

# SPECIAL REPORT

## TD Economics



December 10, 2014

## YOUNG AND RESTLESS

### A LOOK AT THE STATE OF YOUTH EMPLOYMENT IN CANADA

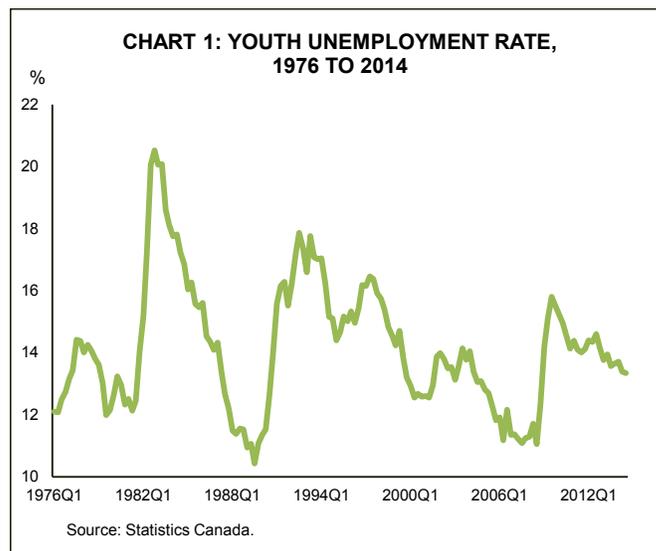
#### Highlights

- The current state of the Canadian youth labour market frequently makes headlines. This is in large part the result of the elevated level of the unemployment rate compared to prior to the Great Recession and relative to older Canadians. These concerns are justified and warrant attention.
- As such, this report examines the underlying trends in youth unemployment in order to determine the factors driving it. It also looks at the types of jobs youth are getting, both in terms of quantity and quality.
- The report concludes that the youth labour market is strongly related to the state of the economy as a whole. In this context, the youth unemployment rate currently remains only modestly elevated.
- Breaking youth into various groups by age, sex, and level of education, it is clear that the sharp increase in the youth unemployment rate is largely due to Canadians aged 15 and 16, males, students, and the less well educated. These are trends which have remained broadly unchanged over time.
- Going forward, it is our view that increased economic growth and the trend toward greater post-secondary education will continue to yield positive employment outcomes. However, the higher share of temporary employment among youth is a concerning trend worth monitoring.

Much has been written about the state of youth employment in Canada today. The elevated youth unemployment rate (youth are commonly defined as Canadians aged 15 to 24), both relative to history and their older counterparts, is a frequent discussion topic among politicians and commentators (Chart 1). Further, youth unemployment remains high when compared to its pre-recession level. This is important for policymakers and parents alike, as weaker employment prospects when young are associated with lower lifetime earnings, often referred to as ‘scarring’.

But are things really as bad as they seem? Building on prior work at TD Economics,<sup>1</sup> we answer this question by dissecting the youth labour market by age, sex, and educational attainment. We also look at the impact that older workers are having on the youth labour market, as well as the role that the business cycle plays in driving changes in youth employment.

We find that the business cycle determines a large part of the current woes of youth in the labour market, and that persistent slack in the economy is weighing most notably on the youngest segments of the working-age population. Age and sex also matter, with secondary-school aged workers and young men bearing the brunt of the labour market setbacks. This suggests that looking only at the average statistics for Canadians aged 15 to 24 can be misleading. Further, educational attainment is also important,

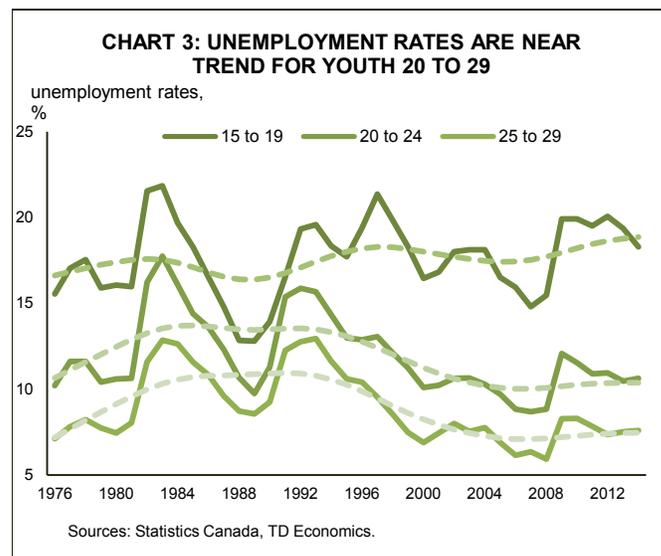
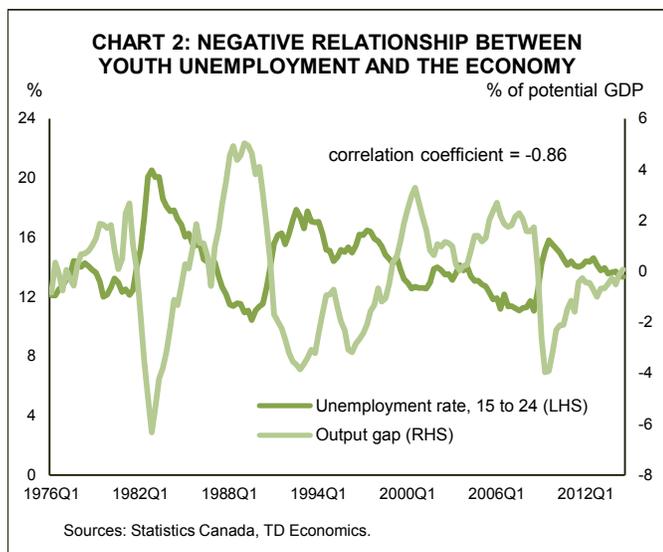


