OBSERVATION

TD Economics

October 23, 2014

ONE INDICATOR TO RULE THEM ALL

TD LABOUR MARKET INDICATOR PROVIDES BALANCED SNAPSHOT OF JOB CONDITIONS

Highlights

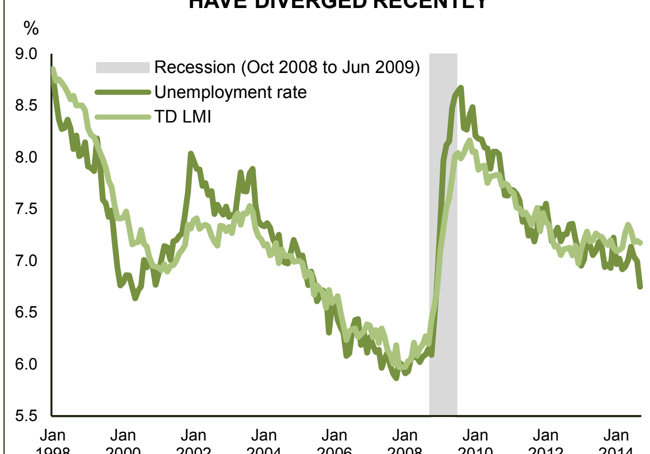
- When it comes to gauging Canada's labour market, changes in employment and the unemployment rate grab the headlines. However, commentators often overlook other important, but less prominent, labour market data.
- In order to take advantage of this additional information without creating confusion by examining a deluge of numbers, TD Economics has created a single Canadian Labour Market Indicator (LMI) that is scaled to be comparable with the unemployment rate. The TD LMI leverages similar, but separate, measures developed by both the Bank of Canada and U.S. Federal Reserve.
- The TD LMI indicates that the Canadian labour market is currently experiencing more weakness than is implied by looking at the headline unemployment rate alone, and has been for nearly two years. Contributing to this weakness are elevated levels of labour underutilization, involuntary part-time employment, and long-term unemployment.

Most commentators tend to point to a small number of indicators, such as employment growth and the unemployment rate, when discussing the health of the Canadian labour market. However, this may miss the mark. For one, as was evidenced again in the September 2014 Labour Force Survey, volatility in the level of employment often provides conflicting signals from month to month. Looking at a small number of headline indicators also ignores other important but less prominent labour market data. At the same time, however, throwing too many numbers at people may also confuse the picture.

Central banks have long recognized the inherent challenges posed by the headline jobs data. In an attempt to make heads or tails of these confusing signals, TD has leveraged the work of central bankers to construct a Labour Market Indicator (LMI) with the aim to synthesize 14 labour market variables into a single indicator. While this measure is similar to that published by the Bank of Canada in the *Spring 2014 Bank of Canada Review*[1], it has been expanded to include some of the additional variables used by the U.S. Federal Reserve in developing its Labour Market Conditions Index (LMCI)[2]. It is then scaled to be comparable to the unemployment rate.

Recent movements in the TD LMI have pointed to a labour market that has underperformed the headline jobless rate, but turned in a steadier showing than the overall hiring figures have signaled (Chart 1).

CHART 1: UNEMPLOYMENT RATE AND TD LMI HAVE DIVERGED RECENTLY



Sources: TD Economics, Bank of Canada, Statistics Canada.

Examining a broad set of labour market indictors

Eight of the variables chosen to construct the TD LMI are those used by the Bank of Canada in its labour market index.

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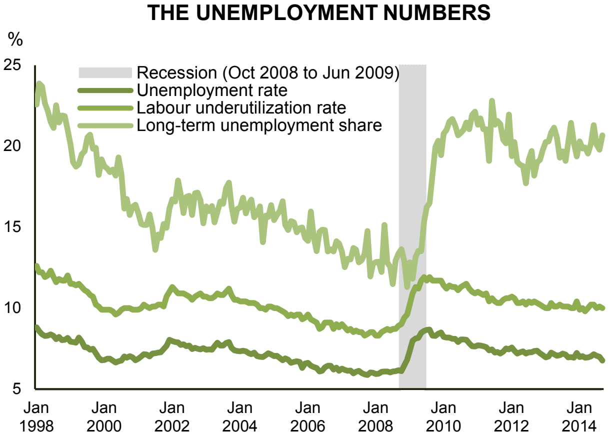
Variables positively correlated with the TD LMI

