



# The Euro-Currency Markets and the International Activities of Canadian Banks

E. Wayne Clendenning



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E... COUNCIL OF CANADA

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ECONOMIC COUNCIL OF CANADA

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This study reflects the views of the author and not necessarily those of the Economic Council of Canada.

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## **Preface**

This study was undertaken for the Economic Council of Canada as part of the research program of the Financial Markets Study Group. The major research for the study was undertaken between January 1974 and June 1975. The author has benefited considerably from discussions with other members of the group, most notably Dr. John Chant, Dr. Frank Roseman, Dr. George Lermer, Mr. Jacques Babin, and Mr. Jack Mintz. I also wish to acknowledge the assistance given by Mr. C. L. Read, Inspector General of Banks, and numerous officers of Canadian chartered banks who kindly provided advice and information during the period of research.

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**PART 1**

**The International Background**

## **The International Background**

The internationalization of banking and financial market activities has been an evolving process over the centuries, but it has only been during the present century that it has become a major force in linking the world economies together. In particular, this process has accelerated sharply during the period since World War II and has given rise to many new international financial techniques and systems of business organization. These, in turn, have added to the internationalization process and have made it more imperative that national financial institutions and monetary authorities have a world-wide perspective of their operations. To set the stage and provide an historical perspective for this study of the internationalization of Canadian banking, this section of the study will provide a brief overview of historical international financial activity during this century and set out the international financial developments and trends in historical perspective. In particular, the developments since World War II will be presented and discussed.

# 1 Historical International Activity

During the twentieth century, international financial relationships and activities have undergone major changes in regard to both their scope and characteristics. In the early part of the century and up to the end of the 1920s, international financial activity was centred primarily on London, with the large and sophisticated U.K. capital market providing a large volume of both long- and short-term funds for international financing activities. Most of the short-term activities involved the financing of foreign trade both for the British themselves and for foreigners. On the long-term side, London was the major supplier of investment funds, particularly for the British colonies and Commonwealth countries, but for other countries as well. The United States was also developing a greater capability for international financing but at this point was primarily concerned with domestic activities. In the 1920s, the United Kingdom also attempted to use this international financial capacity to attract short-term capital inflows so they could avoid the "rules of the game" under the gold standard. This partially shifted the focus of international activities towards meeting domestic economic goals from the previous preoccupation with foreign trade financing and overseas investment.

With the breakdown associated with the currency and trade upheavals of the 1930s, international financial activity contracted severely. The scope for trade financing and foreign investment was reduced substantially by the world-wide depression conditions and the inward-looking policies adopted by most countries. The activities that did take place were again centred primarily on London, with New York playing a minor role. This period of inactivity was followed immediately by the Second World War which prevented any re-activation of either short- or long-term private international financial activities. Exchange controls were rigidly enforced by all the major countries and the governments controlled virtually all international transactions under emergency wartime powers. The major change coming out of this wartime disruption, a result of the huge liabilities incurred by the United Kingdom during the war, was the financial decline of London. These liabilities accrued in the hands of foreigners, mainly in the form of liquid sterling balances, and created a

large cloud over the pound sterling and the United Kingdom's ability to use sterling as an international reserve currency. In contrast, the United States built up a large creditor position which made the U.S. dollar the foundation of the postwar international monetary system.

After the end of World War II, the United Kingdom and other European nations faced a massive rebuilding operation which was going to strain their international financial resources for many years. As a result, rigid exchange controls and inconvertibility of currencies had to be retained in Europe for most of the 1950s. This automatically meant that almost all international financial activities had to be centred in New York and be denominated in U.S. dollars. These activities were primarily concerned with foreign trade financing and war reconstruction in Europe. In the mid-1950s, however, a distinct shift in international financial activities occurred with the development of the Euro-dollar market centred in London. The increasing spread of multi-national enterprises, the development of more advanced communication systems, the desire of the United Kingdom to re-establish a viable international capital market in London, and the interest rate rigidities and uncompetitive attitudes of banks in the United States, contributed to the establishment of this new international market system. This development was a major departure in that it moved international activities away from a national market system to a truly international system that operated beyond the borders of any one country.

The Euro-dollar market was soon supplemented with a whole series of other Euro-currency markets when external convertibility was re-established in Europe in 1958. These markets allowed banks to undertake borrowing and lending operations in currencies other than the currency of their country of residence, and thereby permitted them to avoid many of the exchange controls and domestic regulatory measures that still persisted in Europe. In addition, the lack of viable money markets in Western Europe and Japan encouraged the use of the Euro-currency system. In fact, many countries, including the United Kingdom seemed to encourage the development and use of the Euro-currency system at the expense of their own national markets in the case of international financing activities. Up until the development of the Euro-currency system, banking tended to be primarily national in orientation, with international activities being confined to correspondent relationships and foreign trade financing for domestic exporters and importers. The creation of the Euro-currency markets, however, allowed banks a much greater degree of freedom in international operations and permitted them to compete more aggressively with each other across international boundaries. It was at this point that international banking became a major factor in international financial activities and served to accelerate the internationalization process.

The expansion of the U.S. balance-of-payments deficit in the early 1960s began to threaten the stability of the U.S. dollar. The United States,

therefore, undertook a number of measures aimed at reducing short- and long-term capital outflows from their country. These took the form of the Interest Equalization Tax (IET) in 1963, and the Foreign Credit Restraint Program and the Foreign Direct Investment Restraint Program in 1965.<sup>1</sup> These control measures, and the subsequent strengthening of them in 1968, added further impetus to the Euro-currency markets as they reduced the ability of the U.S. market to undertake international financing activities. As a result, international activities became centred more and more in the Euro-currency system with the U.S. banks beginning to play a large role in these markets through their overseas branches, both for international and domestic purposes. These measures also gave rise to the development of the Euro-bond market which became an increasingly important source of international long-term funds. This was also facilitated by the absence of alternative long-term national capital markets in Europe and Japan. By the end of the 1960s, a large part of international financial activities was centred in these international capital markets rather than in the national markets of individual countries.

This trend has continued in the 1970s with the internationalization process accelerating further with the rapid multi-national spread of commercial banks from all the major countries. Commercial banks have now become large multi-national enterprises that can move large volumes of funds around the world to serve the needs of their clients with many of these activities being beyond the control of the authorities of any particular country. The main vehicles for these transactions are the Euro-currency and Euro-bond markets which have grown enormously during the past few years and now rank as major international capital markets. The U.S. capital outflow controls continued to confine the U.S. capital markets to the provision of domestic financing; but in January 1974, this was dramatically altered by the complete removal of these controls in the face of massive balance-of-payments financing requirements arising from the large international oil price increase. The U.S. markets and banking system are now back on a more competitive footing with the Euro-currency system and will be able to conduct international financial activities with virtually complete freedom from controls. This again places a large national capital market at the disposal of international borrowers and lenders and should add substantially to international capital market capacity. Because of the large balance-of-payments adjustments facing the major oil consuming nations during the next few years, the capacity of both the U.S. market and the Euro-currency system should be fully utilized.

<sup>1</sup> For details of these programs, see Chapter 4.

**PART 2**

**Euro-Currency Markets**



## **Euro-Currency Markets**

One of the most significant financial innovations on the international scene during the postwar period has been the development of the Euro-currency markets. These markets are of a truly international nature and operate on a world-wide scale. Basically, there are two separate, but interrelated, markets: the short-term Euro-currency deposit markets and the long-term Euro-bond market. These markets are based on existing banking and financial market procedures with borrowers and lenders, as well as the banks involved, behaving in much the same way, and reacting to the same type of factors, as they do in a domestic banking system or financial market. We will first attempt to describe briefly the nature of the markets and their roles in the international financial system. We will then examine more closely the U.S. legislative background that has influenced the development of these markets. Next, we will describe the development and growth of the markets and attempt to assess the relative importance of U.S. legislative changes and other non-U.S. influences on this growth and development. Finally, the problem of controlling the markets and the attempts to do so will be discussed and assessed.

