

Impact of Lower Oil Prices on the Canadian Economic Outlook: An Update

Highlights

- Overall Canadian production growth expected to be little impacted
- Activity in the energy sector will be cut back though lower energy costs and a boost to U.S. growth will provide an offset
- More pronounced impact on real national income as the purchasing power of domestic production is curbed
- As well, more significant regional implications with oil-producing provinces impaired while oil consuming provinces benefit
- Overall inflation to come under downward pressure though underlying, or core, inflation expected to see more limited impact

Analysis

Sharp declines in oil prices through the summer and early fall of 2014 recently prompted RBC to downgrade our oil price assumptions through 2016, the impact of which we discussed [here](#). Since that time, prices have fallen even further with OPEC's decision on November 27th not to cut production to curtail falling prices that initiated the latest catalyst pushing prices lower. This has left the price of WTI oil trading below \$70/bbl recently, down some 15% from a month ago and close to 40% since late June (Chart 1). The spread between Western Canadian Select (WCS), the relevant benchmark for western Canadian oil, and WTI prices has narrowed to around \$16-\$17/bbl relative to the \$24 WCS discount on average in 2013 and the Canadian dollar has weakened along with the drop in oil prices; however, the latest bout of market weakness left WCS prices, in Canadian dollars, still down about 39% from June.

Our previous oil price forecast, updated in late October, projected that WTI oil prices would average around \$85/bbl in 2015 and 2016. That was already down some 10% from our earlier forecast; however, the oil price futures curve is currently pricing at about another 20% below those levels. For the purposes of this updated analysis, we are going to assess the impact on the Canadian economy under the assumption of WTI prices averaging \$70/bbl in 2015 and \$80/bbl in 2016.

Chart 1: WTI Oil Price



Source: Energy Information Administration/Chicago Mercantile Exchange, RBC Economics Research

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Limited net impact on real national *production* growth...

The Bank of Canada in its October *Monetary Policy Report* suggested that a drop in the terms-of-trade related to the drop in oil prices relative to their previous projections, would lower Canadian GDP growth by about “1/4 of a percentage point” in 2015. It is likely the case that the direct impact of a drop in oil prices on the Canadian economy is negative as lower activity in the oil and gas sector offsets, at the national level, the benefit to consumers from lower gasoline prices. For a relatively small open economy like Canada, though, the net impact, as the Bank of Canada has highlighted repeatedly in the past, also depends on the impact of lower oil prices on foreign demand. This in turn depends on whether the price shock is the result of predominantly demand or supply factors. A drop in oil prices driven by lower foreign demand is clearly bad for Canada as the economy is impacted negatively by both the direct effect of lower prices and lower external demand. In contrast, a drop in energy costs driven by a positive supply shock is likely still a plus for the U.S. economy which, even with recent rapid increases in its own domestic production capabilities, is still a significant net importer of petroleum products. Given the U.S. absorbs around three-quarters of Canada’s exports; a boost to that economy from lower energy costs, along with a weaker Canadian dollar, results in stronger external demand for other sectors of the Canadian economy that can offset the direct negative impact on the oil extraction sector from lower oil prices.

RBC’s energy research team has attributed part of the recent weakness in oil prices to slower growth in non-U.S. global demand although supply factors, including increased U.S. oil production, the recovery of production in Libya, an appreciating U.S. dollar, and, more recently, OPEC’s decision not to respond to falling prices by cutting production, have likely played a more significant role. Given the drop in oil prices has largely been a function of supply and non-U.S. demand factors, we expect the impact on the U.S. economy is likely positive with our own working assumption that every 10% decline in oil prices increases U.S. GDP growth by 0.1 to 0.2 percentage points. A weaker Canadian dollar, which our estimates suggest depreciates around 1% relative to the U.S. dollar with every 10% drop in oil prices, provides additional support to external demand. Our forecast assumes a depreciation in the Canadian dollar to around 87 cents U.S. by the end of this year (from around 88 cents currently) with a further depreciation to 85 cents expected by the end of 2015. Once accounting for these positive external effects, as well as the positive impact on the domestic consumer sector from lower gasoline prices, the assumed further drop in oil prices could actually increase the level of Canadian GDP in 2015, albeit by a very modest 0.1% or so.

