## Tiff Macklem: A measure of work

Remarks by Mr Tiff Macklem, Senior Deputy Governor of the Bank of Canada, to the Winnipeg Chamber of Commerce, Winnipeg, Manitoba, 4 October 2012.

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### Introduction

Good morning and thank you for the invitation to speak here today. I am pleased to be in Winnipeg, a city that is boldly preparing for the job market of the future. From programs that help new immigrants, to connecting job opportunities with older workers, Winnipeg and Manitoba are providing innovative solutions to the challenge of matching workers with jobs and jobs with workers.

My remarks today will also focus on jobs.

The mandate of the Bank of Canada is to mitigate "fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of Canada."

We learned from bitter experience in the 1970s that the best way for the Bank to fulfill this mandate is to keep inflation low, stable, and predictable. Since 1991 – now more than 20 years ago – this objective has been formalized with an inflation target, and since 1995 the target has been to achieve an annual rate of inflation of 2 per cent, as measured by the consumer price index (CPI). The target is reviewed every five years and was most recently renewed in 2011.[1]

With low, stable and predictable inflation, Canadians can have confidence in the value of their money. That's one less thing they have to worry about. But there is more. Controlling inflation is also a means to an end. Low, stable and predictable inflation paves the way for solid economic growth and a well-functioning, stable and healthy labour market.

Having a job is one of the most important measures of an individual's economic and financial welfare. How well, then, has our inflation-targeting monetary policy succeeded in mitigating fluctuations in the level of employment? How have the benefits been distributed across different segments of the labour market? How has monetary policy supported a better-functioning or more efficient labour market? And what is the health of our labour market today and its prognosis looking ahead?

I am going to address these questions in three parts. In Part 1, I will scan back over the past four decades, comparing labour market performance in Canada before and after the introduction of inflation targeting. In Part 2, I will focus on labour market outcomes through the most recent cycle of recession and recovery. And in Part 3, I will comment on the challenges and opportunities that lie ahead.

### Labour markets before and after inflation targeting

A picture of inflation is worth a thousand words. As depicted in ***Chart 1***, the change in the behaviour of inflation since the adoption of inflation targeting is stark. Both the average level and the variability of inflation have fallen dramatically.[2] Since 1991, inflation in Canada has averaged 2 per cent, as measured by the CPI, and its standard deviation has fallen by roughly two-thirds, compared with the 1970s and 1980s (***Table 1***).

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1 Bank of Canada, "Renewal of the Inflation-Control Target: Background Information – November 2011."

2 D. Longworth, "Inflation and the Macroeconomy: Changes from the 1980s to the 1990s," *Bank of Canada Review*, Spring 2002.

This low, stable and predictable inflation has been associated with more stable economic growth in Canada and lower and less-variable unemployment. The average rate of unemployment has fallen, and fluctuations in unemployment as measured by its standard deviation have been reduced by about one-third.

Importantly, more stable growth since we began inflation targeting has reduced the cyclical fluctuations in unemployment for workers in all age and educational categories. Moreover, fortuitously, the most vulnerable workers have benefited the most (***Table 2***). Unemployment rates for younger workers and those with less education are typically more variable than those for well-educated prime-age workers. And it is these same groups that have experienced the largest decline in variability with the adoption of inflation targeting. So the benefits of greater stability have been shared across the workforce, and workers with the largest fluctuations have seen the greatest improvement.

Better labour market outcomes over the past 20 years have also been accompanied by improved labour market efficiency. The Beveridge Curve measures how well labour markets are matching job vacancies with workers looking for jobs (***Chart 2***).The closer the Beveridge Curve is to its origin (zero vacancies and unemployment), the more efficient the labour market. As shown, the curve in the 1980s (blue line) has a higher level of unemployment for a given level of vacancies than the curve in the 1990s and early 2000s (red line).[3]

Of course, improved labour market performance reflects a broad spectrum of public policies and private sector initiatives, from employment insurance to education and training, active labour market programs, procurement practices, and licensing and residency requirements for employment.

Nonetheless, there is no doubt that better monetary policy has been an important factor. The improved inflation environment has allowed consumers and businesses to manage their finances with greater certainty about the future purchasing power of their savings and income. Interest rates have also been lower and less variable in both nominal and real terms across a range of maturities. And by working to stabilize inflation, monetary policy has helped dampen economic cycles and mitigate fluctuations in employment.

In addition, there is direct evidence that low, stable and predictable inflation has improved the efficiency of labour markets by eliminating inflation uncertainty as an important friction in wage bargaining and allowing wage changes to provide genuine signals to market participants regarding the demand for and the supply of workers.

As inflation has become more stable and predictable, the variability of aggregate wages has declined. The standard deviation of labour income per worker has dropped by about 45 per cent. At the same time, with less uncertainty about inflation, the distribution of wage changes has narrowed. In the unionized private sector, the standard deviation across individual wage settlements fell by about a third, improving the efficiency of the labour market and the perception of fairness around wage setting.

In addition, since 1991, the average duration of labour contracts has almost doubled, from about 20 months to 39 months, and there has been less need for cost-of-living allowances (COLAs) in wage contracts (***Chart 3***). The number of labour contracts with COLA clauses has declined from 21 per cent to less than 5 per cent.

Longer contracts and less disagreement about future inflation have also meant fewer strikes. The hours lost to strikes peaked in the early-to-mid-1970s when inflation was at double-digit levels and uncertainty was high. Since then, the time lost has fallen sharply (***Chart 4***). Total hours lost to strikes fell by 66 per cent from the pre-inflation-targeting era to today. With

[3] Statistics Canada stopped collecting data on vacancies in 2003, since the widespread adoption of the Internet has changed the way vacancies are advertised.

inflation low, stable and predictable, workers and firms are spending less time and fewer resources negotiating and striking, and more time creating value and income.

### Recession and recovery

Let's fast forward from the past 40 years to the past five. Many workers in Canada felt the severe impact of the global financial crisis that began in 2007. When the United States fell into recession, Canada was affected through trade, financial, and confidence channels. But with our well-regulated financial system, a credible monetary policy framework and a record of fiscal prudence, monetary and fiscal stimulus proved highly effective in dampening the cycle and spurring the recovery.

Employment in Canada recovered quickly from the recession compared with previous recessions or the experiences of other G-7 countries (***Chart 5***). Some 430,000 jobs were lost in Canada during the recession. All of them have since been recouped and another 339,000 have been created.

