

Pressures Abound

The Canadian dollar has risen dramatically since the end of last year, from a low of 62.6 cents in October to a high of 74.9 cents in June. Since then, the Canadian dollar has settled around 72 cents. Large upward movements like this are not common to the Canada-U.S. exchange rate. Consequently, many are wondering whether the Canadian dollar is going to continue its surge or whether it is close to stability.

Many economic theories have been developed to explain exchange rate movements, none of which have emerged victorious. Nonetheless, they do offer insights into some of the main factors that tend to influence exchange rate movements. These theories, combined with recent developments in financial markets and current economic trends, provide some insights into recent developments.

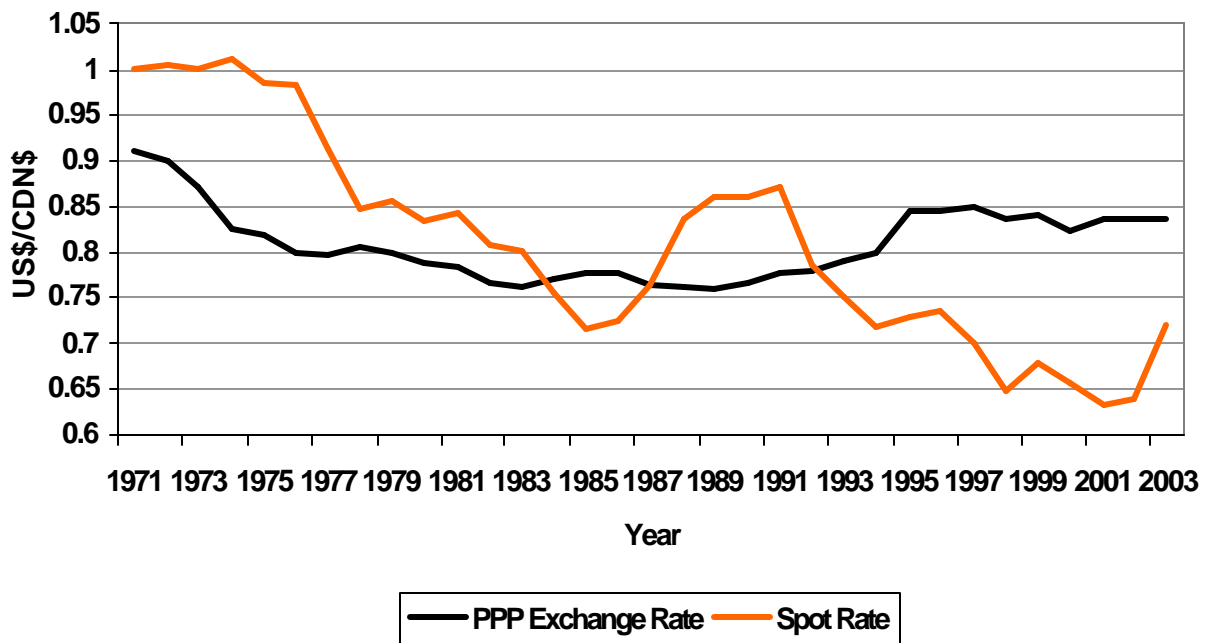
Purchasing Power Parity (PPP)

Economists generally believe that long-run exchange rate movements are dominated by the law of one price and purchasing power parity (PPP). According to the law of one price, a good that is traded should be worth the same in its country of origin as in its country of destination. As a result, the exchange rate should adjust to equalize prices in the two countries to maintain purchasing power parity (PPP).

Since purchasing power parity involves all tradable goods, determining a PPP-consistent exchange rate is very difficult. Its value is very sensitive to the particular price indexes chosen, as well as how transportation costs, trade barriers, and other forms of regulation are accounted for. Hence, calculating a PPP exchange rate may be the theory's greatest weakness.

Since purchasing power parity is generally believed to hold only in the long

Spot and PPP Exchange Rates



Note: Purchasing Power Parity data obtained from the OECD website on May 20, 2003. <http://www.oecd.org/xls/M00009000/M00009295.xls>

