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EXPLAINING THE RISE IN THE CANADIAN DOLLAR

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CANADA

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EXPLAINING THE RISE IN THE CANADIAN DOLLAR

INTRODUCTION

In 2003, the Canadian dollar experienced a period of appreciation vis-à-vis its U.S. counterpart, the speed and magnitude of which are unprecedented in the dollar's modern history. The Canadian dollar, worth 63.6 cents U.S. on 1 January 2003, rose to 77.1 cents U.S. by the end of the year – an increase of 21.2%. This appreciation is all the more remarkable given that, except for a five-year period beginning in 1988, the Canadian dollar has been in a long-term decline relative to the U.S. dollar since the mid-1970s.

In October 2003, the Standing Senate Committee on Foreign Affairs undertook a study of the causes and effects of the rising Canadian dollar. The Committee's final report, *The Rising Canadian Dollar: Explanations and Impacts*,(1) was tabled in the Senate on 6 November 2003. The present paper is the first in a two-part series drawing on the Senate Committee's final report and on testimony presented to the Committee. This paper examines the factors contributing to the rise in the Canadian dollar in 2003. The second of the series, entitled *The Effects of a Higher Dollar on the Canadian Economy*, will consider the potential impact of this rapid currency appreciation on the Canadian economy.

This paper contains three main sections. The first provides a brief overview of the modern history of the Canadian dollar. The second considers several factors known to affect the exchange rate. The third section focuses on the key factors that economists believe are contributing to the current rise in the Canadian dollar. A conclusion follows.

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(1) The report was drafted by Peter Berg and Michael Holden of the Economics Division, Parliamentary Research Branch, Library of Parliament.

HISTORY OF THE VALUE OF THE CANADIAN DOLLAR

The modern era of the Canadian dollar – when market forces of supply and demand determined its value – began in 1950 with the decision to remove all exchange rate controls and "float" the currency on international markets. That decision was made in response to growing concerns about inflationary pressures in Canada and a rising level of foreign indebtedness.

Prior to 1950, the Canadian dollar had been fixed relative to the U.S. dollar at a value of 90.91 cents U.S.(2) With exchange rate controls removed, the dollar quickly rose, trading at a premium to the U.S. dollar through most of the 1950s and reaching a high of US$1.06 in 1957. Canada's initial success with a flexible exchange rate provided a model for the rest of the world when the system of fixed exchange rates finally collapsed in the early 1970s.(3)

Canada's first experiment with a floating exchange rate lasted 12 years. In 1962, prompted by concerns that the dollar was overvalued, a new fixed rate of 92.5 cents U.S. was introduced. This rate was maintained until 1970, when a combination of high interest rates (intended to control surging inflation), rising commodity prices and strong demand for Canadian exports all resulted in substantial capital inflows into Canada. Because this inflow of money was undermining the efforts to combat inflation and placing considerable stress on the level fixed for the exchange rate, Canada re-floated the currency to ease the pressure.(4) The effect was immediate. The Canadian dollar rose sharply, to about 97 cents U.S., and continued to appreciate, reaching a high of US$1.0443 in 1974.

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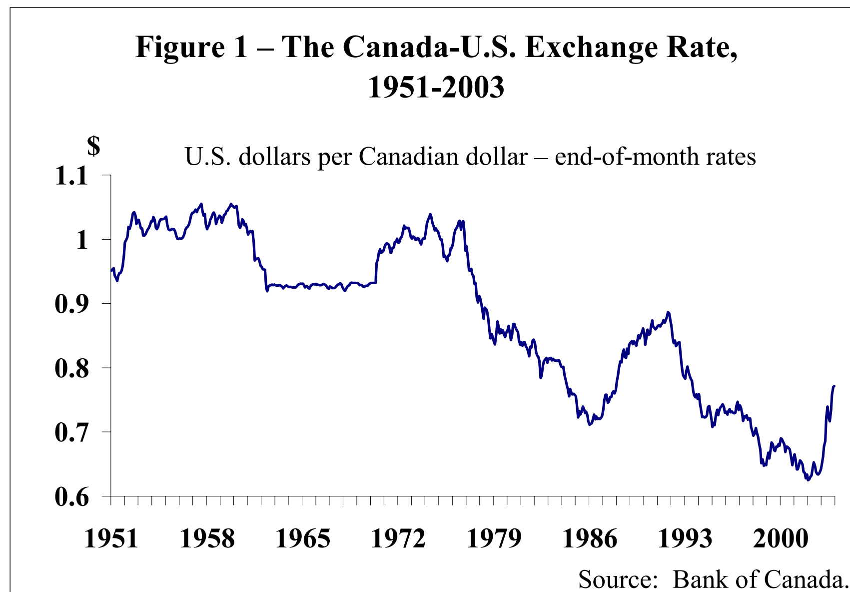
(2) As a member of the International Monetary Fund (IMF), Canada was committed to the Bretton Woods system of fixed exchange rates. The decision to float the Canadian dollar violated that commitment.

