



WILLIAM STERLING

STERLING'S WORLD REPORT



What is "Fair Value" for the Canadian Dollar?

Canadian investors have been both frustrated and confused by global markets in recent years. They may have been frustrated because the returns have been low. And they may have been confused because they have heard news reports about a decent recovery in overseas markets that may not have been reflected in their portfolios.

The key issue has been the behaviour of the Canadian dollar, which has risen dramatically against its U.S. counterpart. That has meant that robust returns from foreign markets have looked relatively anemic when translated back into Canadian dollars.

Consider the last two years of U.S. stock market returns. In 2003, the U.S. market had an excellent year, with the S&P 500 posting a total return of 28.7%. In Canadian dollars, however, the S&P 500 posted a total return of only 5.3% in 2003. That's because the Canadian dollar gained a whopping 23% against the U.S. dollar that year, which erased most of the U.S. market's gains for Canadian investors. Something similar happened in 2004, although the numbers were more modest. The S&P 500 posted a respectable total return for the year of 10.9% in U.S. dollars, but gained only 3.3% in Canadian dollars.

How much longer can this go on? Has this remarkable two-year move in the Canadian dollar/U.S. dollar exchange rate gone so far now that U.S. stocks and bonds are a real bargain for Canadian investors? Or does the U.S. dollar have much further to slide thanks to the massive trade and budget deficits that are now giving headaches to U.S. policymakers?

Obviously, no one can answer these questions with any degree of precision because there is no one simple model of currency valuation that is widely accepted. Much depends on factors that are almost impossible to forecast, such as how long the Chinese and Japanese central banks will continue to finance huge U.S. trade deficits by buying hundreds of billions of dollars' worth of U.S. Treasury bonds. And even

the most steadfast bears on the U.S. dollar's long-term prospects are acutely aware that the highly speculative nature of currency markets suggest the possibility of a large "counter-trend rally" in the U.S. dollar even if the long-term trend is still down.

"Burgeromics" Says Dollar Undervalued

Since precision is impossible in these matters, we have to fall back on rough and ready measures that at least help to quantify how far out of line currency values might be with other fundamental economic data. For years, *The Economist* magazine has helped readers understand the concept of "purchasing power parity" (PPP) in currencies by using a simple example: the price of Big Mac hamburgers in different countries around the world. The PPP theory says that exchange rates should eventually move to equalize the prices of a basket of goods and services across different countries. *The Economist* simplifies the task by considering only Big Mac prices. According to its latest survey, as of December 14, 2004, the average price of a Big Mac in the U.S. was \$3.00 US, while the average price in Canada was the equivalent of \$2.60 US. That suggests that at an exchange rate of \$0.87 US per Canadian dollar, Big Mac prices are equal in both countries.

By that reckoning, the Canadian dollar, which has recently traded at around \$0.80 US, is still undervalued by about 8% against the U.S. dollar. However, the disadvantage of using one item is also illustrated by this example, since the glut of beef in Canada has pushed down meat prices in Canada. The same analysis conducted in 2002 put the Big Mac PPP



Purchasing Power Parity Estimate Puts "Fair Value" of Canadian Dollar at 80 Cents (US)

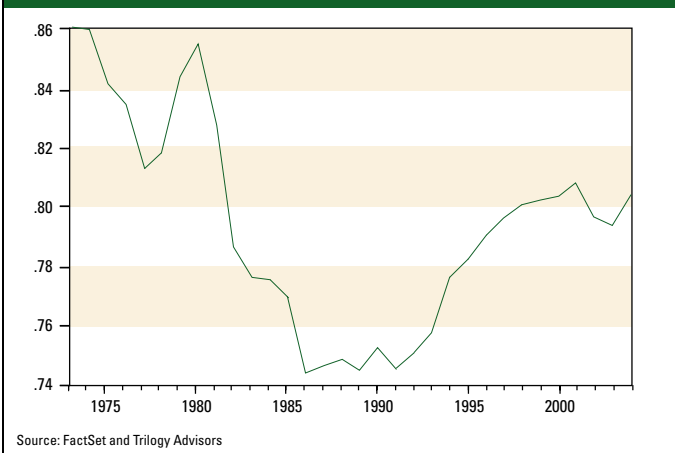


Chart 1: Since the early 1990s Canada's inflation has tended to be lower than U.S. inflation. That has helped push the Canadian dollar's "fair value" exchange rate to about 80 cents US.

