members active, but also inhibits other aspects of labour market efficiency. In particular, older workers are much less likely to move, even to areas where labour demand is high. This could severely hamper provinces, notably Alberta, that have traditionally relied on interprovincial migration to bolster population growth.

There remain few empirical studies of the impact of improving health and technology on the recent increase in participation rates by older people. Better health enables workers to stay active longer, as well as increasing the lifespan that pensions will need to support. Technological improvements help accommodate the needs of older workers in the workplace.26

Youths in today’s labour market

One of the most intriguing dynamics in the labour market is the concentration of higher unemployment among youths rather than adults during the recession. The result is the type of imbalances shown in Figure 7. It shows the coexistence of near record-high unemployment among youths in Ontario and near record-low unemployment among adults in Alberta (this is not an exceptional comparison, as the same point could be made using data for several other provinces). The reasons for the immobility of youths in Ontario are unknown (their unemployment rate of 16 per cent is higher than the 13 per cent for Quebec youths, despite linguistic barriers that some of the latter face when moving to other provinces). Whatever its source, the result clearly is a reduction in the efficiency of Canada’s labour market.

FIGURE 7 UNEMPLOYMENT RATES

Another question is why the ratio of youth-to-adult joblessness has continued to rise during the recovery, an unprecedented trend. There are a number of possible reasons for this. One is being in the wrong locale. Another is the high rate of labour-force participation among youths who are attending school full time. This obviously limits the jobs they can accept and makes them less appealing to employers. However, clearly youths also lack some other characteristics employers are looking for. It may not be that employers find youths are missing technical skills; surveys of employers find their major complaint is youths lack the “soft” skills of good interpersonal relationships and communications skills rather than the “hard” skills of technical knowledge that schools provide.

26 Council of Economic Advisors, “The Labour,” 34.
High youth unemployment creates the illusion of a large supply of available labour, when employers clearly do not regard them as substitutes for older workers approaching retirement. The impact of youth unemployment on the total number of unemployed is significant, since they account for 28.8 per cent of all unemployed Canadians. Of this, just over half are unemployed teenagers between 15 and 19, who had an unemployment rate of 19.4 per cent in 2013. This distorts statistics such as the total unemployment rate or the number of unemployed per job opening, which are used by government both as a guide to policy and as an input into determining if a region is eligible for the Temporary Foreign Worker Program.

Young people in Canada have a much different relationship with the labour market than that of youths in other developed countries. They have higher labour-force participation rates and lower unemployment rates than youths in the U.S. or the EU. The difference is most pronounced for teenagers. In Canada, their participation rate has hovered around 50 per cent since 2000. Teenagers in the U.S. had the same participation rate as Canada in 2000, but it fell steadily to 35 per cent by 2013. Meanwhile, participation rates for teenagers in the EU have remained at about 25 per cent over the past decade.

One reason teenagers in Canada are in the labour force is that they have a better chance of finding a job. The employment rate for teens in Canada is 40 per cent, compared with 25 per cent in the U.S. As a result, their unemployment rate in Canada is 19 per cent, compared with 23 per cent in the U.S. (and nearly 28 per cent in the EU). Teenage unemployment rates in Canada and the U.S. were quite similar until the 2008 recession, yet the participation rate in the U.S. had already declined sharply. So other factors affect the participation rate in the U.S.

For youths between 20 and 24 years, the same pattern exists of higher participation and lower unemployment rates in Canada than the U.S. and the EU, but the gaps are not as pronounced as for teenagers. The participation rate in Canada was 76 per cent, unchanged from 2000. In the U.S., it fell from 77 to 70 per cent, while in the EU it is below 65 per cent. For youths aged 25 to 29, the gaps narrow further; participation rates have been steady at about 85 per cent in Canada and 83 per cent in the EU, while it has fallen to 81 per cent in the U.S. This drop in labour-force participation in the U.S. has lowered the unemployment rate for people aged 25 to 29 to eight per cent, almost matching Canada and nearly half the rate in the EU.27

One reason youth participation rates are lower in the U.S. is that American youths are more likely to be pursuing an education, while in Canada they are more likely to be working. In Canada, 81.6 per cent of teenagers (15 to 19) were attending school in 2012, compared with 85.5 per cent in the U.S. Meanwhile, 11.1 per cent of teens in Canada were working, compared with 6.8 per cent in the U.S. (and the U.S. excludes 15 year olds, who have very low employment rates).

Participation rates for youths have fallen during the recession and recovery. Partly this reflects the dim job prospects for many youths, who chose to stay in school with an eye to boosting future earnings rather than being unemployed or paid low wages. There are reasons to think the drop in participation rates will eventually be reversed as the economy strengthens. As will be discussed later in this paper, wage hikes have been quite modest during the recession and the weak recovery. For many youths, the low level of expected wages (reflecting both the low probability of getting a job and of that job being well-paying) has fallen below their minimum “reservation wage” they require to leave school and join the labour force. However, with wages beginning to increase in response to the growing tightness of the labour market for adults, a rise in expected wages for youths could quickly provoke a recovery of the participation rate.