(3) J. Powell, *A History of the Canadian Dollar*, Bank of Canada, Ottawa, 1999; available at: http://www.bankofcanada.ca/en/dollar_book/dollar_book-e.pdf.

(4) *Ibid.*



Canada has maintained a floating exchange rate since that time. Since the mid-1970s, however, the Canadian dollar has experienced a long-term decline relative to the U.S. dollar. In 1976, the Canadian dollar was trading at about par with the U.S. dollar, but fell from about US$1.01 to 76 cents U.S. over the next 10 years. This trend was reversed temporarily in the late 1980s and early 1990s, when the dollar rose from a low of 71 cents U.S. in 1986 to over 87 cents in 1991. However, this rise proved to be short-lived. A wide range of factors contributed to the dollar's fall to a low of about 62.5 cents U.S. in April 2002.

FACTORS AFFECTING THE EXCHANGE RATE

Like any other traded good, the value of the Canadian dollar relative to the U.S. dollar – or to any other currency, for that matter – is determined by the interaction of the forces of supply and demand. Any factor that increases (or decreases) demand for the Canadian dollar, or that decreases (increases) demand for foreign currency, will place upward (downward) pressure on the exchange rate.(5) Similarly, factors that increase (decrease) the relative supply of the Canadian dollar will push the exchange rate lower (higher).

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(5) In this report, the exchange rate refers to the cost, in Canadian dollars, of buying a unit of foreign currency. Economists more typically consider the exchange rate to measure how much foreign currency can be purchased with one Canadian dollar.

Economic theory and empirical evidence have identified a number of factors known to affect movements in exchange rates. In isolation, these have a predictable effect on currency values. However, since many economic variables are closely interconnected, they rarely, if ever, act in isolation from one another. This makes anticipating or explaining movements in exchange rates notoriously difficult, a difficulty exacerbated by the fact that many factors known to affect currency values are evident only in hindsight. Furthermore, these factors are often themselves affected by movements in exchange rates. In other words, while the Canadian dollar moves in response to prevailing economic conditions, it influences those conditions as well.

In general, the value of the Canadian dollar relative to the U.S. dollar is influenced by two distinct categories of catalyst. The first is domestic or comparative factors – fundamental economic conditions in Canada, especially relative to those in the United States. The second is external factors – those over which Canada or Canadian policy have little to no influence. It should be borne in mind that while each individual factor has a predictable effect on the exchange rate, this cause-and-effect relationship is clouded by the presence of other economic influences that may magnify, or even offset, the predicted outcome. Indeed, in some cases, certain historic indicators have pointed to a stronger (or weaker) dollar, when in fact the reverse occurred over that period.

A. Domestic and Comparative Factors

1. Relative Economic Growth

Perhaps the most significant domestic influence on the Canadian dollar is the relative health of the Canadian economy. A strong economy makes Canada an attractive place to invest in because of the promise of solid financial returns. This raises demand for Canadian dollars, which in turn raises their price on international markets. Conversely, weak economic growth reduces the attractiveness of investing in Canada and thus lowers demand for, and the value of, the Canadian dollar.

In discussing the Canada-U.S. exchange rate, however, it is important to note that the strength of the Canadian economy is a relative measure. If robust growth in Canada were matched by comparable strength in the United States, then there would be little effect on demand for the Canadian dollar relative to the U.S. dollar.[6] Similarly, economic weakness in Canada could in fact place upward pressure on the dollar if the performance of the U.S. economy were significantly weaker still.

