Is Canada Dollarized?

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- *Some critics of Canada's floating exchange rate have suggested that any decision made at the official level either for or against adopting the U.S. dollar as Canada's currency is largely irrelevant. They claim that Canada has already informally dollarized or is well along the path towards dollarization.*
- *This article examines the evidence of dollarization in Canada, focusing on the use of U.S. dollars for the three main money functions: unit of account, medium of exchange, and store of value.*
- *While the evidence is somewhat fragmentary, it strongly suggests that Canada has not become dollarized, nor is it becoming dollarized. Canadians overwhelmingly use the Canadian dollar as a unit of account and as a medium of exchange for transactions between Canadians.*
- *The only area where there is an increasing use of U.S. dollars by Canadians is as a store of value. The Canadian experience is not unique, however. All countries have witnessed a trend towards greater international diversification of portfolios in recent years.*

The sharp depreciation of the Canadian dollar over the past decade and the successful launch of the euro in 1999 have sparked a lively debate in Canada about the possible benefits of "dollarization"—generally defined as the widespread use of another country's currency to perform standard money functions. Proposals have ranged from the unilateral adoption of the U.S. dollar to a full-blown North American monetary union. Some observers have gone so far as to suggest that any official decision, either for or against such an initiative, is largely irrelevant since dollarization is already proceeding informally. Indeed, some have suggested that the process of dollarization is not only underway but is far advanced.

The purpose of this article is *not* to review the advantages or disadvantages of adopting the U.S. dollar as Canada's national currency, but rather to examine the available data and determine the extent to which Canada has already informally dollarized.[1] Although the evidence is fragmentary, existing data suggest that informal dollarization is either not occurring or is proceeding at a very slow pace. Indeed, by many measures, Canada is less dollarized now than it was 20 years ago and bears little resemblance to economies that are typically regarded as truly dollarized.

What Do We Mean by Dollarization?

The term dollarization is used to characterize the widespread domestic use of another country's currency to perform the standard functions of money—that of unit of account, medium of exchange, and store

1. This article summarizes a paper entitled "Dollarization in Canada: The Buck Stops There," presented at the conference "Exchange Rates, Economic Integration, and the International Economy," held at Ryerson University 17–19 May 2002. The paper was recently published as Bank of Canada Technical Report TR-90.

of value. Dollarization can occur either officially or through a market-based process, in which individual consumers and businesses begin to use another currency, typically that of a major trading partner or an important industrial power with a reputation for sound monetary policy.

Most countries that have opted for official dollarization are extremely small and depend on trade for a large part of their GDP. Many have had a historical link with the country whose currency they use.[2] Prior to the recent move by Ecuador to dollarize its economy, the largest country to officially use another country's currency was Panama, whose population is currently less than 3 million. The U.S. Congress Joint Economic Committee (2000) has identified 29 countries and territories that are either using the U.S. dollar or some other foreign currency as their predominant domestic currency.

Countries that have experienced unofficial or market-based dollarization are often larger than those that have officially dollarized. Baliño, Bennet, and Borensztein (1999) have identified 18 countries, such as Argentina, Uruguay, and Turkey, that fall into this category. Unofficial dollarization has usually been preceded by an extended period of poor macroeconomic policies and high inflation, which eroded investor confidence and forced citizens to look for an alternative monetary instrument. Ecuador officially dollarized after years of increasing unofficial dollarization during which its citizens tried to protect themselves from rampant inflation. What is surprising is how serious and protracted the economic mismanagement must be before a majority of citizens are prepared to abandon their domestic currency. But once it has happened, the process is almost impossible to reverse.

It is important not to confuse dollarization with globalization. The dramatic growth in world trade and investment in recent years has led to a sharp increase in the number of transactions that businesses and households have with foreigners. This, in turn, has led to a natural increase in the demand for foreign currency—even among the largest and most well-managed economies. One might argue that globalization is effectively making countries much smaller and that they will soon resemble the small, very open economies described above that have opted for official dollarization. It will be some time, however, before the level of foreign activity in most industrial countries approaches that of officially dollarized economies. In the meantime, most domestic transactions will continue to be conducted in the national currency.