A disconcerting trend is the growing number of youths disconnected from both the labour force and the education system. After falling steadily from 1976 to 2003, the number of youths between 15 and 29

27 The international comparisons are drawn from OECD, “Education at a Glance 2014” (OECD Indicators, October 2014).
years old who were not students and not in the labour force rose from 380,000 to 450,000 between 2003 and 2013. While not a large number, it reveals that more young people are not accumulating human capital from the traditional sources of either school or on the job. While nearly two-thirds were women, over half the increase since 2003 was for young men. Unlike the U.S., incarceration explains little of this increase in Canada (the number of people in Canada's prisons has risen by 7,000 to a total of 41,000 over the past decade). There may have been some increase in youths receiving social assistance, but it is not clear if this is the cause or the result of their growing disconnect from mainstream society.

**Education shifts to universities**

Canada has long had one of the highest percentages of youths attending post-secondary education in the world. However, historically this meant youths enrolled in community colleges more than in universities. This has changed significantly over the past decade, with faster growth in students enrolled in university.

In 1990, 3.7 million Canadians had a post-secondary diploma, compared with 2.0 million who had a university degree. By 2013, the number with a post-secondary diploma had risen 70 per cent to 6.7 million, while the number with a university degree soared 283 per cent to 5.1 million. As a result, the ratio of people with diplomas to university graduates fell from 1.87:1 to 1.31:1. The narrowing of the gap between the number of people with a post-secondary diploma and a university degree was particularly marked after the resource and construction boom started in 2003, with diplomas up 23.4 per cent versus a 51.4 per cent increase for a university degree. This reflected a marked slowdown in people acquiring post-secondary diplomas to an annual average of 2.3 per cent, half their growth in the previous 13 years.

The surge in people with university degrees is reflected in enrolment. There were 938,718 full-time students attending university in 2012, up 58 per cent from 2000. Meanwhile, full-time enrolment at colleges rose 28 per cent to 527,433 over the same period. This does not mean that the gap between people in the labour force with college versus university degrees will fall at a rate of over 400,000 a year in the near future. Colleges are more efficient at graduating their students than are universities, to judge by the higher ratio of post-secondary graduates at colleges compared with universities and how this gap has risen over time (see Figure 8). This also suggests that a good number of people who enrol for university studies leave without acquiring a degree. As Coates has observed, universities have an incentive to lower admissions standards, since they are paid by the number of students enrolled and not the number that graduate. However, the slight increase in graduation rates for university students in recent years suggests this is not a major factor.

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28 Almost half were between 25 and 29, which is why the age group for youths was widened from that used in most of this paper.
29 Statistics Canada, “Labour Force Survey.” This group is only surveyed during the eight months of the school year.
30 All the data in this paragraph come from Statistics Canada, “Labour Force Survey,” Cansim Table 282-0004.
31 The data on enrolments and graduates all come from Statistics Canada, Cansim Table 477-0033.
Some of the rise in demand for education at universities reflects the premium for the wages of university graduates. However, there is no evidence that this premium has suddenly grown, which would justify the shift from community colleges to universities. There is some evidence that the wage premium for university education has eroded slightly in recent years.\textsuperscript{32} The boom in natural resources and construction jobs since 2003 helped maintain the relative earnings from community college education. Therefore, part of the shift from college to university enrolment may be attributable to the endless mantra repeated in our society that a university education was required to compete in the new “information economy” of knowledge workers.

Mike Rose, an education professor at UCLA, wrote that “the commonplace distinction between a ‘new knowledge age’ compared with the ‘old industrial age’ misleads on a number of levels.”\textsuperscript{33} This includes the very distinction between an “industrial” and “knowledge” world, implying the separation of “brain work” and “hand work,” as if industrial jobs did not require specialized knowledge and the work of hands was mindless.\textsuperscript{34} The implication is “that blue-collar and service workers don’t rely on a body of knowledge to do their work, nor learn and solve problems, nor have to coordinate and negotiate with other workers.”\textsuperscript{35} In the real world, there are many ways people acquire knowledge and solve problems without a university education. Mechanics, machinists and construction tradespeople “develop rich knowledge of materials, tools, and processes. They regularly troubleshoot and solve problems.”\textsuperscript{36}

The trumpeting of a knowledge-based economy that requires information workers favours academic over vocational training, since it is assumed that universities are where intelligent people go to learn. Education scholar Theodore Lewis points out that “vocational knowledge is not perceived as valid school knowledge.”\textsuperscript{37} The devaluation of learning outside of universities is reflected in the falling share of students attending community colleges and apprenticeships, and may even be a factor in the low level

\textsuperscript{32} OECD Economic Survey: Canada (June 2014), 17.
\textsuperscript{34} A survey shows that one in four parents think the trades are for “weak students.” See Genna Buck, “Trading Places” Maclean’s, Oct. 13, 2014.
\textsuperscript{35} Rose, \textit{Why School?}, 77.
\textsuperscript{36} ibid., 78.
of training provided by most employers in Canada. By narrowly defining the avenue through which learning and skill is acquired, the university-based definition of knowledge is not rigorous enough to capture the diverse ways of acquiring human capital. In the words of Rose, we have to be “vigilant for the intelligence not only in the boardroom but on the shop floor; in the laboratory and alongside the house frame; in the workshop and in the classroom.”