... although more unambiguously negative impact on real *incomes* and nominal revenues

Although net national *production* growth is not expected to be significantly impacted, there are more unambiguously negative implications for real national income and economy-wide nominal revenues. Crude oil accounts for

about 18% of total Canadian merchandise exports so a drop in the price of oil reduces the amount of imports that can be purchased with a given volume of exports. This negative so-called “terms-of-trade” shock reduces the purchasing power of domestic production and, as a result, reduces real national income. Our assumed profile for oil prices would point to a decline in the terms of trade (the ratio of export to import prices) of close to 3% in 2015 followed by a modest recovery in 2016. This would result in Canadian real Gross Domestic Income (GDI), the most common measure of total real national income, growing just 1.9% in 2015, almost a full percentage point below the 2.7% increase in real GDP we are assuming. It is worth noting that oil prices and, as a result the terms of trade, still are expected to remain historically high (Chart 2). Our assumed profile for oil prices implies that, at its lowest, the terms-of-trade going forward will still be around 12% above its 2000 average.

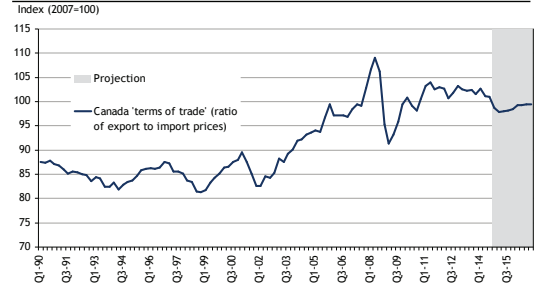
Nominal measures will also be negatively impacted. Lower oil prices will weigh on corporate profits, particularly in industries tied closely to oil extraction, while the deterioration in the terms-of-trade will also weigh on the Canadian current account deficit which we expect could widen to around 2.4% of GDP in 2015, on average, from a deficit of less than 2% in Q3 2014. Lower price growth also means slower growth in nominal GDP which we expect could slow to 3.2% in 2015 from 4.4% in 2014 despite a pickup in real growth to a 2.7% rate from 2.5% over the same period. Slower nominal GDP growth and weaker corporate profits could be reflected in lower federal government revenues.

Limited national impact but more significant regional implications

As well, while the impact on Canada’s economy, in the aggregate, would likely be minimal, there would be substantial variations across provinces. Canada’s oil-producing provinces—Alberta, Saskatchewan and Newfoundland & Labrador—would face negative hits to incomes, and eventually, spending, while the rest of the provinces (all net oil consumers) would likely enjoy net benefits via a stronger US economy and lower energy costs.

Given our assumed oil price profile, we would peg the magnitude of the damage to Alberta’s real GDP growth rate to around 0.8 ppt in 2015, which would still keep the provincial economy well clear of a recession with growth being maintained in the vicinity of 2.7%. It is important to keep in mind that the provincial economy (and government) would face this challenge from a position of strength, which enhances its ability to absorb the shock. We would expect that work on oil sands projects would go forward largely as planned and that oil production (mainly non-conventional) continue to trend higher. It is worth noting that, during the 2008-2009 downturn, when WTI nose-dived by 70% to \$39 by February 2009 and the entire world economy was in turmoil, Alberta’s oil production continued to rise steadily

Chart 2: Canada Terms of Trade



Source: Statistics Canada, RBC Economics Research

(up 4.4% in 2009) as non-conventional oil producers generally took the long view on market conditions. While production may keep rising, we would expect material cutbacks in exploration and drilling expenditures.

By 2016, the assumed strengthening of WTI toward \$80 would boost confidence that oil prices are not headed to deeply depressed levels over the long-term, thereby maintaining the economic case to continue developing oil-sands megaprojects as planned. Nonetheless, the shock on revenues from the fall from \$100+ oil would reverberate more widely across sectors of the provincial economy, such that we would expect economic growth to slow further to 2.3% in 2016—yet remain slightly above the national average.

That being said, it is clear to us that an assumed \$70 oil next year would cause Alberta's nominal GDP to drop. We could see nominal GDP declining outright by approximately 2% (possibly more) in 2015 under such conditions.

