ECONOMIC VIEWPOINT

Is the Canadian Dollar Undervalued?

By Hendrix Vachon, Senior Economist

The Canadian dollar is currently trading at less than US$0.79. However, some variables, such as the high price of oil and other commodities, suggest that it might be worth more. This *Economic Viewpoint* takes a look at different variables to determine whether or not the currency is undervalued. Undervaluation is sometimes viewed as useful in stimulating economic growth, but, in the current context of high inflation and supply shortages, a stronger currency could be an advantage. In particular, it could better play its role as an automatic stabilizer.

Oil No Longer Has as Much Influence

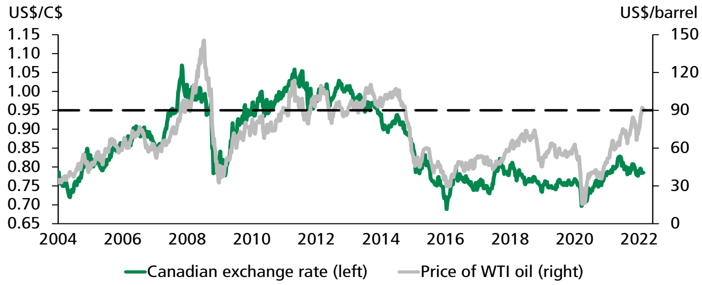
The value of the Canadian dollar has often been tied to changes in oil prices. The correlation has long been very strong (graph 1). The rise in oil prices between 2004 and 2008, in particular, was coupled with a strong appreciation in the loonie. After depreciating during the financial crisis, the loonie quickly rebounded with crude prices. Between 2010 and 2014, oil held steady between US$90 and US$100 a barrel, and the loonie stabilized around parity with the greenback. Today, a barrel of WTI (West Texas Intermediate) is again around US$90 a barrel, but the loonie is not benefiting from this as much as it once did.

Canadian oil is selling for less than WTI, close to US$80 a barrel for WCS (Western Canadian Select) (graph 2). However, the spread with the U.S. benchmark oil price has often been wider in the past and can hardly explain the lower Canadian dollar we are currently seeing.

Low Investment Is to Blame

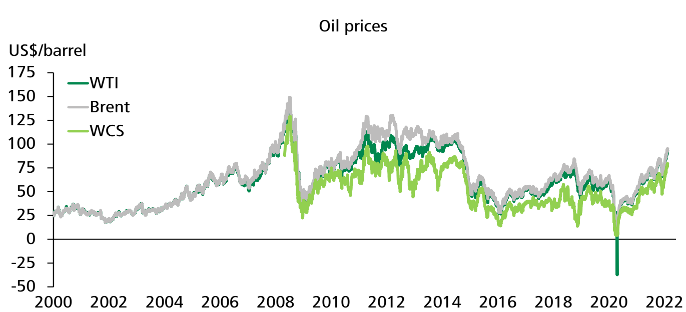
Two main mechanisms made the Canadian currency appreciate considerably when the price of oil was up. First, by selling its more expensive oil, Canada benefited from greater inflows of money, which increased demand for the Canadian dollar. This effect was then boosted by high foreign investment in Canada's energy sector. The first mechanism probably still works quite well today, but not the second because there is much less appetite to invest in the Canadian oil and gas sector (graph 3 on page 2). This loss of appetite is a reflection of greater caution among global producers faced with the risk of overinvestment, but also uncertainties related to transport capacities and the energy transition.

GRAPH 1
For years, a very strong link existed between oil and the Canadian dollar



WTI: West Texas Intermediate
Sources: Datastream and Desjardins, Economic Studies

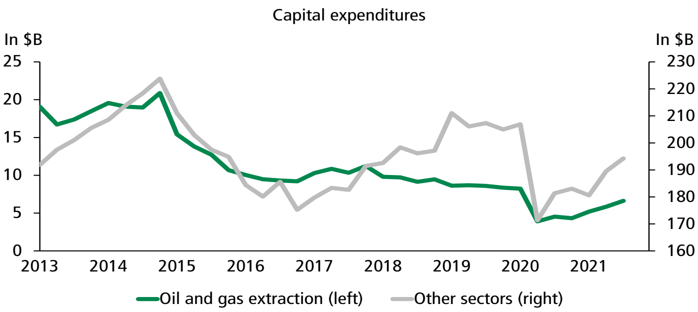
GRAPH 2
There is no abnormal price spread for Canadian oil



WTI: West Texas Intermediate; WCS: Western Canadian Select
Sources: Datastream, Bloomberg and Desjardins, Economic Studies