Not all university graduates possess adequate skills. A recent Statistics Canada report found that over a quarter of university graduates in Canada had low levels of literacy skills (27 per cent) and numeracy skills (32 per cent). Even excluding immigrants, 16 per cent of Canadian-born and university-educated people had lower-level literacy skills and 23 per cent lower-level numeracy skills. The skill level of Canadians was below those of university graduates in the U.S. More education alone may not be the solution; teaching and education were the field of study that posted the worst results in this survey.

An increasing number of studies find that the skills actually acquired during a university education are not as high as is often presumed or what was acquired in the past. For example, Arum and Roksa report that critical-thinking ability is no higher after two years of university education than before. Following this reasoning, at least some of the wage premium attached to university education is not for the skills actually learned, but result from a degree signifying to employers “that its holder has a basic ability to show up on time (mostly), to follow instructions (reasonably well), and to deal with others in close quarters without committing serious felonies.”

As well, there is an ongoing concern about the quality of the education received in university as it applies not only to the “hard skills” of literacy, numeracy and problem-solving ability, but also the “soft skills,” such as punctuality, honesty and responsibility.

Some hold that, as The Economist put it bluntly, “The university bubble is beginning to burst.” The education premium always assumed that more schooling led to higher productivity and hence higher wages, rather than signalling people who were either innately more productive or simply possessing the minimal level of soft skills most employers require. There is some evidence that graduates are finding it harder to find jobs. The Council of Ontario Universities reports that its voluntary survey of recent graduates shows 93.0 per cent found jobs within two years of graduating in 2013, down from 95.7 per cent for the class of 2006. And 22 per cent said their job was not related to the subject matter of their studies.

Another challenge results from the shift towards more university training. Acquiring a university degree usually takes several years longer than other post-secondary certificates or diplomas. This inevitably delays the arrival of youths into careers through which they can eventually begin saving for retirement. Without a corresponding delay in the age at which they retire, this gives people fewer years to save or pay into public pension plans.

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38 The conclusion that employers scrimp on training is disputed for large firms by the Council of Canadian Chief Executives, which argues that training expenditures are underestimated by organizations such as the Conference Board of Canada.
40 D. Hango, “University graduates with lower levels of literacy and numeracy skills,” Statistics Canada Catalogue No. 75-006-X (November 2014).
International and interprovincial migration

A fundamental economic fact for most of Canada’s existence is that labour, not land, has been the factor of production in short supply, with the possible exception of the late 19th century when there was a net outflow of our population to the U.S. Immigrants have been an important part of Canada’s population growth, becoming the dominant source in recent years as the native population ages rapidly. Immigration has not been the only mass population movement of importance to economic growth in Canada. The migration of Canadians within our borders, notably the shift from rural to urban Canada, was a key shift during the 20th century. Historically, Canada, along with the U.S., has had a much more mobile population than that of Europe. This section looks more closely at some of the issues related to population flows across Canada’s borders and within the provinces. Moves within a province are not analyzed, although they could significantly alter the perceived willingness of people to change locales to improve their lifestyle.

An efficiently functioning labour market needs to have the right people with the right skills located in the same region where jobs are being created. The idea that jobs are shifting to a virtual world, where physical location does not matter, remains a fantasy. While some jobs can be done over the Internet, most still require a physical presence. This is particularly true for all the goods-producing industries as well as for services that handle and transport goods, consumer services such as retailing, real estate, accommodation and food, and most business services.

In terms of internal movement, Canada has traditionally had one the most mobile labour forces in the OECD. There are clear signs that this high level of interprovincial mobility is slowing down. In absolute terms, the number of people moving between provinces in Canada has fallen from over 400,000 a year in the early 1970s to fewer than 300,000 for much of the last decade. Years with extremely high disparities in interprovincial job growth have briefly pushed the number of migrants just above 300,000, as occurred in 2007, 2008 and 2013. After declining sharply in the aftermath of the recession, the total of 319,796 interprovincial migrants in 2013 was the highest in absolute terms since 1990. Nevertheless, as a percentage of Canada’s population, this represents a drop from its high of 1.9 per cent in 1973 to 0.9 per cent in 2013.

Some of the recent decline in internal migration reflects that the disparity among provincial unemployment rates since 2011 has been the lowest on record. The slowdown in interprovincial migration is also related to the aging of the population, especially the number of older people and families with children. Few people over 65 years old migrate between provinces, and this continues to be the case even as the size of this demographic grows. Meanwhile, the presence of children in the family increasingly deters mobility. There has been a drop of over 50 per cent in the number of children up to 17 years old who move between provinces, suggesting that parents are increasingly reluctant to move between provinces if they have children, irrespective of the province they live in. The reluctance to move between provinces has carried over into early adulthood. The number of youths 15 to 29 years moving fell from 41 per cent of all provincial outmigrants in 1975 to 35 per cent in 2011, before an upturn in the last two years.