- *Unemployment rate* – Among the better known labour market indicators, the unemployment rate is the number of unemployed Canadians that are actively looking for work as a share of the labour force (Chart 2). From January 2013 to September 2014, the unemployment rate has remained broadly unchanged at round 7%.
- *Labour underutilization rate* – The labour underutilization rate (the so-called 'R8') includes the official unemployment rate as well as discouraged searchers, those waiting to return to work, and a portion of involuntary part-timers (Chart 2). Therefore, it provides a broader glimpse at the state of the labour market than the unemployment rate alone. Much like the unemployment rate, the labour underutilization rate has remained elevated since the recession, hovering around 10% from January 2013 to September 2014.
- *Long-term unemployment* – Similar to the Bank of Canada, we use the share of long-term unemployed (Canadians unemployed for 27 weeks or more) in total unemployed. As is clear from Chart 2, the share of long-term unemployed in Canada has remained high since the recession and been broadly unchanged from late-2009 through September 2014 at around 20%.
- *Separation rate* – The separation rate is the proportion of total employed last month that became unemployed within the past 4 weeks, including those that have left their positions voluntarily or otherwise. The separation rate has fallen by about one-third from its recessionary peak, to reach about 2.5% in September 2014. This means that about 2.5% of those employed last month became unemployed in the past four weeks.

CHART 2: THE CLOSER YOU LOOK, THE WORSE THE UNEMPLOYMENT NUMBERS



Sources: Statistics Canada, TD Economics.
Note: All non-seasonally adjusted series were seasonally adjusted using Census X12.

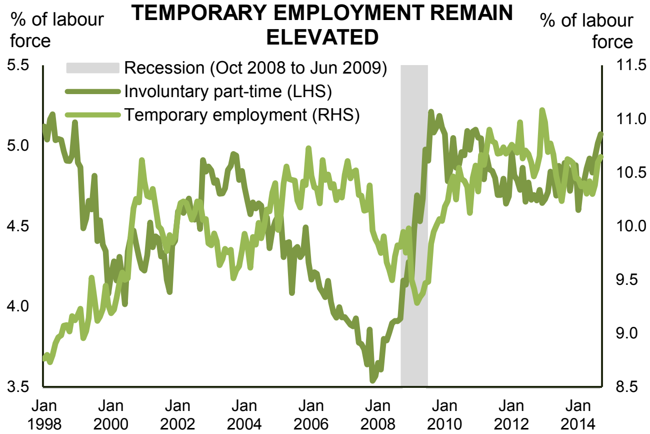
Variables negatively correlated with the TD LMI

- *Job-finding rate* – Essentially the opposite of the separation rate, the job-finding rate is the proportion of total unemployed workers last month who became employed in the past four weeks. The job-finding rate has risen to about 35% in September 2014 from around 30% during the recession, although the current level is down from the pre-recession peak of around 42%. The current job-finding rate means that 35% of those unemployed last month became employed in the previous four weeks.
- *Participation rate of prime-aged workers* – For the purpose of this report, we defined the participation rate as the share of Canadians aged 25 to 54 that are working or unemployed but actively looking for work in that same population. The participation rate provides an indication of the level of labour force attachment among Canadians, where increases are considered to indicate an improving labour market. This age group, in particular, includes those most likely to be active in the labour force, with a participation rate of over 85% in September 2014, albeit down from over 87% a couple of years before.
- *Growth in average weekly hours worked* – While the above indicators give us an idea of Canadians active involvement in the labour force, average weekly hours worked provides an indication of the intensity of the work being done. Growth in average weekly hours worked is therefore used in the TD LMI. On a seasonally-adjusted basis, average weekly hours worked have been falling over time, and have averaged just below 34 hours a week so far in 2014.
- *Wage growth* – Finally, wage growth is an important indicator of labour market tightness. This is because, when labour demand outstrips supply, one would expect wages to rise more quickly as companies compete for workers with the skills they need. Wages would be expected to rise more slowly in the opposite situation. In September 2014, average hourly wage growth was 2.1% y/y, roughly equivalent to total CPI inflation.