2. Interest Rate Differentials

The difference between interest rates in Canada and the United States is also a major determinant of the exchange rate between the two currencies. When Canadian interest rates are higher than those in the United States, Canada becomes a more attractive destination for interest-sensitive foreign capital because the rates of return are higher. This results in higher demand for assets denominated in Canadian dollars (e.g., short-term paper, bonds) and thus places upward pressure on the dollar itself. When Canadian interest rates are lower than in the United States, then the opposite holds true and the Canadian dollar typically weakens.

3. Inflation Rate Differentials

Differences in inflation rates between Canada and the United States also affect currency movements in the long term. Inflation is the rate at which prices rise over time, and it thus measures the erosion of the purchasing power of a dollar. If prices in Canada were to rise faster than in the United States, this situation would, over time, erode the purchasing power – and thus the value – of the Canadian dollar relative to the U.S. dollar. That erosion of value would be reflected in a decline in exchange rates. Similarly, if inflation in Canada were low compared to that in the United States, some upward pressure on the Canadian dollar would result.

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(6) The Canadian dollar would, in all likelihood, rise against the currencies of other slower-growing economies.

4. Current Account Balance

The current account measures the flow of goods, services and investment income between Canada and the rest of the world. It can be thought of as the sum of the merchandise trade balance, the services trade balance and the investment balance (the net flow of interest and dividends). Merchandise trade is by far the largest component of the current account. Currently, since Canada has a merchandise trade surplus that is great enough to offset deficits in both services and investment flows, it has an overall current account surplus.

A current account surplus means that since Canada is selling more than it is buying, there is a net flow of money into Canada. This implies increased demand for Canadian dollars, pushing up the value of the currency. The opposite is also true: a current account deficit suggests a flow of money out of Canada, placing downward pressure on the exchange rate.

B. External Factors

1. World Commodity Prices

Because Canada is a large producer and net exporter of resource-based goods, the Canadian dollar is often referred to as a commodity-based currency. In other words, the value of the Canadian dollar is correlated to the strength of world commodity prices. When world commodity prices are high, then resource-based industries in Canada are more profitable, making the Canadian economy stronger and thus attracting investment and placing upward pressure on the Canadian dollar. When commodity prices fall, they undercut revenues for resource-based firms, eroding profits, dampening the domestic economy and pushing down the Canadian dollar.

2. World Economic Growth

Commodity prices are largely determined by the strength of the global economy. A strong global economy tends to raise demand for – and therefore prices of – basic commodities; conversely, in times of economic weakness, demand for (and prices of) those commodities falter. Accordingly, in times of world economic strength, the Canadian dollar tends to rise; in times of weakness, the dollar tends to fall.

Similarly, since the United States is by far the largest economy in the world, economic strength in the United States plays a large role in determining the health of the global economy. A robust U.S. economy often suggests a strong global economy. Since this situation, in turn, leads to higher world commodity prices, a strong U.S. economy can have a positive effect on the Canadian dollar.(7)

3. Global Stability

In times of economic uncertainty or instability, investors tend to gravitate toward what are considered "safe" currencies until the uncertainty passes. The U.S. dollar has traditionally been the safe haven of investors. Thus, in times of global economic turmoil, the U.S. dollar has typically strengthened relative to most major currencies, including the Canadian dollar. Most recently, this occurred during the Asian Financial Crisis, when uncertainty in Asia, Latin America and Russia led investors to flock to U.S. markets.

C. Other Factors

1. Investor Sentiment/Speculative Investment

Economic theory states that economic forces alone determine exchange rate movements. However, empirical evidence suggests that while exchange rates may ultimately respond to economic fundamentals over the long term, speculative interests and investor sentiment tend to exaggerate those movements in the short run. A rise in the Canadian dollar could become at least partially self-perpetuating if investors begin to buy assets denominated in Canadian dollars based solely upon the expectation of continued appreciation in the exchange rate. Similarly, a falling exchange rate could be magnified if investors lose confidence in the currency, prompting a sell-off of Canadian dollars.