with women achieving higher levels of education, as well as higher employment rates and incomes, than men early in their career. Despite the oft-held view that the nation's youth are losing out to seniors in terms of part-time employment opportunities, older workers instead look to be displacing prime-aged workers. Finally, full-time employment among youth has remained fairly steady as a share of total employment over the past two decades, although there is evidence that these full-time jobs may be increasingly temporary.

Media coverage on the outcomes of 15-24 year olds in the job market tends to be quite bleak. Taken together, our findings paint a decidedly more mixed picture. Overall, youth unemployment remains unacceptably high and many young Canadians are facing much tougher conditions relative to a decade ago. But that period in the 2000s corresponded with a time of unusual economic strength in Canada. For the most part, key barometers are not dramatically out of line with their long-term trends. In other words, many youth in Canada today are encountering challenges finding a foothold in the job market, but this is not a recent phenomenon.

### The economy and youth employment

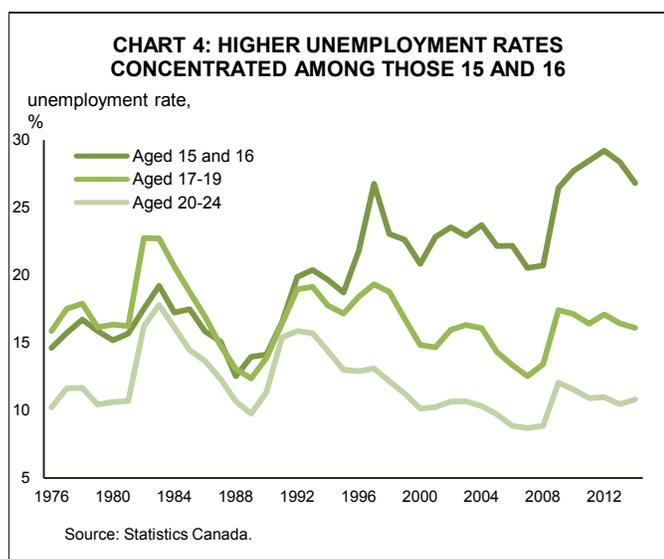
After reaching a peak of 16.4% in July 2009, the youth unemployment rate has gradually come down to reach 13.0% in November 2014. The youth unemployment rate is currently below the historical average (1976 to 2014) of 14.2% and slightly below the average of the past ten or fifteen years. Nonetheless, this remains above the 10.9% reached in August 2008 – a fact that is frequently cited as being an indication of a growing systemic problem in the youth labour market.



However, one needs to recognize that unemployment rates among all age groups were near historic lows at roughly the same point prior to the 2008-09 recession, reflecting an economy that was operating above its trend level. Unemployment rates are currently above their pre-recession trough for all age groups. It is important, therefore, to first discuss the impact that the state of the economy has on the labour market as a whole. In aggregate, this is captured by TD Economics as the relationship between the current level of real output of the economy and the potential level of output, known as the output gap (see [Potential to Improve: A Comparison of Canadian and U.S. Trend Output Growth](#)). As illustrated in Chart 2, the unemployment rate moves in the opposite direction of the output gap. This means that when the economy is doing well, the unemployment rate is subdued. The opposite is true when the economy is doing poorly.

### Age matters for employment

A common shortcoming of the commentary related to youth unemployment is the use of average statistics. By doing so, individuals within the 15-24 age category are painted with one brush. Yet the characteristics of individuals within this age group ranges widely from mid-high-school age to those that have achieved some form of post-secondary education and/or are competing in the job market. Further, Canadians aged 25 to 29, while not typically categorized as youth, exhibit very different labour market trends than the aforementioned two groups as well.<sup>2</sup> This group behaves more like older cohorts, as many of these individuals will have established themselves in the workforce.