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46 Three-quarters of all moves in Canada are within the same province, according to the OECD Economic Survey: Canada, 129.
47 Data on interprovincial migrants come from Statistics Canada, Cansim Table 051-0012.
48 The standard deviation of provincial unemployment rates was 2.6 in 2013, compared with values consistently exceeding 3.0 in previous decades, including a record high of 3.99 in 1997 (Statistics Canada, Cansim Table 282-0087).
A greater willingness to search for a better job in another area is one reason that more educated people command higher salaries.\textsuperscript{49} In the U.S., there is a marked correlation of mobility and education. The argument is that more education leads to more information about job opportunities in other regions, the skills needed to make such a large change in life, and the financial capital to relocate. It also has been noted that simply making the first move to a college or university outside the hometown helps youths overcome the natural resistance that many of them have to uprooting themselves from their familiar network of family and friends. Given the role education plays in encouraging mobility, it is a concern that the wage premium in the Prairie provinces is highest for high school graduates and post-secondary diplomas, not university graduates.\textsuperscript{50}

Many suggestions have been made to modify unemployment benefits so they encourage rather than discourage labour mobility. This could be done be making a percentage of employment insurance benefits payable in the form of a relocation voucher.\textsuperscript{51} However, any program designed to increase mobility should have to make specific provisions for the reluctance of parents to move with their children.

Besides interprovincial migration, the other major population movement is the flow of people across Canada’s border. Net immigration reflects the inflow of permanent immigrants, net non-permanent residents (including temporary foreign workers and refugee claimants) and returning emigrants minus the outflow of permanent emigrants and net temporary emigrants.

In recent years, the net inflow of people from outside Canada has been just over 250,000 a year, equivalent to 0.7 per cent of Canada’s population.\textsuperscript{52} This is the highest and most sustained inflow on record, going back to 1971, except for a spike of immigrants in 1990. Most of the increase from previous decades reflects higher inflows of permanent immigrants and returning emigrants. As well, there has been a comparatively small increase in net temporary population flows into Canada, reflecting both fewer emigrants and more temporary residents from abroad.

The recent upturn in net international migration flows into Canada has offset the slowdown in interprovincial migration flows since 1991.\textsuperscript{53} As a result, the total movement of people across either Canada’s or their province’s borders has been steady at about 1.6 per cent of the population (see Figure 9).

\textsuperscript{50} OECD Economic Survey: Canada, 17.
\textsuperscript{51} Moretti, \textit{The New}, 158.
\textsuperscript{52} All the data on international population flows for Canada come from Statistics Canada, Cansim Table 051-0004.
\textsuperscript{53} There is a small amount of double-counting in this calculation, as a few immigrants will move between provinces in the year they arrive in Canada.
The shift from interprovincial migration to immigration is important because these two groups tend to move to different regions. Immigrants congregate in Canada’s three largest cities, while interprovincial migrants are more efficient in moving to regions with higher incomes.

The more efficient allocation of domestic population flows, compared to international population flows, is shown by the province of destination. Alberta relied almost exclusively on the migration of people from other provinces between 1971 and 2005, after which international immigrants steadily increased. During previous booms, interprovincial migration amounted to over 40,000 people in each of 1981, 1998 and 2006 while immigration from abroad remained below 20,000. So it is encouraging that immigration to Alberta amounted to 41,000 people in 2013, more than the 39,000 arriving from other provinces. This also lifted Alberta past B.C. as the third-favourite destination of immigrants (and not far from Quebec’s second place total of 52,000). Conversely, interprovincial flows to Ontario have dried up for most of the last two decades as its economy slowed, while immigration from abroad remains positive. The same pattern broadly holds for Quebec, which continues to receive net inflows from abroad while exporting its population to the rest of Canada in response to its chronic slow growth.

That the destination of interprovincial migration flows clearly responds before immigrant flows is important on at least two counts. First, it suggests that the flow of information within Canada about the most attractive provinces to find jobs is better than the international flow of information. Second, it implies that, to meet labour shortages in the short run, people in other provinces will respond more quickly than immigrants from abroad. An exception would be immigrants entering the country under the Temporary Foreign Worker Program, which were heavily concentrated in Alberta and B.C.\(^{54}\) From this point of view, the program was a way to improve the efficiency of international immigration flows.

So a straight substitution of international for interprovincial migration would likely lead to a less efficient labour market in Canada because of the destination of workers. As well, it is well-known that outcomes for recent immigrants have deteriorated in recent decades. Some of this deterioration reflects declining language skills, just as labour demand has shifted from manufacturing to services, a sector that requires better language skills.

\(^{54}\) Another example of how people within a country have better information was during the 2008 financial crisis, when Canadians repatriated funds to the safety of our financial system before the rest of the world discovered Canada as a “safe haven.”
One reason it is difficult to attract people to resource projects in remote areas of Western Canada is the “thinness” of markets in these regions: there are fewer sellers and fewer buyers in these markets, making it harder to match demand to supply. Larger cities with “thick” markets offer some insurance against losing a job with one particular firm. As well, married couples will find it easier for both spouses to find a job in their profession in large urban areas than in resource towns.\textsuperscript{55}

\textbf{Raising labour-force participation}

Besides expanding the population, either through immigration or regionally through migration within Canada, raising the participation rate is the only other way to expand the labour force in areas where labour demand is expanding rapidly. Following decades of gains driven by women entering the labour force, recently the overall participation rate has levelled off and even receded slightly, mostly due to the aging labour force. However, there are several groups in the labour force that have low participation rates that could be increased, including older people, recent immigrants, women with children, youths and aboriginals.