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(7) As stated earlier, however, economic growth differentials between Canada and the United States also affect the value of the Canadian dollar. Therefore, the argument that economic strength in the United States can have a positive effect on the Canada-U.S. exchange rate holds true provided that the two economies are growing at comparable rates.

2. Political Stability and Confidence

For the most part, investor confidence is swayed by economic factors. However, when assessing prospects for future growth, factors such as government policies, public perception and political uncertainty can all influence exchange rates. Uncertainty about a country's future in any of these areas can deter investment and push down exchange rates. For example, the threat of Quebec secession in the early to mid-1990s, and the uncertainty created by the 1995 referendum, were believed to have had a dampening effect on the value of the Canadian dollar.

EXPLAINING THE CURRENT RISE IN THE CANADIAN DOLLAR

Research at the Bank of Canada shows that, of all the factors known to affect the value of the Canadian dollar, most long-term movements in the exchange rate can be attributed to fluctuations in four variables: the difference in Canadian-U.S. inflation rates; interest rate differentials between the two countries; the world price of energy; and the world price of non-energy commodities. The Bank of Canada operates a mathematical model that plots a simulated value for the Canadian dollar over time as a function of these four variables, and it has closely tracked the actual performance of the Canadian dollar since the mid-1970s. The results indicate that the four factors mentioned above are, indeed, contributing to the current rise in the Canadian dollar. The magnitude of the increase in the exchange rate, however, is significantly greater than recent movements in those four variables suggest. A large gap has emerged between the Bank's simulation and the actual value of the Canadian dollar.

While this gap could simply be due to the Bank's model lagging behind the actual value of the Canadian dollar, the consensus is that the rising exchange rate is due to some other factor. Specifically, analysts suggest that it reflects more fundamental economic forces at work in the United States. In other words, the current strength in the Canadian dollar is less a result of Canada's relatively sound economic position, than it is of economic weakness in the United States.

A. Decline in the U.S. Dollar

That the rise in the Canadian dollar is largely a U.S.-based phenomenon is evident in the fact that the Canadian dollar is not the only currency to have appreciated against the U.S. dollar in 2003. Indeed, most major currencies worldwide have done so, and some have appreciated even more rapidly than the Canadian dollar. The euro, in particular, has soared versus the U.S. dollar, rising by 39.5% from January 2002 through December 2003. The Australian dollar, another "commodity currency" like the Canadian dollar, has been even stronger, rising by 46.2% over the same period.

The significant difference between the performance of these (and other) currencies and that of the Canadian dollar is the length of time over which the exchange rate appreciation took place. In most countries, domestic currencies began to rise relative to the U.S. dollar in early 2002 and carried on through 2003. For example, by the end of 2002, the euro had already appreciated by 18.3% compared to a year earlier. The British pound and Australian dollar also rose by about 10.5% each over the same period. By contrast, the appreciation in the Canada-U.S. exchange rate took place almost entirely in 2003. Through 2002, the Canadian dollar rose by less than 1%; but it gained 21.2% in 2003.