We would expect Saskatchewan's economy to show greater resilience than Alberta at \$70-\$80 WTI owing to the fact that Saskatchewan comparatively is less dependant on the oil sector and that stronger demand for the province's other commodities would provide offset. For Newfoundland & Labrador, the impact of, say, \$75-\$85 Brent (since provincial production is sold on the basis of Brent to world markets) is quite difficult to assess. Significant production shutdowns in Newfoundland are unlikely, given the marginal cost of extracting and shipping oil from the offshore rigs is very low relative to other regions; however, given the sensitivity of this provincial economy to the oil sector, any impact on production or new investment could translate into a (possibly sizable) decline in the province's real GDP. Moreover, the price shock clearly would cause nominal GDP to drop (perhaps by something close to 1%).

The assumed drop in oil prices will also have a significant impact on government revenues of oil-producing provinces, as both royalty and corporate income tax revenue will be hit. The Alberta government estimates that every \$1.00 decline in the price of oil lowers the provincial budget balance by \$215 million. The revenue sensitivity to oil prices is less in Saskatchewan and Newfoundland & Labrador although still quite significant. Fortunately, provinces such Alberta and Saskatchewan have run strings of budget surpluses in the past and built substantial 'rainy-day' funds that can be tapped as conditions require. These funds put Alberta and Saskatchewan in a position of relative strength to absorb the impact.

The assumption of oil prices at \$70-\$80 (WTI) would provide a non-negligible boost to all other provinces, with Ontario's growth rate possibly gaining 0.3 pts or more in 2015, and Quebec's growth rate slightly less (maybe 0.2 pts). In its most recent mid-year fiscal update, the Ontario Ministry of Finance estimated that a sustained US\$10 drop in WTI generates a

real GDP gain of between 0.1 and 0.3 pts for the Ontario economy.

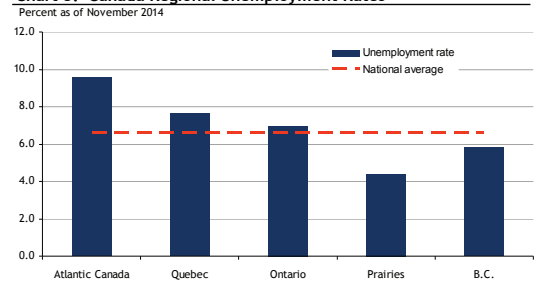
National labour markets not significantly impacted but regional disparity to ease?

With limited impact on real production growth, we also expect limited net impact on national labour market measures, although, again, this is likely to hide more significant offsetting regional impacts. Although the Canadian unemployment rate declined to an almost six-year low of 6.5% in October before inching up to 6.6% in November, there remain significant regional differences in labour markets across the country (Chart 3). Owing much to strong past increases in oil prices, unemployment rates in the Canadian prairies are extremely low with the Alberta reading sitting at 4.5% in November and Saskatchewan's rate more than a percentage point lower at 3.4%. Labour markets in other regions have not been as strong with unemployment rates in Atlantic Canada, Quebec, and Ontario above the national average. The combination of a negative impact on activity in oil-producing provinces and the boost to other provinces more closely tied to stronger foreign demand could result in this regional labour market disparity narrowing with the unemployment rates in non oil-producing provinces edging down while tighter labour markets in the Prairie Provinces cool somewhat.

Consumer price growth lower, although impact on underlying inflation pressures more limited

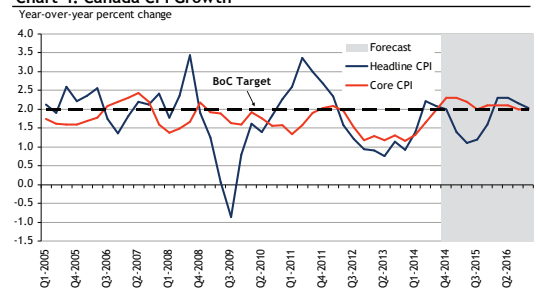
Lower gasoline prices could push growth in the Consumer Price Index (CPI) down to a rate closer to 1% by mid next year from an average pace of 1.9% in all of 2014 (Chart 4). The impact on the core CPI, which excludes gasoline as well as most other energy products and a number of other volatile components, is less clear. Lower oil prices reduce the cost of production for a wide variety of products; however, increased demand for non-energy purchases, with households spending less of their disposable income on gasoline, as well as a potential attendant weakening in the Canadian dollar would likely provide an offset.

Chart 3: Canada Regional Unemployment Rates



Source: Statistics Canada, RBC Economics Research

Chart 4: Canada CPI Growth



Source: Statistics Canada, RBC Economics Research

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