It is also important not to confuse dollarization with diversification. The fact that investors have started to hold a much larger share of their financial wealth in foreign assets is not necessarily a sign of dissatisfaction with their domestic currencies or a sign of capital flight. Market liberalization and a greater appreciation of the gains that can be realized through international diversification have resulted in a dramatic increase in gross capital flows into and out of countries. Investors everywhere have suffered from a "home-country" bias and are only now beginning to achieve a more efficient trade-off between risk and return.

The following sections of this article look at each of the three main money functions—unit of account, medium of exchange, and store of value—to see if there is any evidence of dollarization in Canada.

The U.S. Dollar as a Unit of Account

Very little information is available on the extent to which Canadian businesses and households use the U.S. dollar as a unit of account. While this may be a testament to how uncommon the practice is, there is reason to believe that some Canadian firms regularly price their products and keep their accounts in U.S. dollars. For the most part, however, one would expect this to be restricted to the foreign sales of Canadian firms or firms with extensive operations outside the country. Similarly, few Canadians, other than certain professional athletes and business executives, who work in an international environment, are paid in U.S. dollars.

To better determine what is actually happening in Canada, a survey was conducted by the staff in the Bank of Canada's regional offices. In March and April 2002, 100 firms were surveyed on whether (and under what circumstances) they priced their products and kept financial records in a currency other than the Canadian dollar. Although the sample was relatively small, the staff tried to ensure that it reflected the industrial composition and regional distribution of firms within the economy. (Additional surveys will be conducted in coming months and will include 300 more firms.)[3]

2. Examples of such countries include Andorra (euro), the Channel Islands (pound sterling), the Marshall Islands (U.S. dollar), and the U.S. and British Virgin Islands (U.S. dollar).

3. Since the original background paper for this article was written, a second set of survey results drawing on 100 new firms has been received. The results are qualitatively similar to those originally reported, and in some cases stronger, in the sense of providing even less support for the existence of dollarization in Canada. A technical note summarizing the results of the full survey with all 400 firms will be published early in the new year.

Survey results

Q.1 Do you quote prices to Canadian customers in Canadian dollars, U.S. dollars, or both?

As expected, pricing in U.S. dollars for purely domestic sales is rare. Only 6 per cent of the reporting firms quoted prices exclusively in U.S. dollars (Table 1, row 1). An additional 17 per cent quoted prices in both Canadian and U.S. dollars. These 23 firms, however, also tended to export a large part of their production or to produce raw materials, whose prices are set on U.S.-based markets (such as the Chicago Mercantile Exchange) and are traditionally priced in U.S. dollars. Some firms indicated that they priced in both currencies for convenience and used the same price list for domestic and foreign customers. Others noted that they did so in response to demands from other Canadian companies that were part of a U.S. supply chain or that had extensive international operations. In many instances, however, the Canadian-dollar price was used as the base (or true unit of account) on which the U.S.-dollar price was calculated.

Q.2 Do you quote prices to foreign customers in Canadian dollars, U.S. dollars, the local currency, or some combination of currencies?

Of the firms surveyed, 53 per cent indicated that they price their foreign sales in U.S. dollars, with another 7 per cent using a different local currency (Table 1, row 2). These figures were somewhat smaller than had been expected, given the strong economic ties linking the Canadian and U.S. economies and some earlier evidence reported by Krugman (1984) and a number of other authors who have examined this issue from an international perspective.[4]

Q.3 Are your financial statements quoted in Canadian dollars, U.S. dollars, or both currencies?

Over 80 per cent of the firms interviewed prepare their financial statements in Canadian dollars (Table 1, row 3). Some of them noted that, since they are obliged to use Canadian dollars for domestic taxes and / or regulators, this is the most efficient alternative. Firms that prepare their statements in both currencies or solely in U.S. dollars typically have extensive operations in the United States or want to tap U.S. capital markets to finance their operations. Most firms in this category still use Canadian dollars in their daily accounting operations, however, and base their U.S.-dollar statements on reports that are already completed in Canadian dollars.