## 2 The Nature of the Markets

In this chapter the Euro-currency markets will be defined and described briefly and a number of features of the markets will be outlined and discussed in order to set the stage for later sections of the study.

### **Definitions and Description**

The short-term Euro-currency markets are a series of markets dealing in foreign currency deposits, in which national commercial banks accept interest-bearing deposits denominated in currencies other than their own domestic currency and re-lend these balances in that same currency, in their own domestic currency, or in the currency of a third country. This Euro-currency system includes markets dealing in Euro-dollars, Euro-sterling, Euro-francs, Euro-Swiss francs, Euro-Deutsche marks, Euro-lire, Euro-guilders, and so on. The name "Euro-currency" seems to have originated from the fact that the earliest development of these markets was centred in Europe and that European banks still play a large role in them. The prefix "Euro" does not imply that the currencies used in these markets are in any way different from the corresponding currencies when used domestically, but instead describes a particular type of operation in which these currencies are involved from time to time. The distinguishing feature of a Euro-currency transaction is that it is conducted by a bank (or series of banks) operating outside the country whose currency is being used. The nationality of the original owner or of the final borrower is of no consequence in this distinction with both, in some cases, being residents of the country whose currency is being used. The operations of the Euro-currency system have now spread far beyond the boundaries of Europe and, in fact, a competing market — the Asia dollar market — has now been established with its centre in Singapore.

The Euro-bond market is again an international market operating beyond the boundaries of any individual country. It is a market for the issuance and trading of relatively long-term bonds simultaneously in a number of countries but outside the country in whose currency the bonds are denominated. The Euro-bonds have been mainly denominated in U.S. dollars, Deutsche marks, French francs, Dutch guilders, and Swiss francs.

As in the case of the short-term Euro-currency markets, the U.S. dollar component has been the largest sector of the market and the most innovative, and the issues convertible into common stock of U.S. corporations are quite common. Other Euro-bonds have been mainly long-term debt instruments. The new issue aspect of the market has been the most active with secondary trading only developing gradually and then mainly centred on the U.S. corporate issues, especially the convertible bonds. Recently, a medium-term market has also developed which has aspects of both the Euro-currency and Euro-bond markets involved in its operations. Most medium-term activity has taken the form of either direct private placement of securities or medium-term bank lending, often by means of banking consortia. In many cases, the interest rates on these medium-term securities or loans have been tied to the short-term interest rates in the Euro-currency markets and move with these rates after a short lag.

### Features of the Markets

Using the Euro-dollar market as an example, Table 2-1 outlines the various steps involved in a typical Euro-currency transaction. These steps can be summarized as follows:

- Step 1: This is the position immediately preceding the creation of a Euro-dollar deposit. This position would be achieved whether the deposit holder held his deposit as a U.S. dollar deposit at a U.S. bank, or converted from another currency deposit or other U.S. security into a U.S. dollar deposit.
- Step 2: A Euro-dollar deposit is created when Depositor A transfers his \$100 deposit held previously at a U.S. bank to Euro-bank X operating outside the United States. The original deposit at the U.S. bank remains, but it is now owned by Euro-bank X.
- Step 3: Euro-bank X now places this deposit with another Euro-bank, Euro-bank Y. It also retains a cash reserve deposit at a U.S. bank against its deposit liability to deposit holder A. As a result, it deposits only \$90 in Euro-bank Y (assuming a 10% cash reserve ratio).<sup>1</sup>
- Step 4: Euro-bank Y now passes along a dollar deposit to Euro-bank Z after retaining a cash reserve against its deposit liability to Euro-bank X.

<sup>1</sup> In reality there is no required cash reserve and, in fact, little need to hold cash reserves in Euro-currency transactions as long as assets and liabilities are matched in both amount and maturity.

Step 5: Euro-bank Z now makes a Euro-dollar loan to Borrower B after retaining a cash reserve against its dollar deposit due to Euro-bank Y. Borrower B now owns a U.S. dollar deposit at a U.S. bank, which he then disperses to C. After completion of this chain of transactions, we end up with a Euro-dollar deposit owned by Depositor A of \$100, a Euro-dollar loan to Borrower B of \$73, cash reserves of \$27 held by the Euro-banks at a U.S. bank, and a series of off-setting inter-bank assets and liabilities between the Euro-banks. In addition, the U.S. bank (or banking system) still has total deposit liabilities of \$100 and, therefore, has suffered no decline in total deposits or cash reserves.

This simple outline of the Euro-dollar market also illustrates many of the features of the market, of which the following are probably the most important:

- 1 The most obvious feature is the chain of borrowing and lending transactions involved in moving the deposit from the original depositor to a final borrower. The depositors and borrowers can be official institutions (central banks, governments, or international institutions), commercial banks, or non-bank individuals and corporations. They can also be either U.S. or non-U.S. residents. In the chain of transactions, if all Euro-bank operations are consolidated, the inter-bank deposits cancel out.
- 2 A second feature is the two aspects of the market—an inter-bank money market aspect and a commercial banking aspect. The banking operation is very similar to that of a domestic financial intermediary (or near-bank). A Euro-bank accepts deposits denominated in U.S. dollars, holds part at a U.S. bank as a cash reserve, and then on-lends its excess cash reserves. A domestic near-bank does essentially the same thing by accepting domestic currency deposits, a portion of which it holds as a cash reserve with the domestic banking system, while on-lending the remainder to a non-bank borrower. The inter-bank money market, on the other hand, operates much like the Federal Funds market in the United States.
- 3 Another important feature of the market is the absence of a central monetary authority. As a result, its credit-creating capability depends upon its ability to attract and re-attract U.S. dollar deposits which have already been created by the U.S. banking system and its ability to on-lend these deposits to non-bank borrowers. The Euro-dollar market cannot receive an

Table 2-1  
Outline of Euro-Dollar Transactions

Step 1		U.S. Bank	
Depositor A			
Deposit at U.S. bank - 100		Deposit due to: A - 100	

Step 2		U.S. Bank		Euro-Bank X	
Depositor A					
Deposit at Euro-bank X - 100		Deposit due to: X - 100		Deposit at U.S. bank - 100	Deposit due to: A - 100

Step 3		U.S. Bank		Euro-Bank X		Euro-Bank Y	
Depositor A							
Deposit at Euro-bank X - 100		Deposit due to: X - 10		Deposit at U.S. bank - 10	Deposit due to: A - 100	Deposit at U.S. bank - 90	Deposit due to: Euro-bank X - 90
		Y - 90		Deposit at Euro-bank Y - 90			
		100		100			

**Step 4**

Depositor A	U.S. Bank	Euro-Bank X	Euro-Bank Y	Euro-Bank Z
Deposit at Euro-bank X - 100	Deposit due to: X - 10 Y - 9 Z - 81 100	Deposit at U.S. bank - 10 Deposit at Euro-bank Y - 90 Y - 100	Deposit due to: Euro-bank X - 90	Deposit due to: U.S. Bank - 81 Euro-bank Y - 81

**Step 5**

Depositor A	U.S. Bank	Euro-Bank X	Euro-Bank Y	Euro-Bank Z	Borrower B
Deposit at Euro-bank X - 100	Deposit due to: X - 10 Y - 9 Z - 8 B - 73 100	Deposit at U.S. bank - 10 Deposit at Euro-bank Y - 90 Y - 100	Deposit due to: Euro-bank X - 90	Deposit due to: U.S. bank - 8 Euro-bank Y - 81 Loan to B - 73 81	Deposit at U.S. bank - 73 Euro-bank Z - 81 Paid to C

input of cash reserves from a central monetary authority of its own. In this sense, it also operates like a system of domestic financial intermediaries which are dependent upon attracting already-existing domestic currency deposits from the domestic banking system.