This stands in stark contrast to the situation in the United States, where 8.8 million jobs were lost and only about half have been regained (***Chart 6***). The U.S. unemployment rate currently stands close to 1 percentage point above Canada's and a full 2 percentage points higher when measured on a like-for-like basis. And more than 40 per cent of unemployed U.S. workers have been out of work for more than six months, compared with only 18 per cent of workers in Canada (***Chart 7***). Long-term unemployment is particularly worrisome because workers who are out of a job for extended periods lose valuable job skills, making them less employable and more likely to give up looking for work. Indeed, labour market participation in the United States has declined by 2.5 percentage points more than it has in Canada (***Chart 8***).

Some commentators have suggested that while the Canadian economy has created more jobs, fewer manufacturing jobs and more service sector jobs have meant fewer high-paying full-time jobs. True, the share of service sector jobs has risen while manufacturing has declined. This is part of a longer-term trend. The share of employment in manufacturing has declined steadily across all advanced economies and Canada's experience is about average.

But the rest of the argument is myth. Since the trough, the vast majority of the new jobs created are full-time and in the private sector (***Chart 9***). And more than 90 per cent of them are in industries that pay average or above-average wages (***Table 3***). These new positions are in such fields as construction, utilities, health care and professional, scientific, and technical services.

Gauging the tightness of the labour market is a key element in assessing how close the economy is operating relative to its capacity, which, in turn, is an important indicator of inflationary pressures. With a relatively quick recovery in employment, much of the slack in the labour market following the 2009 recession has been taken up. Nevertheless, most indicators suggest that some slack remains (***Chart 10***).

The unemployment rate remains above its pre-crisis decade average. The duration of unemployment also remains above its pre-recession average and the number of people working part-time who would prefer to work full-time has come down only slowly. And the behaviour of wages is not pointing to generalized excess demand for labour. Wage growth has been modest (***Chart 11***).

The labour market is an important component of the Bank's assessment of the amount of excess supply in the economy. We continue to monitor the full range of labour market indicators, together with other relevant information, very closely as we seek to achieve the 2 per cent inflation target.

To the extent that the economic expansion continues and the excess supply in the economy is gradually absorbed, some modest withdrawal of the present considerable monetary policy stimulus may become appropriate, consistent with achieving the 2 per cent inflation target over the medium term. The timing and degree of any such withdrawal will be weighed carefully against domestic and global economic developments.

### The future labour market

In the five years since the start of the financial crisis, the most significant labour market challenge has been creating enough good jobs for workers. Over the next five years, the most important challenge is more likely to be finding enough good workers for jobs.

Even with some slack remaining in labour markets, firms are reporting – with increased frequency – difficulty in attracting suitable labour. Our own *Business Outlook Survey* indicates that labour shortages have gradually moved up across the country. And in the latest survey of small and medium-sized businesses by the Canadian Federation of Independent Business, "Shortage of skilled labour" has moved ahead of "Insufficient customer demand" as the top business constraint facing their members.[4]

Looking ahead, Canada's demographic trends will compound the scarcity of labour.[5] We are getting older, living longer and having fewer children. That means more workers retiring and fewer people to replace them. This will put upward pressure on wages and lead to adjustments to the composition and the nature of the labour force. For firms, attracting talent while retaining relevant expertise and institutional knowledge will be more challenging.

Confronting this challenge requires working on three margins: expanding the labour force; utilizing it more efficiently; and increasing labour productivity. Let me address each of these in turn.

### Expanding the labour force

Several segments of the labour force have potential for greater labour market participation. Let me highlight three.

First, older individuals may be enticed to stay longer in the workforce. Indeed, this is already happening. The labour market participation rate of workers over 50 has increased by more than 12 percentage points since 1995.

This is being facilitated by the fact that Canadians are, on average, healthier than ever and that more jobs today are knowledge-based. Corporate policies and technology that support more flexible working arrangements, together with targeted training and employment information programs, will be needed to further improve labour market access for aging workers.

On this issue, I know I'm preaching to the converted here in Manitoba. The innovative ThirdQuarter project initiated by you and your colleagues in the Manitoba Chambers of Commerce, which is helping to match employers with experienced workers over 50, is the sort of creative thinking we need to address our demographic challenges.[6]

Second – and this point is particularly important here in Manitoba – we must redouble our efforts to address unemployment among Aboriginal people. Their unemployment rate is above the Canadian average and their participation rate is lower. Moreover, the Aboriginal population is growing faster and has a higher proportion of young people than the overall

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[4] "September 2012 Results of SME Business Outlook Survey," Business Barometer, Canadian Federation of Independent Business, 3 October 2012.

[5] J. Boivin, "Aging Gracefully: Canada's Inevitable Demographic Shift" (speech to the Economic Club of Canada, Toronto, 4 April 2012).

[6] For details on the ThirdQuarter program, see: www.thirdquarter.ca.

Canadian population. Improving the access to jobs for Aboriginal people is the right thing to do for many reasons. The demographic squeeze is just one more reason. This all points to the importance of public and private initiatives to successfully launch the careers of more Aboriginal people in the workforce.

And third, immigration is critical for the growth of the labour force. Without immigration, the Canadian population would be expected to shrink over the next 50 years. And here again, Manitoba is serving as an example for others. When the federal government introduced Provincial Nominee Programs to influence the regional distribution of immigrants and allow the provinces to address local labour needs, Manitoba took the lead in using the program.[7] As a result, although foreign migrants to Canada are more naturally attracted to our largest urban centres, Winnipeg, and Manitoba more broadly, punch above their weight at attracting foreign migrants.

But attracting foreign migrants is only the first step. We must also tear down the barriers that keep educated and skilled immigrants from contributing to their full potential. Recent federal government initiatives to support improvements in the recognition of foreign credentials are a welcome step. Employers also have a role to play in revising their own hiring practices.

### *Improving the efficiency of the labour market*

The second margin is to get more of the labour force working.

This means ensuring that workers have the skills employers are seeking, which speaks to the importance of ongoing dialogue between industry, labour and institutions for post-secondary education.

It also means getting workers to where the jobs are being created. Migration has always been an important adjustment mechanism for the Canadian economy and we see signs that workers are, in fact, becoming more mobile. Recent Bank research suggests that long travel distances across Canada may not be as great a barrier to labour mobility as they once were.[8] Over the past decade and a half, people have moved from regions with excess labour to those with the tightest labour markets, leading to the convergence of unemployment, participation and employment rates (***Chart 12***). By 2011, the gap or disparity in employment rates across the 10 provinces was at its lowest level since 1976 (as far back as data are available) and not very different from the dispersion of employment rates across the United States.

