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The Sweet Spot Price: When Do Oil Prices No Longer Benefit the Canadian Economy?

EXECUTIVE SUMMARY

- **As a net oil exporter, Canada typically benefits from higher oil prices, but is there a point when the gains diminish or disappear?**
- **Our results confirm that higher oil prices remain a net positive for activity at current levels, but the macro payoff diminishes as prices rise.**
- **We find evidence that once oil prices move into the US\$120–US\$130 range (in 2026 dollars), they no longer provide a statistically meaningful boost to Canadian activity.**
- **These estimates should be interpreted with caution: Rather than a precise tipping point, this range is better viewed as an indicative zone where the positive relationship becomes markedly less clear.**

Oil prices have risen sharply amid the Iran war, and this has reignited debate around what higher oil prices mean for Canada. At a basic level, the story is well understood. Higher oil prices improve Canada's terms of trade, raise national income, and typically support investment and employment. However, the relationship between oil prices and Canadian macro outcomes has clearly weakened over time as investment in the oil and gas sector declined. As we showed in our [previous note](#), the correlation between the Canadian dollar and oil prices has also declined in the last decade.

The distinction between supply and demand matters in the current episode. Today's oil rally is largely supply-led, which mechanically delivers a smaller boost to domestic activity. Indeed, the Bank of Canada has emphasized that the near-term macro impact of the recent oil price increase will likely be modest. That raises a deeper question: When the relationship between oil and Canada has already weakened and the price surge is mainly supply-led, could higher oil prices eventually become neutral, or even negative, for the Canadian economy? Put differently: *Is there a level of oil prices beyond which Canada no longer benefits?*

COULD OIL PRICES BE NEUTRAL FOR CANADA?

In a purely linear world, the answer would be no. As a net oil exporter, any increase in oil prices would always be positive for Canada. The improvement in the terms of trade would outweigh the negative effects of slightly lower volumes, given how inelastic oil demand is.

But that logic rests on the assumption that foreign demand remains resilient in the face of an oil supply shock. Once oil prices are high enough to begin weighing materially on global activity, especially among Canada's trading partners, the impact could change.

Simple simulations of our own macro model highlight this trade-off. For a 10% increase in oil prices, we would need foreign demand for Canadian goods to fall by roughly 0.5% for the net impact on Canada to turn negative. While this figure is not exceptionally large in isolation and appears plausible, it is less likely to occur when oil prices are around US\$100. Indeed, higher oil prices can still be expansionary for the U.S. economy at those levels, abstracting from financial market volatility and confidence effects related to geopolitical risks. Nonetheless, this underscores that the Canadian economy's response to oil price changes may not be uniform. The impact when oil is priced at US\$60 may diverge significantly from the impact when oil is at US\$120. This raises the question: Is there a sweet spot after which oil price increases no longer benefit the Canadian economy?

OUR TWO-STEP EMPIRICAL STRATEGY

To examine whether the response of the Canadian economy to oil supply shocks depends on the level of oil prices, we adopt an empirical strategy that allows explicitly for nonlinear effects. Our approach combines two complementary frameworks that are now standard in the literature. First, we use a structural VAR (SVAR) of the global oil market to identify oil shocks. In a second step, we use local projections to trace their dynamic impact on the Canadian economy.

In a [recent note](#), we estimated a sign-restricted SVAR of the global oil market to disentangle the underlying drivers of oil price movements. The model includes global oil production, global real activity, real oil prices (WTI deflated by the U.S. GDP deflator), and oil inventories, and identifies three structural disturbances: (1) Oil supply shocks, (2) oil-specific demand shocks, and (3) global demand shocks. This framework allows us to recover shocks that are both economically interpretable and historically plausible. Importantly, it enables us to distinguish between oil price increases driven by supply disruptions and those reflecting stronger global demand conditions. This distinction is critical from a Canadian macro perspective: Demand-driven oil price increases tend to be associated with stronger global activity and, therefore, have a larger positive impact on Canadian GDP, whereas supply-driven increases typically act as a positive terms-of-trade shock but are associated with weaker global demand, partially offsetting the positive terms-of-trade lift. Since the recent rise in oil prices is a supply-driven shock, this decomposition is particularly relevant.

Having identified the structural oil supply shocks, we then turn to local projections to estimate their macroeconomic effects in Canada. Local projections provide a flexible framework for estimating impulse responses, particularly when allowing for nonlinearities or state dependence. To assess whether the impact of oil shocks varies with the level of oil prices, we extend this framework to incorporate threshold effects. Specifically, we allow the response of GDP to an oil supply shock to depend on whether oil prices are above or below a given threshold. By estimating impulse responses across a range of thresholds, we can trace how the sensitivity of the economy evolves as oil prices increase. This approach enables us to move beyond an average effect and instead characterize how the transmission of oil shocks changes across different price regimes.