4. Krugman noted that there is a tendency for exporters in small countries to denominate their export prices in the currency of a large trading partner. Exports of primary products from all countries are also typically priced in U.S. dollars.

Table 1

Survey Results: Use of U.S. Dollars by Canadian Firms

	Per cent of total responses (absolute numbers)*				
	Can$	US$	Both currencies	Other currency	Combination of currencies
Q.1 Denomination of domestic prices	77 (76)	6 (6)	17 (17)		
Q.2 Denomination of foreign prices	23 (19)	53 (43)		7 (6)	17 (14)
Q.3 Denomination of financial statistics	82 (81)	7 (7)	11 (11)		

* Responses to Q1 totalled 99; to Q2, 82; and to Q3, 99.
Source: Bank of Canada survey

Other evidence

Multinational firms and companies whose shares are listed on U.S. exchanges are typically required to provide financial statements in U.S. dollars. Some Canadian stocks that are traded on the Toronto Stock Exchange (TSX) are also quoted in U.S. dollars as opposed to Canadian dollars.[5] This may help explain why 7 per cent of the firms included in our survey decided to report their financial statements in U.S. dollars, while another 11 per cent elected to report in both Canadian and U.S. dollars.

Over the past 10 years, the proportion of Canadian firms listed on the TSX that also trade on a U.S. stock exchange has increased from approximately 10 per cent to slightly under 14 per cent. The proportion of total trading in these stocks that takes place on U.S. exchanges by value has remained relatively constant, however, at around 50 per cent, with a slight downward trend.[6] In addition, the number of Canadian firms with shares trading in U.S. dollars on the TSX, together with their relative importance, has been declining over time.[7]

5. As one might imagine, there is considerable overlap between the companies with interlisted stocks and those companies on the TSX that have their shares quoted in U.S. dollars.

6. This figure may understate the relative importance of Canadian firms trading on U.S. exchanges, since the market value of interlisted firms is often greater than that of firms listed solely on the TSX.

7. The number of companies with at least one issue of shares trading on the TSX and denominated in U.S. dollars has fallen from 56 in 1980 to 52 in 2002.

The *Fact Book* published by the New York Stock Exchange (NYSE) indicates that 74 Canadian firms had stock listed on the NYSE in 2001, with a trading volume of over US$152 billion and a market capitalization of approximately US$308 billion. While these figures are impressive, and significantly higher than those reported only five years earlier, the numbers must be put into context.[8] The number of foreign firms listed on the NYSE grew by more than 52 per cent during this period, and Canada's share of all foreign stocks listed on the NYSE actually declined (from roughly 18 per cent to 16 per cent).

The U.S. dollar . . . has made very few inroads . . . and accounts for a surprisingly small share of all pricing, wage-setting, and financial-reporting activity in Canada.

The listings data described above, together with the survey results reported earlier, suggest that the Canadian dollar remains the dominant unit of account. The U.S. dollar, in contrast, has made very few inroads in this regard and accounts for a surprisingly small share of all pricing, wage-setting, and financial-reporting activity in Canada.

The U.S. Dollar as a Medium of Exchange

The second use of money is as a medium of exchange. Everyday experience would suggest that U.S. dollars are not typically used for transactions in Canada. Although U.S. currency is generally accepted in retail stores in Canada, usually at close to market rates, and Canadian residents are free to hold foreign currency deposits in banks, examples of Canadians using U.S. dollars in transactions with other Canadians are rare. This may be surprising to outside observers, given the extent to which the Canadian and U.S. economies are integrated and that 80 per cent of Canadians live within 160 kilometres (100 miles) of the U.S. border.

Hard data on the extent to which U.S. dollars are used in Canada are, however, limited. While statistics are available on the U.S.-dollar deposits held by Canadians in domestic and foreign banks, no Canadian agency collects information on the amount of U.S. currency (i.e., coins and dollar bills) held by Canadians and the extent to which such currency is used for transactions in Canada.