Nonetheless, barriers to interprovincial migration that are not related to distance, such as differences in occupational licensing, remain an obstacle. The New West Partnership Trade Agreement could be an important step to bringing down such barriers, as could the 2009 amendments to the Agreement on Internal Trade (AIT).

### *Improving productivity*

The final margin is improving labour productivity. Indeed, over the longer term, productivity growth has the greatest potential to boost prosperity. Regrettably, it is also where our performance has been the worst.[9]

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[7] T. Carter, M. Pandey and J. Townsend, "The Manitoba Provincial Nominee Program: Attraction, Integration and Retention of Immigrants," IRPP Study No. 10, October 2010.

[8] D. Amirault, D. de Munnik and S. Miller, "What Drags and Drives Mobility: Explaining Canada's Aggregate Migration Patterns," Working Paper No. 2012–28, Bank of Canada, 2012.

[9] T. Macklem, "Canada's Competitive Imperative: Investing in Productivity Gains" (speech to Productivity Alberta, Edmonton, 1 February, 2011).

Productivity growth in Canada has ranged from disappointing to dismal. Since 2001, Canada's productivity growth has slowed to historically low rates and has languished well below U.S. rates. From 2000 to 2011, productivity growth in the Canadian business sector averaged 1 per cent annually, compared with 2.4 per cent in the United States. As a result, Canadian firms today are only 78 per cent as productive as U.S. firms.

While some aspects of Canada's productivity performance remain a puzzle, there are a number of clear facts that point to obvious remedies.

Workers that have more and better machinery and equipment (M&E) to work with, particularly information and communication technology (ICT), are more productive. And Canadian businesses on average invest less in M&E and ICT than their U.S. counterparts. Between 1987 and 2010, Canadian investment per worker in M&E and ICT averaged 76 per cent and 58 per cent, respectively, of that invested in the United States. By 2010, on average, Canadian workers had only about half as much M&E and ICT capital stock to work with as their U.S. counterparts.

With a persistently strong Canadian dollar, a widening competitiveness gap, low interest rates, strong balance sheets and increasing labour scarcity on the horizon, the imperative for Canadian businesses to invest in M&E has rarely been more compelling. Recent investment performance has been solid but not spectacular. We must do better than solid.

In addition to more M&E, workers need better skills. Canada has a well-educated workforce that ranks favourably when it comes to primary and post-secondary education. However, compared with U.S. firms, Canadian firms lag in the employment of workers with advanced degrees, in the educational attainment of their managers, and in on-the-job training. Canadian firms hire fewer employees with PhDs and other postgraduate degrees, especially in the sciences. Only one-third of managers in Canada have a university degree, compared with almost half of American managers.[10] And only about a third of adult workers receive job-related education and professional development training in Canada, compared with half in the United States.[11] Canadian firms need to put more emphasis on skills when hiring and invest more in training to enhance the skills of existing workers.

There are also other aspects to strengthening productivity growth, including research and development, innovation and developing new markets but I must conclude.

## Conclusion

The health of the Canadian labour market is vastly improved since the 1970s and 1980s. Low, stable and predictable inflation has been an important ingredient in this transformation. And Canadians can continue to rely on the Bank of Canada to deliver on its inflation target and, in doing so, support a better functioning and more stable labour market.

Canada's labour market has recovered from the recession better than most, and continues to expand at a modest pace. Most of the jobs created since the end of the recession have been full-time and in sectors that pay above-average wages. Much of the slack in the labour market has been taken up, and firms are increasingly facing difficulty in finding suitable labour. Nevertheless, some slack remains and can be expected to persist in the near term.

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[10] Institute for Competitiveness & Prosperity, "Management Matters", Working Paper No. 12, 2009; N. Bloom, "Management and Productivity in Canada: What Does the Evidence Say?," Industry Canada, Working Paper No. 2011–05, 2011.

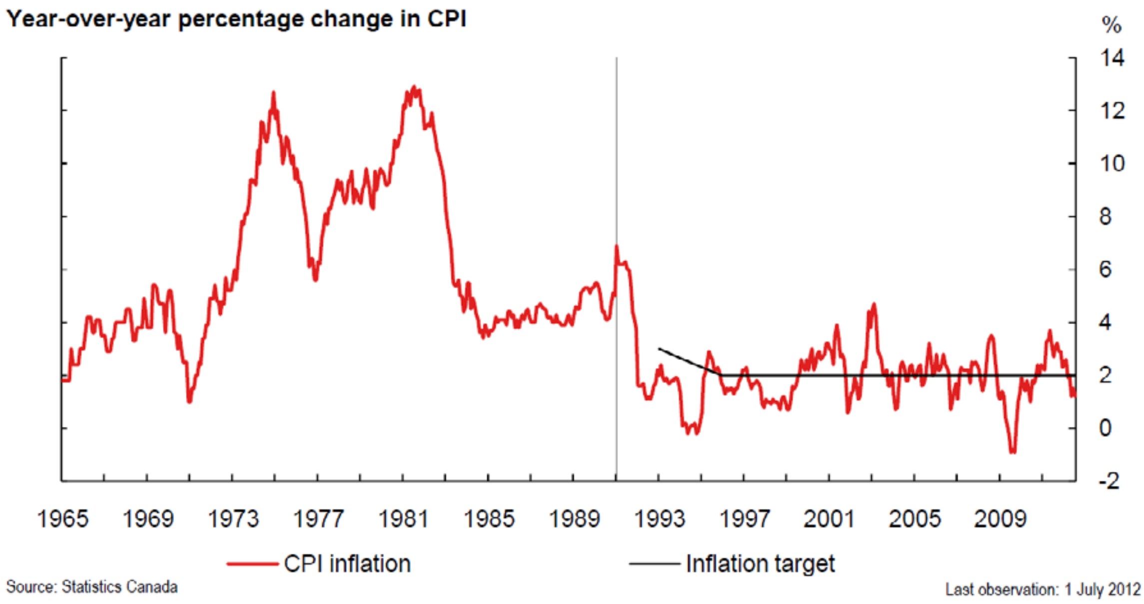
[11] M. Goldenberg, "Employer Investment in Workplace Learning in Canada," Discussion Paper for the Canadian Council on Learning, prepared by Canadian Policy Research Networks, 14 September 2006.

But looking ahead, as the slack is taken up and demographic trends slow the growth of the labour force, continued labour-market health will depend increasingly on reducing barriers to work, connecting workers with jobs, and facilitating a more mobile and more productive workforce.