As noted earlier, keeping the skills and knowledge of older workers solves several of society’s problems simultaneously—it provides a pool of talented workers, while reducing the strain on pension plans and possibly even reducing demand on our health-care system.

While immigrants are the fastest-growing part of Canada’s overall population, they make a smaller contribution to labour-force growth. This is because the participation rate of immigrants is typically about five percentage points below the rate for people born in Canada. This gap may narrow, as the participation rate of recent immigrants has risen to equal that of people born in Canada (although participation rates remain low for immigrants from certain regions, such as Asia).

For decades, women were the fastest source of labour-force growth. In recent years, the participation rate of women has levelled off. However, there are important interprovincial differences in participation rates, especially for women with young children. Alberta’s labour-force participation rate is already the highest in the country, reflecting its high rates of pay and its demographic profile, the youngest in Canada. It is easy to conceive of scenarios that could further increase the participation rate. If mothers in Alberta with children under six years old had the same labour-force participation rate as in Quebec, Alberta’s labour force would swell by 32,000 people.

This does not mean that Alberta should adopt the wholesale subsidy of daycare that costs Quebecers $2.5 billion a year, resulting in the high income tax rates that discourage labour-force participation among the rest of the population.\textsuperscript{56} It simply implies that some combination of higher wages and more support for daycare from both business and government could tap into this large potential source of labour. In the U.S., Blau and Kahn estimate that adopting family-friendly workplace policies (such as more paid leave) could boost the participation rate of women by about seven percentage points.\textsuperscript{57} Nevertheless, there may be limits to the labour-force participation of women in high-income families. Census data show that female participation rates are below average when the spouse earns over $75,000 a year, although this varies by generation.

Youths are another potential source of labour whose participation rate has fallen recently. Youth participation rates in Alberta remain below their peak level set during 2007–08. At that time, some people argued that it was not in the long-term interest of either Alberta or the youths to leave school to work in the oilsands. However, it is not clear what prevents youths from earning a lucrative income for

\textsuperscript{55} Moretti, The New, 131.

\textsuperscript{56} Milligan finds the two effects cancel each other out, leaving total labour-force participation little changed.

short periods of time and then returning to school when the inevitable slowdown occurs in the resource economy. Arguments are regularly made that youths are not harmed by taking some time to travel or study abroad and, in fact, many people say it is beneficial. So it is unclear why acquiring experience in the workplace, the No. 1 thing that employers complain that youths are missing, would be harmful.

The disabled are another non-conventional source of labour supply with below-average rates of labour-force participation. Some of this reflects poor policies that push some disabled onto social assistance.\textsuperscript{58}

Aboriginal participation rates are well below the national average. For core-age workers between 25 and 54 years, the 75.0 per cent participation rate for aboriginals in 2010 was over 10 points below non-aboriginals. With their unemployment rate nearly double that for non-aboriginals, the employment rate among aboriginals was 65.8 per cent, compared with 80.9 per cent for the rest of Canada.\textsuperscript{59}

Higher aboriginal employment would increase the efficiency of the labour market for several reasons. Aboriginals are concentrated in Western Canada, where the need for new sources of labour supply is greatest. Aboriginals are also one of the youngest groups in Canadians society, meaning that they can contribute their skills for decades, rather than employers just trying to wring another couple of years out of older workers. This justifies more investment in education and training.

\textbf{Expanding labour supply from the existing labour force}

Alberta and Saskatchewan stand out in their efforts to expand the labour supply from their labour force. They have done this primarily by getting older workers to stay in the labour force and extending the workweek of employees.

As noted earlier, the participation rate has been rising for older workers.\textsuperscript{60} Alberta and Saskatchewan’s participation rates for older workers are much higher than in the rest of the country and have risen the most over the past decade. The participation rate for people over 55 years was 47.2 per cent in Alberta and 44.1 per cent in Saskatchewan, compared with 36.1 per cent in the rest of the country in 2013. Over the past decade, these rates rose about 10 points in these two provinces, compared with less than seven points elsewhere. Two-thirds of people between 60 and 64 years (and one in five over 65 years) are still active in Alberta’s and Saskatchewan’s labour force, compared with only half in the rest of Canada (indeed, participation rates for these provinces resemble those of cohorts five years younger in some eastern provinces). These high levels of participation show what is achievable in the rest of the country.

Alberta and Saskatchewan also have relied on a longer workweek. Just over 15 per cent of workers in Alberta and Saskatchewan were willing to work 50 hours or more a week in 2013, compared with just under 10 per cent elsewhere in Canada. While about a third of Albertans working long hours were self-employed, most of the increase since 2009 has been for employees, suggesting a cyclical increase in response to rising demand. This is supported by the industries where employees were working long hours, with 22 per cent in natural resources (including farming) and 18 per cent in construction (these industries account for a total of 21 per cent of employment in Alberta). In Saskatchewan, 44 per cent of long workweeks were in the resource and construction industries.\textsuperscript{61}

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\textsuperscript{60} Data on participation rates are from Statistics Canada, Cansim Table 282-0002.