In this section, we examine two ways of measuring the extent to which U.S. dollars are used for transactions in Canada. The first method uses data collected by the Bank of Canada and looks at the value of U.S. deposits held by Canadians in Canadian banks relative to a broad money aggregate (M3) composed of deposits denominated in both domestic and foreign currencies. The ratio of foreign currency deposits to broad money has traditionally been used by the International Monetary Fund and others as a proxy for assessing the extent to which a country is "dollarized." The second method uses data from the U.S. Customs Service on reported cross-border flows of U.S. currency. By totalling net flows over time, one can estimate the amount of U.S. cash circulating within Canada. While both measures have their drawbacks, neither suggests that Canadians use U.S. dollars in domestic transactions to any significant degree. Nor is there strong evidence that the use of U.S. currency in Canada has been increasing.

Ratio of foreign currency deposits in Canada to broad money

As stated above, the extent to which a foreign currency is used in transactions is often measured by examining the ratio of a country's foreign currency deposits to its broadly defined money supply. This method does not provide a pure measure of the use of foreign currency as a transactions vehicle, since some foreign currency deposits are held for other purposes, for example, as a store of value. It can also be a biased indicator, since it assumes that foreign currency deposits and foreign currency are close substitutes (Feige et al. 2000) and have a fixed relationship with one another.[9] This would be of particular concern in countries with weak or underdeveloped financial systems, because residents of such countries are more likely to rely on currency than on other forms of payment, such as cheques, debit, or credit cards.

Chart 1 shows the value of U.S.-dollar deposits held by Canadian residents in Canadian banks. Data are

8. The *Fact Book* indicates that 55 Canadian companies had stock listed on the NYSE in 1996, with a market capitalization of US$60 billion.

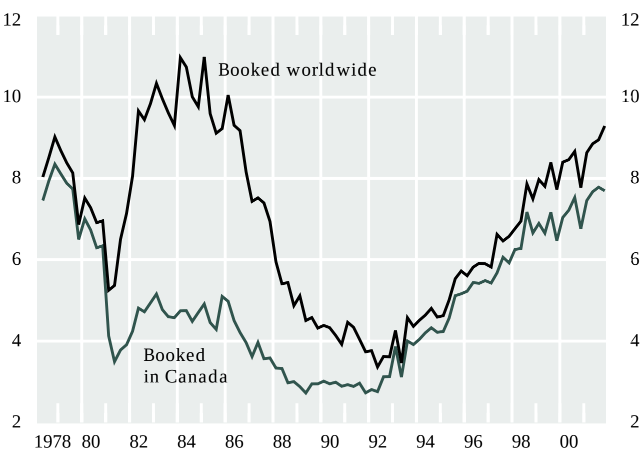
9. In other words, movements in one series, say deposits, are associated with a proportionate increase in the other, in this case currency.

reported both on a booked-worldwide and booked-in-Canada basis. To facilitate comparisons, the two series have been converted into Canadian dollars and scaled as a proportion of broad money (M3). While the trends in the two series have been broadly similar, there was a marked divergence through the 1980s.[10] Since then, both series have risen sharply, touching in 2001 slightly over 9 per cent on a booked-worldwide basis and roughly 8 per cent on a booked-in-Canada basis. In neither case is the current level exceptional. These series have fluctuated over a wide range in the past 25 years and were actually somewhat higher (as a percentage of M3) at various times in the late 1970s and early 1980s.

Chart 1

U.S.-Dollar Currency Deposits of Canadian Residents as a Percentage of M3

Expressed in Canadian dollars



Source: Bank of Canada

The steady rise in U.S.-dollar deposits since the beginning of the 1990s could reflect growing Canada-U.S. economic integration following the signing of the Free Trade Agreement in 1988. Growing two-way trade with the United States may have increased the demand for U.S.-dollar balances, particularly by Canadian firms, which account for more than two-thirds of the total foreign currency deposits held by Canadians in Canadian banks.

10. Reserve requirements levied on domestic deposits but not on deposits booked outside of Canada might offer at least a partial explanation for the divergence. These reserve requirements were phased out during the early 1990s.