Expanding on the Bank of Canada's work

While the indicators provided by the Bank of Canada are useful, the list is not exhaustive. A newly-unveiled index on U.S. labour market conditions that was developed by the Federal Reserve includes a number of additional variables. Leveraging this analysis, we have elected to add six addi-

CHART 3: INVOLUNTARY PART-TIME AND TEMPORARY EMPLOYMENT REMAIN ELEVATED



Sources: Statistics Canada, TD Economics.
Note: All non-seasonally adjusted series were seasonally adjusted using Census X12.

tional labour market variables to our TD LMI for Canada.

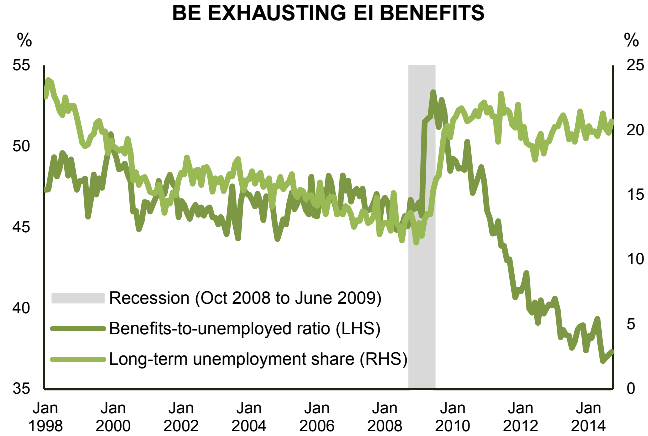
Variables positively correlated with the TD LMI

- *Involuntary part-time employed* – In the TD LMI, we capture the evolution of involuntary part-time employment by including it as a share of the labour force (Chart 3). In September 2014, about 20% of Canadians that work part-time that would prefer not to, a share that has remained broadly unchanged for nearly two decades. That said, when the economy is struggling, the share of part-time employed in the labour force rises, particularly for those working part-time that would prefer not to be.
- *Self-employment* – Self-employment (measured here as a share of the labour force), while a preferred employment choice for many, is well known to increase during periods of economic stress. For instance, self-employment peaked at 14.9% of the labour force in October 2009, following a dramatic rise during the 2008-09 recession. Since then, the most notable increases have occurred since the beginning of 2013, although the share of the labour force remained at a more subdued 14.0% in September 2014. As such, we have chosen to use self-employed Canadians in the TD LMI.
- *Benefits-to-unemployed ratio* – When the economy enters recession, unemployment often increases. At the same time, the number of Canadians receiving Employment Insurance (EI) benefits also increases, often at a faster rate, as recently unemployed are more likely to qualify for benefits. However, if a recipient of EI benefits remains unemployed for an extended period of time, those benefits may be exhausted. As a result, the benefits-to-unemployed ratio tends to fall as the economy recovers, reaching a near historic low of around 37% in September 2014. As such, we have selected the benefits-to-unemployed ratio, defined as the ratio of Canadians receiving regular EI benefits to total unemployment, as an input into the TD LMI (Chart 4).

Variables negatively correlated with the TD LMI

- *Private payroll employment* – During good times, private-sector employment (measured here as a share of the labour force) should be leading employment growth, as was the case coming out of the 2008-09 recession. As such, we would assume that private payroll employment would be a good indicator of the state of the Canadian labour market. That said, at 60.1% in September 2014, private-sector employees as a share of the labour force remains well below the pre-recession peak of 61.7% reached in October 2006 and has remained broadly unchanged since September 2013. This suggests some weakness in private-sector hiring has persisted following its initial strength in the early part of the recovery.
- *Government payroll employment* – Much like the self-employed, the share of government employees in the labour force tends to rise during periods of labour market weakness. However, unlike self-employment, this is because the public sector is less likely to reduce its workforce and may indeed even expand its workforce during this period along with increased government spending. This pattern is clear from the data, as the share of government employees in the labour force rose from 18.4% to 19.2% from early-2009 to early-2011, and has remained broadly unchanged since.

CHART 4: LONG-TERM UNEMPLOYED LOOK TO BE EXHAUSTING EI BENEFITS



Sources: Statistics Canada, TD Economics.
Note: All non-seasonally adjusted series were seasonally adjusted using Census X12.