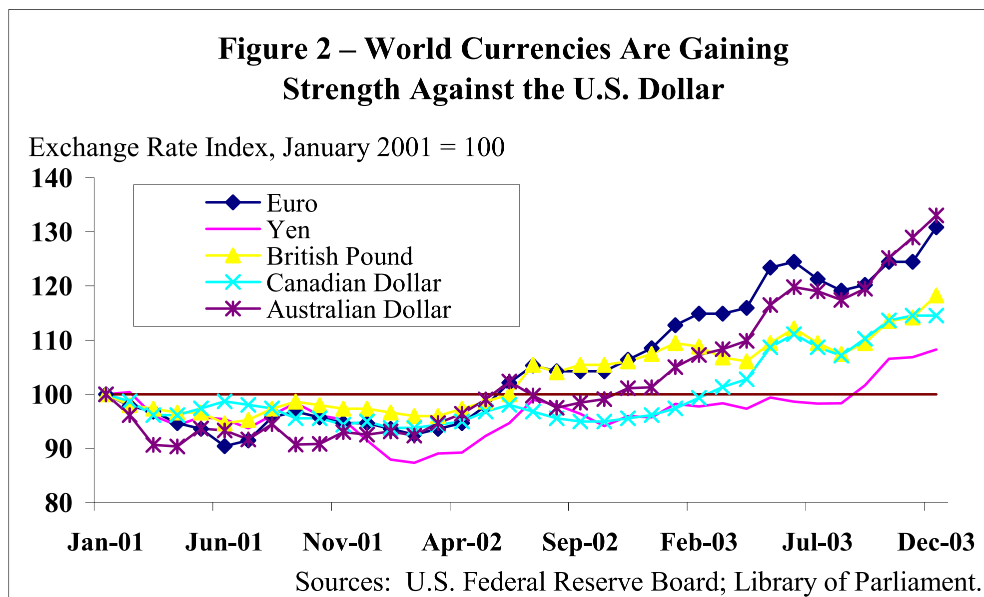


Figure 2 – World Currencies Are Gaining Strength Against the U.S. Dollar

Sources: U.S. Federal Reserve Board; Library of Parliament.

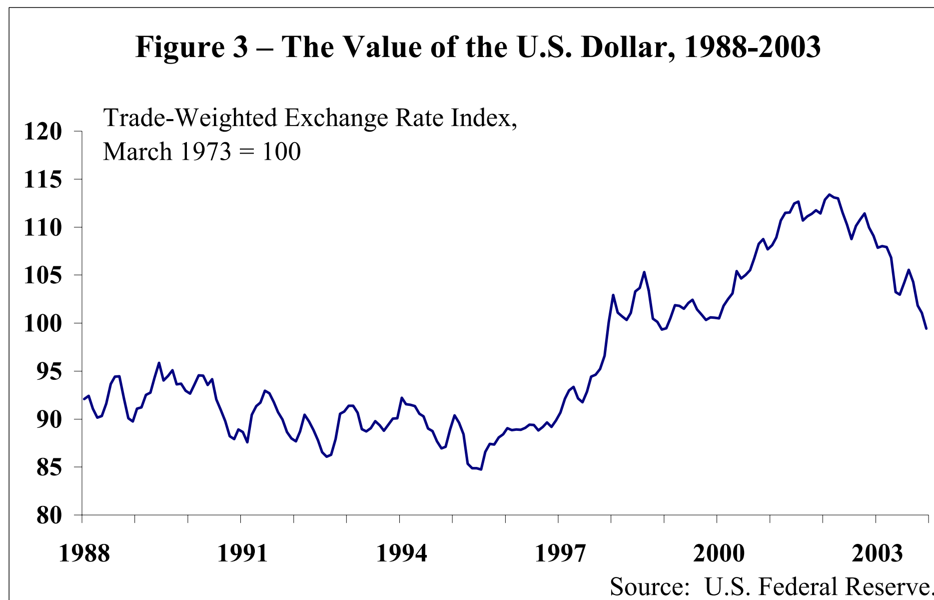
There are two facets to the explanation for the decline in the U.S. dollar. The first is that the U.S. dollar had been overvalued in recent years and the current decline represents a return to equilibrium levels. The second is that weakness in economic fundamentals in the United States is driving the exchange rate lower. Each is discussed below.

1. Overvalued Currency

Many economists believe that a major factor behind the depreciation of the U.S. dollar is that the dollar had been overvalued in recent years. Beginning in the mid-1990s, the U.S. dollar began to appreciate significantly in response to domestic and international conditions. In this context, the current decline represents not a deterioration in the value of the currency, but rather, its return to a more appropriate value.

Two major factors were responsible for the rapid appreciation of the U.S. dollar in the late 1990s. The first is that the U.S. economy was in the midst of a period of prolonged expansion, sustained by a "virtuous cycle" of economic conditions. Surging investment in machinery and equipment led to healthy productivity gains, which in turn allowed wages, profits and equity prices to rise without triggering inflationary pressures. Low inflation allowed the U.S. Federal Reserve to keep monetary policy loose, thus further attracting capital investment and productivity gains, and prolonging the economic expansion. As demand for U.S. assets grew in the wake of the booming economy, the U.S. dollar began to rise, further dampening inflationary pressures.