Comparison with other countries

The ratio of foreign currency deposits to total deposits in Canada is significantly lower than that observed in many other countries. Baliño, Bennet, and Borensztein (1999) identify several developing economies whose ratio of foreign currency deposits to broad money exceeded 30 per cent in 1995—the benchmark they use to define a dollarized economy. These included Argentina, with a ratio of 44 per cent; Bolivia at 82 per cent; Turkey at 46 per cent; and Uruguay at 76 per cent. Similar statistics for selected industrial countries ranged from 4.4 per cent for the Netherlands to 21.6 per cent for Greece. The ratio for the United Kingdom was 15.4 per cent. On this basis, Canada, at only 10 per cent in 2001, cannot be considered a dollarized economy.[11]

Currency and monetary instruments reports

Since 1980, the U.S. Customs Service has required individuals and companies shipping US$10,000 or more in cash across the border (in both directions) to complete a currency and monetary instruments report (CMIR), indicating the size, origin, and destination of the shipment.[12] These reports are confidential. From time to time, however, aggregate information is made available to researchers. This information provides some insight into how much U.S. currency is in circulation outside the United States and the location of that currency.

While CMIRs should be a good source of information regarding the extent to which countries are dollarized, the data are distorted by at least four factors.[13] First, only travellers entering the United States are required to pass through customs. Consequently, outflows of U.S. currency are likely to be under-reported. Second, shipments of currency of less than US$10,000 are not captured by the CMIR data system. This could be particularly significant for Canada, given its proximity to the United States and the number of cross-border visits that Canadian households make each year. Third, it is likely that some shipments of greater than US$10,000 are misreported or unreported, especially if they are linked to an illegal activity. Fourth, the CMIRs were designed to track individual transactions, rather

11. U.S.-dollar deposits account for roughly 9 per cent of M3, with an additional 1 percentage point accounted for by other currencies.

12. The U.S. Customs Service began collecting these reports in 1977. The threshold amount was increased from US$5,000 to US$10,000 in 1980.

13. See Porter and Judson (1996).

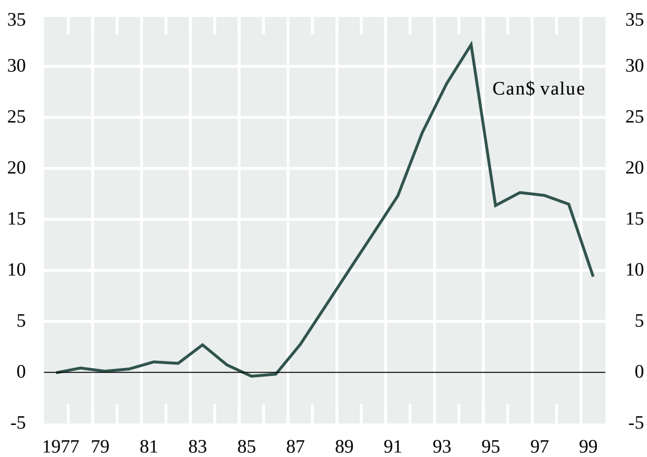
than to provide aggregate data on currency movements. Consequently, errors can arise when the data are aggregated.

Despite these caveats, CMIR data provide an interesting perspective on U.S.-dollar flows and can shed some light on the extent to which there is net demand for U.S. currency outside the United States. Large, persistent net outflows of U.S. cash to a country would be evidence that U.S. dollars are being used for transactions (and possibly other purposes) by individuals and companies resident in that country.

Chart 2 shows aggregate CMIR data for Canada over the 1977–99 period (expressed as a ratio of Canadian coins and notes in circulation). During this time, net inflows of U.S. dollars in cash totalled roughly US$3 billion, with most of the inflows occurring during the second half of the 1980s and the first half of the 1990s.[14] Demand for U.S. currency declined during the late 1990s. Indeed, sizable outflows were recorded in three of the five years ending in 1999.[15]

Chart 2

Cumulative Net Inflows of U.S. Dollars (CMIR data) as a Percentage of Canadian Notes and Coins in Circulation



Note: Currency and Monetary Instruments Reports were collected by the U.S. Customs Service. Prior to 1981, data on notes only were collected.
Sources: U.S. Federal Reserve Board of Governors; Bank of Canada - b251 (Notes); Royal Canadian Mint, Memorandum of Subsidiary Canadian Coin in Circulation (Coins)

14. The stock of U.S. dollars in circulation in Canada would be higher, since there were undoubtedly some U.S. dollars in circulation prior to 1977, the starting point for the series. Nevertheless, we can probably assume that the amount was quite small, given the negligible inflows that occurred during the late 1970s and early 1980s.