- 4 Since the market is international in nature and is dealing in a currency other than the currency of the country in which the banks are operating, it generally operates in the absence of direct government regulations and has the ability to avoid exchange controls, cartel arrangements and other regulatory controls. This is what gives the market its great flexibility and much of its attraction for both borrowers and lenders as well as the banks involved.

The Euro-bond market is quite different from the short-term Euro-currency markets in that it does not have a long chain of inter-bank transactions involved in the movement of funds from lender to borrower. It operates on much the same basis as a domestic long-term bond market with most transactions involving a longer-term investment decision on the part of the lender and a longer-term borrowing decision by the borrower. The lender obtains his funds by acquiring ownership of either a domestic or Euro-currency deposit denominated in the desired currency through income flows, the conversion of other currency deposits, or the liquidation of other securities. These funds are then loaned directly to the final borrower through the intermediary of an investment underwriter, bank, or broker. The main linkage between the Euro-bond market and the Euro-currency markets occurs when Euro-currency deposits are used to purchase Euro-bonds and when proceeds of a Euro-bond issue are temporarily deposited in the Euro-currency markets. In fact, however, Euro-currency deposits and Euro-bonds are relatively poor substitutes for each other and both borrowers and lenders are usually motivated by quite different considerations in the two market systems. As a result, the linkage is not very strong between the short- and long-term Euro-markets. Also, the Euro-bond market does not involve very much secondary trading activity, although efforts are being made to increase the depth and scope of the secondary market. On the other hand, the recent trends towards more medium-term Euro-currency bank lending and the adoption of flexible interest rates on many long-term Euro-loans that are tied to the short-term Euro-currency rates have probably served to increase the linkage between the two Euro-systems, particularly with regard to interest rate structures.

### **3 The U.S. Legislative Background**

One of the major factors involved in the development and growth of the Euro-currency system has been a series of U.S. legislative measures aimed at limiting interest rates on bank deposits, setting cash reserve requirements for the U.S. banking system, and restricting capital outflows from the United States. A number of these measures were instituted before the development of the Euro-currency markets, while others were enacted during the Euro-currency development period. In addition, all of them have been modified to varying degrees since the establishment of the Euro-currency system. In order to provide a starting point for analysing the impact of these changes on the development and growth of the Euro-currency markets, this chapter will briefly outline the legislative background and the changes in it over the period since 1957.

#### **Regulation Q and Reserve Requirements**

Regulation Q was established in 1933 by the Board of Governors of the Federal Reserve System when the U.S. Congress gave the Federal Reserve the responsibility for regulating the maximum rates of interest payable on time and savings deposits by their member banks. This regulation prohibits the payment of interest on demand deposits (i.e., deposits placed for thirty days or less) and sets the maximum permissible rates of interest that can be paid on time and savings deposits by the U.S. banking system. The maximum rate payable on time deposits was set at 3 per cent in 1933, and then reduced to 2½ per cent in 1935, where it remained until January 1, 1957 when it was again raised to 3 per cent. Since 1957, the maximum permissible rates on deposits of varying maturities have been altered from time to time by the Board of Governors. These alterations are outlined in Table 3-1.

On October 15, 1962, an amendment was made exempting time deposits of foreign governments, monetary and financial authorities of foreign governments, and certain international financial institutions from the terms of Regulation Q for a period of three years. In October 1965, this exemption was renewed for a further three years and on October 15, 1968, official time deposits were exempted permanently from the terms of



Table 3-1

Maximum Interest Rates Payable on U.S. Time Deposits Under Regulation Q

Effective Period	30 Days	60 Days	90 Days	180 Days	One'	Two	Four
	to 59 Days	to 89 Days	to 179 Days	to One Year	to Two Years	to' Four Years	Years and Over
	(Per cent)						
Prior to January 1, 1957	1	1	2	2½	2½	n.a.	n.a.
January 1, 1957 to December 31, 1961	1	1	2½	3	3	n.a.	n.a.
January 1, 1962 to July 16, 1963	1	1	2½	3½	3½	n.a.	n.a.
July 17, 1963 to November 23, 1964	1	1	4	4	4	n.a.	n.a.
November 24, 1964 to December 5, 1965	4	4	4½	4½	4½	n.a.	n.a.
December 6, 1965 to July 19, 1966	5½	5½	5½	5½	5½	n.a.	n.a.
July 20, 1966 to September 25, 1966							
Multiple-maturity							
Single-maturity	4	4	5	5	5	n.a.	n.a.
September 26, 1966 to April 17, 1968	5½	5½	5½	5½	5½	n.a.	n.a.
Multiple-maturity							
Single-maturity	4	4	5	5	5	n.a.	n.a.
Over \$100,000							
Single-maturity	5½	5½	5½	5½	5½	n.a.	n.a.
Under \$100,000							
Single-maturity	5	5	5	5	5	n.a.	n.a.
April 18, 1968 to January 20, 1970							
Multiple-maturity							
Single-maturity	4	4	5	5	5	n.a.	n.a.
Over \$100,000							
Single-maturity	5½	5½	6	6¼	6¼	n.a.	n.a.
Under \$100,000							
Single-maturity	5	5	5	5	5	n.a.	n.a.
January 21, 1970 to June 23, 1970							
Multiple-maturity							
Single-maturity	4½	4½	5	5	5½	5¾	n.a.
Over \$100,000							
Single-maturity	6¼	6½	6¾	7	7½	7½	n.a.
Under \$100,000							
Single-maturity	5	5	5	5	5½	5¾	n.a.

June 24, 1970 to May 15, 1973									
Multiple-maturity	4½	4½	5	5	5½	5¾	5¾	n.a.	
Single-maturity	—	—	6¾	7	7½	7½	7½	n.a.	
Over \$100,000	5	5	5	5	5½	5¾	5¾	n.a.	
Under \$100,000	4½	4½	5	5	5½	5¾	5¾	n.a.	
May 16, 1973 to June 30, 1973									
Multiple-maturity	—	—	—	—	—	—	—	—	
Single-maturity	5	5	5	5	5½	5¾	5¾	n.a.	
Over \$100,000	5½	5½	5½	5½	6	6½	6½	—	
Under \$100,000	—	—	—	—	—	—	—	—	
July 1, 1973 to Present									
Multiple-maturity	—	—	—	—	—	—	—	—	
Single-maturity	5½	5½	5½	5½	6	6½	6½	—	
Over \$100,000	—	—	—	—	—	—	—	—	
Under \$100,000	5½	5½	5½	5½	6	6½	6½	—	

1 One year to 2½ years and 2½ years to four years since July 1, 1973.

n.a. Not applicable.

— No ceiling or suspended ceiling.

Regulation Q. In addition, Regulation Q applies only to U.S. banks and branches of U.S. banks operating within the United States. This permits the foreign branches of U.S. banks to pay interest on demand deposits and higher rates on time deposits than those allowed under Regulation Q.

The most obvious change in recent years has been the greater flexibility of the maximum interest rates payable on time deposits and closer reflection of market conditions. Over the past ten years, the maximum rates have been progressively raised in the face of changing market and competitive conditions. Starting in 1970, maximum rates were gradually removed from large (over \$100,000) single-maturity time deposits. In 1973, this removal was completed and, currently, no maximum rates exist for this type of large time deposits.