The second factor was a series of economic and political crises that shook confidence in world markets and led investors to flock to "safe" U.S.-dollar assets. The first of these incidents was the Asian Financial Crisis in 1997-1998. The crisis began in Thailand when investors lost confidence in that country's ability to maintain its fixed exchange rate and began a run on the Thai currency. This financial crisis quickly became a contagion, spreading through East and Southeast Asia, as well as Brazil and Russia. The resulting turmoil in international markets placed further upward pressure on the U.S. currency.



The collapse of the tech stock bubble in September 2000, far from deterring investment in the United States, created further economic uncertainty and pushed the U.S. dollar even higher. Similarly, the effect of the terrorist attacks a year later was to undermine global stability and certainty, providing further impetus for investors to seek out safe assets.

All told, the U.S. dollar rose considerably in the late 1990s and into the current decade. Using a broad trade-weighted index of the U.S. dollar relative to its major trading partners, the U.S. currency rose by 25% from 1996 to the end of 2001, a stark contrast to the modest downward trend that had prevailed from 1988 to 1996.(8)

2. Weakening Economic Fundamentals

The rise in the U.S. dollar through the late 1990s, however, contributed to a deterioration in economic fundamentals in the United States – a deterioration that portended the present decline in the value of the U.S. currency. In the late 1990s, solid wage gains in the United States created an upsurge in consumer spending which, in turn, increased demand for imported goods. This increased demand was magnified by the rising U.S. dollar, which lowered the price of imports. As a result, the U.S. trade balance began to deteriorate.

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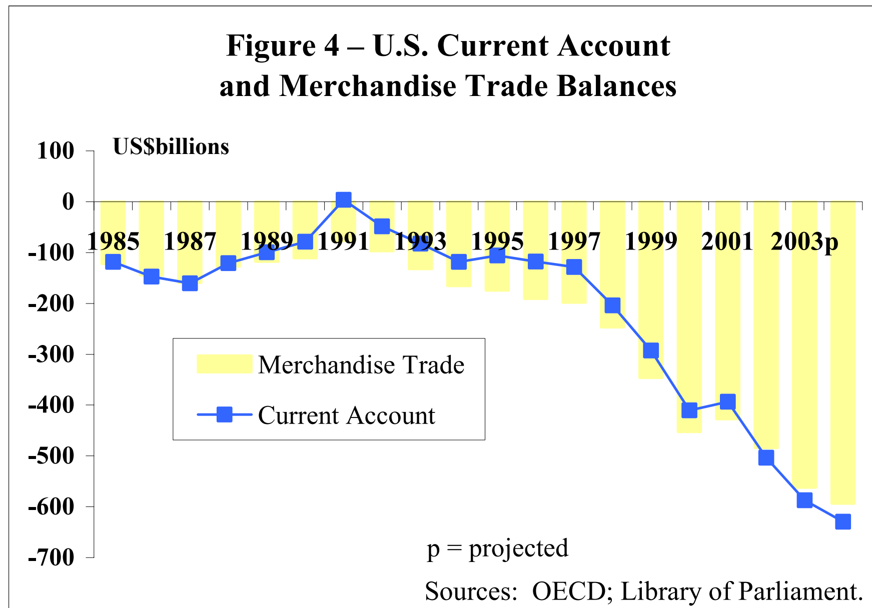
(8) This exchange rate index is developed and maintained by the U.S. Federal Reserve. Data and information on methodology are available on the Federal Reserve's Web site (http://www.federalreserve.gov).

Since merchandise trade balances are by far the largest component of the current account, the ballooning trade deficit has caused the current account deficit to grow as well. From less than 2% of GDP in 1997, the current account deficit in the United States now sits at about 5% of GDP – one of the largest deficits in the OECD.(9)



In the past, the current account deficit had been financed by private investors eager to take advantage of the strong U.S. economy and lucrative equity market returns. More recently, however, low interest rates and poor stock market returns in the United States have deterred private investors from buying assets denominated in U.S. dollars. This situation has been exacerbated by a falling dollar that has further eroded foreigners' returns on U.S.-dollar assets. Instead, the U.S. current account deficit has been largely financed by foreign governments, particularly in Asia, that are using U.S. dollar bonds to build up their foreign exchange reserves or, in the case of Japan, to prevent a large increase in the value of the yen.