### Higher unemployment rate among younger Canadians

Unpacking the numbers by age, a divergent trend comes to the fore. For instance, in November 2014, the unemployment rate among youth aged 15 to 19 was 17.8%, 0.2 percentage points (ppts) below its 1976 to 2014 average. At the same time, the unemployment rate among youth aged 20 to 24 was 10.4% in November 2014, 1.6ppts below its historical average. Meanwhile, Canadians aged 25 to 29 had an unemployment rate that was broadly in line with its long run average and much closer to that of Canadians aged of 25 to 54 (considered to be prime-aged).

Chart 3 provides more context of where youth unemployment rates currently stand relative to history by stripping out the impact of the business cycle. In comparing these trend unemployment rates with actual unemployment rates, it becomes clear that the unemployment rates are in line with their long-term trend for Canadians aged 20 to 24 and 25 to 29, with only the unemployment rate among youth 15 to 19 having fallen below trend, albeit modestly. Further, it is worth noting that while the trend unemployment has been generally falling over time among Canadians aged 20 to 29, the opposite is true for those 15 to 19, which have seen a modest trend increase in their unemployment rate over the past four decades.

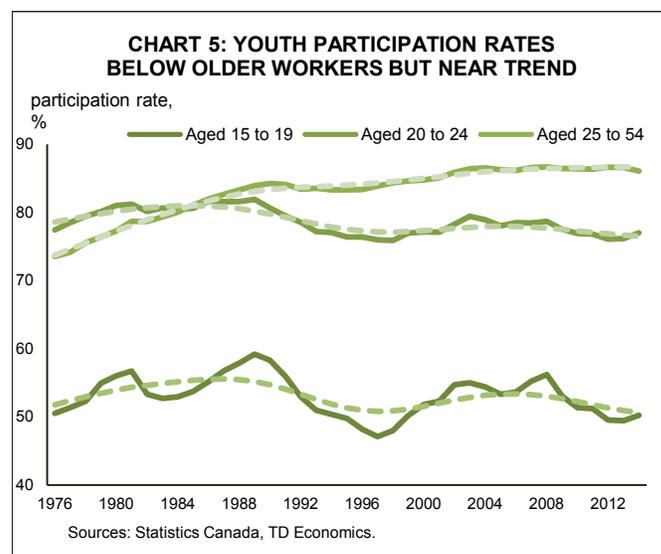
### Trends among 15 and 16 year olds driving the numbers

Looking more closely at Canadians aged 15 to 19, we see that much of the high unemployment rate is being driven by youth aged 15 and 16 (Chart 4). The unemployment rates of these youth experienced a secular increase beginning in the early 1990s, while the unemployment rates of Canadians

aged 17 to 19 fell. Additionally, 15 and 16 year olds bore the brunt of higher unemployment rates during and after the 2008-09 recession, whereas the unemployment rates among the other youth were much less affected. Indeed, if these youth were to be excluded from the unemployment rate, the youth unemployment rate for would have been lower by 1.4ppts, on average, in the 2010-2014 period. Further, the trend among youth aged 17 to 19 looks very similar to that of Canadians aged 20 to 24, suggesting a disproportionate share of the high youth unemployment rate is concentrated among youth aged 15 to 16. As can be observed in Chart 4, actual unemployment rates for these particularly young individuals tends to experience greater oscillations around the trend line since they can move in and out of the workforce with frequency.

### Other labour market indicators are telling a similar story

The unemployment rate can paint a misleading picture of labour market conditions. For example, rather than increased hiring, a decline in the unemployment rate may be the result of a falling number of people in the labour force, which can be a negative outcome. Accordingly, it is also important to examine trends in the participation rate (defined as the labour force as a share of the population) and the employment rate (defined as employment as a share of the population). By these measures, notable differences also stand out across different age groups. For instance, the participation rate for 20 to 24 year olds actually peaked in March 2003 and has experienced a trend decline since (Chart 5). However, the same cannot be said for their employment rate, which fell sharply during the 2008-09 recession and has remained broadly unchanged since (Chart 6). The same is



true for the employment rate among Canadians aged 15-19, although their participation rate also dropped sharply during the recession and has remained roughly unchanged since. This said, the most dramatic declines in the employment and participation rates remain concentrated among 15 and 16 year olds, reinforcing the view that the weakness in the youth labour market is not as wide spread as many believe. Further, these trends are similar to those observed following previous downturns.