\textsuperscript{61} Data on hours by industry come from Statistics Canada, Cansim Table 282-0022.
Increasing the workweek is unlikely to be a long-term source of more labour supply, especially for older workers. Of the 333,000 Albertans working 50 hours or more a week, 61,000 (or 18 per cent) were over 55 years old, and their share has been rising since 2009. The share of older people working long hours was even higher at 23 per cent in Saskatchewan. As well, there is a prejudice in some circles against long workweeks. The International Labour Organization calls working more than 49 hours a week “excessive” and counts it as a negative in its measurement of the quality of jobs. Younger employees in Alberta and Saskatchewan may focus more on their quality of life than older workers do today.

**Wages and salaries**

Wage growth overall remains subdued in Canada five years after the recession. Partly this reflects that wages are a lagging indicator of labour market conditions, since they are usually adjusted only once a year by most employers (or less often when multi-year contracts are negotiated).

There are many ways of measuring how employees are compensated. The most basic measures report only earnings, such as hourly or weekly earnings or wage settlements. These measures do not cover the wide range of non-wage benefits employees increasingly prefer, such as pension and medical coverage, which are captured in broader measures of labour income. For several years, as the population has aged, compensation has shifted from wages and salaries to supplementary labour income (the latter also includes retroactive payments, such as large employment-equity payments in the public sector). Any discussion of trends in wages and incomes should keep in mind this distinction.

No single measure of wages or income is always better than the others. Earnings understate total labour-income growth when non-wage benefits are rising. However, data on earnings are available quickly and are rarely revised, while labour income can be revised significantly several years later when data are benchmarked to income tax records. Labour incomes can also paint a misleading picture of the underlying trend of wages when, as occurred in 2010 and 2011, large retroactive payments are paid to employees to compensate them for labour provided years in the past. As shown in Figure 10, this gave an artificial boost to income growth that misled about the underlying trend of wages early in the recovery. The passing of the effect of these payments also exaggerated the slowdown of incomes in 2013.

However, Figure 10 also shows that labour income per employee better reflected changes in the business cycle than did earnings during the recession, when income per employee fell even as hourly earnings were little changed. Partly this reflects how it is easier for employers to cut non-wage benefits (such as bonuses) during a recession, without the demoralizing impact of wage cuts.

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62 Data on hours worked by age come from Statistics Canada, Cansim Table 282-0018.
64 The demoralizing impact of wage cuts was documented by Truman Bewley, *Why Wages Don’t Fall During a Recession* (Cambridge, Mass.: Harvard University Press, 1999).
So far in the recovery, wage increases have been muted. Total labour income per employee has risen slightly more than three per cent over the past year. This has led some observers to question whether there are developing shortages of labour. However, national data on wages conceal the strong upward pressure on wages in some provinces. Average hourly earnings in Alberta, Saskatchewan and Newfoundland and Labrador have risen much faster than the national average during the recovery, and their level is clearly above the other provinces (Figure 11). This is particularly notable for Newfoundland, where wages have jumped from the fourth-lowest in Canada to the third-highest in just four years. Meanwhile, the national average wage continues to be depressed by slow growth in Central Canada and the Maritime provinces.
Wages are not a timely indicator of labour market conditions, since they are set infrequently. As well, there is considerable analysis that wages are trailing in the recovery because of “pent-up wage deflation” in the words of Janet Yellen.\textsuperscript{65} The evidence suggests that firms are reluctant to cut nominal wages during the recession, but recoup this implicit subsidy to employees by restraining wage growth during the recovery. Typically, wage growth in the U.S. does not begin to accelerate until the unemployment rate reaches about six per cent. The risk is that wage growth could pick up significantly to make up the drop in real wages in the past five years.

Complaints about shortages of labour are eternal in Alberta, especially with regard to the oilsands. Even during the Great Depression of the 1930s, the rebuilding of the Abasand Oils plant after a fire was delayed “as manpower and materials shortages slowed the renovations.”\textsuperscript{66}

Employers in Western Canada have clearly learned from their experience with shortfalls in 2007 and 2008. They have been more creative in their human resource policies, notably by inducing employees to stay in the labour force and work longer hours. Alberta is doing a better job of attracting international immigrants. Another tactic is to better co-ordinate work on megaprojects so they do not compete with each other for the same labour, materials or engineering resources. When Suncor and its partner Total are building their Fort Hills project, for example, they will not simultaneously develop their Joslyn project. As one analyst put it, “Since 2008–2009 we’ve seen a rationalization of oil sands growth and timing.”\textsuperscript{67}

Do vacancies signal a mismatch in the labour market?

Vacancies are often used as a measure of the difficulty of finding employees to fill a position. Vacancy rates can be combined with unemployment rates in the so-called Beveridge curve, which show the number of vacancies for a given level of unemployment. A shift in the Beveridge curve to the right points to a growing mismatch between vacancies and unemployment, symptomatic of the hysteresis that accompanied the onset of Europe’s permanent unemployment problem in the 1980s and also occurred in the U.S. during the last recession. The limited data from Statistics Canada’s vacancy survey suggest a slight shift to the left, suggesting no hysteresis. This would be consistent with other measures (such as unemployment duration) that point to a relatively mild and short-lived slump in Canada’s labour market.