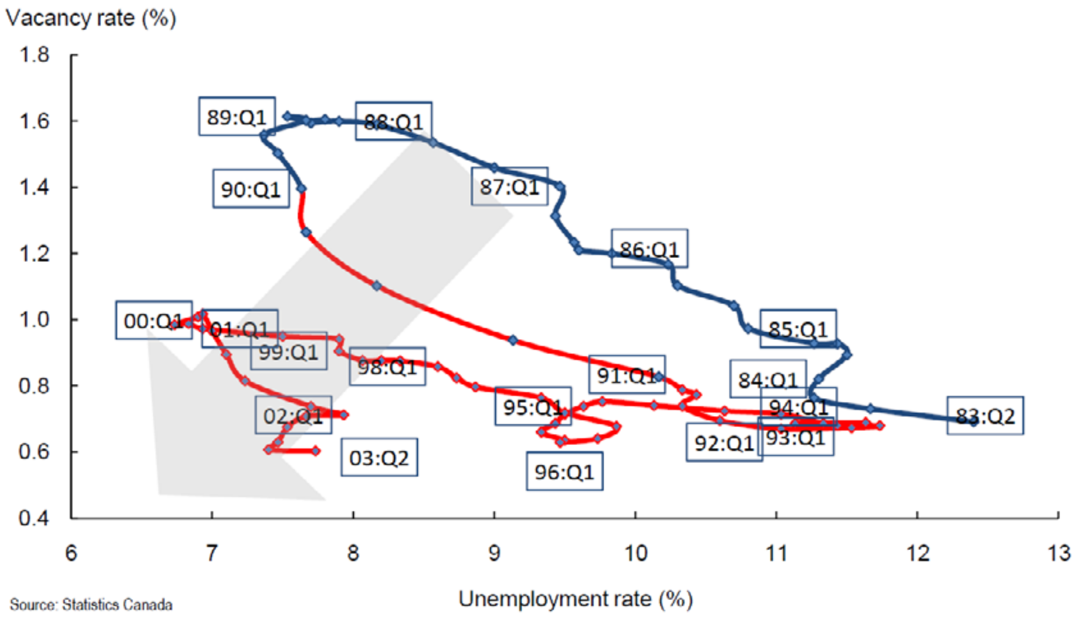
Thank you.

## Charts and tables

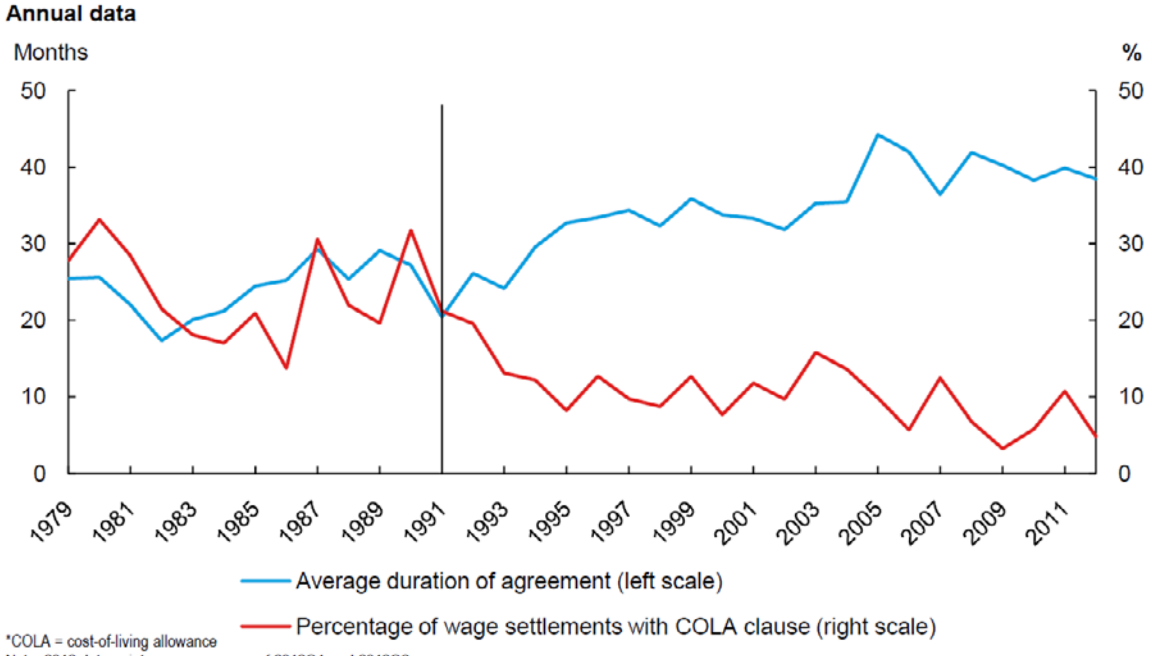
### Chart 1: Over the past 20 years, inflation has averaged 2 per cent