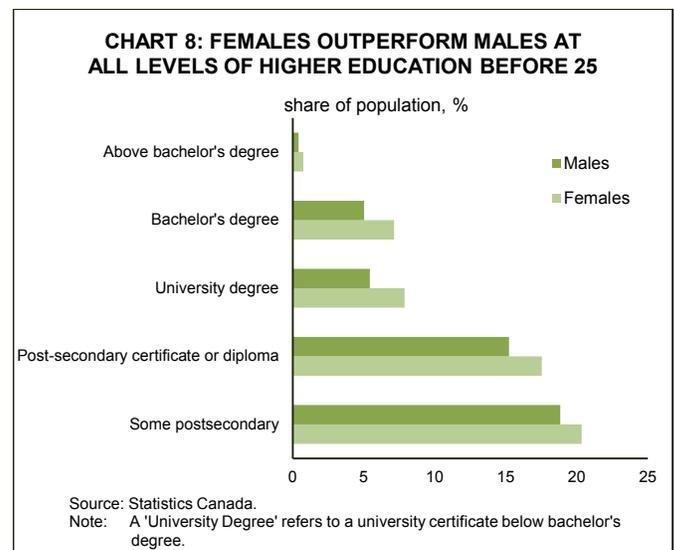
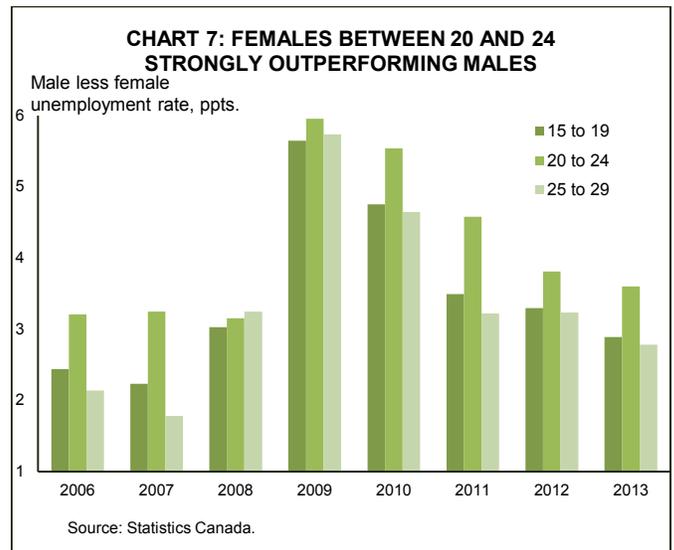
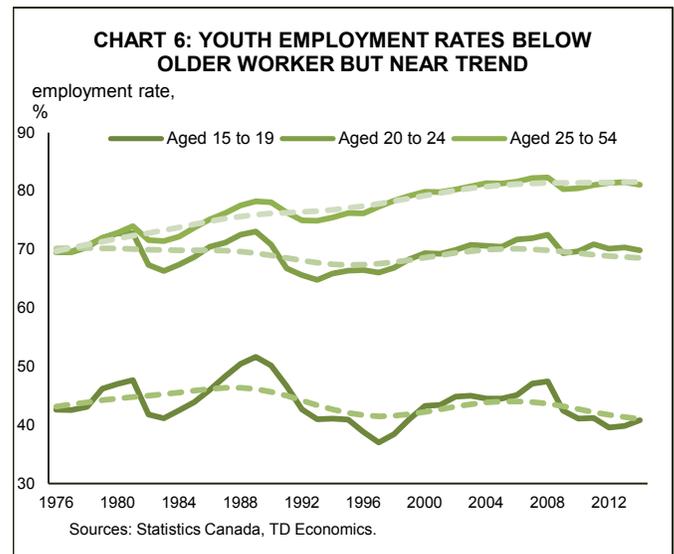
**The gender divide**

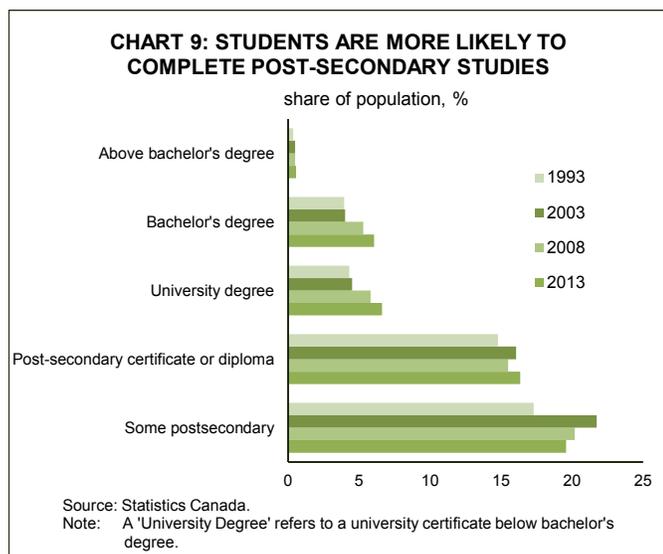
Beyond age, there is also a notable divide between the sexes among youth. For instance, in November 2014, the unemployment rate among men aged 15 to 24 was 14.0%, whereas for young women it was 12.0%. This should come as no surprise however, as the unemployment rate among men in the general population has been higher than that of women since the early 1990s. More specifically, this gender gap is much more pronounced among Canadians aged 20 to 24, on average, than it is for those 15 to 19 or 25 to 29 (Chart 7). (For more information on female participation in the labour force, see [Falling Female Labour Participation: A Concern](#).)