However, there are several reasons to question the usefulness of vacancy surveys. One reason why data on vacancies are hard to interpret is that they explicitly assume that firms fill specific positions externally.\textsuperscript{68} Vacancy data capture the interaction between the internal labour market of an employer and the external labour market. This interaction is inevitably quite different among employers for a variety of reasons. Many positions are filled only with internal recruitment. In some organizations, internal responsibility for staffing is highly formalized and centralized; in others, is informal and diffuse, to the point that the person/branch responding to a survey of vacancies may not even be aware of staffing in other parts of the organization. Highly unionized employers, which today mostly means the public sector, will have a much more rigorous and defined process to fill external vacancies than will businesses. Microdata suggests that firms post a minimum level of vacancies regardless of their job

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\textsuperscript{66} Barry Ferguson, “Athabasca Oil Sands Northern Resource Exploration, 1875-1951” (Alberta Culture/Canadian Plains Research Center, 1985), 90.


\textsuperscript{68} The Statistics Canada vacancy survey requires that “a specific position exists” and “the employer is actively seeking employees from outside the organization to fill the position.” From “Job vacancies, three-month average ending in March 2014,” Statistics Canada, The Daily, June 17, 2014.
growth. Small firms necessarily have a much broader definition of job functions than do large firms, and empirically have much different levels of vacancies.

The most important drawback of vacancy data is that they are open to interpretation by the respondent, which leads to confusion about their meaning. The assumption in surveys is that firms have a consistent classification of their occupational requirements, which in reality does not hold. The attempt to extend the Statistics Canada survey of job vacancies to include occupational categories is likely to fail for just this reason. Too high a level of occupational classification (such as “clerical” or “sales”) covers too wide a range of jobs; too detailed a level encourages non-response or leads to firms interpreting the occupation of their vacancies differently from other firms or even other regions. For example, mining skills in Alberta’s oilsands means something quite different than in Sudbury’s nickel belt.

**Will factory jobs exist in the future?**

Widespread job losses in manufacturing in recent years are important for several reasons. The concentration of layoffs and unemployment in one industry “suggests that workers formerly employed in sectors in structural decline will have a harder time finding new jobs than other workers.” The future of manufacturing jobs in North America is frequently debated. Some point to offshoring and automation and say the factory jobs will go the way of farming, where the production is done by a very small segment of the labour force. Others look to reshoring and North America’s energy cost advantage and maintain that factory jobs will not only survive, but may start to increase. To better appreciate this debate, this paper reviews the recent trend in manufacturing employment before speculating on its future.

Manufacturing employment has hovered around two million jobs for most of the past half-century. It rose past two million for brief periods when a low Canadian dollar encouraged low-wage factory jobs. It sank back to just under two million during the past decade, weighed down first by a higher exchange rate and then by the recession (in fact, factories cut employment at a faster rate before than during the actual recession). Manufacturing jobs have levelled off at about 1.8 million since the recession ended in 2009, remaining a powerful force in Canada’s economy. Manufacturing is still the second-largest employer among all industries, after the 2.2 million jobs in health care and social assistance.

The relative stability of the absolute number of factory jobs in Canada contrasts with a relentless secular decline in the U.S. (Figure 12). Factory jobs in the U.S. fell from 19 million to 13 million over the past decades. Similar declines in manufacturing employment are evident in other major industrial nations, notably the U.K. From this vantage point, what is surprising is that Canada’s manufacturing sector has avoided large losses over the long term, not that it has stagnated.

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71 Elsby, Hobijn and Sahin, “The Labor.”

72 Peter Marsh provides a good summary of these opposing arguments in *The New Industrial Revolution* (New Haven, Conn.: Yale University Press, 2012).

73 Statistics Canada, “Labour Force Survey Estimates,” Cansim Table 282-0008. Usually employment by industry estimates from the “Survey of Earning, Payrolls and Hours” are more precise, but their track record only extends back to 2001. The trend of manufacturing employment is the same for both surveys.
However, looking at manufacturing’s share of employment in Canada shows that this stability in absolute terms masks a sharp reduction in factory jobs relative to total employment. In particular, it has fallen from 19.1 to 9.8 per cent over the past half-century (Figure 13). This is because the stability of factory jobs at 1.8 million between 1976 and 2013 pales by comparison with the more than one million jobs added in both professional services and health care and the half-million jobs created in each of the construction, business services, retail, education and accommodation and food industries. Manufacturing is the only industry besides agriculture (where jobs continued to fall outright) that did not add jobs between 1976 and 2013.
The Canadian Manufacturers and Exporters association has expressed concern about attracting young people to factory work, because “they see it in 4D—declining, dangerous, depressing and dirty.” In reality, these fears do not seem justified. Instead, a large number of young people are available in the manufacturing labour force but cannot find work. Unlike most other sectors, manufacturers are not hiring youths to replace their rapidly aging labour force. This suggests that firms intend to allow the older cohort to retire without replacing them, instead relying on some combination of automation and offshoring to fill their needs. This implies that there is a pool of workers with some technical expertise and a disposition to do blue-collar work that could be tapped by industries such as natural resources or construction. However, the geographic location of most of these jobs is not in Southwestern Ontario, home to the largest pool of young, unemployed manufacturing workers.

