

CANADIAN FOREIGN EXCHANGE COMMITTEE

**Report on Activities**

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**2003**

# **Canadian Foreign Exchange Committee Report on Activities 2003**

The Canadian Foreign Exchange Committee (CFEC), which has met regularly since its establishment in 1989, is composed of senior officers from financial institutions actively involved in the foreign exchange market in Canada and the dollar-Canada market globally. Its objective is to provide a forum for the regular discussion of issues and developments pertinent to the foreign exchange market, including the review of market practices and procedures. As the Committee is representative of the Canadian foreign exchange market generally, it also serves as a channel of communication between the foreign exchange market in Canada and other organizations and official institutions, both within Canada and abroad.<sup>1</sup>

## **Market Developments and Policy Issues**

Each meeting of the CFEC begins with a Tour de table in which there is an exchange of views on foreign exchange (and other financial) market developments as well as economic developments from the time of the last meeting (usually four months earlier). The CFEC also acts as a forum for the Bank of Canada to obtain the views of participants in the foreign exchange market on various policies and issues and, similarly, for market participants to bring issues of concern to the attention of the Bank.

Over the past year, the CFEC discussed a number of topics at their meetings. Of particular interest was the rapid and significant appreciation of the Canadian dollar, occurring as it did over a very short period of time. There were also discussions about general economic developments, the weakness of the U.S. dollar and, for example, the September 20th G7 Finance Ministers statement that "... more flexibility in exchange rates is desirable for major countries or economic areas to promote smooth and widespread adjustments in the international financial system ..."

CLS Bank, which only began its operations in September 2002, continues to be a topic of discussion for the CFEC. CLS Bank is a global multi-currency settlement bank that was designed to reduce the risk involved in settling foreign exchange transactions. It does this on the basis of the payment-versus-payment principle, in which the two sides of a foreign exchange transaction are settled simultaneously. This virtually eliminates the

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1. The full document of "Objectives and Organization", which was originally developed by the Committee in 1990, and was most recently revised in May 2003, is attached.

credit risk associated with foreign exchange settlement. As the use of CLS grows globally and the Canadian banks undertake technology investments and make other adjustments to participate in CLS, issues arise that are discussed regularly by the Committee.

New in 2003, it was decided that twice per year the members would take turns hosting a dinner after the meeting and a speaker would be invited to give his/her views on a topic of interest to the Committee. In January, Dr. Sherry Cooper, Chief Economist at BMO/Nesbitt Burns, gave her views on and outlook for the world economy at a dinner hosted by BMO/Nesbitt Burns. In May, Reuters hosted the dinner and the Deputy Bureau Chief for Reuters, Janet Guttman, spoke about the media and the reporting of economic and financial market developments.

In November, some of the members of the CFEC attended a conference and reception in London as part of the London Foreign Exchange Joint Standing Committee's (FX JSC's) 30th anniversary.

### **Business Continuity Planning**

While each financial institution undertakes its own business continuity planning which includes, for instance, having back-up systems and off-site facilities, there is an interest to also ensure that system-wide business continuity arrangements are in place. Following a review of the experience in the wake of the September 11, 2001 terrorist attacks, the CFEC has put together a contact list for the Canadian foreign exchange market. The intention of the list, which is updated regularly, is to give participants in the foreign exchange market the means to contact one another in the event of an emergency if the normal channels of communication are not working.

### **Creation of a Website**

One of the initiatives of the CFEC this year was to develop a website for the Committee. The website includes not only the CFEC's annual Report on Activities but also an up-to-date membership list, minutes of meetings, announcements of importance to the foreign exchange market and information on foreign exchange volumes and rates. As well, there are articles of interest to the foreign exchange community and useful links to the websites of other foreign exchange committees and organizations. The address of the website is [www.cfec.ca](http://www.cfec.ca) and it is updated regularly.

### **Canadian Committee for Professionalism**

The Canadian Committee for Professionalism (CCFP), which is sponsored jointly by the CFEC and the Financial Markets Association of Canada (FMAC), was inaugurated in 1993. This independent Committee reports regularly to the CFEC, and its guiding mission is to promote a high standard of professionalism and ethical conduct in the

Canadian foreign exchange markets. The Document of Organization for the CCFP, a copy of which is appended to this report, was last updated in January 2001. The CCFP met regularly in 2003 and has been active in promoting its objectives in conjunction with the CFEC.

One of the issues the CCFP investigated this year, along with the CFEC, was undisclosed or unnamed principal trading. This practice occurs when a financial institution (for example a fund manager) engages a dealer to execute a trade for a client whose identity is not disclosed to the dealer, in order to maintain the anonymity of the client. Such practices are inherently risky for dealers because of their inability to accurately assess the credit, legal and other risks involved in undertaking the trade. While this practice has taken place in other jurisdictions, it was determined that it has not occurred in Canada. Nevertheless, the Committee supported the efforts of the ACI and foreign exchange committees in other jurisdictions to discourage this type of activity.