*Education attainment among women surpasses men*

The higher unemployment rate among male youth may in part be explained by a larger proportion of women being enrolled in and completing post-secondary education than men between the ages of 20 and 24. Chart 8 illustrates the proportions of males and females between the ages of 15 and 24 in their respective populations that have some level of post-secondary education. Regardless of the level of education, a larger portion of women have completed their studies than their male contemporaries. As such, it should come as no surprise that women aged 20 to 24 have a lower unemployment rate than men, as the likelihood of being employed increases with level of education.

Further, we see that the difference in the male and female unemployment rates tends to rise during recessions and fall back gradually during recoveries. This can in part be explained by the fact that women are more likely to work in service industries, which are well known to be much less cyclical than goods-producing sectors. For instance, after reaching its peak in July 2008, monthly real GDP had fallen by 4.5% as of May 2009, due to a 12.6% decline in goods-sector output and a 0.9% decline in services-sector output. Over the same period, total employment fell by 1.7%,





resulting from a 7.8% decline in goods-sector employment which was marginally offset by a 0.2% increase in services-sector employment.

### More on the trends in education

Education is often used as a fall back option when jobs are scarce during economic downturns, particularly for youth. Comparing the share of post-secondary education attainment for Canadian youth over time, we see that educational attainment has increased across most levels of post-secondary education since the 2008-09 recession (Chart 9). Of course, some of this does reflect the secular decline in primary and secondary school drop-out rates and increased in post-secondary enrollment. That said, educational attainment at the post-secondary level also looks to be strongly influenced by the ebb and flow of the business cycle.

### Student unemployment rates higher than non-students

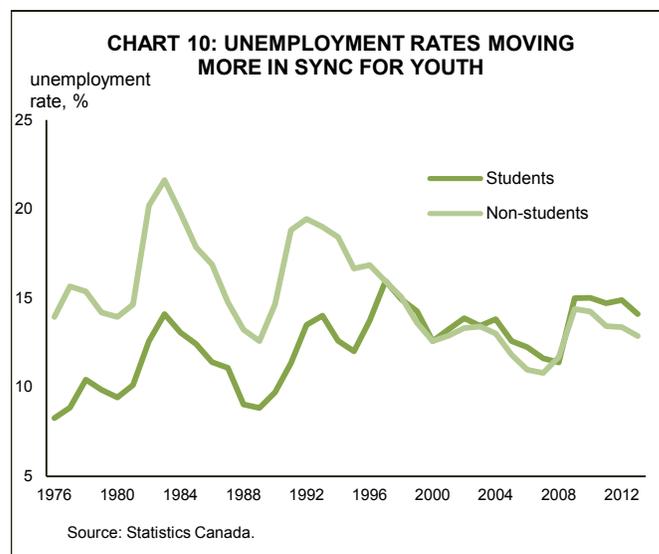
Looking to Statistics Canada data, we see that the unemployment rate among students aged 15 to 19 was 19.2% in 2013, but dropped to 7.4% for students aged 20 to 24. While the latter group had a lower unemployment rate than their non-student peers (11.7%), the unemployment rate for non-students aged 15 to 19 was slightly lower than their student peers (18.7%). This may reflect either 15 to 19 year olds leaving the labour force entirely after leaving school or, alternatively, leaving school to pursue pre-existing employment opportunities. That said, for youth aged 20 to 24, while the unemployment rate is higher for non-students than for students, the current unemployment rate among non-students is down from the recessionary peak (12.8% in 2010) and equivalent to the unemployment rate in 2003.