### Chart 2: Labour markets have become more efficient

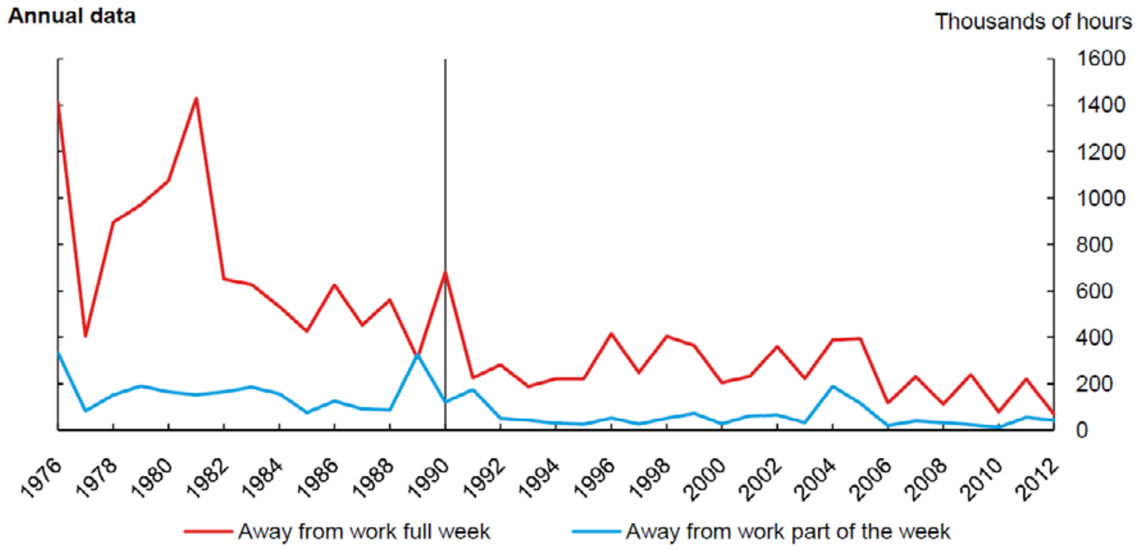


## Chart 3: Wage agreements are longer and fewer have COLA* clauses



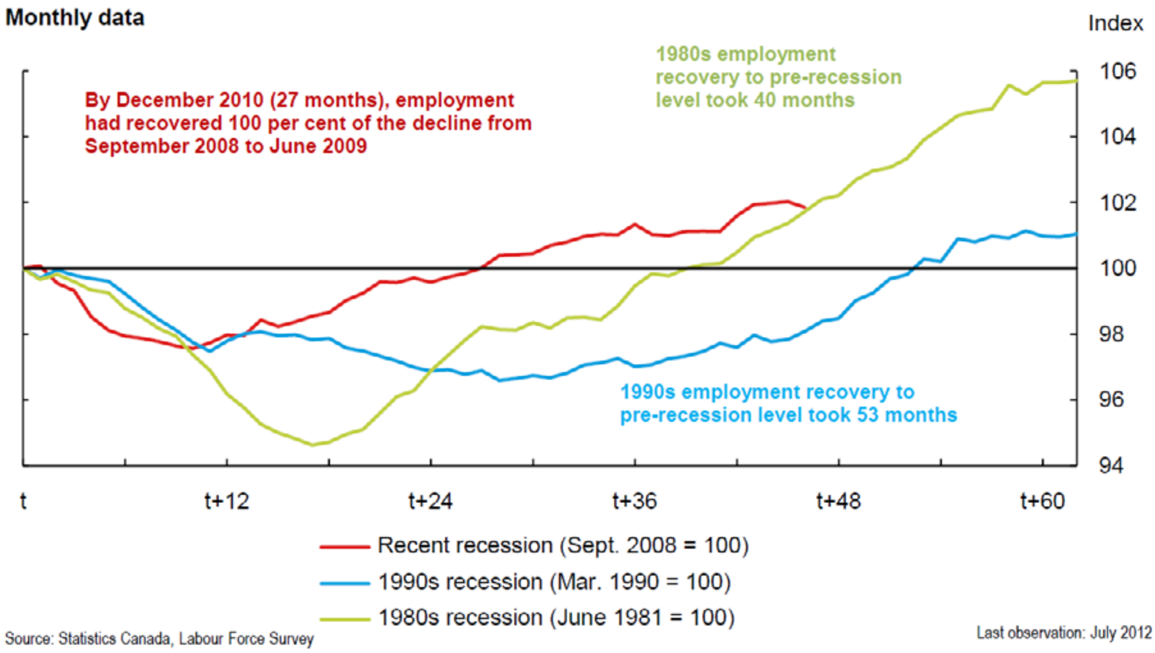

*COLA = cost-of-living allowance
Note: 2012 data points are an average of 2012Q1 and 2012Q2.
Sources: Statistics Canada and Bank of Canada calculations

## Chart 4: Time lost due to strikes has declined dramatically




Note: 2012 data points are an average of 2012Q1 and 2012Q2.
Sources: Statistics Canada and Bank of Canada calculations

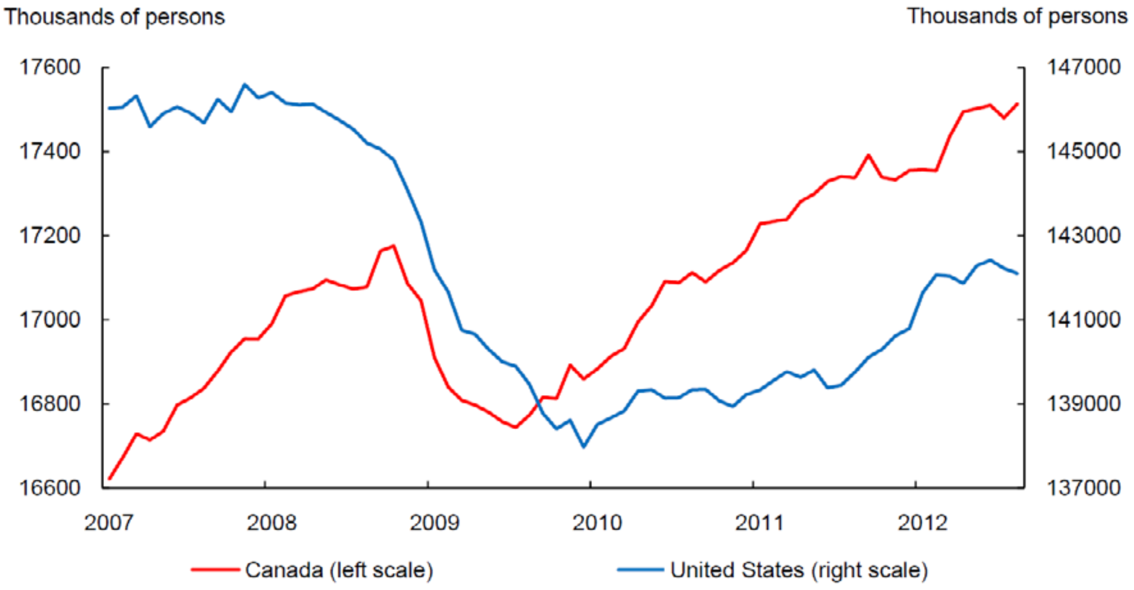
## Chart 5: Employment recovered faster than it did in previous recessions