In particular, the guidelines in the *ACI Model Code*, which the Canadian foreign exchange marketplace adopted in 2001, have been strengthened with respect to dealing with unidentified or unnamed principals. It recommends that "... at the very least, it is good practice for the Compliance, Legal and Credit functions within a firm to have full knowledge of the end principal's identity, prior to the execution of a transaction, in order that credit, 'Know Your Customer', anti-money laundering and potential fraud issues can be addressed."

The ACI's Committee for Professionalism (CFP) has responsibility for keeping the *ACI Model Code* up-to-date. The CCFP has had input into the ACI's CFP through its representative that has sat on the ACI's Committee. With the departure of Karl Berger from that role, the CFEC and the CCFP have put forward Linda Park as a replacement, to be approved by the ACI in May.

The CCFP is currently looking into two other issues. The first issue relates to the date conventions (or lack thereof) for overnight index swaps (OISs). The Canadian OIS is a fixed/floating swap where the floating rate is tied to the overnight repo rate (known as the Canadian Overnight Repo Rate Average or CORRA) which is published by the Bank of Canada based on broker trade data. The issue at hand is whether, for example, when trading OISs for one month the date convention should be end-to-end or date-to-date, e.g., June 30 to July 31 or June 30 to July 30 (assuming no weekends or holidays fall on those dates). There are many traders (including repo, swap and forward foreign exchange traders) from different markets with different conventions that make use of this short-term interest rate product, which makes the setting of a universal convention difficult.

The second issue evolved out of an incident in November in which 48 employees of foreign exchange dealers and voice brokers in the New York area were arrested as a result of fraudulent trading activity. While none of this activity took place in Canada, the CCFP is using this as an opportunity to review professional standards and practices in the Canadian marketplace to see if any measures can be taken to further minimize the

potential for abuse. The results from this review and the investigation into OIS date conventions will be posted on the CFEC's website at [www.cfec.ca](http://www.cfec.ca).

Another objective of the CCFP is to arbitrate disputes, upon request, between two or more counterparties. While it is only on rare occasions that the CCFP has received any formal request for arbitration, the Committee has provided advice and direction on issues related to best market practices.

## **Operations Managers Working Group**

A major new initiative for the CFEC this year was the creation of an Operations Managers Working Group (OMWG). The purpose of this group is to focus on operational issues such as delivery or settlement problems, confirmation procedures and best practices, business continuity planning, SWIFT messaging issues, the movement toward straight through processing and electronic confirmations etc.

The OMWG held their inaugural meeting in September 2003. It was decided that the Group would meet four times per year. A list of the members, including the current Chair, Vice Chair and Secretary, can be found at the end of this Report.

One of the first activities for a number of the members of this Group was to attend a global conference and meeting of operations managers at the Federal Reserve Bank of New York on September 17-18, which was hosted by the New York Foreign Exchange Committee's Operations Managers Working Group. The intent of this conference was to get operations managers from foreign exchange committees around the world to participate in a global meeting in which they could interact and share information. A major outcome of the meeting was a commitment to work toward having a single, global set of best practices for operations managers.

During its first full year, 2004, the OMWG expects to focus its work in the areas of operational best practices, business continuity planning and continuous-linked settlement.

## **Market Statistics**

### **2004 Triennial Survey**

In preparation for the 2004 Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity, there was considerable work and collaboration with the Bank for International Settlements (BIS) and other participating countries to refine some of the definitions and clarify the reporting procedures of the survey. This was done to

reduce the scope for inaccuracies and to ensure that there is consistency of reporting across countries.

The *turnover* part of the survey covers foreign exchange contracts and interest rate derivatives, and will be conducted on a *locational* basis in April 2004. In this survey, it has been clarified in order to ensure uniformity that the basis for reporting should be, if possible, the location of the sales desk of the trade. (Where no sales desk is involved in a deal, the trading desk should still be used to determine the location of deals.) Similarly, in the 2004 survey, the concept of a reporting dealer and the definition of related party (in-house) deals have been clarified. The only other major change in the turnover part of the survey is that more detailed information on the role of electronic-based systems (given their growing importance in the market) and voice brokers is being requested.

The *amounts outstanding* part of the survey covers foreign exchange, interest rate, equity, commodity and credit derivatives, and will be collected on a *consolidated* basis as at June 30, 2004. This means that data from all branches and (majority-owned) subsidiaries worldwide of a given institution must be added together and reported by the parent institution only to the central bank in the country where the parent institution has its head office.

### **Regular Derivatives Market Statistics**

Statistics on derivatives markets from approximately 60 major global dealers in the Group of 10 (G10) countries are collected regularly. This was originally a proposal of the Euro-currency Standing Committee of the Bank for International Settlements (BIS) and was approved by the governors of the central banks of the G10 countries in January 1997. Three Canadian financial institutions are participating in this reporting, and consolidated amounts outstanding were collected for the first time as of 30 June 1998 and have been collected every six months thereafter. The BIS issues a press release with the aggregated global summary results of this survey after each reporting date.