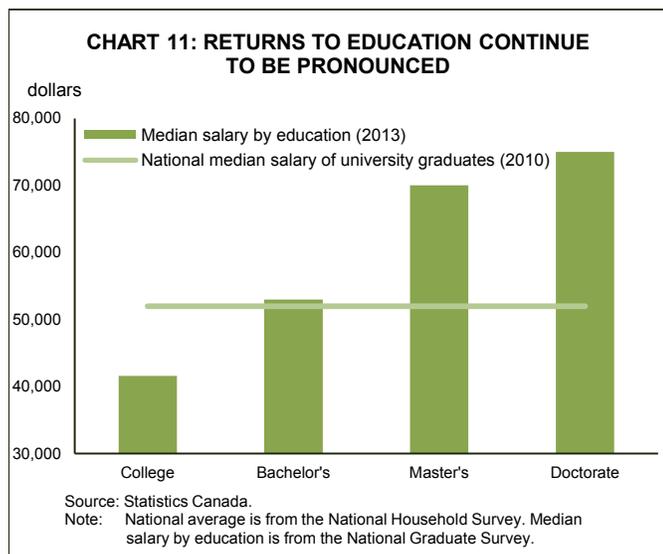
Overall, Chart 10 illustrates that the unemployment rates of student and non-student youth have been of roughly the same magnitude and have moved more in line with one another since 1997, when the unemployment rate for non-students came down to meet that of students.

Looking more closely at non-student youth, the Organization for Economic Cooperation and Development (OECD) publishes a useful statistic which tracks youth that are not in employment, education or training (NEET).<sup>3</sup> This shows that youth inactivity was 7.3% in 2012 for Canadians aged 15 to 19, equal to the pre-recession levels in 2006 and 2007, while that of Canadians aged 20 to 24 was 14.8% in 2012, lower than the 15.3% peak reached in 2010 but still higher than the 13% to 14% range observed from 2006 to 2008. This suggests that those Canadians aged 20 to 24 that are not in employment, education or training are struggling to find their footing. This said, compared to other G7 countries, Canada still fares well. Only Germany has recorded a lower NEET share than Canada for both aged groups, with France also having a small advantage among those 15 to 19.

### Youth job quality and opportunity are mixed

At the end of the day, statistics on unemployment say very little about youth job quality and opportunity. Hence, it is helpful to complement those data with other analysis. For instance, research by Statistics Canada using the Adult Literacy and Life Skills Survey suggests that, among the youngest age group (16 to 35), there tends to be a pronounced mismatch between the people with medium to high literacy skills who have jobs that engage only medium-low literacy skills. This mismatch is much more evident for





youth than for older workers, suggesting a possible greater degree of underemployment.<sup>4</sup>

However, the phenomenon may be temporary, possibly reflecting the timing of skills development relative to the state of the business cycle. As such, pursuing further education amid a dearth of economic opportunity is generally seen as a reasonable strategy to pursue, as it can be thought of as an investment in increasing future earnings. According to analysis based on the 2013 National Graduates Survey (NGS)<sup>5</sup>, there was essentially no difference between the employment rates among recent graduates with college or bachelor's degrees in 2010 than was the case in 2005. This suggests that most graduates of post-secondary institutions are having just as much luck finding employment in good times as in bad. Indeed, in 2010, 90% of 2009-10 college graduates surveyed were working, as were 92% of bachelor's and master's graduates and 93% of doctoral degree holders.

Beyond employment rates, roughly 80% of employed college and bachelor graduates reported a 'close' or 'somewhat close' relationship between their job and their education three years after graduation. The share was even higher for master's and doctoral graduates, reaching 92% and 96% respectively. However, this still implies that roughly one in five undergraduates is employed in an area that does not closely align with their formal training.

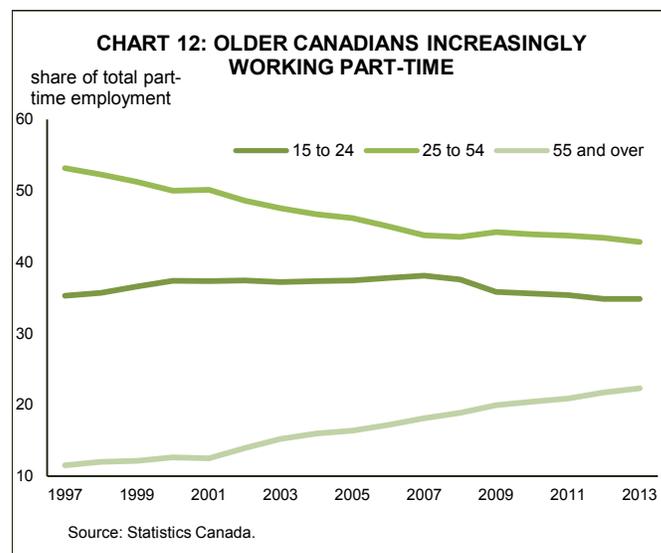
The NGS survey also shows that salaries have also continued to increase for this group, with median, inflation-adjusted salaries rising for both college and Bachelor's graduates by 8% and 7%, respectively, since the release of the previous NGS in 2008. For college graduates surveyed,