15. More recent, corroborating data from the Federal Reserve Bank of New York, which monitors the currency movements of major New York-based banks, suggest that sizable outflows of U.S. currency from Canada continued in 2000 and 2001.

After fluctuating close to zero until the mid-1980s, the ratio of U.S. currency to Canadian notes and coins rose steadily through the second half of the 1980s and the early 1990s. The CMIR data would suggest that the amount of U.S. dollars in circulation was at its peak in 1994 and amounted to more than 30 per cent of the outstanding stock of Canadian notes and coins in circulation. This is a surprisingly high figure. But by 1999—the last year for which data are available—this ratio had fallen to about 9 per cent.

The reason for the temporary increase in demand for U.S. cash by Canadians during the late 1980s and early 1990s is not immediately obvious. That this phenomenon occurred during a period when the Canadian dollar was strengthening, or was relatively strong, against its U.S. counterpart deepens the mystery. Superficially, the data would be consistent with increased use of U.S. dollars by Canadians, at least temporarily. But the fact that U.S.-dollar deposits of Canadians declined during this period would not support this interpretation.

There was a strong positive correlation between holdings of U.S. dollars by Canadian residents and cross-border shopping during the late 1980s and early 1990s.

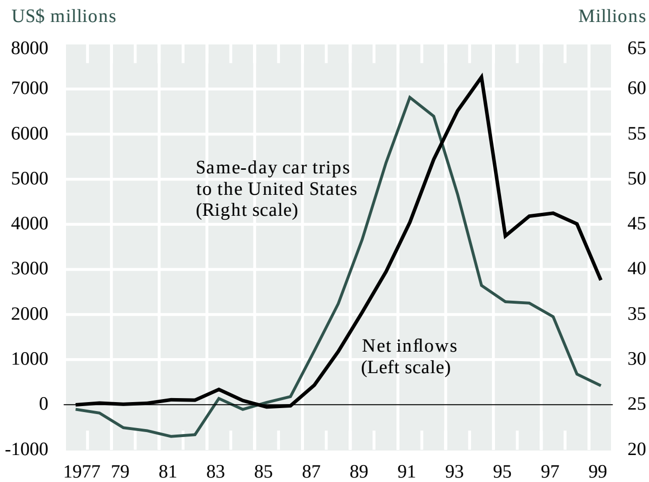
It is quite likely that the increased demand for U.S. cash by Canadians was related to increased transactions with U.S. residents rather than with Canadian residents. Through the late 1980s and early 1990s, there was a steady rise in same-day car trips by Canadian residents to the United States, as Canadians, taking advantage of their relatively strong currency, shopped in U.S. border cities. Because U.S. stores typically accept only U.S. bank notes, the demand for U.S. cash by Canadians likely increased.[16] Same-day trips peaked in 1991 at roughly 58 million trips per year, up from only 25 million in 1986. As the Canadian dollar weakened through the 1990s, the number of day trips

16. Canadian banks supplying the U.S. dollars to Canadian travellers would buy the U.S. cash from U.S. banks, who would, in turn, fill out a CMIR (assuming the shipment was in excess of US$10,000), indicating an outflow of U.S. dollars from the United States to Canada.

declined. By 1999, the number of such trips had returned to approximately the 1986 level. As Chart 3 shows, there was a strong positive correlation between holdings of U.S. dollars by Canadian residents and cross-border shopping during the late 1980s and early 1990s.[17]

Chart 3

Cumulative Net U.S.-Dollar Inflows (CMIR data) into Canada and Same-Day Car Trips to the United States



Note: Currency and Monetary Instruments Reports were collected by the U.S. Customs Service.
Sources: U.S. Federal Reserve Board of Governors; Statistics Canada, Car Trips V129491

The declines in cross-border shopping and U.S.-dollar holdings by Canadians as measured by the CMIR data are not exactly coincident. Day trips to the United States by Canadian residents peaked roughly two years before the peak in U.S.-dollar holdings by Canadians. While one would not necessarily expect a perfect fit, it is possible that U.S.-dollar holdings by Canadian residents were being influenced by another temporary factor—cross-border smuggling of tobacco products.