The U.S. banking system has been subject to cash reserve requirements on demand and time deposits under Federal Reserve Regulation D. These reserve requirements have been varied over time in accordance with monetary and other policy decisions. Until September 1969, no compulsory reserves were required against advances or loans from overseas branch offices or foreign banks. This differential treatment made it attractive for U.S. banks to accept deposits (or advances) from their overseas branches which, in turn, were not subject to Regulation Q limits on deposit interest rates. In September 1969, however, Regulation M was amended to establish a 10 per cent reserve requirement on increases in advances from overseas branches over the May 1969 levels. This reserve requirement was also applied to assets purchased from domestic offices by foreign branches. A new reserve-free base was to be established at the existing level of borrowings from foreign branches when this fell below the original base. A similar reserve requirement was placed on increases in foreign-branch loans to U.S. residents. Regulation D was also amended to establish a similar 10 per cent reserve requirement on borrowings from other foreign banks. In January 1971, this 10 per cent reserve requirement was increased to 20 per cent, and the reserve-free base was altered to the greater of 3 per cent of the current level of total deposits normally subject to reserve requirements or the November 1970 level of borrowings from foreign branches. A new reserve-free base was to be established when borrowings fell below this original base level. In May 1973, this reserve requirement was reduced from 20 per cent to 8 per cent and the reserve-free base, still held by some banks, was gradually eliminated between July 1973 and March 1974. This change now affords roughly equal treatment with the marginal reserve requirements on large domestic certificates of deposit and bank-related commercial paper.

### **The Interest Equalization Tax**

On July 18, 1963, the U.S. administration proposed the imposition of a temporary one-time tax on U.S. purchases of foreign securities from

foreigners at rates up to 15 per cent on the purchase price of bonds, depending upon their maturity, and at a flat rate of 15 per cent on preferred and common shares. This tax was to be applied to the purchase of both outstanding securities and new issues as of July 19, 1963. The primary purpose of this proposal was to raise the effective interest cost to foreigners on foreign bonds sold to U.S. investors by about 1 per cent; and, thereby, discourage them from floating bond issues in the U.S. market. This legislation was not to be applied to long- or short-term bank loans granted to foreigners or to direct investments abroad by U.S. residents. In addition, the new issues of the less-developed countries were to be exempt from the tax. On July 21, 1963, it was also agreed to exempt new Canadian issues on the understanding that Canada would refrain from building up foreign exchange reserves by means of borrowing in the United States.

This proposal, along with an amendment providing for the extension of the tax to long-term bank loans, was passed by the U.S. Congress in September 1964. The tax was retro-active to July 19, 1963 and was to continue through 1965. In early 1965, the legislation was extended to cover all bank and non-bank credits to foreigners with a maturity of one year or more. At the same time, it was decided to continue the tax until the end of 1967. In July 1967, the basic rate was raised to 22½ per cent and discretion was given to the Administration to vary the rate between 15 per cent and 22½ per cent. This legislation was retro-active to January 26, 1967 (from which date it was collected at the rate of 22½ per cent) and was to continue until the summer of 1969. In August 1967, however, the basic rate was reduced to 18¾ per cent — thereby setting the additional cost to foreign borrowers at approximately 1¼ per cent — and discretion was given to vary the rate from 0 per cent to 22½ per cent.

In April 1969, the basic rate was reduced to 11¼ per cent and this rate was subsequently extended to March 1971. In 1971, discretion was given to lower the rate on new issues and to extend the legislation to cover securities of less than one year maturity, but these discretionary powers were not used. The legislation, however, was extended to March 1973 and, subsequently, to July 1, 1974, with the expressed intention of phasing out the tax by that date. On January 1, 1974, the basic tax rate was reduced to 3¾ per cent, with an effective additional interest cost to foreigners of ¼ per cent; this was followed by complete removal of the tax on January 29, 1974.

### **The Foreign Credit Restraint Program**

On February 10, 1965, the U.S. administration instituted a voluntary program to limit the expansion of foreign assets held by U.S. commercial banks and non-bank financial institutions. This program had, as its main element, a call on all U.S. banks and financial non-banks to voluntarily limit their extension of credit to foreigners and their investment in foreign

Table 3-2  
The U.S. Foreign Credit Restraint  
Program as Applied to U.S. Banks, 1965-1973

	Overall Ceiling	Special Trade Credit Ceiling	Term Loans to Continental Western Europe	Short-Term Ceiling for Continental Western Europe	Other Restraints
1965	105% of December 31, 1964 base	n.a.	n.a.	n.a.	Bank-owned foreign U.S. dollar deposits and foreign short-term securities should be reduced in an orderly manner.
1966	109% of December 31, 1964 base	n.a.	n.a.	n.a.	Same as 1965.
1967	Same as 1966	n.a.	n.a.	n.a.	Same as 1965.
1968	103% of December 31, 1964 base; Mandatory system.	n.a.	No new term loans or renewals; reduce ceiling by amount of repayments.	60% of credit outstanding at December 31, 1967	Same as 1965.
1969	Same as 1968 until April; then new option of 1½% of total assets as at December 31, 1968.	n.a.	No new term loans except to finance U.S. exports; continue to reduce ceiling by repayments.	Same as 1968.	Same as 1965.
1970	Same as 1969.	New separate trade credit ceiling equal to 1% of end-of-1968 total assets.	Same as 1969.	75% of December 31, 1967 base	Same as 1965.

1971	Same as 1969.	Same as 1970.	Same as 1969.	Exempt export credit from ceiling.	Same as 1965.
1972	Three options — the higher of: (1) 85% of September 30, 1971 ceiling; (2) September 30, 1971 ceiling less export credits; (3) 2% of total assets as at December 31, 1970	Ceiling abolished; no restraints or trade credit for U.S. exports.	Same as 1969.	Ceiling abolished.	U.S. agencies and branches of foreign banks asked to report; otherwise same as 1965.
1973	Same as 1972.	n.a.	Same as 1969.	n.a.	U.S. agencies and branches of foreign banks not to increase foreign assets above June 30, 1973 level; otherwise same as 1965.

n.a. not applicable.

Table 3-3  
 The U.S. Foreign Credit Restraint Program  
 As Applied to U.S. Non-Bank Financial Institutions, 1965-1973

	Ceiling for Covered Assets <sup>1</sup>	Holdings of Liquid Funds Abroad	Holdings of Loans and Investments Under Ten Years	Loans and Investments to Continental Western Europe	Other Restraints
1965	n.a.	Not to exceed lesser of 1963 or 1964 year-end totals.	105% of end-1964 level.	n.a.	Reduce holdings of liquid funds gradually.
1966	n.a.	To be held to minimum levels not to exceed September 30, 1965 level.	110% of end-1964 level.	105% of September 1965 level.	Same as 1965.
1967	105% of the September 30, 1966 level.	n.a.	n.a.	To be limited to September 30, 1966 level.	Same as 1965.
1968	95% of the December 31, 1967 level; Mandatory system.	Reduce holdings to zero except for working balances.	n.a.	No new investments.	Same as 1965.
1969	Same as 1968.	Same as 1968.	n.a.	Not to exceed December 31, 1968 level.	Same as 1965.
1970	Same as 1968 (may exceed ceiling modestly for trade credit).	Same as 1968.	n.a.	Same as 1969.	Same as 1965.
1971	Same as 1968.	Same as 1968.	n.a.	Same as 1969.	Same as 1965.

1972	Export financing exempted — new ceiling equal to greater of: (1) September 30, 1971 ceiling less trade credit; (2) 85% of September 30, 1971 ceiling.	Same as 1968.	n.a.	Same as 1969.	Same as 1965.
1973	Same as 1972.	Same as 1968.	n.a.	Same as 1969.	Same as 1965.

I Liquid funds, loans and investments with maturities of ten years or less, and long-term and equity investments in developed countries other than Canada and Japan.  
n.a. not applicable.



securities in accordance with a series of guidelines issued from time to time by the Federal Reserve System. These guidelines did not apply to the foreign branches of U.S. banks as long as the funds used for credits to foreigners were derived from foreign sources and did not add to the dollar outflow from the United States. Head office advances to these branches, however, were covered and represented bank credit to non-residents for the purposes of the program. In January 1, 1968, this voluntary program was replaced by a mandatory series of guidelines under which the Federal Reserve System had the power to investigate, regulate, and prohibit transactions subject to the guidelines. On March 1, 1968, Canada was totally exempted from the guidelines program and assets held in Canada were excluded from the target ceilings.