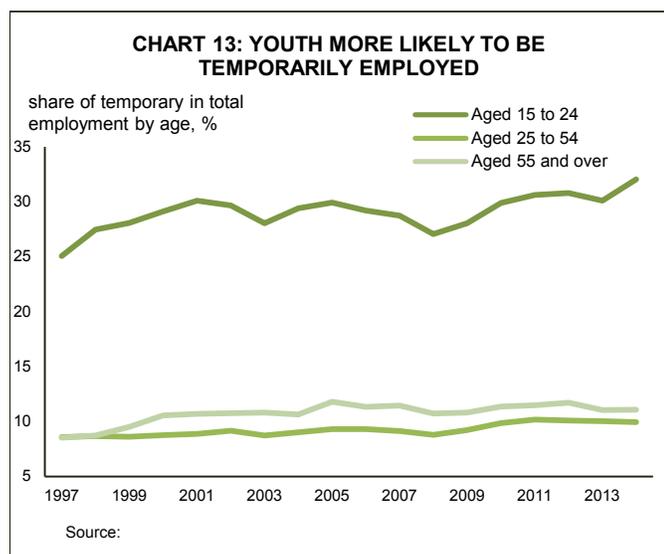
the median estimated earnings before taxes in 2010 were \$40,600 three years after graduation. For bachelor's graduates, the median was \$53,000, while median earnings for master's graduates were \$70,000 and \$75,000 for doctoral graduates. Chart 11 illustrates these findings, comparing the median income in Canada with the median salary by level of education just three years after graduation. Considering that the median salary of Canadians with a completed university education or higher was about \$53,000 in 2010, an obvious conclusion to reach is that, at least for most people, post-secondary education pays off.

## Types of jobs and who's getting them

### Youth continue to get the part-time jobs

The Canadian population is getting older. As the baby boomers age, this has the potential to affect the nature of employment across the age distribution. As such, concerns have been voiced that older Canadians are taking part-time jobs away from Canadian youth. This view is premised on the fact that older Canadians are making up an increasingly large share of part-time employment. Since 1997, the share of part-time employment undertaken by Canadians aged 55 and over has nearly doubled, from 11.5% to 22.3% in 2013 (Chart 12). However, part-time employment among Canadians aged 15 to 24 is broadly unchanged over time, as their share remains around 35%. This is also important as the share of youth in the labour force is falling along with its population, meaning part-time employment is likely becoming the increasingly preferred choice for labour market engagement among youth. Instead, it is Canadians aged 25 to 54 that have seen their share of part-time employment





decline, falling from around 53% in 1997 to just shy of 43% in 2013. (For more information on part-time employment in Canada, see [Part-Time Nation: Is Canada Becoming a Nation of Part-Time Employed?](#))

At the same time, the reasons that youth are choosing to work part time hasn't changed much over the years. For instance, going to school is still the top reason for working part time among youth, increasing from 66.4% in 1997 to 71.7% in 2013. The increase is largely driven by an increase in women working part time while going to school, rising from 63.4% to 71.2% over the same period (the same share was broadly unchanged for men). Another interesting trend for young women is related to their working part time for child care reasons, the share of which in 2013 was less than half of what it was in 1997. This fits well with the results of the most recent population estimates from Statistics Canada, which showed that the fertility rate among women aged 35 to 39 exceeded that of women aged 20 to 24 for the first time in 2013. Looking to involuntary part-time employment among youth, the share of involuntary part-time employment in total youth part-time employment remains slightly elevated relative to the 10-year and 15-year averages, at 8.6%. However, this share has been essentially unchanged since 2005 and is lower than the 17.7% share of involuntary-to-total part time for the population aged 25 to 54.

#### *Youth employment is getting increasingly temporary*

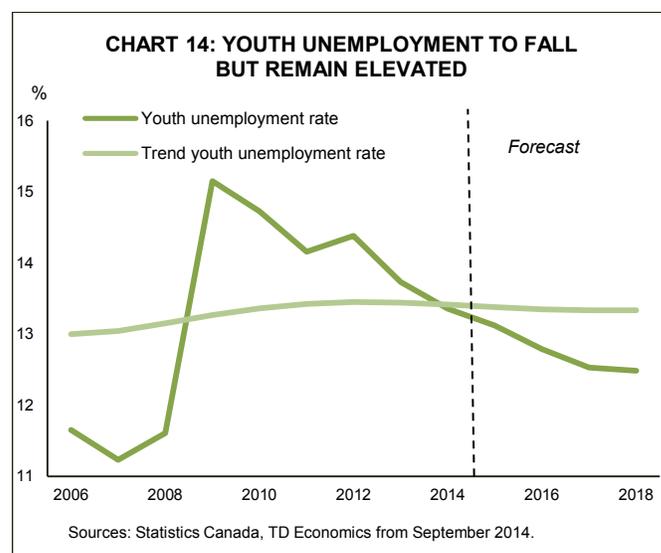
Since changes in part-time employment don't appear to be driving youth unemployment, we must therefore look to full-time employment. Indeed, the share of youth full-time employment in total youth employment saw a spectacular

decline from the mid-1970s through mid-1990s, falling from around 80% to just over 50%, and has remained roughly unchanged since. While the recent recession impacted this somewhat, the impact was small but concentrated among females. This could be related to the fact women are increasingly likely to be participating in secondary and post-secondary education in this age group, thereby reducing their likelihood of pursuing full-time employment at that age.