### **Daily/Weekly Reporting**

The Bank of Canada coordinates, on behalf of market participants, the compilation of regular reports on the volume of foreign exchange business against Canadian dollars. The information is aggregated by the Bank of Canada and is distributed to the participants each month in the form of market totals. Market participants use the data to calculate their relative market shares.

Charts and tables of selective summary data from these series for spot, outright forward and foreign exchange swap volumes covering the period from 1998 to 2003, are appended. This information may be helpful in indicating trends and broad orders of magnitude. However, while every effort is made to ensure the accuracy of the information presented, the informal nature of the reports, as well as some arbitrary

adjustments to translate weekly to monthly statistics, mean the data should not be interpreted precisely.

## **IFEMA, ICOM and FEOMA Master Agreements**

Over the last few years the CFEC has, frequently in conjunction with the Foreign Exchange Committee of New York, the British Bankers' Association and the Tokyo Foreign Exchange Market Practices Committee, sponsored work on three Master Agreements: the International Foreign Exchange Master Agreement (IFEMA), the International Currency Options Market Master Agreement (ICOM), and the International Foreign Exchange and Options Master Agreement (FEOMA). In 1997, the CFEC, along with the above-noted committees, obtained legal opinions as to the enforceability and validity of the netting provisions of the updated IFEMA, ICOM and FEOMA Master Agreements in various jurisdictions including Canada. At the end of 2003, the annual update was obtained on the conclusions reached in the 1997 Canadian opinion.

## **Organization and Membership**

The CFEC issues this report on an annual basis to inform financial institutions that are active in the foreign exchange market about the Committee's activities and membership. Over the course of the year, updates on the activities of the Committee can be found on the CFEC's newly created website ([www.cfec.ca](http://www.cfec.ca)) under the links to either the announcements of the Committee or the minutes of meetings.

There were a number of changes to the CFEC's Document of Objectives and Organization in 2003. The most important change was to allow for up to two non-resident representatives from major Canadian dollar market making institutions based outside of Canada to sit on the Committee (which also required that the number of voting members on the Committee be increased from 15 to 16). The intention of this change was to increase the input and dialogue on the Committee from an important segment of the dollar-Canada market that was not fully represented. The criteria for these new members to sit on the CFEC is the same as for the existing members, i.e., they must: (1) be senior officials within their organization; (2) be able to attend the Committee meetings in person on a regular basis; and (3) be able to contribute to the discussions and work of the Committee. As well, the quorum for the Committee was increased from one-third to two-thirds, and the three positions on the Membership Subcommittee were each given a definite term of three years, with each term expiring in a different year to provide for continuity.

The CFEC welcomed three new members to the Committee in 2003. The first new member was Bernard Vives (Société Générale Securities), which brought to three the number of financial institutions from Montreal with representatives on the Committee. As well, two new members were added to the CFEC to represent major participants in the dollar-Canada market that are resident outside of Canada: Jeff Feig (Citigroup, based in London) and Even Berntsen (JP Morgan Chase, based in New York). At the end of the year, David Gibbins stepped down from the Committee on his retirement from RBC Capital Markets and was replaced by Rob Wittmann. As well, Sandra Lavoratore (Department of Finance) replaced Nigel Stephens. A membership list follows.

The contributions over many years of those members who have left the Committee have been greatly appreciated. I would also like to thank all the current members for their active participation in the discussions and work of the Committee. In a year in which we have seen considerable currency movements and the continuing evolution of the foreign exchange market, the insights and collective action of the Committee have contributed to a better understanding of those developments and to the professionalism of the foreign exchange market in Canada. We have also benefited from a broadening of the membership of the Committee to include those with different insights and experiences outside Canada and from our enhanced involvement with foreign exchange committees in other parts of the world.

Sheryl Kennedy  
Chair

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Canadian Foreign Exchange Committee  
Report on Activities  
2003



## **Canadian Foreign Exchange Committee Membership, December 2003**

Sheryl Kennedy, Deputy Governor (Chair)  
Bank of Canada, Ottawa

Firas Askari, Vice President (President, FMAC, an ex officio post)  
Bank of Montreal/Nesbitt Burns, Toronto

Even Berntsen, Managing Director  
JP Morgan Chase, New York

Vincent Butkiewicz, Vice President  
National Bank of Canada, Montreal

J-F Courville, Managing Director & Principal Officer  
State Street Bank & Trust Company Canada Branch, Toronto

Craig Ellis, Managing Director  
CIBC World Markets, Toronto

Normand Faubert, Vice President  
Laurentian Bank, Montreal

Cliff Feehan, Managing Director  
TD Securities, Toronto

Jeff Feig, Global Head  
Citigroup, London

Susan Gammage, Vice President  
Reuters America Inc., New York

Dan Gandy, Manager  
Freedom International Brokerage, Toronto

Sharon Grewal, Vice President (Chair, CCFP, an ex officio post)  
RBC Capital Markets, Toronto