The initial guidelines for U.S. banks and non-bank financial institutions for the year 1965, and the subsequent changes in them to the end of 1973, are outlined in Tables 3-2 and 3-3 respectively.

It is apparent from these tables that the foreign credit restraint program was at its peak during the years 1968-1971 inclusive. In 1972, a modest easing of the program was undertaken with the removal of the restraints on trade credit for U.S. exports and on short-term credit to continental Western Europe. At the end of 1973, the program consisted of a continued (although modestly more flexible) overall ceiling on foreign asset holdings, a prohibition of term loans to continental Western Europe, and a continued recommendation that holdings of liquid funds abroad be reduced and held to a minimum required for operational purposes. Although the precise guidelines vary somewhat, these restraints generally applied to both U.S. banks and non-bank financial institutions. In 1973, U.S. agencies and branches of foreign banks were brought under the program for the first time and were asked not to increase foreign assets above June 30, 1973 levels. On January 29, 1974, the foreign credit restraint program was terminated.

### **The Foreign Direct Investment Restraint Program**

In 1966, the U.S. administration also instituted a foreign direct investment restraint program to be administered by the Department of Commerce. For 1966 and 1967, there was a voluntary request that financial and non-financial corporations limit their annual average rate of capital transactions to a level 20 per cent higher than that during the 1962-64 period. For the two years, the total would be 240 per cent of the annual average during the 1962-64 base period. For the purposes of the program, capital transactions were defined as capital outflows from the United States plus re-invested earnings.

On January 1, 1968, as part of the overall tightening of the balance-of-payments program, a mandatory restraint program on direct investment

was instituted. For this program, the recipient countries were broken down into three classes:

- 1 Schedule A countries — underdeveloped countries around the world.
- 2 Schedule B countries — developed countries requiring a high level of capital inflow from the United States for the maintenance of economic growth and stability. These included Australia, the United Kingdom, Canada, Japan, New Zealand, Ireland, Middle East oil countries, The Bahamas, and Bermuda.
- 3 Schedule C countries — all other developed countries and communist countries.

For Schedule A countries, new investment from the United States plus re-invested earnings during 1968 were not to exceed 110 per cent of the investor's average investment in 1965-1966. New investment (including re-invested earnings) in Schedule B countries was not to exceed 65 per cent of the average new investment in these countries during the 1965-66 period. In the case of Schedule C countries, there was to be a complete moratorium on new investments through transfers from the United States, but up to 35 per cent of the average earnings of respective ventures in 1965-1966 could be re-invested provided the same share of total earnings as in the base years was repatriated to the United States. In addition, repatriated earnings must equal at least the average repatriated in 1964, 1965 and 1966 and non-repatriated earnings must not exceed the permitted limit for new investment. This program remained virtually unchanged until it was terminated on January 29, 1974.

## **4 Development and Growth of the Markets**

From a very small beginning in the mid-1950s, the Euro-currency system has expanded dramatically to become one of the major money and credit markets of the world. In this section, the reasons for the initial development of the markets will be discussed and the growth trends during the past ten years briefly outlined. In particular, the influence of U.S. legislative changes on the development of the market will be analysed and compared to the impact of other non-U.S. influences. Finally, the current trends and developments in the markets will be reviewed.

### **Reasons for Initial Development**

During the mid-1950s, the Euro-currency system (in particular, the Euro-dollar market) began to develop in response to the combination of an increasing supply of foreign-owned U.S. dollar deposits and the discovery by banks operating outside the United States that they could be more competitive than U.S. banks in borrowing and lending these U.S. dollar deposits. Many holders of U.S. dollar deposits during this period preferred, for a number of reasons, to hold their funds in U.S. dollars but were not satisfied with the low yields obtainable on their funds in the United States. As a result, they began to seek more profitable outlets for their U.S. dollar funds by offering them to European banks. In turn, as the volume of U.S. dollar deposits available to them became substantial, the European banks began to look for profitable outlets for these funds and, because of the low yields available in the United States, they were forced more and more to find the outlets in Europe among their own customers and other European banks.

At this point, the ability of the European banks to attract U.S. dollar deposits resulted mainly from the limitations imposed on the U.S. banking system by the regulatory controls on U.S. deposit rates under Regulation Q. During this period, U.S. commercial banks were prohibited from paying interest on demand deposits and were limited to paying 1 per cent on time deposits of less than ninety days and to  $2\frac{1}{2}$ -3 per cent on longer term maturities. Undoubtedly, these limitations under Regulation Q caused the interest rate structure on dollar deposits in the United States to

be rigid and unresponsive to changes in both U.S. and foreign monetary conditions. Consequently, because of the generally higher level of interest rates in Europe during this period, deposit rate differentials between the United States and Europe were for several years substantial. These limitations by themselves, however, only affected the supply side of the market and were not sufficient to account for the overall development of the Euro-dollar market. In order to find outlets for the U.S. dollar deposits placed with them, European banks also had to be willing to undercut U.S. bank lending rates. This, of course, had to involve a willingness on the part of European banks to operate on narrower interest margins than the U.S. banks were prepared to accept. As a result, the unwillingness of U.S. banks to accept lower interest margins appeared to be just as important as the limitations imposed by Regulation Q in the initial development of the Euro-dollar market.

During the 1957 sterling crisis, the Euro-dollar market received its first major stimulus from the demand side. When the use of sterling to finance foreign trade was restricted during their crisis, British banks attempted to overcome this by using U.S. dollars in their foreign-trade financing activities. This development led to the first substantial demand for U.S. dollar deposits in Europe and caused a general awakening of European banks to the advantages of mobilizing their U.S. dollar resources and acting as intermediaries in the market. As a result, European banks began to more actively solicit U.S. dollar deposits. In 1958, an additional impetus was given to the market when there was a relaxation of exchange controls throughout Western Europe and a return to external convertibility. This allowed the retention of U.S. dollar deposits in the hands of Europeans and the greater exchange of U.S. dollars for other currencies. The further increase in the U.S. balance-of-payments deficit during the 1958-60 period and the emergence of tight money policies in many parts of the world also gave further stimulus to the market. There was an increased supply of U.S. dollar deposits held in Europe at a time when the general tightening of credit led to increased demands for U.S. dollar financing.

The other Euro-currency markets developed only after the return to external convertibility in 1958. The reasons behind their development are in most cases similar to those that led to the development of the Euro-dollar market. European banks found that these markets allowed them to compete more vigorously with each other than was possible under the domestic cartel arrangements that were prevalent in Europe during this period. By operating through a foreign branch and with another currency, many banks found that they could attract business from their domestic competitors who were restricted by the cartel arrangements and traditional relationships that existed in the domestic market. These markets also allowed greater arbitrage opportunities between Euro-dollar deposits and deposits denominated in European currencies, as well as a certain amount

of scope for speculative activities that may have otherwise been prevented by the remaining exchange control measures.

The Euro-bond market developed considerably later than the short-term Euro-currency markets and was really a result of the imposition of the U.S. Interest Equalization Tax (IET) in 1963. This U.S. measure effectively closed the U.S. bond market to borrowers in most developed countries (except Canada) by raising the interest cost by about 1 per cent per annum. This encouraged foreign borrowers to turn to European markets and other sources of funds. The measures taken by a number of European countries during 1963-1964, which discouraged foreign borrowing in their national markets, provided further stimulus for the Euro-bond market. This forced most European bond issues into the international Euro-bond market which was free of these limitations. In 1965, U.S. corporations also began to borrow heavily in the Euro-bond market as a result of the newly introduced U.S. guidelines restraining outflows from the United States for direct investment purposes. From this, it is apparent that the Euro-bond market received its initial impetus from the demand side as both foreign and U.S. borrowers were cut off from raising long-term funds in the U.S. market and were forced to look elsewhere for their financing requirements. In addition, European countries did not encourage the development or use of their own domestic markets.

