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# OBSERVATION

## TD Economics



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# POTENTIAL TO IMPROVE: A COMPARISON OF CANADIAN AND U.S. TREND OUTPUT GROWTH

## Highlights

- There has been renewed discussion of late regarding the long-term slowdown in U.S. potential growth. This begs the question whether Canada's long-term growth potential has followed a similar track.
- The U.S. has enjoyed faster trend economic growth relative to Canada over the past 50 years. This has largely reflected stronger labour productivity that has outweighed Canada's historic advantage in trend labour supply.
- The Great Recession appears to have had a more detrimental effect on potential U.S. growth relative to Canada. America suffered a substantial collapse in investment, which weakened labour productivity, while its labour market sustained more permanent damage relative to Canada. As a result, potential economic growth in the United States has underperformed Canada over the past several years.
- Going forward, Canada's labour force will be subject to the same aging effect as in the United States and is likely to slow to a comparable rate. Modestly faster labour productivity growth means U.S. potential growth is likely to regain its historical outperformance relative to Canada. By 2018, potential real GDP growth is expected to slow to 2.0% in the United States and 1.8% in Canada.
- Policy reform in both countries could help to improve labour supply and labour productivity growth, especially with respect to immigration, social and labour policy, and taxation.

A recent article in the Economist magazine observed that the American economy has lost “oomph” over the past few decades due to a weakening in the structural drivers of growth.<sup>1</sup> In the 1980s and 1990s, trend – or potential – economic growth in the U.S. ran as high as 3.0% to 3.5%. Today, many believe it has fallen to around 2.0% or even less.

The slowdown in the running speed of the American economy has significant implications. Slower trend growth implies weaker gains in living standards, corporate profits, government revenues, and lower interest rates. This raises the question: to what extent has Canada followed a similar path and, which economy is poised to fare better going forward?

Over the last several years, Canada's potential growth rate appears to have eclipsed the rate in the United States. Canada's outperformance stems from a faster pace of labour force growth relative to the United States, as well as a smaller relative decline in labour force productivity (even as the overall rate remained lower than America's). However, going forward, trend labour force growth in Canada is likely to slow substantially due to population aging. By 2018, we expect trend labour force growth to be similar in the United States and Canada (at 0.6%, respectively). Assuming America's consistently stronger record for labour productivity growth is maintained, this implies that U.S. potential growth will regain the lead.

The reality is that economic growth will not be what it used to be in either the U.S. or Canada over the next decade. By 2018, we expect the U.S. to grow at a trend rate of around 2.0% and Canada slightly lower at 1.8%.

Table 1: Average Historical Potential GDP Growth Estimates (%)				
<b>Canada</b>	<b>1980s</b>	<b>1990s</b>	<b>2000s</b>	<b>2010-2013</b>
<b>Range</b>	2.5-3.0	2.2-2.7	2.4-2.7	1.2-1.9
<b>US</b>	<b>1980s</b>	<b>1990s</b>	<b>2000s</b>	<b>2010-2013</b>
<b>Range</b>	3.0-3.1	3.1-3.4	2.7-3.2	1.5-1.9
The range of estimates for Canada includes the Bank of Canada, Finance Canada, Parliamentary Budget Officer (PBO), International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD) and TD Economics.				
The range of estimates for the U.S. includes the Congressional Budget Office (CBO), IMF, OECD and TD Economics.				

## Measuring potential

As its name implies, *potential* GDP refers to the amount of goods and services an economy *could* produce over the long run if it were using all of its resources. The growth of potential GDP represents the economy's underlying cruising speed. While an economy can grow faster than its potential rate for a period of time – by, for example, eating up slack or pushing up inflation – it cannot do so forever. Eventually, economic activity converges to potential.

Where things get tricky is that potential GDP is unobservable, and there is no “official” estimate. Still, it is a useful concept, serving to anchor longer-term expectations for the economy. As such, a number of government and private-sector organizations – including TD Economics – attempt to put a number on it.

Potential GDP growth is often estimated by decomposing it into labour hours and labour productivity. Potential labour hours are determined by the size of the adult population, the rate of participation in the workforce, and changes in the average number of hours in a day devoted to work. Labour productivity is determined by the level of investment in machinery and equipment, the rate of innovation and technological change, and the strength of economic institutions.

## A history of lagging behind

Historically, potential GDP growth has been higher in the United States than in Canada (Table 1). However,

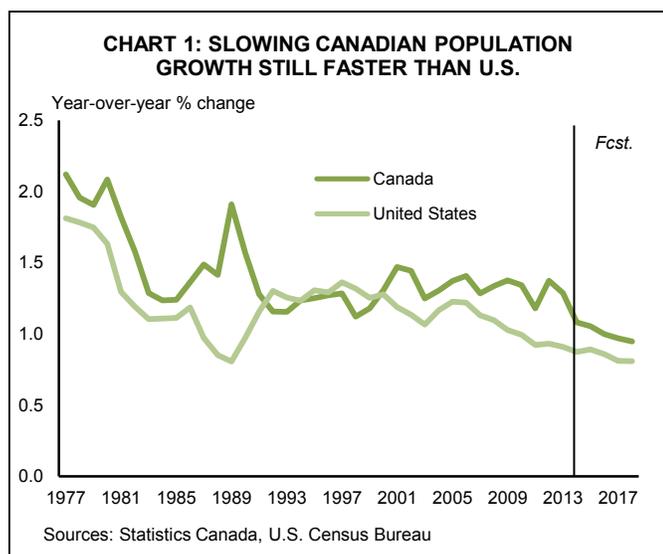
estimates of potential GDP growth have converged since the mid-2000s to sub-2.0% rates in both countries.

