OBSERVATION

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OF OIL AND OUTPUT

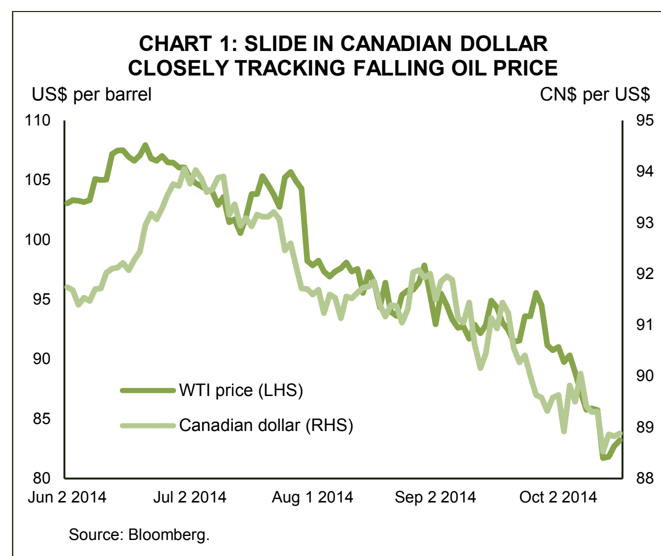
AN OVERVIEW OF THE IMPACTS OF FALLING OIL PRICES ON THE CANADIAN ECONOMY

Highlights

- With the price of a barrel of crude oil having fallen from a peak of nearly US$108 in June to around US$82 this week, investors and analysts are rightly asking: what will be the impact of this decline on the Canadian economy?
- On the whole, falling oil prices put modest downward pressure on Canadian output, prices, and the Canadian dollar. As the impact on output tends to be more gradual than on other economic variables, a slight drag on employment also tends to lag falling oil prices.
- As a result, while consumers may feel richer as the price at the pumps comes down, over the longer-term, weaker oil prices are expected to weigh on income, wage, and, ultimately, consumption growth. On the whole, government revenues can also be expected to soften modestly.
- With this in mind, the Bank of Canada may find further justification for maintaining its current stance on monetary policy. Consequently, we continue to expect the Bank of Canada to remain on hold until mid-2015.

After reaching a peak on June 20, 2014 at US$108 per barrel, the price of a barrel of West Texas Intermediate (WTI) has fallen to US$82 per barrel this week – marking a drop of about 25%. This move is far from unprecedented. Indeed, it was only two years ago that crude followed a similar ride downwards. And each time sharp swings are recorded – in one direction or the other – Canadians are thirsty for answers on how the change in crude will impact the economy and financial markets.

Falling oil prices affect the Canadian economy through a multitude of channels. On the positive side, the most obvious is the benefit consumers receive at the pumps, as gasoline prices fall along with oil prices. Heavy energy users, such as airlines, also benefit from lower energy prices. Further, falling oil prices are correlated with a falling Canadian dollar, which make exports more competitive (Chart 1). And, all things equal, lower inflation equates to lower interest rates, which benefit borrowers.



Still, these benefits tend to be modestly outstripped by the costs to the economy. The adverse effect of lower prices on revenue in Canada's powerhouse crude oil sector tends to be swift, although the commensurate decline in the Loonie helps to mitigate these impacts. Investment and, ultimately, job creation tend to follow suit, particularly if the decline in oil prices is prolonged. The heavy weighting of energy producers in the

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S&P TSX has been a key culprit behind the 10% slide in Canadian equity prices over the past six weeks. Lastly, the combination of weaker output, lower export prices and lower wealth can act as a drag on consumption and delivers a hit to federal and provincial government coffers.

A closer look at the impact on GDP

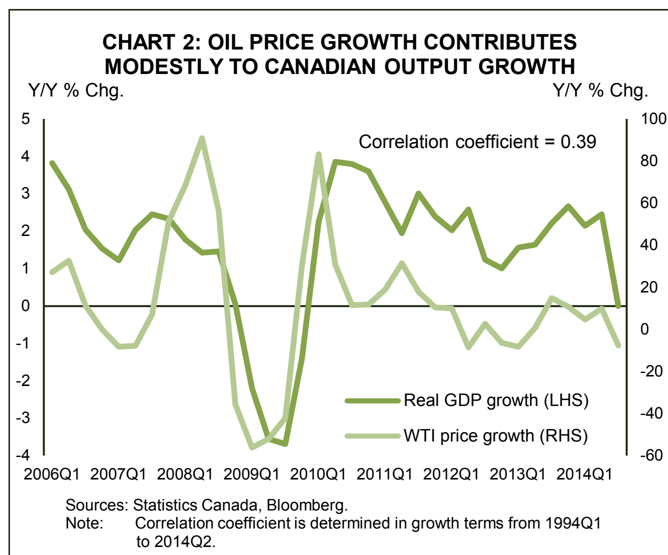
From the perspective of Canadian real GDP, the effects of a sustained reduction in crude prices tend to be relatively modest (Chart 2). In the quarter that the bulk of the decline occurs, the impact on real GDP is small. That said, the lagged affects are more important, with a sustained decrease in the price of WTI of 30% over the 3 quarters subtracts between 0.1% and 0.15% to real GDP. This implies that the 25% drop since the summer, if sustained over 3 quarters, could ultimately subtract roughly a similar magnitude from GDP.