Source: Statistics Canada, Labour Force Survey

Last observation: July 2012

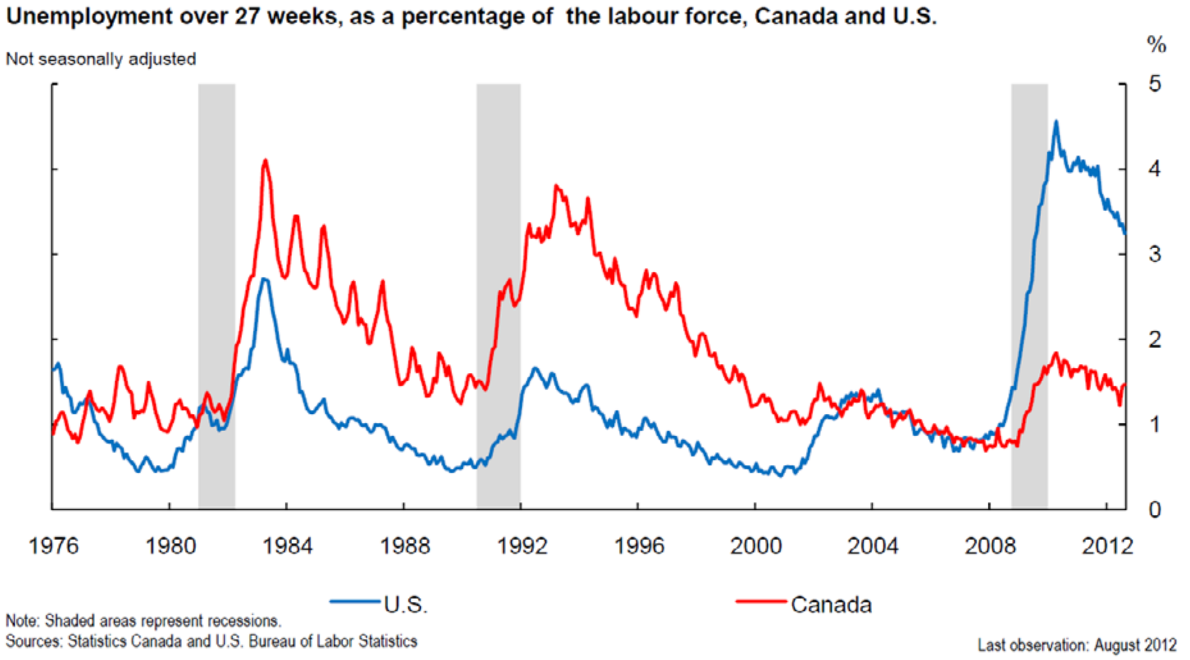
## Chart 6: Canada has more than fully recovered all jobs lost



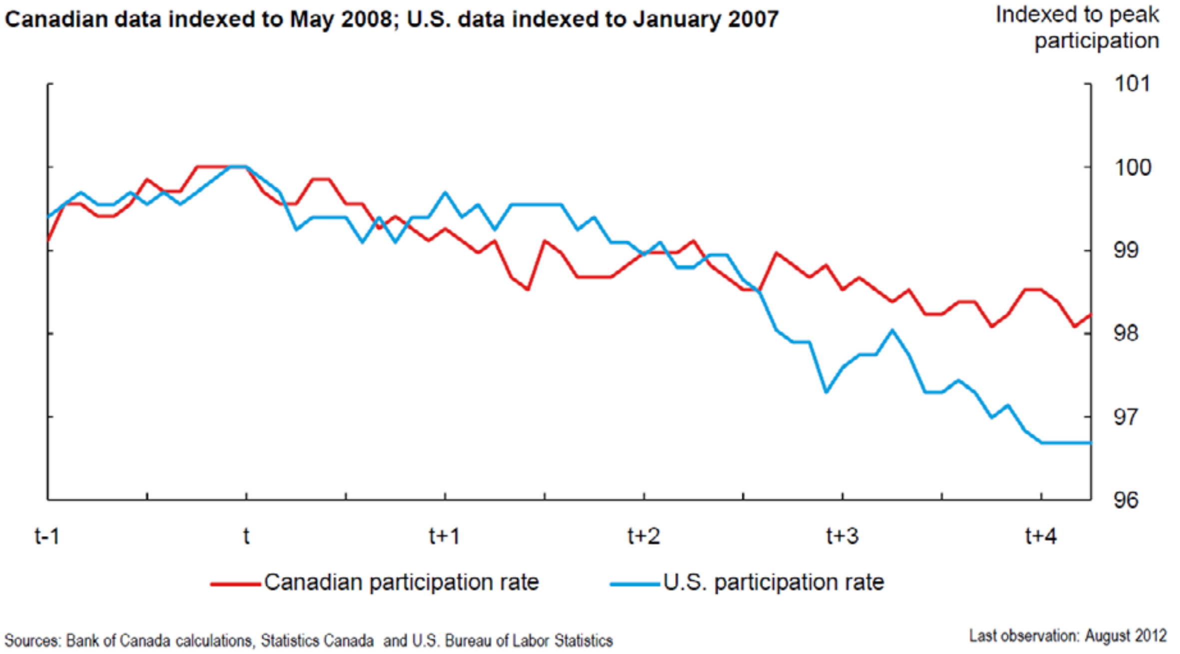

Sources: Statistics Canada and U.S. Bureau of Labor Statistics

Last observation: August 2012

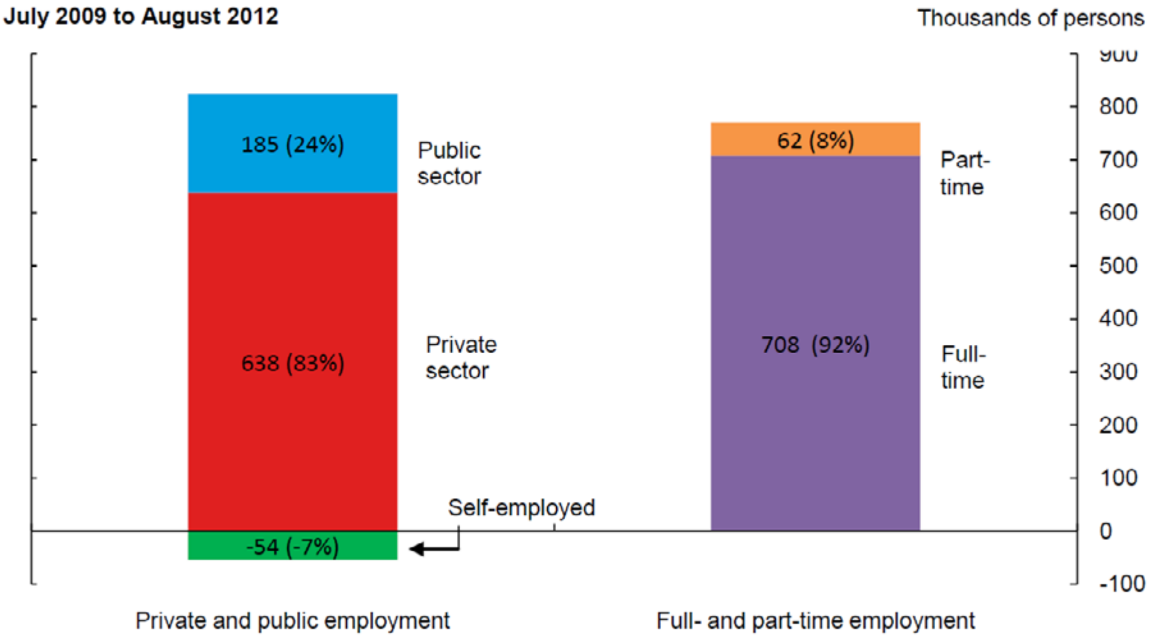
## Chart 7: Long-term unemployment is up more sharply in U.S. than Canada