Since a current account deficit implies an outflow of U.S. dollars, it also implies that foreigners' claims on the United States must be increasing. In other words, since the United States must raise funds in order to continue to buy imports, it does so by selling assets such as government bonds and private sector equities, as well as by direct foreign investment in

(9) According to the June 2003 OECD *Economic Outlook*, only Slovakia, Portugal and Greece have higher current account deficits than the United States.

U.S. physical assets such as machinery, plant and equipment. As a result, the United States' net foreign debt has soared in recent years, and the country has gone from being the world's largest creditor in the early 1980s to the world's largest debtor today.

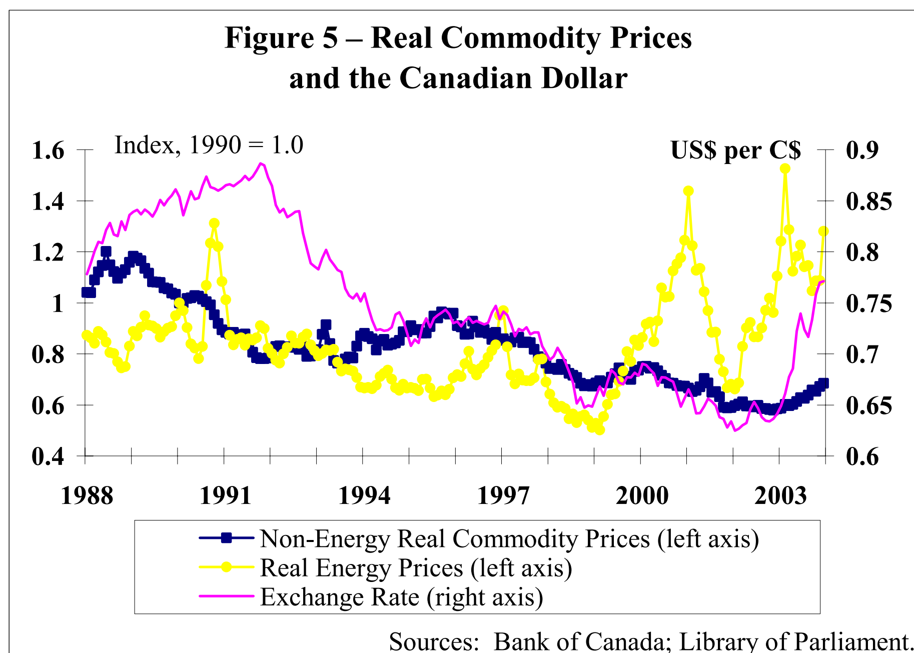
The current decline in the U.S. dollar can be seen as a natural response to these conditions. A lower U.S. dollar will make that country's exports more competitive, raise the price of imports, and thus help alleviate its trade and current account deficits. At the same time, while a lower dollar erodes foreigners' returns on current investments, it will lower the cost of making future investments, thus helping attract capital into the United States.

B. Other Factors

1. Recovering Global Economy

While the appreciation of the Canadian dollar through 2003 can be seen largely as a U.S.-based phenomenon, other factors are also contributing to the currency's rise. In particular, a recovering global economy – led by China and Southeast Asia – has begun to increase world commodity prices, providing a further boost to the Canadian dollar. Indeed, as mentioned above, so-called "commodity currencies" such as the Canadian and Australian dollars have made some of the strongest gains against the U.S. dollar.

