Intelligence MEMOS

From: Martin Eichenbaum, Benjamin K. Johannsen, and Sergio Rebelo

To: Bill Morneau, Minister of Finance, and Stephen Poloz, Governor of the Bank of Canada

Date: February 16, 2018

Re: **Commodity Prices Not Best Predictor for the Loonie**

Contrary to popular belief, commodity prices are not the best predictor of the future exchange rate for the Canadian dollar, according to our new report for the C.D. Howe Institute. In fact, the current real exchange rate – the relative cost of a typical bundle of consumer goods in Canada and the US -is more useful than commodity prices for forecasting changes in the Canada/US nominal exchange rate.

We examined the historical determinants of the Canadian/US dollar nominal exchange rate and considered whether they can be used to accurately forecast long-run future rates.

In fact, short-run forecasts based on the real exchange rate are as good as the random-walk forecasts – considered the gold standard – in which the future exchange rate is expected to be the same as today's. Strikingly, medium- and long-run forecasts based on the real exchange rate are superior to random-walk forecasts.

It turns out Canada's real exchange rate with the United States is mean-reverting – that is, when the real exchange rate is high, it tends to fall to its long-run average. Second, the current real exchange rate displays a tight negative correlation with future values of the Canadian dollar relative to the US dollar.

The explanation for the first fact is that the shocks driving the real exchange rate are not permanent in nature. A non-exhaustive list of such shocks includes movements in commodity prices, changes in government spending and temporary shocks to the US economy. The explanation for the second fact is that Canadian and US monetary policies are similar in their broad contours in that both countries use a short-term interest rate to control inflation and do not explicitly manage the exchange rate. As a result, there have not been persistent changes in the relative price levels of the two countries.

A potential cost of Canada's monetary policy regime is that the real exchange rate is highly volatile. A benefit is that consumers and firms can mostly avoid the type of potentially costly changes in nominal prices and wages that would be required if the nominal exchange rate did not adjust in a flexible manner or if we allowed large deviations in Canada – US inflation rates. Evaluating the costs and benefits of those tradeoffs should play an important role in the process leading to the Bank of Canada's next five-year agreement with the government.

Martin Eichenbaum is Co-Director, Center for International Macroeconomics, Northwestern University; Benjamin K. Johannsen is Senior Economist, Federal Reserve Board and Sergio Rebelo is Co-Director for the Center for International Macroeconomics, Northwestern University.

To send a comment or leave feedback, email us at blog@cdhowe.org.