Sandra Lavoratore, Acting Chief  
Department of Finance, Ottawa

Brad Meredith, Senior Vice President  
HSBC Bank Canada, Toronto

Jamie Thorsen, Senior Vice President  
Bank of Montreal, Chicago

Bernard Vives, Managing Director & Treasurer  
Société Générale Securities, Montreal

Barry Wainstein, Managing Director  
The Bank of Nova Scotia, Toronto

Rob Wittmann, Managing Director  
RBC Capital Markets, Toronto

Rob Ogrodnick, Senior Analyst (Secretary)  
Bank of Canada, Toronto

## **Other Committee Members December 2003**

### **Canadian Committee for Professionalism (CCFP)**

|                       |                                 |
|-----------------------|---------------------------------|
| Sharon Grewal (Chair) | RBC Capital Markets             |
| Firas Askari          | President, FMAC                 |
| Chris Benham          | CIBC World Markets              |
| Simon Côté            | National Bank of Canada         |
| Pamela David          | HSBC Bank Canada                |
| Dan Gandy             | Freedom International Brokerage |
| Steve Kent            | TD Securities                   |
| Brendan Luxton        | Bank of Nova Scotia             |
| Rob Ogrodnick         | Bank of Canada                  |
| Linda Park            | Bank of Montreal/Nesbitt Burns  |

### **Operations Manager Working Group (OMWG)**

|                               |                                   |
|-------------------------------|-----------------------------------|
| Jean Naphthine (Chair)        | RBC Capital Markets               |
| Andy Sittambalam (Vice Chair) | Scotiabank                        |
| Alain DeMontigny              | Bank of Montreal                  |
| Richard Épaule                | National Bank                     |
| Doug Grey                     | CIBC                              |
| Sam Jeries                    | TD Bank Financial Group           |
| Maylin Koo                    | Citibank Canada                   |
| André Richard                 | Laurentian Bank                   |
| Ramesh Sankar                 | HSBC Bank Canada                  |
| Donna Wareham                 | State Street Bank & Trust Company |
| Rob Ogrodnick (Secretary)     | Bank of Canada                    |

### **Membership Subcommittee**

|                        |                     |
|------------------------|---------------------|
| Sheryl Kennedy (Chair) | Bank of Canada      |
| Craig Ellis            | CIBC World Markets  |
| Jamie Thorsen          | Bank of Montreal    |
| Barry Wainstein        | Bank of Nova Scotia |

# CANADIAN FOREIGN EXCHANGE COMMITTEE

## Document of Objectives and Organization

May 2003

### I. Objectives

The objectives of the Committee are:

- to provide a forum for the regular exchange of views on foreign exchange market developments;
- to identify, analyse and comment on issues pertinent to the foreign exchange market;
- to review procedures, practices, and technical issues in the foreign exchange and related financial markets;
- to provide a channel for communication between the foreign exchange market in Canada and organizations and official institutions within Canada and abroad; and,
- to promote, to the community at large, the activities, decisions and views of the Committee, as representative of the Canadian foreign exchange market generally.

### II. Organization

1. The Committee is comprised of senior officers of institutions actively participating in the Canadian foreign exchange market and the Canadian dollar market globally.
2. The composition of the Committee is to reflect the interests of the major Canadian dollar market-making institutions in Canada and such other interests of the foreign exchange community as the standing Membership Sub-committee (as described below) believes will contribute positively to the ongoing work of the Committee. It shall include one representative each from the inter-dealer voice and electronic broking communities, the Department of Finance and the Bank of Canada. The Committee may also include up to two non-resident representatives from major Canadian dollar market-making institutions based outside of Canada.
3. The President of the Financial Markets Association of Canada and the Chairperson of the Canadian Committee for Professionalism, if they are not already members in their own right, are to be non-voting, ex-officio members.

4. An officer of the Bank of Canada will serve as Secretary to the Committee.
5. The Committee will not exceed 16 voting members, excluding the Secretary. A quorum is two-thirds of voting members. Members each have one vote. The Chair votes only in the case of a tie. Members appoint substitutes, from their own organizations, to attend on their behalf on an exceptional basis. Substitutes are to be considered possible candidates for future membership.
6. Initially, one third of the members will serve a term of three years, one third for a term of two years, and a final third for one year. Thereafter, each member will normally serve for a term of three years, although membership will remain, at all times, at the pleasure of the Committee. For consistency, all terms will be deemed to end on April 30.
7. Members serve on the Committee as individuals, to reflect the broader interests of the foreign exchange market, rather than that of the firm which employs them.
8. The Chair of the Committee is elected by and from the current members of the Committee, for a term determined by the Committee. The standing Membership Subcommittee (see below) recommends appropriate candidates for this position.
9. The Committee meets three times each year, or more frequently, as required. At each meeting, the date and location of the next meeting are decided by those present.
10. A standing Membership Subcommittee, consisting of a Chairperson, who is the member from the Bank of Canada, and three other members, as determined by the full Committee, identifies and proposes individuals for membership, based on their personal stature, breadth of experience and anticipated ability to contribute to the work of the Committee. The three other member positions serve a term of three years, with each one expiring in a different year on April 30.
11. The Committee may form ad hoc subcommittees, chaired by any of its members, to study specific issues. Outside participants may be invited to serve on such subcommittees.
12. The Committee will issue an Annual Report of its Activities, to be sent to all the financial institutions in Canada known to be active in the foreign exchange market, informing them of the Committee's activities and membership.
13. The Secretary prepares and circulates a notice and the minutes of each meeting to all members and their substitutes.