During the early 1990s, the imposition of high excise taxes on tobacco products by the federal and provincial governments led to a surge in cross-border smuggling, particularly in central and eastern Canada. Tobacco products made in Canada were exported tax-exempt to U.S. wholesalers. These products were subsequently sold to Canadians and smuggled back into Canada. The extent of the smuggling was enormous. The federal government estimated that smuggling accounted for roughly 40 per cent of the $12.4 billion Canadian tobacco market in 1993, up from only 5 per cent in 1990 (Office of the Prime Minister 1994).

Because such activities were illicit, it is reasonable to presume that transactions were mainly in cash. And because such purchases were being made from U.S.-based distributors, it is also reasonable to assume that transactions were often conducted in U.S. dollars.[18]

A plausible, but admittedly circumstantial, case can therefore be made that the apparently substantial, yet temporary, increase in U.S. dollars in Canada during the late 1980s and early 1990s was related to legal and illegal cross-border shopping. Demand for U.S. currency subsequently fell as the Canadian dollar depreciated, thus reducing the incentive for legal cross-border shopping, and immediately following the reduction in tobacco excise taxes in 1994, which reduced the incentive for tobacco smuggling.

The U.S. Dollar as a Store of Value

The third use of money is as a store of value. To what extent do Canadians denominate their savings in U.S.-dollar assets, and how has this changed over time? In which currency do Canadians choose to denominate their liabilities, and how has this evolved? Both sides of Canadian balance sheets are examined.

Assets of Canadians

Table 2 provides estimates of the currency distribution of the portfolios of Canadian mutual funds, pension funds, and other pooled funds over the 1997–2000 period. The share of assets denominated in Canadian dollars declined steadily from 75 per cent in 1997 to 67 per cent in 2000, with the share of foreign assets rising concomitantly from 24 per cent to 32 per cent. The share of identified U.S.-dollar assets rose from 13 per cent to 19 per cent over this period. These figures are consistent with longer-term data, which indicate that there has been a consistent upward trend in the foreign-denominated assets of pension funds over the past decade. This increase has been driven in

17. It is unlikely that Canadians shopping in the United States would have been carrying US$10,000 or more in cash. Hence, they would not have been required to fill out a CMIR upon entering the United States. Consequently, the stock of U.S. dollars in circulation in Canada as calculated by the CMIR data would be biased upwards.

18. As would have been the case with cross-border shoppers, it is very unlikely that CMIRs were filled out by smugglers. Again, the stock of U.S. dollars in circulation in Canada, as measured by the CMIR data, would be biased upwards.

part by changes in regulations governing the foreign content of tax-sheltered investment funds. While Canadians are free to invest in foreign assets without constraints, the federal government has limited the extent to which pension funds, as well as mutual funds eligible to be held in registered retirement plans, can invest in foreign assets. This ceiling, set at 10 per cent in 1991, has risen in steps to 20 per cent in 1994 and to 30 per cent, effective January 2001.

Table 2

Holdings in Equities and Bonds of Mutual, Pension, and Other Pooled Funds

Distribution of portfolio assets by currency of denomination, per cent

Currency group	1997	1998	1999	2000
Canadian dollar	75	72	68	67
U.S. dollar	13	15	17	19
Other currency	6	7	7	9
Unidentified currency*	5	5	8	4
Total	100	100	100	100

Note: Canadian stocks and bonds are considered to be 100 per cent Canadian dollars, and U.S. stocks and bonds are considered to be 100 per cent U.S. dollars.
* Contains foreign assets only.
Source: Statistics Canada

Comparison with other countries

The Canadian experience is not unique. Pension funds in all major countries have increased their foreign content over the past several years, and this trend is expected to continue. If anything, Canadian pension fund portfolios appear to be relatively underweight in foreign assets, partly reflecting the government restrictions on foreign content. The foreign content of pension funds in smaller industrial countries that do not have such restrictions (such as Ireland and the Netherlands) is close to two-thirds. In the United Kingdom, which also has no restrictions, the percentage stood at 27 per cent in 2000 (InterSec Research Corporation 2001).