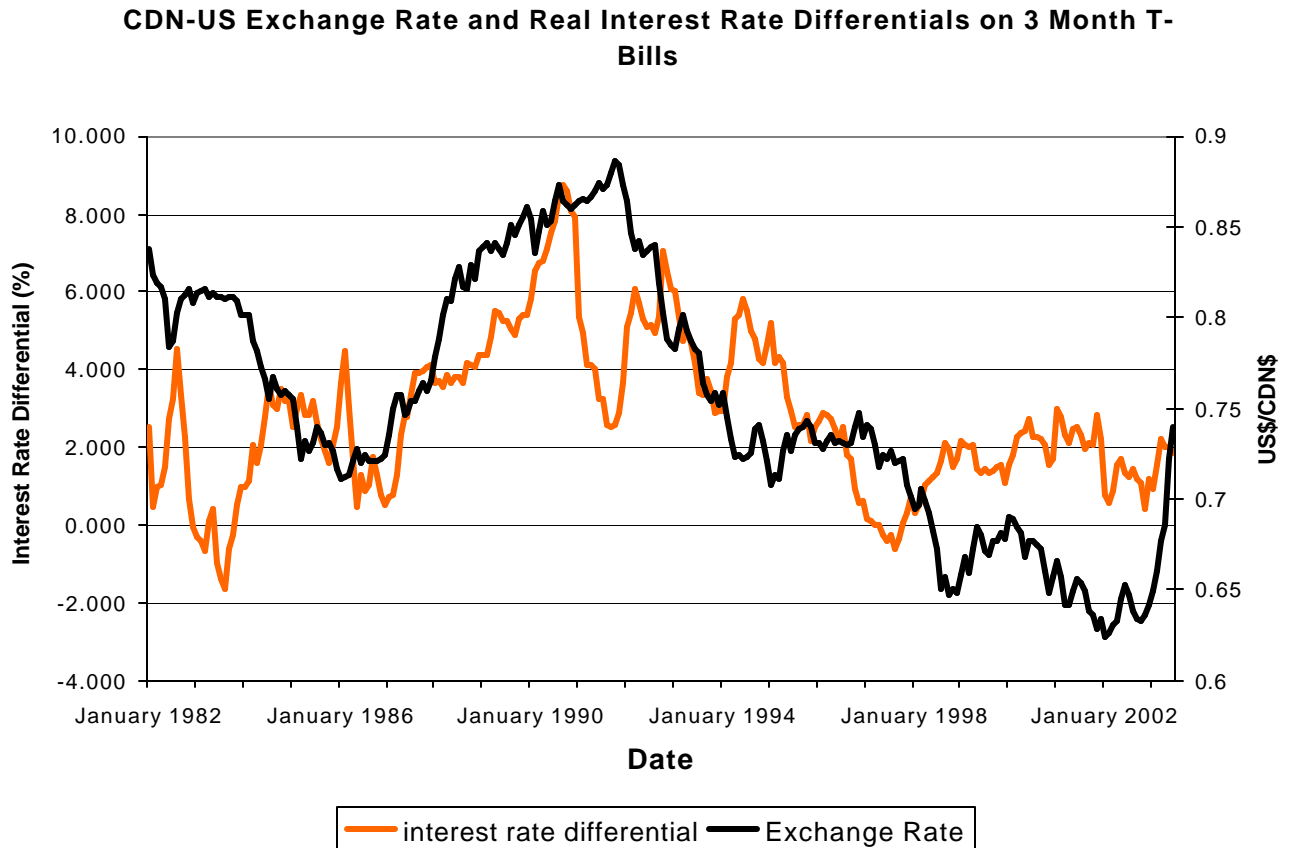
run, it is not surprising to see the market exchange rate differ significantly from its PPP level. A comparison of the market value and the OECD's estimate of the PPP value of the Canadian dollar tends to support this view. Between the late 1970s and the early 1990s, the market rate tended to fluctuate around its PPP value. In the early 1970s, however, the market rate was 10 to 20 U.S. cents above its PPP rate. Since the mid 1990s, on the other hand, the market exchange rate has been about 20 U.S. cents below its PPP level. Considering that the PPP rate has remained relatively stable at US\$0.84 since then, there may be some pressure for the Canadian dollar to appreciate further.

strong influence on capital flows in the short run since investors tend to move their money from lower-yielding assets into higher-yielding ones. Investors who move their money from low-yielding assets in one country to higher-yielding assets in another put upward pressure on the currency they buy and downward pressure on the currency they sell. Therefore, when the difference in interest rates between two countries increases, the currency of the country with a higher interest rate may appreciate.

Interest rates however tend to be different from reasons other than supply and demand. Countries with high rates of inflation tend to offer higher interest rates than countries with low rates of inflation. This was Canada's case in the early 80s, when it had a higher rate of inflation than the United States. To compensate for this,

Real Interest Rate Differentials

Interest rate differentials can have a



Note: Data gathered from Statistics Canada.

the following analysis will deal with real interest rate differentials rather than nominal interest rate differentials.