**CANADIAN COMMITTEE FOR PROFESSIONALISM**  
**Document of Organization**  
**January 2001**

The Canadian Foreign Exchange Committee (CFEC) and the Financial Markets Association of Canada (FMAC) are joint sponsors of an independent Canadian Committee for Professionalism (CCFP), formed in 1993.

**Mission Statement:**

To promote a high standard of professionalism and ethical conduct in the Canadian foreign exchange markets.

**Objectives:**

1. To *advocate* the continuing improvement of market practices to enhance the self-regulatory nature of the foreign exchange markets in Canada.
2. To provide *educational* vehicles which foster the understanding of the foreign exchange markets and related financial markets, in practice and theory.
3. To *arbitrate* disputes, upon request, between two or more members of the community or the institutions they represent.
4. To *communicate* with foreign exchange market professionals, and related trade associations, on matters relating to market practices and ethical conduct.

**Committee Members:**

The Committee is composed of a maximum of nine individuals who will be invited to join the CCFP at the request of the CFEC and FMAC, for a term of two years, with half the sitting Committee being present making a quorum, as follows:

1. The Chairperson of the CFEC or his/her designate.
2. The President of FMAC or his/her designate.
3. One member representing each of the major Canadian dollar market-making institutions in Canada.

4. One representative each from the Montreal foreign exchange community, the inter-dealer broker association, the foreign bank sector and the Bank of Canada.

Each individual on the Committee may satisfy one or more of the above requirements. A minimum of two members on the Committee should also be sitting members on the CFEC. All the members should have a broad knowledge of the foreign exchange markets in Canada, sufficient stature in the community to engender respect, and an anticipated ability to contribute to the work of the Committee. Traditionally the past President of FMAC has been asked to chair the Committee. If that is not possible, the Committee will select a Chairperson from its membership.

**Committee Procedures:**

1. The Committee will meet at the Chair's request. The format of the meeting will be informal, and the Committee will report to the CFEC on a regular basis. Any recommendation or issue paper prepared by the Committee will be presented for discussion at the CFEC before distribution and public disclosure.
2. The Committee will use FMAC as a vehicle to distribute information to the market.

**Table 1**  
**Selected Monthly Canadian Dollar Foreign Exchange Market Volumes**  
**C\$ Billions, Jan/98-Dec/03**  
**Outright Spot Transactions**

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | % Chge |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|--------|
| <b>Commercial Clients</b>  |     |     |     |     |     |     |     |     |     |     |     |     |       |        |
| <b>03</b>  | 44  | 44  | 47  | 47  | 50  | 45  | 45  | 35  | 44  | 44  | 39  | 44  | 527   | 3      |
| <b>02</b>  | 42  | 34  | 46  | 45  | 43  | 40  | 50  | 39  | 42  | 48  | 41  | 42  | 514   | -3     |
| <b>01</b>  | 47  | 45  | 51  | 44  | 44  | 51  | 43  | 40  | 43  | 43  | 41  | 36  | 528   | -3     |
| <b>00</b>  | 44  | 41  | 50  | 45  | 42  | 50  | 42  | 44  | 43  | 47  | 47  | 47  | 543   | 19     |
| <b>99</b>  | 35  | 34  | 42  | 35  | 35  | 39  | 36  | 37  | 38  | 37  | 42  | 48  | 457   | -9     |
| <b>98</b>  | 46  | 42  | 44  | 35  | 40  | 45  | 42  | 47  | 45  | 41  | 38  | 39  | 504   | 5      |
| <b>Foreign-Domiciled Financial Institutions and Investment Flow Business</b> |     |     |     |     |     |     |     |     |     |     |     |     |       |        |
| <b>03</b>  | 108 | 102 | 116 | 114 | 124 | 124 | 144 | 103 | 116 | 121 | 113 | 117 | 1403  | 20     |
| <b>02</b>  | 103 | 84  | 97  | 92  | 102 | 98  | 120 | 89  | 93  | 117 | 88  | 83  | 1166  | 13     |
| <b>01</b>  | 95  | 90  | 103 | 93  | 83  | 100 | 81  | 79  | 67  | 84  | 90  | 71  | 1035  | 1      |
| <b>00</b>  | 81  | 92  | 102 | 77  | 88  | 84  | 74  | 82  | 79  | 102 | 85  | 76  | 1022  | -3     |
| <b>99</b>  | 84  | 92  | 93  | 93  | 101 | 94  | 90  | 86  | 95  | 88  | 82  | 61  | 1058  | -5     |
| <b>98</b>  | 100 | 105 | 104 | 77  | 76  | 94  | 97  | 123 | 120 | 85  | 73  | 60  | 1112  | 3      |
| <b>Total Retail<sup>a</sup></b>  |     |     |     |     |     |     |     |     |     |     |     |     |       |        |
| <b>03</b>  | 162 | 154 | 172 | 169 | 183 | 180 | 200 | 148 | 171 | 174 | 161 | 171 | 2045  | 14     |
| <b>02</b>  | 155 | 126 | 152 | 147 | 154 | 147 | 181 | 137 | 144 | 176 | 136 | 134 | 1789  | 6      |
| <b>01</b>  | 155 | 146 | 168 | 148 | 136 | 161 | 133 | 127 | 118 | 137 | 140 | 116 | 1683  | -1     |
| <b>00</b>  | 136 | 147 | 167 | 133 | 139 | 144 | 126 | 134 | 132 | 161 | 141 | 135 | 1695  | 4      |
| <b>99</b>  | 128 | 134 | 146 | 140 | 144 | 143 | 134 | 132 | 142 | 133 | 133 | 118 | 1626  | -6     |
| <b>98</b>  | 157 | 157 | 159 | 120 | 124 | 152 | 150 | 181 | 178 | 134 | 118 | 105 | 1734  | 4      |