More formally, local projection consists of a series of regressions of our variable of interest (GDP) on an identified shock (the oil supply shock):

$$y_{t+h} = c_h + \beta_h Shock_t I_{thresh} + \Omega_{h,t}$$

where “h” represents the horizon of the impulse response we want to estimate. Thus, the coefficient β_h represents the GDP response h periods after the shock. The variable I_{thresh} is a dummy variable that takes the value of 1 when it is above a given threshold. Control variables ($\Omega_{h,t}$) include lags of the shocks and lags of the variable of interest (i.e. GDP).

IS THERE A “SWEET SPOT” PRICE FOR OIL?

When we estimate the average impulse response to a supply-driven oil price shock over the full sample, the results are unsurprising. Higher oil prices lead to a positive and statistically significant response in Canadian activity, broadly in line with our previous work and our macro model. This is also in line with our expectations that Canada will see some benefits (in isolation) from higher oil prices. Chart 1 shows the impulse response from the local projection, with the 90% confidence intervals (each point in the graphs representing the coefficients β_h from equation 1 above).

However, our results point to some non-linear effects. When we restrict the analysis to periods where oil prices are above US\$135 (in 2026 dollars), the picture is different.¹ The response of

Chart 1



Source: Scotiabank Economics.

¹The thresholds are defined with real oil prices in the local projection, but are then expressed in 2026 dollars for ease of exposition.

Canadian activity becomes statistically indistinguishable from zero (chart 2). In other words, once oil prices move into very elevated territory, the traditional positive macro effect appears to fade.

Chart 3 shows the resulting heat map of the *lower bound* of the impulse responses across horizons and all thresholds we estimated. The X axis represents the number of quarters after the shock hits (the horizon of the impulse response), and the Y axis shows the oil price threshold. Green means a positive response of Canadian GDP, thus statistically above 0, and red means negative. A negative lower bound means that we can no longer see the statistically significant positive benefits. At the lower end of the threshold range, the impact is positive throughout the horizon, indicating that the economy responds clearly positively when oil prices are above US\$80. However, as prices rise toward US\$120, the positive effect becomes less evident, and by US\$130 the response is clearly no longer statistically distinguishable from zero.

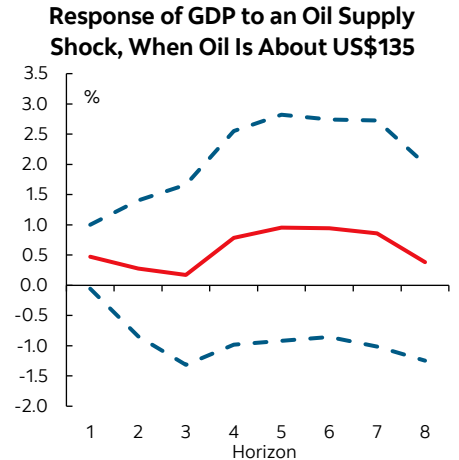
This pattern is consistent with the idea that the negative global demand effects eventually dominate. At sufficiently high oil prices, the drag on oil-importing economies—and perhaps on sentiment and financial conditions—begins to offset the income gains accruing to oil exporters like Canada.

However, like any empirical work, especially non-linear work, important caveats apply. Inference in threshold local projections is challenging, and it is difficult to establish whether impulse responses at different thresholds are statistically distinct from one another. Moreover, there is actual uncertainty about the oil shock itself, and different specifications of the SVAR could lead to different results. Finally, and perhaps more importantly, very high oil prices occur only sporadically in the data. The estimates at the upper end of the distribution rely on a small number of observations. For these reasons, we do not view the US\$120–US\$130 range as a precise tipping point. Rather, it should be seen as an indicative zone where the positive relationship between oil prices and Canadian activity becomes markedly less clear.

BOTTOM LINE

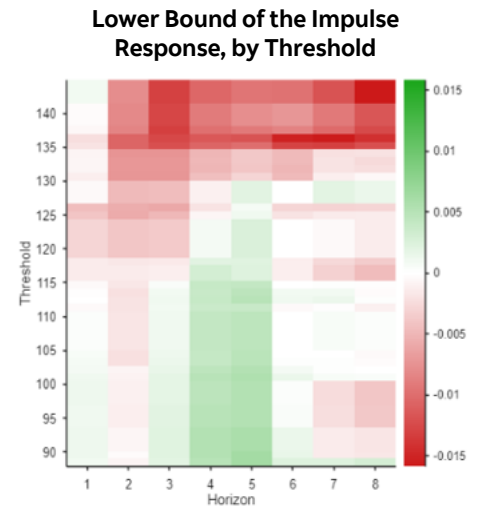
Higher oil prices remain a small net positive for Canada, but not without limits. At very high price levels, the negatives, which may come from lower global demand and/or tighter financial conditions, become large enough that the traditional terms-of-trade benefits may no longer dominate. While our results are necessarily tentative, they suggest that the Canadian economy does have a “sweet spot” for oil prices at around US\$120–US\$130 in today’s dollars and that pushing well beyond it comes with diminishing, and potentially negative, macro returns.

Chart 2



Source: Scotiabank Economics.

Chart 3



Source: Scotiabank Economics.

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