rate at \$0.75 US! That would suggest that the Canadian dollar is now overvalued by about 7%. (We warned that precision is impossible.)

Our Analysis Puts Fair Value at 80 Cents

We used consumer price indexes for both the U.S. and Canada for the 1973-2004 period to come up with a more solid estimate of PPP that currently puts fair value at about \$0.80 US – or roughly where the currency has recently traded. The method we used, which was developed by analysts at the International Monetary Fund, considers how much higher Canadian and U.S. prices are currently compared to the average level of the last few decades. It then adjusts the "PPP rate" upward or downward accordingly, relative to the average exchange rate that has prevailed for the last few decades. The idea is that the market does tend to equalize prices in both countries over the long haul – even though substantial divergences in prices can exist for a number of years based on interest rate differences and other factors.

Chart 1 shows how our estimate of the PPP or "fair value" rate has changed over the years. Since 1990, Canadian inflation has typically been lower than U.S. inflation, which has tended to raise the PPP rate over time. The way to understand this is to suppose that every product in Canada became cheaper than corresponding products in the U.S., just as Canadian beef prices dropped relative to U.S. prices.

That means the real value of the Canadian dollar – in terms of what it can buy – was going up relative to the U.S. dollar. Thanks to lower Canadian inflation, our estimate shows that the PPP rate for the Canadian dollar rose from about \$0.75 US in 1990 to \$0.80 currently.

Chart 2 shows how much the actual exchange rate has tended to deviate from its theoretical "fair value" rate over the years. What is clear in this chart is that there were periods in time, such as the mid-1970s or the late 1980s and early 1990s, when the Canadian dollar was significantly overvalued relative to the PPP measure. In 1989, for example, the Canadian dollar was 16% overvalued compared to the PPP measure, as foreign capital rushed into Canada to take advantage of short-term Canadian interest rates that were nearly 5% higher than U.S. rates.

This type of rough analysis permits us to draw several conclusions. The first is that the Canadian dollar is now trading at close to its "fair value" level – the quotation marks are used because this is such a slippery concept. The second is that the Canadian dollar is still far lower in real terms than levels it has reached in its past periods of overvaluation. In other words, suppose the pressures created by U.S. trade and current account deficits eventually push the Canadian dollar up to a level of overvaluation comparable to what was seen in 1989. Given today's fair value rate of \$0.80 US, a 16% overvaluation would correspond to a value of the

Canadian Dollar Trading Close to "Fair Value" Deviation from Purchasing Power Parity (%)

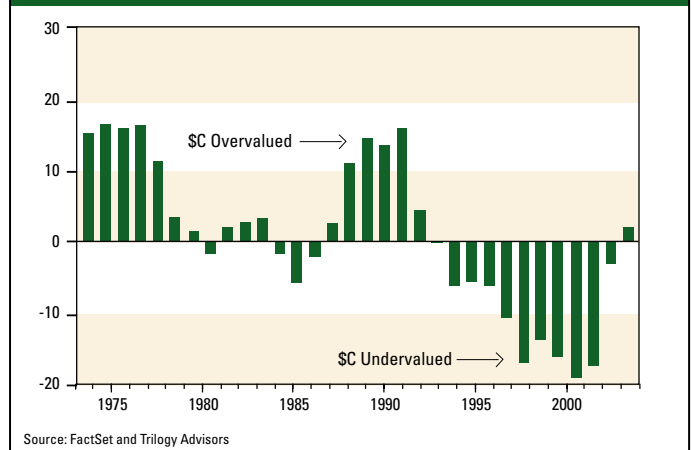


Chart 2: The Canadian dollar has recently traded very close to its estimated "fair value" of about 80 cents US. The key question is whether it will become as overvalued as it was in 1990.