Looking at potential GDP growth as a sum of gains in labour hours and productivity, performances were similar in both countries (Table 2). While both countries saw potential labour hours slow in the 1990s, this was offset by an increase in labour productivity growth. In the case of the United States, the acceleration in labour productivity more than compensated for the slowdown in labour hours, resulting in a slight acceleration in estimated potential growth (to 3.1% from 3.0%). Interestingly, while Canada also saw an increase in trend labour productivity growth in the 1990s, it maintained its negative differential with the United States, leaving Canada's overall potential growth rate at a slower 2.7%.

In the 2000s, the Canadian pattern of slower labour productivity growth relative to the U.S. was maintained. However, this was offset by a widening gap in Canada's favour in terms of potential labour hours. The outperformance of potential labour hours in Canada relative to the United States in the 2000s was a function of both faster population growth (Chart 1) as well as a growing gap in the labour force participation of women (Chart 2).<sup>2</sup> In the United States, the participation rate of women aged 25 to 54 peaked in April 2000 (77.3%) and has been trending slowly down since. In Canada, the peak in core female labour force participation occurred in December 2012 (82.9%). The US also has higher participation among older workers than Canada (Chart 3).

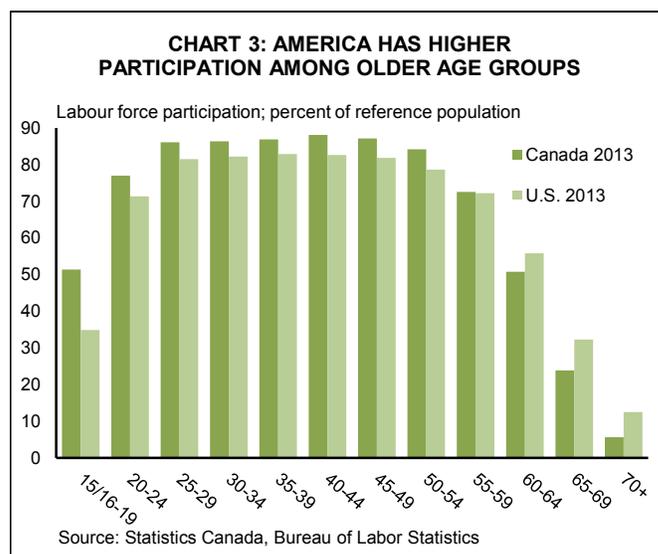
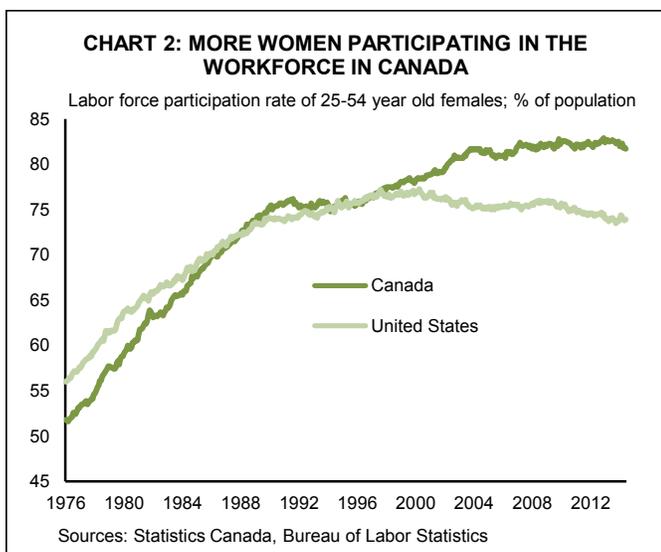
Still, U.S. potential growth outpaced Canada's through the 2000s due to stronger labour productivity, which main-

Table 2: Trend Inputs into TD Economics Potential GDP Growth Estimates (%)				
<b>Canada</b>	<b>1980s</b>	<b>1990s</b>	<b>2000s</b>	<b>2010-2013</b>
<b>Potential GDP</b>	2.6	2.7	2.5	1.8
Labour hours	1.6	1.3	1.4	0.9
Labour productivity	0.9	1.4	1.1	0.8
<b>US</b>	<b>1980s</b>	<b>1990s</b>	<b>2000s</b>	<b>2010-2013</b>
<b>Potential GDP</b>	3.0	3.1	2.7	1.5
Labour hours	1.7	1.3	0.9	0.5
Labour productivity	1.3	1.8	1.8	1.0
Source: TD Economics.				



tained the strong rate of the previous decade. In contrast, labour productivity in Canada slowed from 1.4% in the 1990s to 1.1% in the 2000s.