Several factors explain the growing internationalization of pension fund portfolios: the easing of government restrictions on foreign content; better communication and information regarding foreign companies, which have reduced transactions and monitoring costs; and, most importantly, increased desire for diversification. International diversification can simultaneously raise returns and lower risk if pension funds invest in countries where returns are relatively uncorrelated with those in the domestic country.

Canadian pension fund portfolios appear to be relatively underweight in foreign assets.

The above evidence suggests that while Canadians are indeed holding an increasing proportion of their assets in U.S.-dollar-denominated instruments, this trend has more to do with the easing of government restrictions and portfolio diversification than with dollarization.

Liabilities of Canadians

Generally, consumer lending denominated in foreign currency by Canadian banks to Canadian individuals has been on a slow upward track in current dollar terms over the past 20 years. But as a share of total consumer bank lending, foreign currency lending accounted for less than 1 per cent in 2001, unchanged from its share in 1981.

Foreign currency lending by Canadian banks to Canadian firms has also been on a slow upward track in current dollar terms over the past 20 years. As with consumer lending, however, the share of foreign lending as a proportion of total business lending has remained essentially constant, at roughly 18 per cent.

In contrast to foreign currency lending by banks, there has been strong growth in U.S.-dollar bond issues by Canadian firms over the past 25 years. Consequently, the share of Canadian-dollar issues (including euro-Canadian issues) as a proportion of total outstanding bonds issued by Canadian corporations fell from 80 per cent in 1975 to 46 per cent in 2001. Outstanding U.S.-dollar issues rose from 19 per cent to 49 per cent over the same period.

It is interesting to note, however, that Canadian-dollar bond issues placed in Canada have been broadly stable since 1985. The share of U.S.-dollar-denominated bonds increased at the expense of issues denominated in third currencies, as well as euro-Canadian dollar issues. The decline of euro-Canadian issues was likely due to waning overseas investor interest in Canadian-dollar bonds as the Canadian dollar depreciated through the 1990s and as interest differentials narrowed or shifted to favour U.S. instruments.[19]

19. Some of these foreign bond issues were no doubt hedged through the use of derivatives or used to offset U.S.-dollar export receipts (a form of natural hedge).

Unlike bonds, a large proportion of equity raised by Canadian corporations in 2001—86 per cent—was placed in Canada in Canadian dollars. Equity issues placed in Canada but denominated in foreign currency are rare.

Conclusions

Many of the concerns that have been expressed about the imminent dollarization of the Canadian economy appear to be misplaced. The Canadian dollar continues to be used as the principal unit of account, medium of exchange, and store of value within our borders. There is also no indication that dollarization is likely to take hold in the foreseeable future.

Most goods and services in our country are priced exclusively in Canadian dollars. The same is true for the preparation of corporate financial statements, unless the company is listed on a U.S. stock exchange. In short, the U.S. dollar is seldom used as a unit of account for domestic transactions. The same can be said of the U.S. dollar as a medium of exchange in Canada. There is little indication that Canadians use U.S. dollars in transactions with other Canadians.

The one area where dollarization has become more prevalent is as a store of value. Canadian households seem to be holding an ever-larger share of their portfolios in U.S.-dollar assets. However, the same phenomenon is occurring elsewhere. Standard portfolio models indicate that, by most measures, Canadians are still significantly under-diversified in foreign currency assets.

Canadian corporations are also borrowing more extensively in U.S. dollars. But the share of financing raised in domestic markets has remained essentially unchanged during the past 15 years. The same can be said of Canadian equity financing, where domestic markets have also managed to preserve and even increase their relative share through the late 1990s and early 2000s.

In summary, there is no evidence that Canadians have lost faith in their currency and are beginning to adopt the U.S. dollar. Moreover, as long as Canadian monetary policy continues to achieve its policy objective of low and stable inflation this is likely to remain the case.

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