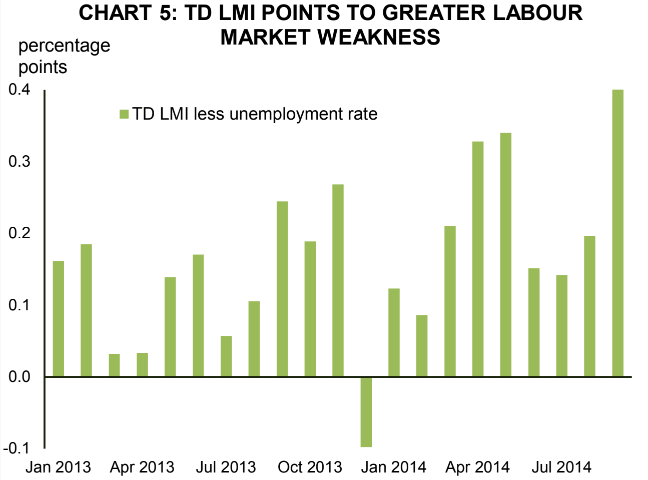
- *Temporary workers* – Much like Canadians that work part time, there are many Canadians that are employed on a temporary basis (measured here as a share of the labour force) that would prefer to have a permanent position. However, unlike self-employment, temporary employment tends to follow movements in the broader economy, increasing when the economy is doing well and falling otherwise. According to this measure, Canadians employed on a temporary basis have increased to 10.5% of the labour force, on average, from July 2009 to September 2014, as compared to 10.1% over a similar period prior to the recession (Chart 3). However, both of these levels are more elevated than the recessionary trough of 9.3% reached in March 2009.

The LMI points to labour market weakness

Over history, the TD LMI has tracked the headline unemployment rate closely. The TD LMI has tended to be less volatile than the unemployment rate, posting less pronounced improvement during good times and the converse during bad times. That said, beginning in early 2013, the TD LMI began to diverge from the unemployment rate. Specifically, the TD LMI has been gradually trending up to 7.2% in September 2014 while the official unemployment rate has edged down, reaching a low of 6.8% in the same month. The TD LMI therefore suggests that labour market conditions worsened slightly over the past two years, while the unemployment rate has suggested that they had improved. The resulting spread between these two measures is currently the widest it has been since the 2008-09 recession (Chart 5).

To explain this divergence, Chart 6 illustrates the correlation between the TD LMI with each of the 14 variables used to construct it. Specifically, it is those variables that are most highly correlated with the TD LMI that have generally shown the most weakness since the beginning of 2013. These include the long-term unemployment, labour underutilization rate, and involuntary part-time employment, all of which have either increased or remained essentially unchanged over the past two years. Meanwhile, labour market variables that are positively correlated with the TD LMI, such as temporary employment and the prime-aged participation rate, have either weakened or remained unchanged since early-2013. In contrast, the slightly higher job-finding rate and much lower benefits-to-unemployed ratio recently have put downward pressure on the TD LMI.

CHART 5: TD LMI POINTS TO GREATER LABOUR MARKET WEAKNESS



Sources: TD Economics, Statistics Canada.

CHART 6: WEAK LABOUR MARKET VARIABLES HIGHLY CORRELATED WITH THE TD LMI

Sources: TD Economics, Statistics Canada.

Bottom line

A single labour market indicator, based on the work of the Bank of Canada and U.S. Federal Reserve, introduces another important tool in evaluating the state of the Canadian labour market. As such, the TD LMI clearly indicates that the Canadian labour market is underperforming relative to the official unemployment rate, a view supported by a broad set of labour market indicators. This finding supports the Bank of Canada's view that significant slack in the Canadian labour market persists, and adds further weight to its continued accommodative policy stance. Going forward, we plan to continue publishing the TD LMI as needed, in order to provide additional context around our labour market analysis.

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End Notes

1. Konrad Zmitrowicz and Mikael Khan, *Beyond the Unemployment Rate: Assessing Canadian and U.S. Labour Markets Since the Great Recession*, Bank of Canada, 2014. http://www.bankofcanada.ca/wp-content/uploads/2014/05/boc-review-spring14-zmitrowicz.pdf
2. Hess Chung, Bruce Fallick, Christopher Nekarda, and David Ratner, *Assessing the Change in Labour Market Conditions*, U.S. Federal Reserve, 2014. http://www.federalreserve.gov/econresdata/notes/feds-notes/2014/assessing-the-change-in-labor-market-conditions-20140522.html