The slowdown in potential GDP growth in the aftermath of the Great Recession marked a sea change in the relative fortunes of Canada and the United States, with potential growth estimated to have fallen to just 1.5% in the United States versus 1.8% in Canada. Still, the composition of growth represented a continuation of the trends in the 2000s. In both countries labour productivity fell, but the US from a higher perch. The slowdown in potential labour hours in the United States – in part representing a permanent scarring on labour force participation caused by the magnitude of the Great Recession – resulted in potential labour hours falling to just 0.5%, just over half the estimated 0.9% rate in Canada.



### U.S. potential to moderately surpass Canada

Noting that there is range of projections and that estimating potential growth in real-time is fraught with uncertainty, Canada's advantage in terms of labour force growth should be enough to keep potential GDP growth roughly on par with the United States over the next few years (Table 3).

However, over the longer term, Canada's edge in terms of potential labour hours is unlikely to last. While Canada is likely to maintain a faster rate of population growth relative to the United States, population aging is likely to exert a greater drag on labour force growth over the next five years. By 2018, potential labour hours are likely to slow to around 0.6% in Canada, in line with the projected growth in the United States (Table 4).

Productivity growth is more difficult to project as it is driven by a complex array of factors. In Canada, trend labour productivity growth is expected to accelerate to 1.2% in 2018, slightly above its historical average, as increased foreign-demand-led export growth leads to renewed investment.<sup>3</sup> Productivity growth is expected to reach around 1.4% in the U.S., surpassing productivity growth in Canada, but still representing a deceleration relative to past decades.

### Bottom line

Historically, potential GDP growth in Canada has lagged behind the US. However, over the last several years, stronger relative growth in potential labour hours in Canada has led to a similar rate of potential GDP growth in the two countries.

Going forward, potential labour force growth is likely to slow in Canada closer to the American rate. As a result, faster trend productivity growth in the U.S. will result in

**Table 3: Potential GDP Growth Projections (%)**

Canada	2014	2015	2016	2017	2018
<b>TD Economics</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>
<b>Range</b>	1.8-2.1	1.8-2.0	1.7-2.0	1.6-2.0	1.5-2.0
US	2014	2015	2016	2017	2018
<b>TD Economics</b>	<b>1.8</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
<b>Range</b>	1.7-2.1	1.9-2.3	2.0-2.4	2.0-2.4	2.0-2.4

The range of estimates for Canada includes the Bank of Canada, Finance Canada, Parliamentary Budget Officer (PBO), International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), and TD Economics.

The range of estimates for the U.S. includes the Congressional Budget Office (CBO), IMF, OECD, Oxford Economics and TD Economics.

**Table 4: Disaggregation of TD Economics Potential GDP Growth Projections (%)**

Canada	2014	2015	2016	2017	2018
<b>Potential GDP</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>
Labour hours	0.8	0.8	0.7	0.6	0.6
Labour productivity	1.2	1.2	1.2	1.2	1.2
US	2014	2015	2016	2017	2018
<b>Potential GDP</b>	<b>1.8</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
Labour hours	0.6	0.6	0.6	0.6	0.6
Labour productivity	1.2	1.3	1.4	1.4	1.4

Source: TD Economics.

modestly faster U.S. growth relative to Canada. Still, at just 2.0% in the U.S. and 1.8% in Canada, neither have much to brag about.

The consequences of diminished output growth will likely be felt across various sectors of the economy. These include weaker income gains than historically, translating into more modest increases in the standard of living, slower growth in government revenues, weaker corporate profits, and a lower neutral interest rate due to more subdued inflationary pressure.

All this to say, more can and should be done to increase potential GDP growth in both countries. Policies that increase immigration, particularly of skilled workers, and facilitate the recognition of foreign credentials would work to increase potential labour hours and productivity growth in both countries. Further, policies which allow for a more dynamic labour market, such as reducing barriers to labour mobility, facilitating retraining and reentry into the labour market for long-term unemployed, further extending the retirement age, introducing a publicly-subsidized preschool system, et cetera., would also make positive contributions to increasing potential growth.<sup>4</sup>

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## End Notes

1. <http://www.economist.com/news/leaders/21607809-countrys-potential-growth-rate-barely-half-what-it-was-two-decades-ago-heres-how-raise>.
2. U.S. working-age population is defined as the civilian, non-institutional population aged 16 and over, while Canada uses individuals aged 15 and over. For the purpose of this analysis, the U.S. definition has been adjusted to include individuals age 15.
3. For more information, see <http://www.td.com/document/PDF/economics/special/BusinessInvestmentInCanada.pdf>.
4. For recent analysis on policies which would work to increase labour input and/or labour productivity, see the section entitled 'Strategies to Mitigate Skills Mismatch and Labour Shortages' in the October 2013 TD Economics special report *Jobs in Canada: Where, What and For Whom?* for Canada. With respect to potential output enhancing policies in the US, see the April 2014 TD Economics special report *Economic Growth after Recovery: Quantifying the New Normal*.

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