There has been a marked shift in the skill and pay of manufacturing work in Canada over the past two decades. In 1997, two-thirds of factory jobs paid less than $20 an hour (Figure 14). These jobs, especially the 600,000 paying less than $12 an hour (notably in the textile, clothing and furniture industries) proved vulnerable to intensified competition from overseas, the rising Canadian dollar and finally the global recession in 2008–09. As a result, the ranks of factory jobs paying less than $20 an hour were decimated from 1.4 million in 1997 to 0.7 million in 2013.

By contrast, factory jobs that pay more than $20 an hour have doubled since 1997 to 900,000, especially those that pay over $30 an hour. This shift is consistent with the idea that the factory work that remains in North America is advanced manufacturing of “anything from robotics and pharmaceuticals to electronics and advanced medical devices.” These gains occurred despite being subject to the same forces of intensified overseas competition, a rising dollar and global recession that pummelled lower-paying factory jobs. The majority of manufacturing jobs in Canada are now higher-paying ones that have demonstrated a resilience to the most severe structural and cyclical forces imaginable. Canada does not need an industrial policy encouraging a shift to high-value-added manufacturing jobs: the combination of intense global competition and a high exchange rate already has produced exactly this result. This

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75 Moretti, The New, 53.
bodes well for the potential for a reshaped manufacturing industry in Canada to continue to play an important role in our economy for decades to come.

This optimistic view about the future of manufacturing in Canada is borne out by the investment spending of manufacturers. Since the end of the severe recession in 2009, investment in manufacturing has increased for five consecutive years to $19 billion, close to its pre-recession high of $21 billion (Figure 15).

**FIGURE 15 MANUFACTURING INVESTMENT**

![Manufacturing Investment Graph](image)

**CONCLUSION**

Labour markets around the world have undergone profound changes in recent years. Some of the changes are structural, reflecting the aging of the labour force and tumultuous changes in the manufacturing sector. In some countries, the cyclical fallout from a severe recession and a weak recovery also has fundamentally altered the approach to analyzing labour market conditions. Just in the past year, the U.S. Federal Reserve Board and the Bank of England have abandoned the unemployment rate as the best gauge of labour market health, a reflection of how interpreting changes in the labour market have become more complicated in the wake of these structural and cyclical changes.

This paper did not attempt to address all the important issues in our labour market. Since the recession was less severe in Canada’s labour market than in the U.S., and real GDP fell the same in both countries, the inevitable result was that productivity slumped more in Canada than the U.S., aggravating the gap that has opened up in recent years.

In Canada however, the most profound changes in the labour market did not begin in the recession. The shift to self-employment and part-time work happened decades ago and was little affected by the recession. The recession might be blamed for aggravating the gap between youth and adult unemployment, but a structural gap between the two had already appeared before the recession. The reasons for higher youth unemployment are unclear, but it is apparent that a sharp increase in their acquisition of university education has not prevented deteriorating outcomes for youths.
Other important structural changes in Canada’s labour market have their origins in demographics as much as economics. The aging of the population is quickly changing the face of our labour force. Older workers have shown a much different attitude to staying in the labour force than have previous cohorts, but on terms that accommodate their desire for flexibility and control of their working environment. However, analysts have much more information about how boomers transitioned into the labour force decades ago than about how they are exiting today, reflecting the slow adaptation of researchers and statisticians to understanding this new challenge in how labour markets function.

Another fundamental change in the labour market is the long-term shift in demand to the resource-producing provinces in Western Canada and Newfoundland and Labrador. With population flows not responding sufficiently, this has led to changes in these provinces in the composition of their labour force and the hours people are working to meet demand in the short term. Nor did the growth of natural resources doom Central Canada’s factory base. There has been a marked restructuring of manufacturing from the low-paying jobs that proved vulnerable to recession and global competition to higher-paying jobs that not only survived, but thrived.

As is too often the case in public policy, Canada has been ill-served by the poor quality of the public debate on labour markets, which has focused on aspects such as the Temporary Foreign Worker Program and the contingent labour force, which comprise a relatively small share of the labour force. This has wasted the opportunity to discuss some of the bigger challenges for Canada’s labour market now and in the future. These challenges include a better understanding of the transition of older workers into retirement; whether youths are receiving the quality of training and education they need to compete and succeed in today’s global marketplace; and boosting the population and labour-force participation in regions that are growing rapidly.
About the Author

Philip Cross does research for various institutes across Canada and is a member of the Business Cycle Dating Committee at the C.D. Howe Institute. Before that, he spent 36 years at Statistics Canada, the last few as its Chief Economic Analyst, where he wrote its monthly assessment of the economy. He writes a bi-weekly column for the Financial Post and is quoted frequently by media outlets on various economic and statistical issues.
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