## Chart 8: Canadian labour participation remains below peak but above U.S.



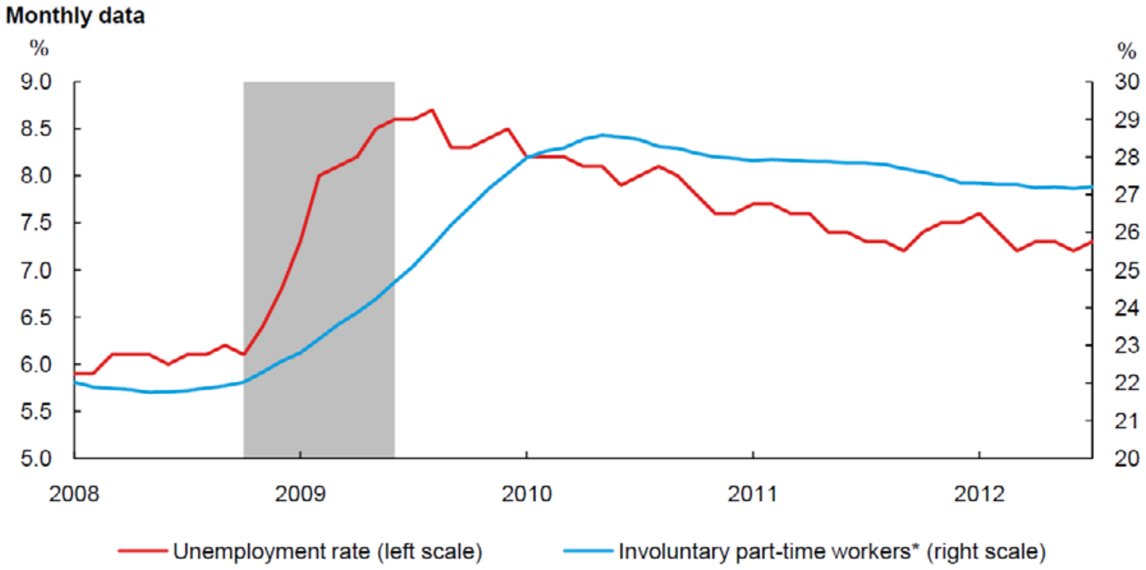
## Chart 9: Most new jobs are full-time paid employment in the private sector




Note: Self-employment decreased by 54,000 during this period and is not included in the private and public employment numbers
Source: Statistics Canada

Last observation: 1 August 2012

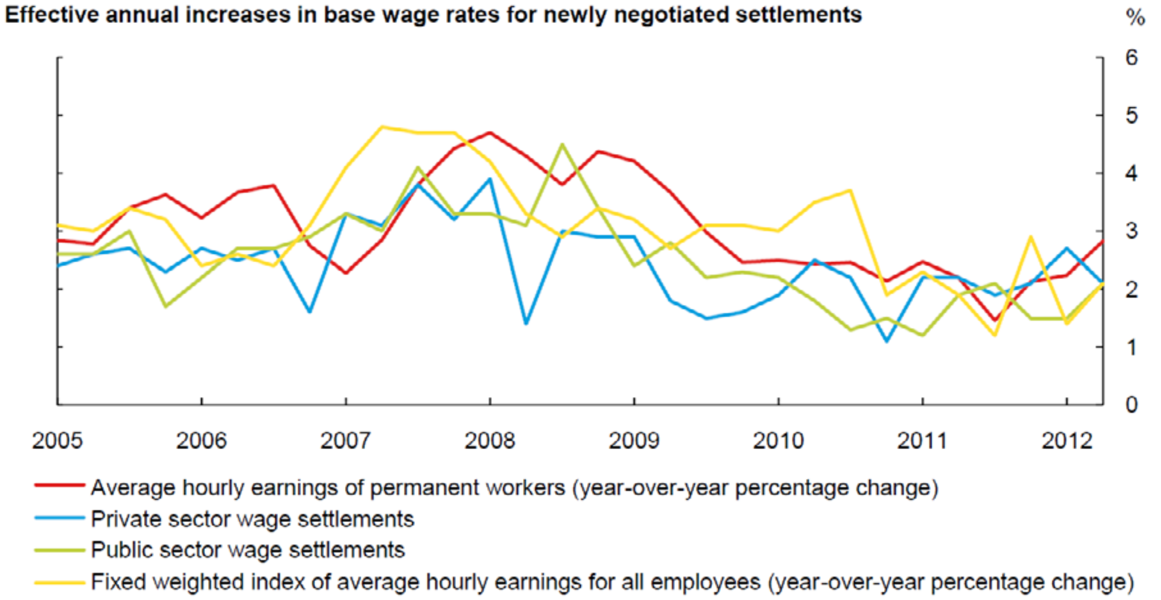
## Chart 10: Some slack remains in the Canadian labour market




Note: shaded area represents the recession period based on quarterly real GDP
*Expressed as a percentage of total part-time employment, seasonally adjusted, 12-month moving average
Source: Statistics Canada