Even with real interest rates however, there are cases in which a higher real interest rate in a particular country may not attract investors and not cause an appreciation. This occurs when the real interest rate is higher in a country because there is a risk premium associated with investing in that country, or, as is Canada's case, the country possesses smaller and less liquid capital markets.

According to Canadian and American short-term rates (3 month t-bills), Canada currently offers real interest rates 220 basis points above the United States. This may indicate the presence of upward pressure on the Canadian dollar. Recent history however, suggests that periods of real interest rate differentials averaging 200 basis points are associated with relatively stable exchange rates between Canada and the United States. The period from January 1985 to January 1988 and the period from November 1995 and November 1996 demonstrate this. As mentioned, this may be due to Canada's smaller and less liquid capital markets. On the other hand, long sustained upward or downward movements in real interest rate differentials, similar to those that occurred in the periods from 1986 to 1991 and 1991 to 1997, seem to be linked with similar movements in the US\$/CDN\$ exchange rate.

It appears then, that the Canadian dollar follows a pattern very similar to the pattern exhibited by the Canada-U.S. real interest rate differential, with a couple of self-correcting short-lived deviations. The last large deviation occurred during the Asian financial crisis of 1998 when the real interest rate differential increased, but the US\$/CDN\$ exchange rate depreciated. Since then, the Canadian dollar has largely followed the pattern of the Canada-U.S. real

interest rate differential. Therefore, there seems to be some pressure for the Canadian dollar to appreciate to US\$0.73 and correct the deviation that occurred in 1998. Thus, real interest rate differentials seem to explain the appreciation of the Canadian dollar in the first half of the year.

Financial analysts generally seem to expect that the real interest rate differential between Canada and the U.S. will remain close to 200 basis points for the remainder of the year, before narrowing. In that case, the exchange rate may be expected to remain relatively unchanged from its current level.

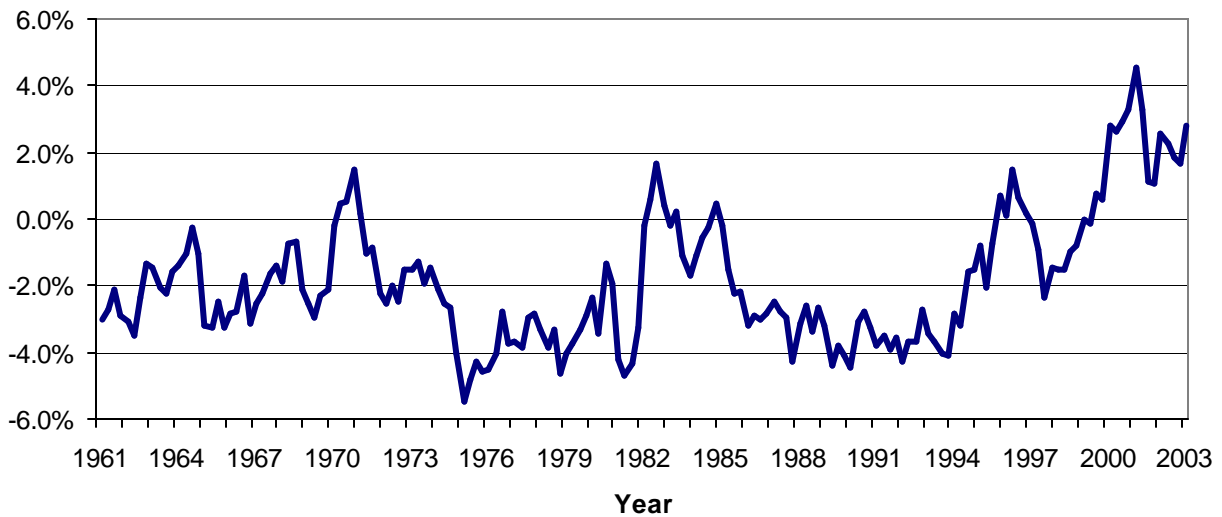
The Current Account

Another factor that theoretically should influence the value of a nation's currency is a nation's current account position. In the long run, nations possessing current account surpluses should have strong currencies because they export more than they import, causing the demand for their currencies to increase. Similarly, nations possessing current account deficits should have weak currencies in the long run, because they import more than they export, causing their currencies to increase.

Although the current account has been considered for a long time as a key determinant of exchange rate movements, it may be losing some of its importance. The increased integration of financial markets has made the flow of money between countries due to portfolio investment exceed the flow of money due to imports and exports. Hence, factors that influence capital flows, like real interest rate differentials, have become more important in determining exchange rate movements than factors influencing the movements of goods and services.