Canada - U.S. Interest Rate Differential Does Not Support Major Overvaluation of Canadian Dollar

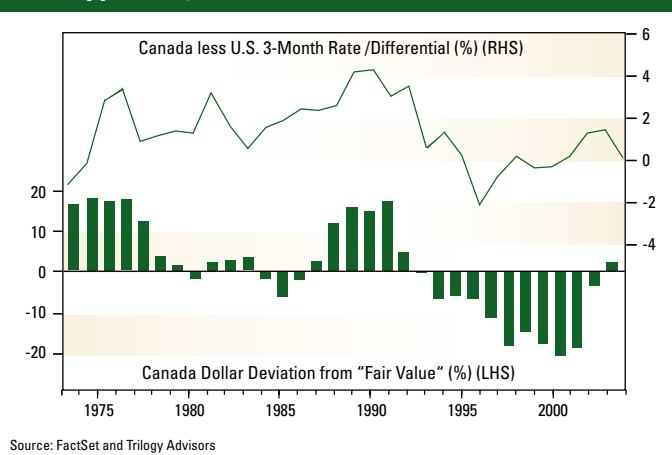


Chart 3: In the past, the Canadian dollar has tended to become "overvalued" against the U.S. dollar when Canadian short-term interest rates were much higher than U.S. rates.

Canadian dollar at \$0.93 US. So one can certainly not rule out some fairly extreme scenarios of how high the loonie might fly based on past currency cycles.

That said, it is worth pointing out that previous episodes of Canadian dollar strength have been associated with interest rate differentials between the U.S. and Canada that have made it highly attractive for investors to keep their money in Canadian dollars. That is evident in Chart 3, which shows the historical gap between Canadian and U.S. three-month Treasury bill rates plotted against our measure of overvaluation or undervaluation of the Canadian dollar. In particular, it shows that in the late 1980s and early 1990s the Canadian dollar was richly valued precisely when Canadian interest rates were very high relative to U.S. rates.

Trade Gap Remains a Concern

That is highly relevant now because there is currently little gap between U.S. and Canadian rates. If anything, the interest rate factor is likely to move in favour of a weaker Canadian dollar. That's because the U.S. Federal Reserve is raising interest rates steadily while the Bank of Canada has signalled that it will probably not follow the Fed step for step.

The major factor arguing for a weaker dollar is the U.S. current account deficit. With the deficit approaching 6% of GDP, U.S. policymakers may have little choice but to encourage the dollar to decline further against almost all

major currencies. To put into perspective the massive size of this deficit, a typical recession occurs when GDP falls 2% from peak to trough. Consider all of the media hysteria associated with a swing in GDP of that magnitude. Now multiply by three. That is not to say that the deficit has to be reduced by 6% of GDP overnight. In all likelihood, the process of adjustment will and should be spread out over many years. However, the price swings (exchange rate and possibly interest rate movements) required to make such an adjustment are likely to be substantial.

An international economist at New York University's Stern School of Business, Nouriel Roubini, has created a website (<http://www.stern.nyu.edu/globalmacro/>) with analysis on the unsustainable nature of the U.S. current account deficit. The site contains links to academic and financial market research on this important topic. In some ways, this website represents a one-stop shop for the long-term bear case on the U.S. dollar.

Our concern about the U.S. current account issue underpins our decision to continue to hedge a substantial fraction of our U.S. dollar exposure (about 25%), despite recent interest rate trends that have lent some support to the U.S. dollar. We also think that the most logical recipe for reducing the imbalance is to have stronger growth overseas, slower growth for the U.S. consumer, and a weaker dollar. All of those factors suggest to us that non-U.S. equity markets are likely to outperform U.S. markets for some time to come.

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