Last observation: July 2012

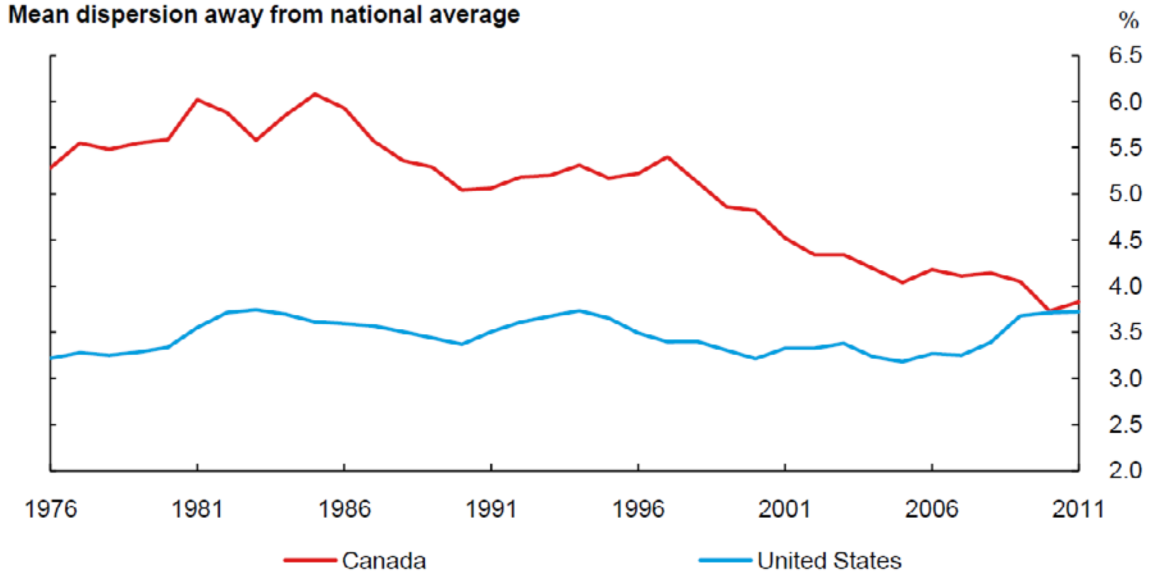
## Chart 11: Wage growth has been modest




Sources: Human Resources and Skills Development Canada and Statistics Canada

Last observation: 2012Q2

## Chart 12: Dispersion of employment rates within Canada and United States




Note: Data shown are average absolute dispersion of provincial employment rates away from the overall Canadian employment rate and the same for state employment rates away from the overall U.S. employment rate.

Last observation: 2011

Sources: Bank of Canada calculations, Statistics Canada and U.S. Bureau of Labor Statistics

## Table 1: Canada's economic performance, 1975-2012

| | Average (%) | | | Standard deviation | | |
|---|---|---|---|---|---|---|
| | 1975M1 to 1990M12 | 1991M1 to 2012M7 | 1995M1 to 2012M7 | 1975M1 to 1990M12 | 1991M1 to 2012M7 | 1995M1 to 2012M7 |
| **CPI: 12-month increase[a]** | 7.1 | 2.0 | 2.0 | 2.9 | 1.2 | 0.9 |
| **Real GDP growth[b]** | 3.0 | 2.5 | 2.6 | 3.6 | 2.6 | 2.5 |
| **Unemployment rate[c]** | 8.9 | 8.2 | 7.6 | 1.7 | 1.6 | 1.1 |
| **3-month interest rate[d]** | 10.9 | 4.1 | 3.5 | 3.0 | 2.1 | 1.8 |
| **10-year interest rate[e]** | 10.7 | 5.5 | 4.8 | 2.0 | 2.0 | 1.5 |

a. Year-over-year percentage change in total CPI
b. Annualized quarter-over-quarter growth rate for quarters within time period, ending 2012Q1
c. Unemployment data start in 1976M1, owing to the introduction of a new labour force survey at that time.
d. The 3-month interest rate refers to the 3-month prime corporate rate from Statistics Canada (Series v121812, Table 176-0041).
e. Owing to data availability, the 10-year interest rate refers to the over 10-year government bond yield prior to June 1982 (Statistics Canada, Series v121758, Table 176-0041); and after June 1982, it is based on the 10-year government bond yield from Statistics Canada (Series v121790, Table 176-0041).
Source: Statistics Canada

## Table 2: Unemployment has been less volatile with inflation targeting

| | | Unemployment rate–standard deviation | | |
|---|---|---|---|---|
| | | 1976M1 to 1990M12 | 1991M1 to 2012M7 | 1995M1 to 2012M7 |
| **Education** | Less than high school | 2.2 | 1.7 | 1.4 |
| | High school | 2.0 | 1.5 | 1.0 |
| | Some college | 1.5 | 1.6 | 1.2 |
| | Bachelor's degree or higher | 0.9 | 0.6 | 0.6 |
| **Age** | 15-19 years | 2.8 | 1.9 | 1.9 |
| | 20-24 years | 2.6 | 2.2 | 1.5 |
| | 25-34 years | 1.9 | 2.0 | 1.3 |
| | 35-44 years | 1.4 | 1.4 | 1.0 |
| | 45-54 years | 1.2 | 1.2 | 0.8 |
| | 55+ years | 1.3 | 1.3 | 0.9 |

Source: Statistics Canada

**Table 3: Most new jobs pay average or above-average wages**

| | Average hourly wage CAN$ August 2009 – August 2012 | % of average hourly wages August 2009 – August 2012 | Employment change since July 2009 (000s) |
|---|---|---|---|
| **All industries** | **22.85** | **100.0** | **770** |
| Agriculture | 14.95 | 65.4 | -10 |
| Forestry, fishing, mining, quarrying, oil and gas | 31.13 | 136.2 | 57 |
| Utilities | 33.64 | 147.2 | -5 |
| Construction | 24.50 | 107.2 | 101 |
| Manufacturing | 23.07 | 100.9 | 56 |
| Trade | 17.22 | 75.3 | -31 |
| Transportation and warehousing | 22.86 | 100.0 | 68 |
| Finance, insurance, real estate, leasing | 25.01 | 109.5 | 13 |
| Professional, scientific and technical services | 28.58 | 125.1 | 105 |
| Business, building and other support services | 17.16 | 75.1 | 51 |
| Educational services | 29.16 | 127.6 | 98 |
| Health care and social assistance | 24.03 | 105.1 | 206 |
| Information, culture and recreation | 22.18 | 97.1 | -9 |
| Accommodation and food services | 13.10 | 57.3 | 59 |
| Other services | 19.24 | 84.2 | 10 |
| Public administration | 30.55 | 133.7 | 1 |
| Public sector | 26.96 | 118.0 | 185 |
| Private sector | 21.44 | 93.8 | 638 |
| Self-employed | N/A | N/A | -54 |
| Full-time | | | 708 |
| Part-time | | | 62 |

| | Level (000s) | % of total |
|---|---|---|
| Total employment change in above-average wage industries | 575 | 75 |
| Total employment change in average wage industries* | 124 | 16 |
| Total employment change in below-average wage industries | 71 | 9 |

*Plus or minus 1% around average

Source: Statistics Canada