a. Total Retail includes commercial clients, Canadian-domiciled investment flow business, and foreign-domiciled financial institutions and investment flow business.



**Table 2**  
**Selected Monthly Canadian Dollar Foreign Exchange Market Volumes**  
**C\$ Billions, Jan/98-Dec/03**  
**Outright Forward Transactions**

|                                 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | %Chge |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| <b>Commercial Clients</b>       |     |     |     |     |     |     |     |     |     |     |     |     |       |       |
| <b>03</b>                       | 29  | 32  | 34  | 27  | 32  | 27  | 31  | 21  | 29  | 28  | 32  | 33  | 356   | 21    |
| <b>02</b>                       | 26  | 19  | 23  | 25  | 28  | 26  | 30  | 19  | 22  | 30  | 23  | 24  | 295   | -5    |
| <b>01</b>                       | 31  | 24  | 30  | 25  | 25  | 35  | 27  | 23  | 25  | 23  | 27  | 18  | 312   | 13    |
| <b>00</b>                       | 22  | 19  | 25  | 21  | 23  | 23  | 17  | 23  | 23  | 29  | 28  | 27  | 277   | 18    |
| <b>99</b>                       | 17  | 22  | 19  | 19  | 17  | 22  | 20  | 18  | 18  | 18  | 24  | 20  | 234   | -10   |
| <b>98</b>                       | 22  | 21  | 25  | 19  | 22  | 24  | 20  | 23  | 28  | 19  | 20  | 18  | 260   | -4    |
| <b>Total Retail<sup>a</sup></b> |     |     |     |     |     |     |     |     |     |     |     |     |       |       |
| <b>03</b>                       | 52  | 51  | 53  | 47  | 55  | 49  | 57  | 44  | 53  | 51  | 58  | 57  | 627   | 20    |
| <b>02</b>                       | 49  | 34  | 43  | 41  | 49  | 48  | 49  | 34  | 38  | 56  | 42  | 40  | 521   | -9    |
| <b>01</b>                       | 59  | 50  | 54  | 45  | 43  | 59  | 43  | 46  | 41  | 41  | 52  | 39  | 572   | 8     |
| <b>00</b>                       | 39  | 39  | 50  | 42  | 42  | 43  | 35  | 39  | 42  | 55  | 53  | 50  | 528   | 10    |
| <b>99</b>                       | 35  | 40  | 37  | 43  | 33  | 44  | 39  | 34  | 51  | 38  | 47  | 41  | 482   | 2     |
| <b>98</b>                       | 41  | 36  | 44  | 34  | 36  | 47  | 38  | 40  | 49  | 36  | 38  | 34  | 474   | -3    |

a. Total Retail includes commercial clients, Canadian-domiciled investment flow business, and foreign-domiciled financial institutions and investment flow business.

**Table 3**  
**Selected Monthly Canadian Dollar Foreign Exchange Market Volumes**  
**C\$ Billions, Jan/98-Dec03**  
**Interbank, Foreign Exchange Swap and Total Transactions**