GRAPH 3

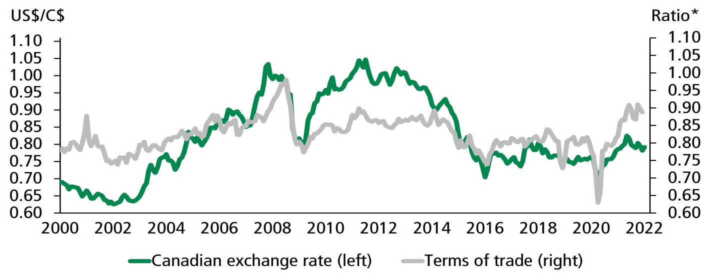
There is not much appetite to invest in oil and gas in Canada



Sources: Statistics Canada and Desjardins, Economic Studies

GRAPH 5

The improvement in the terms of trade should support a stronger Canadian dollar

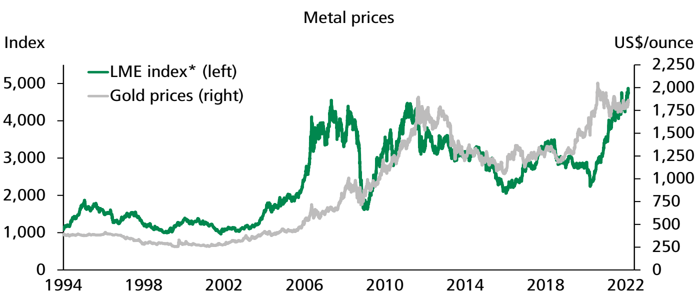


* Ratio of export and import prices, adjusted to the average 2000–2021 exchange rate.

Sources: Datastream and Desjardins, Economic Studies

GRAPH 4

Metal prices are very high and some have hit historic peaks

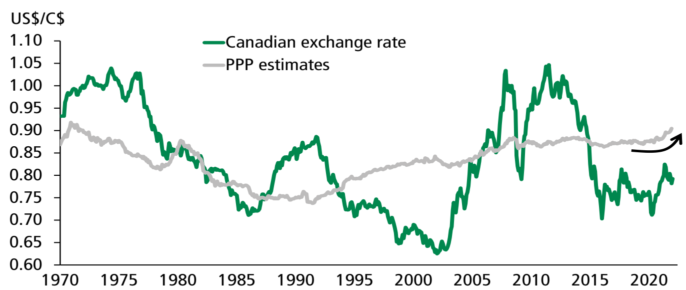


LME: London Metal Exchange; * The index comprises aluminium, copper, lead, nickel, tin and zinc prices.

Sources: Datastream and Desjardins, Economic Studies

GRAPH 6

Higher inflation in the United States increases the value of the PPP-estimated exchange rate



PPP: Purchasing power parity

Sources: Datastream and Desjardins, Economic Studies

But It Is Not Just Oil

The prices of many other natural resources also have an impact on the Canadian dollar. Many have been trending upwards recently, including metal prices, which would justify a stronger Canadian dollar than what it is now (graph 4).

Rather than being limited to oil or other commodity prices, the analysis can take into account all exported and imported product prices. The ratio of these prices measures the terms of trade, which can dictate the trend in the exchange rate. All other things being equal, a larger increase in the prices of exported products than of imported products leads to higher demand for the Canadian dollar and its appreciation. Canada's terms of trade are currently very favourable and would alone be enough to make the currency worth close to US$0.90 (graph 5).

Purchasing Power Parity Also Supports a Stronger Loonie

Another variable sometimes used to judge the over- or underestimation of a currency is purchasing power parity (PPP). The main idea is that the value of a basket of goods and services should be equal from one country to another. In case of disparity, the exchange rate should adjust to maintain equality. The PPP can be calculated based on the ratio of the consumer price indexes (CPI) of two countries. This measurement would also support a loonie in the vicinity of US$0.90 (graph 6). Before the pandemic, the estimated equilibrium value was closer to US$0.87, but higher inflation in the United States in recent years has shifted the situation in favour of the Canadian dollar.

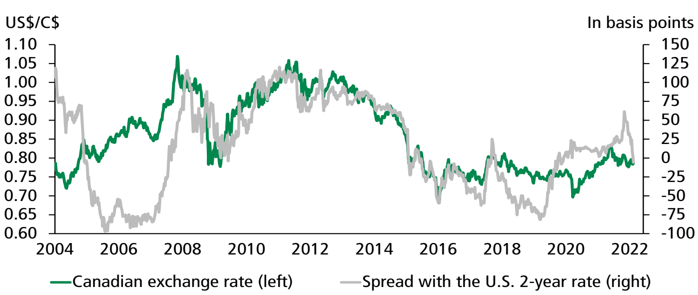
However, the PPP is not a very accurate measurement. Represented on a graph, the exchange rate can be seen to often deviate considerably and for long periods. The PPP is more of an indicator of the trend over the very long term. Measurement biases also arise from the use of CPIs that are not calculated the same way from country to country. The price comparison is therefore not quite of the same goods and services. Consumption taxes can also add discrepancies. That is not to mention the fact that goods and services cannot all be exported or imported. Due to a lack of arbitrage between all prices, differences can therefore arise between countries over several years.