Since entering the North American Free Trade Agreement in the early 90s, Canada has steadily improved its current

Canadian Current Account Surplus/Deficit as a Percentage of GDP



Note: Data gathered from Statistics Canada.

account position, going from a deficit to a surplus. The United States, on the other hand, has worsened its current account deficit over the last couple of years. As a result, economic theory would suggest that in the long run, the Canadian dollar should gain in strength relative to the U.S. dollar.

What do Financial Markets Say?

Market expectations about a currency's future value can be an important factor in determining short run movements in exchange rates. When people involved in the buying and selling of currencies believe a currency is on its way up, they may adjust their actions accordingly, and put upward pressure on the currency. The same would be true if market participants expect a currency to fall in value. Therefore, looking at forward rates and private sector forecasts may be helpful in determining where a currency may be heading.

Forward rates are exchange rates agreed to by two parties in the present for a transaction in the future. A downward pattern to forward rates is normal even if a stable exchange rate is expected, because there is a risk premium offered to the buyer. As a result, when the exchange rate is expected to depreciate, forward rates follow

a very steep downward pattern, and when the exchange rate is expected to appreciate, forward rates become flat.

Canada-U.S. forward rates as of early August seemed to follow a slight downward pattern associated with the presence of risk premiums and a stable dollar. On August 8, the three-month forward rate stood at 0.708, the six-month forward rate at 0.7052, and the twelve-month forward rate at 0.7005 (when the spot rate stood at 0.7113). Hence, forward rates suggest that there may not be any pressure from expectations for the dollar to appreciate more.

Since transactions using forward rates are usually restricted to few large institutions, they may not reflect accurately what the dominant market expectation may be. Therefore, another useful tool for capturing market expectations regarding the exchange rate are private sector forecasts. These forecasts may not give an indication of what the future value for the Canadian dollar may be, but may give some indication as to what direction it is likely going to move.

Institution	Exchange Rate on Date of Forecast	Forecasted Average Exchange Rate For 2003	Forecasted Average Exchange Rate For 2004
<i>Bank of Montreal</i>	0.719 (August 8)	0.706	0.74
<i>TD Bank</i>	0.708 (July 18)	0.714	0.746
<i>CIBC</i>	0.741 (July 23)	0.705	0.734
<i>Bank of Nova Scotia</i>	0.715 (August 1)	0.738	0.767

Private sector forecasts currently differ substantially among institutions, possibly because of the incredible amount of volatility shown by the Canadian dollar in the last couple of months. Generally, however, most institutions see the Canadian dollar remaining near its current level or increasing by the end of the year. Most institutions also believe in a further appreciation by the Canadian dollar next year, as the United States economy picks up .

Although forecasts are currently very different among institutions, they generally lie between 70 and 76 cents U.S. That is, they all lie well above the range attributed as normal for the Canadian dollar in the previous four years. They are also lie well below the PPP-consistent level.

Current Economic Trends

As mentioned earlier, economic theories of exchange rate determination, on average, do not fare well in explaining exchange rate movements in the short run. Therefore, current economic trends involving investor confidence and American economic weakness may be able to tell us as much about what is happening as the theories already discussed.

Currencies like the euro (+9%) and the Australian dollar (+14%) have also appreciated considerably since the beginning of the year. For this reason, it is difficult to say that the appreciation of the Canadian dollar is a result of good Canadian fundamentals. The U.S. economy has remained weak in recent months, prolonging the slump that began with the collapse of the stock market bubble and the events of

September 11. American GDP finished the first quarter up only 1.4% annually. Canada, on the other hand, has been growing at a rate of 2.4% annually so far this year. This may suggest that investors have lost confidence in a quick U.S. turnaround this year. As a result, investors may be seeking, to a certain degree, other countries for quick gains in the short run, resulting in the appreciation of many world currencies relative to the U.S. dollar.

Just as U.S. economic weakness may have been a key factor in the Canadian dollar's sudden rise, a U.S. turnaround may become a key factor in halting the Canadian dollar's appreciation. The U.S. government has responded strongly to the current economic slump by cutting interest rates to their lowest levels in years and by providing a powerful fiscal stimulus through tax cuts. As a result, economists generally expect the U.S. economy to grow faster at the end of the year, converging in growth with Canada, and possibly putting downward pressure on the Canadian dollar.

Conclusion

All in all, the multitude of pressures acting on the Canadian dollar may result in a considerable amount of volatility in the short run. However volatile the Canadian dollar may be, upward pressures from PPP and expectations, balanced by downward pressures from shrinking interest rate differentials and a recovering U.S. economy, are likely going to keep it from making significant gains or losses in the near future.