The impact on the Canadian dollar

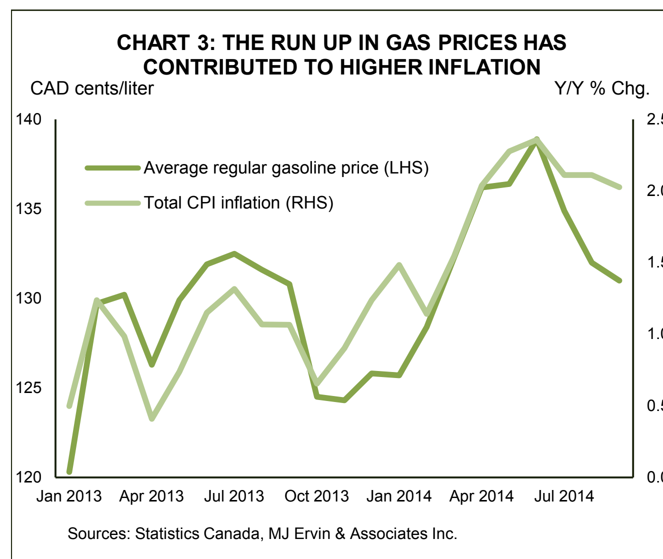
The positive correlation between oil prices and the exchange rate is well known. Research by the Bank of Canada has pinpointed that this relationship became significant in the mid-1990s. In fact, our analysis shows that a 10% decline in the price of a barrel of WTI leads to a roughly 1% decline in the value of the Canadian dollar. This would suggest that the recent decline in the Canadian dollar of roughly 5% is double the impact that the nearly 25% decline in the price of WTI would suggest. As such, there are likely other factors at play, notably flight-to-safety flows from smaller commodity-based economies to the U.S. greenback.

The impact on prices

Falling oil prices tend to quickly spill over to the price of gasoline, thereby pulling down total CPI inflation, as this component makes up about 5% of the total CPI basket (Chart 3). From June to September, the price at the pumps fell by 5.7%, in line with the decline in the gasoline price component of CPI over the same period. The price at the pumps has continued to fall in October, down nearly 6% since the start of the month, pointing to still further downward pressure on total CPI inflation. That said, the pass through of a lower Canadian dollar to higher import prices will place some offsetting upward pressure on inflation over the medium term, although the net effect will still be downwards.



Sources: Statistics Canada, Bloomberg.
Note: Correlation coefficient is determined in growth terms from 1994Q1 to 2014Q2.

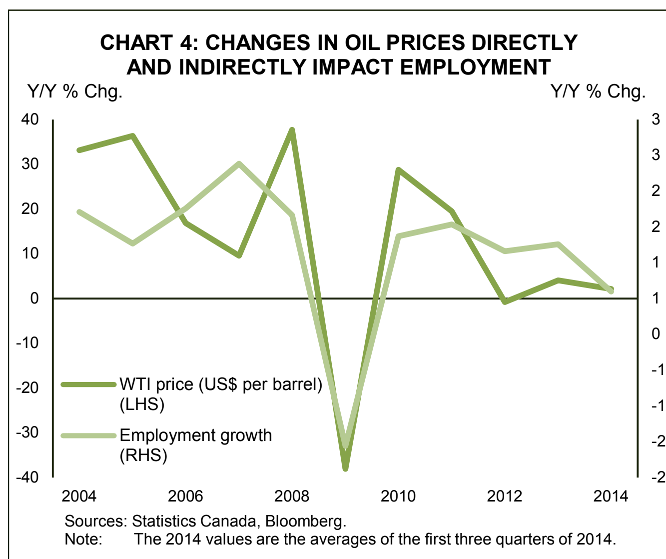


Sources: Statistics Canada, MJ Ervin & Associates Inc.

On a more macroeconomic level, lower crude oil prices weaken Canada's terms of trade (the ratio of export prices to import prices). This will drive up the trade deficit and lead to weaker national income. Since government taxes nominal income, aggregate federal and provincial government revenue in Canada will be lower than otherwise would be the case.

The impact on incomes and employment

With oil prices falling, corporate profits in the resource sector can be expected to be constrained, reducing the incentive on the part of firms to produce and invest, particularly if the recent price decline is persistent. Lower production and investment leads to lower output and job creation (Chart 4). By our estimate, for every 0.1% decline in the level of GDP in a given year (roughly the estimated impact of a 10% drop in oil prices), the annual level of employment is expected to be lower by about 10,000 jobs (on average). As wage growth is broadly tied to CPI inflation, more modest employment and wage gains can be expected to restrain



income and, hence, consumption growth.

Regional impacts

So far, this analysis only measures the impact at the highest possible level. Drilling down further, the impacts will of course be felt differently across the country, with more energy-rich provinces (i.e., Alberta, Saskatchewan and N&L) feeling the greatest impacts. On the plus side, the price of heavy crude has been considerably more stable than its WTI counterpart, mitigating some of the effects on Alberta's oil sands production. Given that profits on Canadian production are in Canadian dollars, the falling exchange rate will also act to buffer falling oil prices.

Central Canada in contrast would tend to be net beneficiaries, as lower energy prices deliver a de facto tax cut, while its large manufacturing base reaps rewards of lower energy costs, a weaker Canadian dollar, and higher exports. These wins are counterbalanced by some of the regional losses, including the negative wealth effects from lower equity prices, higher import prices and less trade to energy rich provinces.

The Bottom Line

Amid all the winners and losers, the Canadian economy stands to suffer a modest net loss from the recent rout in crude oil prices. The extent of this hit will depend on how long the price decline is sustained. Consensus forecasts appear to be hardening around the view that the price slide is at or near a bottom, but few (including ourselves) are predicting a strong rebound amid ample global supply.

Provided that the U.S. remains resilient – which is a good bet – Canada's economy appears well positioned to absorb any negative impacts. We maintain a view of moderate economic growth in Canada, both in the near- and medium-term, and a Bank of Canada that will remain on the sidelines until mid-2015, at which time some modest hikes will be in store.

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