Figure 5 – Real Commodity Prices and the Canadian Dollar



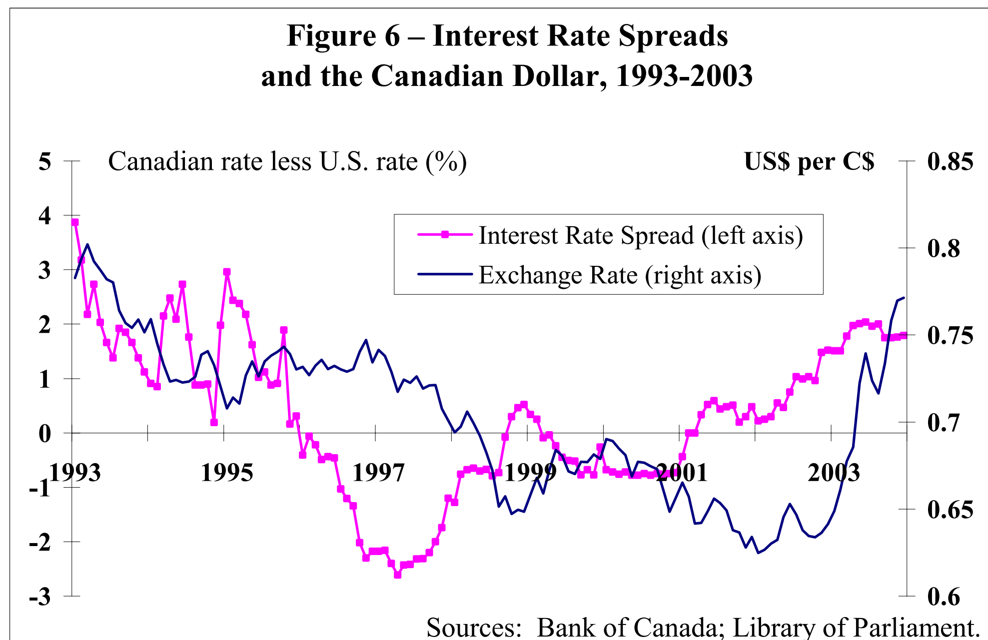
Sources: Bank of Canada; Library of Parliament.

By December 2003, world non-energy commodity prices had increased by 17.0% compared to December of the previous year. In particular, base metals and forest product prices saw considerable improvement over that period, rising by 34.1% and 20.8%, respectively.[10] At the same time, although energy prices were in modest decline through most of 2003, average prices that year were considerably higher than in 2002.

2. Domestic Economic Conditions

While the rise in the Canadian dollar is more accurately portrayed as a decline in the U.S. dollar, economic conditions in Canada are, to some degree, dictating the magnitude of the appreciation. The Canadian economy has enjoyed considerable strength in recent years, outpacing GDP growth in the United States each year since 1999. Whereas the U.S. Federal Reserve has kept interest rates low in that country in an effort to stimulate economic growth, Canada has not been obliged to exercise as liberal a monetary policy. As a result, while U.S. interest rates have fallen, Canadian rates have remained higher, opening a gap in interest rates between the two countries. As mentioned above, higher interest rates attract interest-sensitive investments, pushing the exchange rate higher.

Figure 6 – Interest Rate Spreads and the Canadian Dollar, 1993-2003



(10) These figures are based on the commodity price indices maintained and published by TD Economics.

At the same time, while the United States is operating under large and growing current account and fiscal deficits, Canada is the only G7 country operating with a surplus in both accounts. As a result, while net foreign indebtedness is climbing in the United States, it is falling in Canada. Until recently a large debtor, Canada now has a net foreign debt that is below U.S. levels. In 2002, Canadian net foreign debt was equivalent to 16% of GDP, compared to 23% of GDP in the United States.

CONCLUSION: WHERE WILL THE DOLLAR GO FROM HERE?

Although such a rapid appreciation in the Canadian dollar might not normally be considered stable, economists are in general agreement that the current rise in the Canadian dollar will not be a short-lived phenomenon. Rather, the rising dollar is being viewed as an appropriate reflection of economic conditions in Canada, the United States and around the world. Indeed, economic indicators have pointed towards a higher Canadian dollar for a number of years. It is only the speed, and perhaps the magnitude, of the appreciation that was unexpected.

Underpinning the belief that the Canadian dollar will remain higher in the near future is the fact that, while economic conditions in Canada are much improved today compared to the mid-1990s, the higher dollar is chiefly the result of a depreciation in the U.S. dollar against most world currencies. Furthermore, a number of economists believe that this depreciation is taking place with the implicit approval of the U.S. administration. Given the ballooning current account deficit and an economy that until recently was sputtering, the United States is hopeful that a weaker dollar will increase export competitiveness, stem job losses in manufacturing and stimulate economic growth in that country.