Macroeconomic impact of the WCS/WTI/Brent crude oil price differentials

Owing to bottlenecks in oil distribution networks, the price of oil exported from the Canadian oil sands has fallen sharply relative to North American benchmark West Texas Intermediate (WTI) prices. WTI prices, in turn, have fallen well below European benchmark Brent prices. In particular, oil pipeline infrastructure expansion has failed to keep pace with expanding production, both in Canada and the US. Lack of sufficient pipeline access to the Gulf of Mexico has contributed to a supply glut in the important distribution hub at Cushing, Oklahoma which has put downward pressure on WTI prices relative to Brent prices. Compounding this problem, a lack of pipeline capacity from Chicago, where most Alberta oil sands production is transported, to Cushing is putting even greater downward pressure on Canadian crude benchmarks. Western Canadian Select (WCS) prices, for example have fallen sharply relative to even WTI prices.

There are a number of ways that the spread between WCS and WTI/Brent prices can impact the Canadian economy; however, the bulk of the potential impact can likely be summarized by the impact on business investment (e.g. most of the often-quoted negative terms-of-trade effects on GDP growth would ultimately first manifest themselves in the form of reduced business investment). Statistics Canada estimates that in 2011 direct capital expenditures in the oil & gas extraction industry amounted to about $56 billion dollars. That amount equalled about 3.2% of national GDP and 15% of total national capital investment by all industries in the year.

In addition, oil prices can have a significant impact on fiscal balances, and consequently government spending. While the federal budget deficit has actually been tracking notably below the $26 billion projected for the full 2012-13 fiscal year in the latest budget update, the same can not be said for the province of Alberta where recent comments from the Premier are pointing to an estimated $6 billion revenue shortfall this year due to lower oil royalties. The 2012 provincial budget for Alberta, released in February 2012, assumed WCS oil prices would average $US 84 per barrel over fiscal 2012-13. Since then, the actual price has averaged closer to $70 per barrel, with the price over the last two months even lower, fluctuating in the $55-60 range. Less government revenue from oil & gas royalties means governments either have to adopt policies that are contractionary in the short-run (i.e. tax increases or spending cuts) or run larger deficits.
Given the importance of oil & gas investment to the overall economy, as well as fiscal balances, a significant drop in capital spending in the oil & gas sector would have a significant impact on the Canadian macroeconomic outlook even if there were viable alternative investment plans coming from other sectors of the economy. With that said, while lower WCS prices, at the margin, could have an impact on some projects, we expect that investment in the oil extraction industry will continue to provide significant support to Canadian business investment and the overall Canadian macroeconomic outlook, for a number of reasons.

1. **Lower prices are being driven by infrastructure limitations, not lower demand**
   The price of Canadian oil exports is low relative to international benchmarks because of infrastructure limitations that prevent oil from getting to market. The larger the price difference grows, the more incentive there is to add infrastructure to get product into regions that earn a higher return (ie. the more incentive there is to develop further infrastructure). These adjustments are, notably, already taking place.

   In a recent report *Energy Insights: North America’s New Oil Equation*, RBC Capital Market’s energy research team has estimated that approximately 1.4 million bbl/d of pipeline expansions will be added from Cushing to the Gulf Coast over the course of 2013-14. This added capacity should result in the spread between WTI and Brent prices narrowing later this year. Most Alberta oil flows initially to the Chicago area, not Cushing; however, the completion of new pipeline capacity running from Chicago to Cushing should also begin to ease pressure on WCS prices by mid-2014. Additionally, assuming regulatory approval is granted in the first half of 2013 RBC expects the new Keystone XL pipeline that will transport oil more directly from Alberta to the Gulf of Mexico could be in place by late 2014 or early 2015. This would allow a further easing in capacity pressures and correspondingly the spread between WCS and WTI prices will narrow.

   A key risk to this outlook is that the Keystone XL pipeline is not approved or is significantly delayed. Such could cause a rethink of current oil sands production/expansion plans. With that said, the previous delay earlier in 2012 has been attributed largely to political posturing by both major political parties in the US. With the presidential election now over and key approval from Nebraska for a new route that avoids environmentally sensitive areas already in place, it seems highly likely that the project will ultimately go ahead. An alternative route from the oil sands to the west coast, the Northern Gateway project, could also eventually provide relief; however, if the project goes ahead, RBC expects the pipeline might only be in place sometime in 2017. A proposed TransCanada pipeline that would deliver oil from Western to Eastern Canada could also provide some relief; however, that proposed project is still in very early stages and it is not yet clear if it will go ahead.

2. **Oil extraction projects aren’t as expensive as they used to be.**
   The majority of new projects expected in coming years will use Steam Assisted Gravity Drainage (SAGD) methods that are cheaper than surface mining. This lowers the ‘break-even’ price that would prevent new oil extraction projects from going forward. While every project is different, estimates from RBC’s energy research team suggest the ‘break-even’ price for a typical SAGD project is probably around $52/bbl, still below current WCS prices which have hovered in the $55 to $60 range in recent months. While it is possible that some marginal projects will be lost or delayed, the level of current prices, along with the widely held belief that weakness in WCS relative to WTI and Brent prices will ultimately prove temporary, appears to be sufficient to allow much of the previously planned expansion in the Alberta oil sands to continue.

3. **Even at current WCS prices, companies are still planning significant capital expenditures in 2013.**
   Consistent with estimates that put the break-even WCS price level below current prices, early indicators suggest that companies will continue to invest in the Canadian oil sands in 2013. For example, Suncor and Canadian Natural Resources are both planning almost 10% increases in capital spending in 2013. Canadian Oil Sands has indicated it plans an almost 20% increase in capital spending in 2013. The Canadian Association of Petroleum Producers (CAPP) forecast currently calls for total oil withdrawals to rise almost 10% in 2013. RBC expects production to rise by about 110K bbl/d in 2013 following a 151K bbl/d increase in 2012. In the medium-term, RBC’s energy team expects Canadian oil sands production to rise by 1.2-1.4 million bbl/d (or about 66%) by 2017.
Overall Macroeconomic impact?

It is difficult to pinpoint just how much of an impact the WCS/WTI price spread alone is having on business investment given the lack of a control scenario (e.g. it is still unclear how much of the slowing in overall equipment and software investment in recent quarters reflects the price spread and how much is due to other factors like uncertainty about the US fiscal cliff, the broader slide lower in commodity prices, etc.); however the impact of the spread, at least at current levels, is probably relatively limited. This is in line with recent analysis in the Bank of Canada’s January Monetary Policy Report that suggested that the expectation that the WCS/WTI price spread would remain elevated longer than previously expected subtracted about 0.1 percentage points from their outlook for 2013 GDP growth relative to expectations in October 2012. We continue to expect business investment to grow at a 5-7% pace over 2013 and 2014. This is still down from the 10%+ gains recorded in 2010 and 2011 as the Canadian economy recovered from recession; however, it will still boost GDP growth by 0.6-0.8ppt this year and next. The February release of Statistics Canada’s annual Private and Public Investment (P&PI) survey, which gauges business investment plans for the year ahead over the October to January period, will provide additional clarity on broader Canadian business investment plans in 2013.