Finally, another possibility is that work is becoming increasingly tenuous among youth, leaning more toward temporary employment. Temporary jobs are defined as those that have a pre-determined end date or are slated to end after a specific job is completed. Temporary jobs tend to pay lower wages, offer fewer benefits (medical and pension), are less likely to offer on-the-job training, and are more precarious in nature.<sup>6</sup> Canadians aged 15 to 24 are more likely to work on a temporary basis today than at any other point since the data began being collected in 1997 (Chart 13). At just over 30% of total youth employment, temporary employment rose quickly from 25% in 1997 to 30% in 2001. Since then it has been trending up but continued to hover around 30%, fluctuating with the ebb and flow of the business cycle. This share is much higher than for Canadians aged 25 to 54 and 55 and over (at around 10% and 11%, respectively).

#### **Something to look forward to**

As was discussed earlier, the state of the youth labour market is highly (negatively) correlated with the state of the economy. As such, the youth unemployment rate can also be expected to move closer to its trend level as the economy returns to its level of potential output. We expect the output gap to close by mid-2015 and remain moderately positive



for several years. As a result, the youth unemployment rate is expected to fall moderately below its current and trend level through 2018 (Chart 14).

### Bottom line

In this review of the youth labour market in Canada, we have come across several interrelated trends.

- The first is that the business cycle has a significant impact on the state of youth unemployment, and that much of the youth unemployment today is related to the state of the business cycle. As the economy returns to its potential level of output, the youth unemployment rate can be expected to gradually return to its trend level as well.
- Second, labour market conditions depend on age, with much of the higher than trend youth unemployment rate being driven by Canadians aged 15 and 16. Indeed, the older the age group, the closer it appears to be to its trend. Further, among Canadians aged 15 to 19, there appears to have been a trend increase in the unemployment rate over time, again largely attributed to Canadians aged 15 and 16.
- The third is that sex matters, as young women are more likely than men to pursue and complete post-secondary education. As a result, the labour market outcomes for women in this group are better than for men. Given that Canadians with a post-secondary education earn more than Canadians without, even early in their careers, this bodes well for lifetime income growth.

- Fourth, the returns to education continue to be significant and the pursuit of post-secondary education may explain some of the underlying trends in the youth labour market. That said, there is some evidence that youth may be underemployed relative to their average levels of literacy, although the returns to education continue to be significant in spite of this.
- Lastly, older Canadians are not displacing younger Canadians in the labour force. While older Canadians are taking up a larger share of part-time employment, this is coming from prime-aged Canadians and not youth. Further, the low share of involuntary part-time employment among youth when compared to other age groups should come as some relief. Full-time employment among youth has also remained steady as a share of total employment over the past two decades, although there is evidence that this full-time employment may be increasingly temporary, which is of concern.

Taken together, these trends suggest the problems that are said to exist in the Canadian youth labour market may not be as severe as some commentators suggest. Nonetheless, as prolonged unemployment in youth is known to lower lifetime earnings and future employment prospects, youth unemployment or underemployment is a serious matter. As such, while policies that facilitate effective skills development and retraining, labour market mobility, and increased hiring are important for a flexible and dynamic labour market, new policies targeted at increasing youth unemployment exclusively may not be warranted.

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**End Notes**

1. [http://www.td.com/document/PDF/economics/special/ms0113\\_YouthUnemp.pdf](http://www.td.com/document/PDF/economics/special/ms0113_YouthUnemp.pdf); [http://www.td.com/document/PDF/economics/special/ff0813\\_YouthUnderemployment.pdf](http://www.td.com/document/PDF/economics/special/ff0813_YouthUnderemployment.pdf).
2. This group is important as, according to the National Graduate Survey (NGS), the median and average age for completing a bachelor's degree in Canada is 24 and 26, respectively.
3. <http://data.oecd.org/youthinac/youth-not-in-education-or-employment-neet.htm>.
4. <http://www.statcan.gc.ca/pub/89-604-x/89-604-x2011001-eng.pdf>.
5. <http://www.statcan.gc.ca/daily-quotidien/141114/dq141114b-eng.pdf>; <http://higherstrategy.com/early-results-from-the-national-graduates-survey-the-good-news/>.
6. <http://www.td.com/document/PDF/economics/special/JobInCanada.pdf>.

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