|   | Jan | Feb | Mar | Apr | May | Jun  | Jul  | Aug  | Sep  | Oct | Nov | Dec | Total | % Chge |
|---|-----|-----|-----|-----|-----|------|------|------|------|-----|-----|-----|-------|--------|
| <b>Canadian Banks ("Interbank") - Outright Spot and Outright Forward</b>  |     |     |     |     |     |      |      |      |      |     |     |     |       |        |
| <b>03</b>   | 38  | 37  | 39  | 37  | 40  | 39   | 42   | 32   | 37   | 40  | 33  | 45  | 460   | -8     |
| <b>02</b>   | 42  | 36  | 40  | 46  | 50  | 39   | 49   | 38   | 37   | 46  | 41  | 37  | 501   | -7     |
| <b>01</b>   | 58  | 48  | 60  | 51  | 42  | 51   | 37   | 38   | 36   | 41  | 47  | 31  | 541   | -9     |
| <b>00</b>   | 52  | 54  | 53  | 50  | 51  | 47   | 42   | 42   | 44   | 55  | 55  | 50  | 594   | -11    |
| <b>99</b>   | 60  | 63  | 63  | 53  | 52  | 59   | 51   | 44   | 58   | 57  | 52  | 53  | 666   | -27    |
| <b>98</b>   | 81  | 70  | 73  | 59  | 64  | 92   | 72   | 95   | 118  | 81  | 60  | 50  | 916   | 10     |
| <b>Total Foreign Exchange Swaps</b>                                       |     |     |     |     |     |      |      |      |      |     |     |     |       |        |
| <b>03</b>   | 564 | 560 | 623 | 535 | 528 | 579  | 613  | 502  | 510  | 630 | 570 | 608 | 6823  | 6      |
| <b>02</b>   | 541 | 435 | 493 | 536 | 527 | 518  | 623  | 600  | 543  | 562 | 565 | 498 | 6442  | -1     |
| <b>01</b>   | 583 | 473 | 616 | 549 | 562 | 552  | 494  | 525  | 542  | 527 | 527 | 544 | 6494  | 10     |
| <b>00</b>   | 471 | 514 | 596 | 451 | 505 | 529  | 420  | 440  | 453  | 492 | 513 | 523 | 5908  | -10    |
| <b>99</b>   | 538 | 513 | 670 | 599 | 524 | 616  | 459  | 541  | 545  | 541 | 567 | 487 | 6601  | -18    |
| <b>98</b>   | 612 | 572 | 609 | 592 | 571 | 781  | 785  | 754  | 791  | 660 | 617 | 716 | 8060  | 18     |
| <b>TOTAL (Outright Spot, Outright Forward and Foreign Exchange Swaps)</b> |     |     |     |     |     |      |      |      |      |     |     |     |       |        |
| <b>03</b>   | 816 | 802 | 887 | 788 | 806 | 847  | 912  | 726  | 771  | 895 | 822 | 881 | 9955  | 8      |
| <b>02</b>   | 787 | 631 | 728 | 770 | 780 | 752  | 902  | 809  | 762  | 840 | 784 | 709 | 9253  | 0      |
| <b>01</b>   | 855 | 717 | 898 | 793 | 783 | 823  | 707  | 736  | 737  | 746 | 766 | 730 | 9290  | 6      |
| <b>00</b>   | 698 | 754 | 866 | 676 | 737 | 763  | 623  | 655  | 671  | 763 | 762 | 758 | 8725  | -7     |
| <b>99</b>   | 761 | 750 | 916 | 835 | 753 | 862  | 683  | 751  | 796  | 769 | 799 | 699 | 9375  | -16    |
| <b>98</b>   | 891 | 835 | 885 | 805 | 795 | 1072 | 1045 | 1070 | 1136 | 911 | 833 | 905 | 11184 | 14     |

Chart 1  
**Canadian Foreign Exchange Market Volumes**  
 (Billions of \$C/Quarter, Q1/98 – Q4/03)

- Total Spot, Forward & Swaps
- - - Swaps
- · · Spot
- · - Forwards

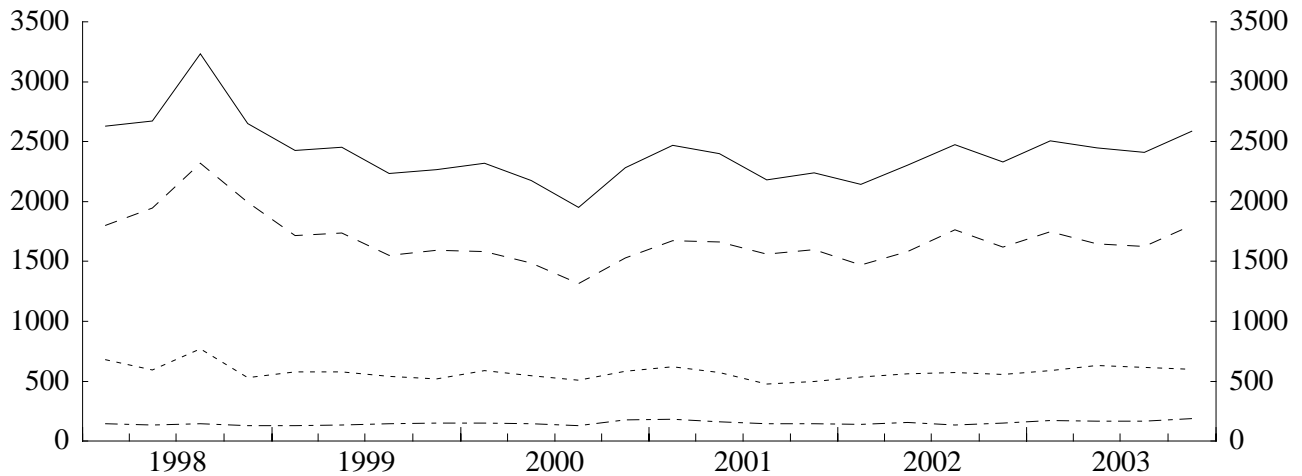


Chart 2  
**Spot Market Volumes**  
 (Billions of \$C/Quarter, Q1/98 – Q4/03)