Interest Rate Movements Have Been Less Favourable Recently

Interest rates are another important variable for exchange rates. A currency with higher interest rates will usually be more attractive than another with lower rates. Of course, higher interest rates should not be the result of a higher risk premium. In this case, a depreciation should instead be observed.

Significant interest rate movements in bond markets have been noted over the past few months as a result of inflation and many signals from central banks regarding potential key interest rate hikes. Interest rate hike expectations started out higher in Canada, but the needle has shifted south of the border more recently. Interest rate spreads between Canada and the United States are now less advantageous for the Canadian dollar and are in line with an exchange rate slightly below US$0.80 (graph 7). However, the loonie had remained below the value suggested by interest rate spreads over the last quarters. This variable is therefore not always reliable.

GRAPH 7
Interest rate spreads between Canada and the United States are less favourable

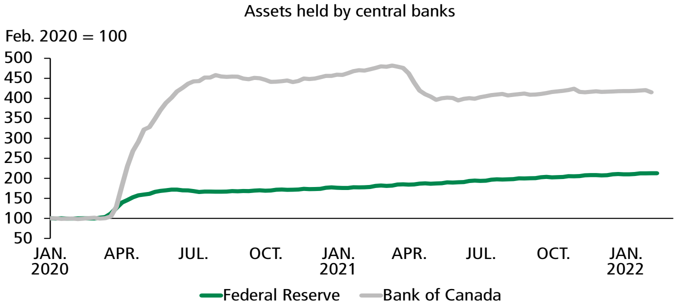


Sources: Datastream and Desjardins, Economic Studies

Asset Purchases

It is not just key interest rates that could soon move. Central banks could also announce a reduction in their asset holdings after having increased them considerably during the pandemic. The Bank of Canada (BoC) more than quadrupled the size of its balance sheet compared to its pre-pandemic level. That is far more than the Federal Reserve (Fed) (graph 8). Proportionally speaking, that means that the BoC increased the money supply to a greater extent than the Fed during the same period. This additional supply of Canadian dollars could explain a lower exchange rate. However, we do not have a long enough history to fully measure its effect. It is also difficult to predict how a reduction in the size of the BoC balance sheet will affect the Canadian exchange rate.

GRAPH 8
The Bank of Canada has injected more liquidity than the Federal Reserve during the pandemic



Sources: Datastream, Bank of Canada and Desjardins, Economic Studies

And Then There Is Everything Else…

In the end, anything that helps Canada's economy can push the loonie up and anything that harms it can pull it down. Economic health helps maintain confidence in a currency. Economic data have been less favourable in Canada as of late due to the effects of the Omicron wave and stricter public health measures. The recent demonstrations and blockades at some border crossings could have also given some international investors a bad impression.

Market volatility and uncertainty must also factor into the balance. Many investors view the U.S. dollar as a safe haven. When the uncertainty becomes too great or market volatility increases, the greenback will often appreciate against many currencies. Markets have been more volatile lately, and new sources of uncertainty have emerged, such as the tensions in Ukraine.

Ultimately, the Loonie Has Some Room to Appreciate

Although its recent weakness can be explained by certain factors, the Canadian dollar could manage to regain some ground in the coming months. This is assuming that the terms of trade will continue to be favourable, even if the price of oil and other resources begins to decline. That also presupposes that interest rate spreads will move less than in recent months and that Canadian economic data will improve. There will also have to be no escalation in market volatility. Less uncertainty on various fronts, including in connection with the pandemic and tensions in Ukraine, would also help the Canadian dollar. Lastly, potential announcements regarding a reduction in the size of central bank balance sheets is something to watch for as well. Greater upside potential might then appear for the loonie. We expect the exchange rate to appreciate above US$0.80 during the spring.

A weak currency is often viewed as more favourable for economic growth. However, in the current context of global shortages and high inflation, a stronger Canadian dollar might be more desirable. The exchange rate can be seen as an automatic stabilizer, limiting inflationary pressures when they are too high, among other things. We have already analyzed the effect of foreign exchange movements on inflation and estimated that a 10% currency movement in Canada resulted in a 0.7% adjustment in prices. A stronger currency could also facilitate investment by businesses facing worker shortages and high demand. Technologies and equipment are often imported. An appreciation in the loonie would facilitate these types of structuring imports.