- Total Spot Market
- - - Canadian Interbank
- · · Foreign-domiciled FI's & Investment Flows
- · - Commercial Clients
- · - Canadian-domiciled Investment Flows

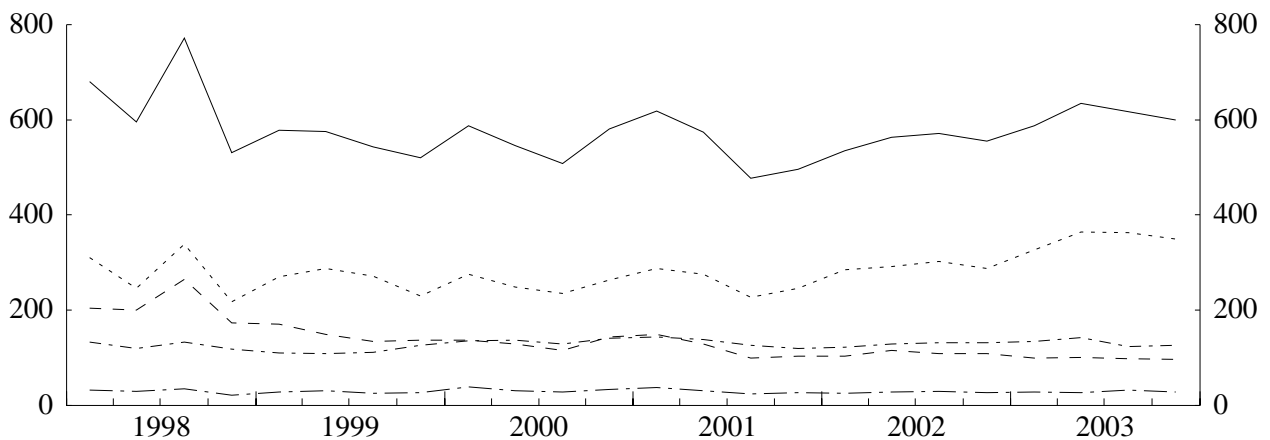


Chart 3  
**Forward Market Volumes**  
 (Billions of \$C/Quarter, Q1/98 to Q4/03)

- Total Forward Market
- - - Commercial Clients
- · · Foreign-domiciled FI's & Investment Flows
- · - Canadian-domiciled Investment Flows
- - - Canadian Interbank

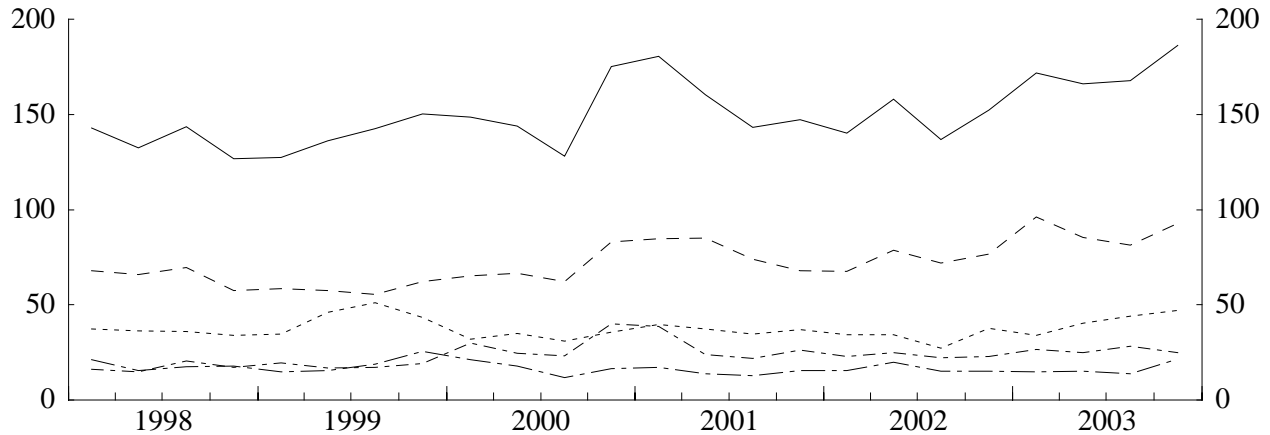


Chart 4  
**Swap Market Volumes**  
 (Billions of \$C/Quarter, Q1/98 to Q4/03)

- Total Swaps
- - - Canadian Interbank
- · · Foreign-domiciled FI's & Investment Flows
- · - Commercial Clients
- - - Canadian-domiciled Investment Flows