### **Growth Trends in the Markets**

Although there are no satisfactory statistical measures of the markets' growth from their beginning in 1956-1957 until 1963, it appears from partial U.K. data that the Euro-currency markets grew at a slow, but steady, pace during this period. Almost all of this growth was concentrated in the Euro-dollar market with the other Euro-currency markets only being in existence after the return to convertibility in 1958. The only data available to measure the growth of the market during this period were the overseas deposits and advances of the overseas banks and accepting houses in London. These deposits and advances include those denominated in both sterling and foreign currencies so that it is difficult to determine the actual volume that involved U.S. dollar transactions, although it is likely that most of the growth occurred in this category. During the 1957-63 period, these data show that overseas deposits grew from \$1,570 U.S. million to \$6,650 U.S. million, while overseas advances increased from a modest \$342 U.S. million to \$3,930 U.S. million. These data would suggest a steadily growing Euro-currency system as owners of U.S. dollar deposits and potential borrowers became more aware of the facilities offered by these markets. This was particularly true during the 1958-60 period when Europeans were freer to participate as a result of the return to convertibility and partial dismantling of exchange controls.

Beginning in 1964, the Bank for International Settlements (BIS) started to collect broader data covering non-resident short-term foreign currency (mainly U.S. dollar) liabilities and assets of the commercial banks operating in ten countries — Belgium, Canada, France, Germany, Italy, Japan, The Netherlands, Sweden, Switzerland, and the United Kingdom. This coverage was later reduced to banks operating in the eight European countries. In estimating the size and growth of the Euro-currency markets, BIS starts with the foreign currency position with non-residents of these banks and then excludes the positions with the country whose currency is being used, and which are not involved in Euro-currency activities. This they admit is done on the basis of rough estimates. Next, they exclude the positions of the reporting banks with other banks within the eight-country area in order to eliminate the double-counting involved in deposits being placed over and over again with banks inside the area. Positions with banks outside the eight-country area, however, are included in their estimates. Finally, estimates of the reporting banks' positions with residents of their own countries and the funds used by the banks themselves through conversions into or out of foreign currencies are added to their positions with non-residents to give an overall estimate of market size. These estimates for the period 1964-74 are presented in Table 4-1.

**Table 4-1**  
**Estimated Net Size of the Euro-Currency Markets, 1964-1974**

	Euro-Dollars	Other Euro-Currencies	Total
	(End-of-year figures in billions of U.S. dollars)		
1964	9.0	n.a.	n.a.
1965	11.5	n.a.	n.a.
1966	14.5	n.a.	n.a.
1967	17.5	3.5	21.0
1968	25.0	5.0	30.0
1969	37.0	7.0	44.0
1970	46.0	11.0	57.0
1971	54.0	17.0	71.0
1972	71.0	21.0	92.0
1973	97.0	35.0	132.0
1974	133.0	44.0	177.0

n.a. not available.

Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

Table 4-2  
Geographical and Institutional Sources of Euro-Dollars, 1964-1969

	Quantity Supplied as at End of Year						Change in Quantity Supplied				
	1964	1965	1966	1967	1968	1969	1964-65	1965-66	1966-67	1967-68	1968-69
(Billions of U.S. dollars)											
<b>Outside European Reporting Area</b>											
United States and Canada	1.5	1.3	1.7	2.6	4.5	6.7	-0.2	+0.4	+0.9	+1.9	+ 2.2
Other Countries	3.1	3.6	4.4	5.3	7.3	12.2	+0.5	+0.8	+0.9	+2.0	+ 4.9
<b>Total</b>	4.6	4.9	6.1	7.9	11.8	18.9	+0.3	+1.2	+1.8	+3.9	+ 7.1
<b>Inside Area</b>											
Non-banks	1.8	2.2	2.8	3.9	5.2	9.4	+0.4	+0.6	+1.1	+1.3	+ 4.2
Banks	2.6	4.4	5.6	5.7	8.0	9.2	+1.8	+1.2	+0.1	+2.3	+ 1.2
<b>Total</b>	4.4	6.6	8.4	9.6	13.2	18.6	+2.2	+1.8	+1.2	+3.6	+ 5.4
<b>Total</b>	9.0	11.5	14.5	17.5	25.0	37.5	+2.5	+3.0	+3.0	+7.5	+12.5

Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

**Table 4-3**  
**Geographical and Institutional Sources of Euro-Currencies, 1969-1973**

	Quantity Supplied as at End of Year							Change in Quantity Supplied				
	1969	1970	1971	1972	1973	1974	1969-70	1970-71	1971-72	1972-73	1973-74	
	(Billions of U.S. dollars)											
<b>Outside European Reporting Area</b>												
United States <sup>1</sup>	4.1	4.5	6.1	6.9	9.5	11.9	+ 0.4	+ 1.6	+ 0.8	+ 2.6	+ 2.4	
Other Countries	18.2	24.8	32.5	49.9	91.0	96.6	+ 6.6	+ 7.7	+17.4	+21.1	+25.6	
<b>Total</b>	22.3	29.3	38.6	56.8	80.5	108.5	+ 7.0	+ 9.3	+18.2	+23.7	+28.0	
<b>Inside Area</b>												
Non-banks	12.2	14.2	16.0	17.8	27.5	36.9	+ 2.0	+ 1.8	+ 1.8	+ 9.7	+ 9.4	
Banks	9.5	13.5	16.4	16.4	24.0	31.6	+ 4.0	+ 2.9	+ 1.0	+ 6.6	+ 7.6	
<b>Total</b>	21.7	27.7	32.4	34.2	51.5	68.5	+ 6.0	+ 4.7	+ 1.8	+16.3	+17.0	
<b>Total</b>	44.0	57.0	71.0	91.0	132.0	177.0	+13.0	+14.0	+20.0	+40.0	+45.0	

<sup>1</sup> Canada removed from these data and included in other countries.

Source: Bank for International Settlements, *Annual Reports* (Base: Bank for International Settlements, annual).



Table 4-4  
Geographical and Institutional Uses of Euro-Dollars, 1964-1969

	Quantity Used as at End of Year						Change in Quantity Used				
	1964	1965	1966	1967	1968	1969	1964-65	1965-66	1966-67	1967-68	1968-69
(Billions of U.S. dollars)											
<b>Outside European Reporting Area</b>											
United States and Canada	2.2	2.7	5.0	5.8	10.2	17.8	+0.5	+2.3	+0.8	+4.4	+ 7.6
Other Countries	1.8	2.5	3.2	4.8	6.8	8.0	+0.7	+0.7	+1.6	+2.0	+ 1.2
<b>Total</b>	4.0	5.2	8.2	10.6	17.0	25.8	+1.2	+3.0	+2.4	+6.4	+ 8.8
<b>Inside Area</b>											
Non-Banks	2.3	3.3	3.7	4.1	4.7	5.6	+1.0	+0.4	+0.4	+0.6	+ 0.9
Banks	2.7	3.0	2.6	2.8	3.3	6.1	+0.3	-0.4	+0.2	+0.5	+ 2.8
<b>Total</b>	5.0	6.3	6.3	6.9	8.0	11.7	+1.3	—	+0.6	+1.1	+ 3.7
<b>Total</b>	9.0	11.5	14.5	17.5	25.0	37.5	+2.5	+3.0	+3.0	+7.5	+12.5

Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

**Table 4-5**  
**Geographical and Institutional Uses of Euro-Currencies, 1969-1974**

	Quantity Used as at End of Year							Change in Quantity Used				
	1969	1970	1971	1972	1973	1974	1969-70	1970-71	1971-72	1972-73	1973-74	
(Billions of U.S. dollars)												
<b>Outside European Reporting Area</b>												
United States	16.8	13.1	8.3	9.6	13.2	18.2	- 3.7	- 4.8	+ 1.3	+ 3.6	+ 5.0	
Other Countries	12.2	19.9	29.9	43.5	67.5	96.9	+ 7.7	+10.0	+13.6	+24.0	+29.4	
<b>Total</b>	29.0	33.0	38.2	53.1	80.7	115.1	+ 4.0	+ 5.2	+14.9	+27.6	+34.4	
<b>Inside Area</b>												
Non-Banks	8.0	15.0	19.1	20.8	29.5	41.0	+ 7.0	+ 4.1	+ 1.7	+ 8.7	+11.5	
Banks	7.0	9.0	13.7	17.1	21.8	20.0	+ 2.0	+ 4.7	+ 3.4	+ 3.7	- 0.9	
<b>Total</b>	15.0	24.0	32.8	37.9	51.3	61.9	+ 9.0	+ 8.8	+ 5.1	+12.4	+10.6	
<b>Total</b>	44.0	57.0	71.0	91.0	132.0	177.0	+13.0	+14.0	+20.0	+40.0	+45.0	

Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

From Table 4-1, it is apparent that the Euro-dollar market has been much larger than all the other Euro-currency markets added together throughout this period. However, it is also clear that the other Euro-currency markets as a group have gained significantly on the Euro-dollar market during the past few years and now form a modestly larger proportion of the total market. It is also clear that the most rapid growth of the markets has occurred since 1967 with the Euro-dollar market growing strongly throughout the 1967-74 period and the other Euro-currency markets only showing substantial growth since 1969. The BIS also prepares a geographical and institutional breakdown of the sources and uses of Euro-dollars and total Euro-currencies. Those data for the sources are presented in Tables 4-2 and 4-3 for the 1964-74 period, and for the uses in Tables 4-4 and 4-5.

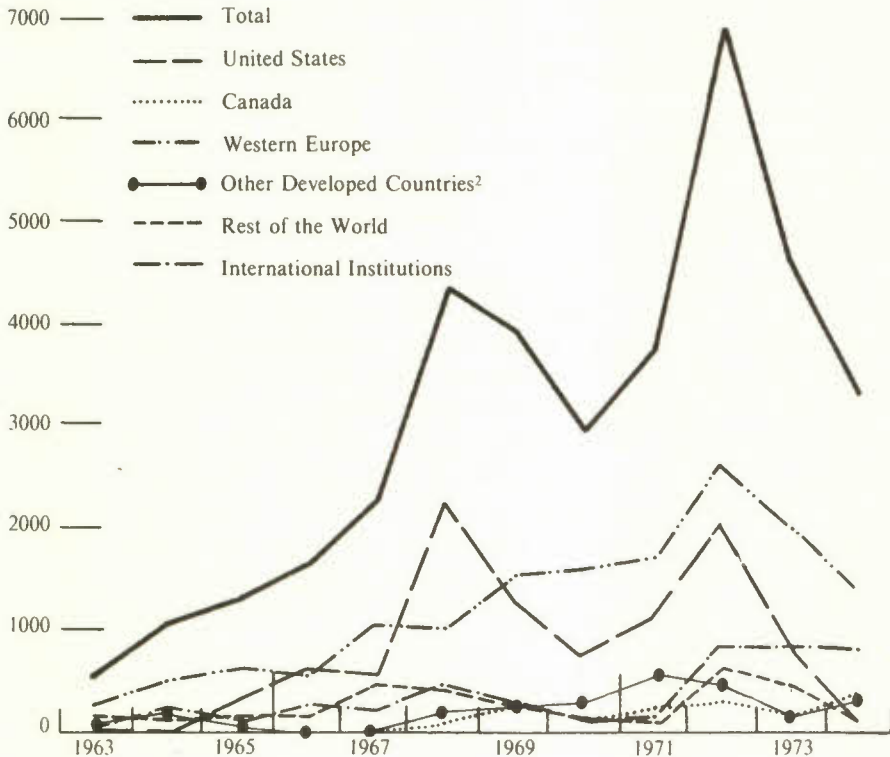
From these tables, it is evident that the European area was the major source of Euro-dollar deposits until 1969, after which the area outside Europe became the major supplier of both Euro-dollars and total Euro-currency deposits. This trend became particularly pronounced in the 1972-74 period. Within the outside area the countries other than the United States have been the major suppliers, most notably since 1969. In fact, since 1969, these countries have provided a large proportion of the growth in deposits, particularly in 1972 when \$17.4 billion of the total \$20 billion growth in the market was supplied by the outside area (exclusive of the United States). On the demand side, the outside area has been the major user of both Euro-dollar and total Euro-currency deposits since 1966 with the difference being particularly large since 1972. Up until 1970, the United States (including Canada until 1969) was the major outside user, especially during 1969. Subsequent to 1969, however, the other-country category became dominant with the difference increasing substantially during the 1971-74 period. The use of Euro-currency deposits inside the European area has also grown consistently throughout the period. Within the European area, non-banks have tended to dominate the supply side (but the difference has not been great), while on the demand side, they have also dominated, but by a somewhat larger amount, especially during 1973 and 1974.

The BIS has also collected data on foreign and international bond issues for the 1963-74 period. These are broken down both by borrowing country or region and by currency of issue. These data are presented in Charts 4-1 and 4-2 respectively. From these charts, it is apparent that total issues rose sharply in 1964 with the imposition of the U.S. Interest Equalization Tax. This was followed by a further period of strong growth in 1966 and 1967 after the United States instituted the voluntary foreign credit restraint program and voluntary direct investment restraints. When these voluntary programs were strengthened and made mandatory in 1968, the volume of issues again rose substantially. During the 1969-71 period, the volume of

Chart 4-1

International Euro-Currency Bond Issues,<sup>1</sup> 1963-1974, By Country or Region

(Millions of U.S. dollars)



1 Includes bonds and notes with nominal maturities of five years or more, but not bank loans, stand-by agreements, and investment facilities.

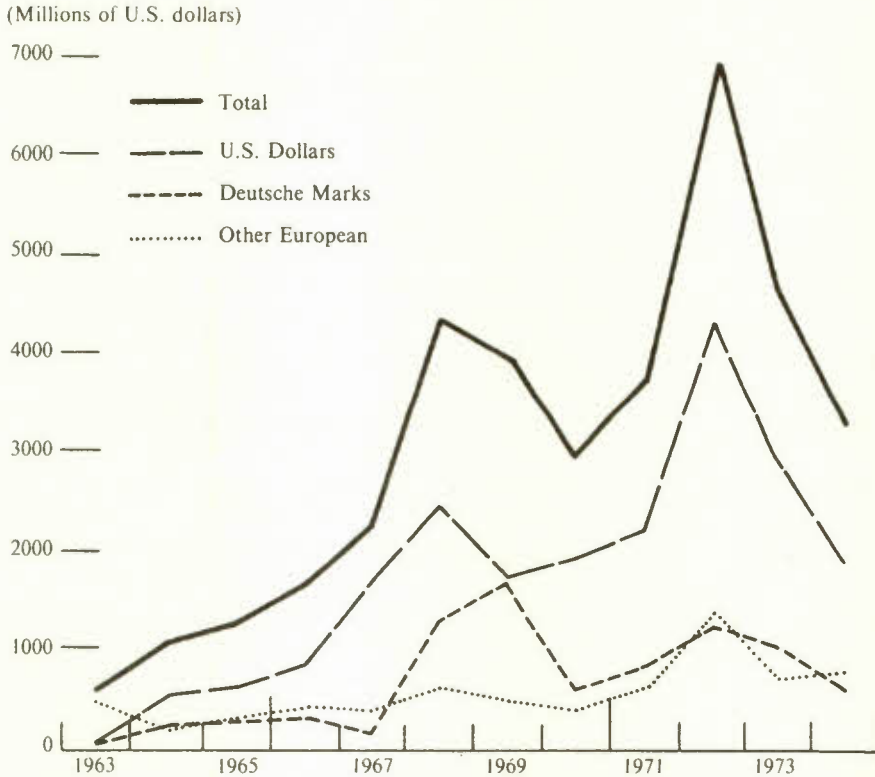
2 Australia, Japan, New Zealand, and South Africa.

Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

issues was more modest and relatively stable but, in 1972, a record volume of new issues took place. This was followed by declines in 1973 and 1974. Western Europe has been the largest issuer, except in 1968, when the United States was the major borrower. However, it is probable that a large part of the European borrowing was done by European subsidiaries of U.S. corporations that could not obtain funds in the United States because of the capital outflow controls. The major currency of issue has consistently been the U.S. dollar with the Deutsche mark being the second most popular. Only in 1969 did the Deutsche mark issues rival the U.S. dollar issues in value. This was also a year during which issues denominated in all other currencies substantially exceeded those denominated in U.S. dollars.

Chart 4-2

## International Euro-Currency Bond Issues, 1963-1974, By Currency



Source: Bank for International Settlements, *Annual Reports* (Basle: Bank for International Settlements, annual).

### Impact of U.S. Legislative Changes

The changing U.S. legislative environment has had a significant impact on the growth trends in the Euro-currency and Euro-bond markets throughout the period under review. This influence however has not always been dominant in determining the growth patterns in the markets, and other non-U.S. factors have also been influential in their development. In the case of the short-term Euro-currency markets, the major U.S. influence has originated from the Regulation Q and bank reserve requirement changes and from the changing Foreign Credit Restraint Program. For the Euro-bond market, the Interest Equalization Tax and the Foreign Direct Investment Restraint Program were the main U.S. legislative measures influencing the development of the market. In most cases, these programs have had both an initial impact upon their

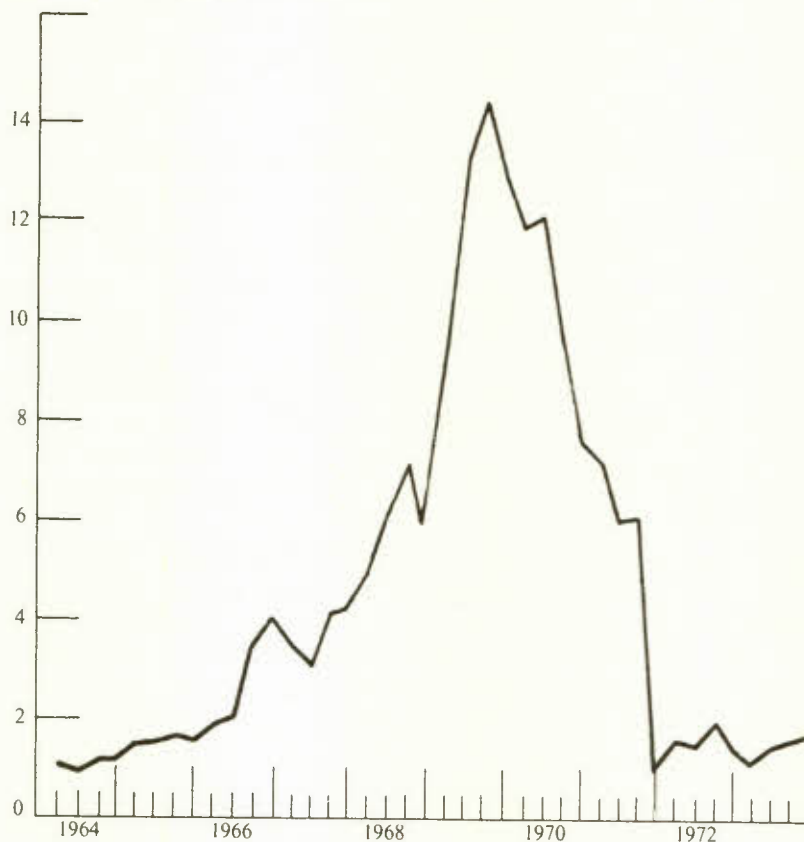
implementation, and a continuing influence throughout the period as a result of further changes in the U.S. legislation.

The most important U.S. legislative influence on the development and growth of the Euro-currency system, particularly the Euro-dollar market, has been the Regulation Q limits on interest rates paid on term deposits by banks operating within the United States. These limitations were certainly an important factor in the initial development of the Euro-dollar market as discussed earlier in the study; but they have also continued as a major influence on the market throughout the period under review and, particularly, during periods when U.S. deposit rates were held below U.S. and international market rates by the Regulation Q ceilings. Under these conditions, U.S. banks are forced to compete for deposits outside the United States through their foreign branches which were not subject to Regulation Q in determining their deposit rate structures. As a result, during these periods U.S. banks used their foreign branches to gather U.S.-dollar deposits (Euro-dollars) outside the United States, which were then advanced to their head offices in the United States. In addition to the avoidance of Regulation Q limits, these advances from foreign branches were also attractive to U.S. banks because they were free of reserve requirements up until September 1969. The main influence on the development of the Euro-dollar market during these periods was the increased demand for Euro-dollars emanating from the United States; this demand was a result of the inability of U.S. banks to compete for deposits within the United States because of the Regulation Q limits and the advantages offered by the reserve-free advances from foreign branches.

This influence on the Euro-dollar market was most pronounced during the 1966-71 period when the United States went through two periods of tight monetary policy and rapidly rising interest rates. This is apparent from Tables 4-4 and 4-5 which show a substantial increase in the use of Euro-dollars by the United States (and Canada) during 1966 (+\$2.3 billion), during 1968 (+\$4.4 billion), and in 1969 (+\$7.6 billion). These increases were the largest factors in the growth of the Euro-dollar market during those years. This was followed by a decline in the use of Euro-currencies by the United States in 1970 and 1971 as monetary policy turned expansionary and interest rates declined in the United States. This is also clearly illustrated in Chart 4-3, which shows a significant increase in the liabilities of U.S. banks to their foreign branches in 1966 when U.S. banks first had reason to look to their foreign branches for deposits, and again in 1968 when another minor monetary restraint operation was undertaken. However, the largest increase took place during 1969 when U.S. monetary policy became very restrictive and short-term market rates rose substantially above the Regulation Q ceilings and resulted in a large outflow of domestic deposits from U.S. banks to other short-term securities. The peak in liabilities to foreign branches occurred in

**Chart 4-3**  
**Liabilities of U.S. Banks to Their Foreign**  
**Branches, 1964-1973**

(Billions of U.S. dollars)



Source: *Federal Reserve Bulletin* (Washington: Board of Governors of the Federal Reserve System, monthly).

September 1969 when these advances from foreign branches were subjected to a 10 per cent reserve requirement for the first time. From that point on, these liabilities began to decline with this process being accelerated by the return to an expansionary monetary policy in early 1970.

The raising of the Regulation Q maximum rates in January 1970 and June 1970, along with the complete removal of the ceilings on rates paid on thirty-to-ninety day single-maturity deposits of over \$100 thousand, also appeared to have a major influence after mid-1970 with liabilities to foreign branches dropping from \$12.2 billion at the end of June to \$7.7 billion by the end of December. In addition, the increase in reserve

requirements from 10 per cent to 20 per cent on these advances in January 1971 appeared to have a significant impact on reducing liabilities (even though this was delayed by the investment of deposits by the foreign branches in special U.S. Treasury and Export-Import bank securities during 1971 in an effort to spread out the reflow of these deposits to the Euro-dollar market). The combination of these changes in Regulation Q and reserve requirements had a major impact on U.S. participation in the Euro-dollar market and on the operation of the foreign branches of U.S. banks. Many of these branches had been partially established for the purpose of making advances to head offices, and the removal of the incentive to do so forced many of them to look elsewhere for a reason for their existence. This was added to by the complete removal of Regulation Q limits on single-maturity deposits of over \$100,000 and the further raising of other ceilings, along with the standardization of reserve requirements at the 8 per cent level for advances from foreign branches, large certificates of deposit, and bank-related commercial paper during 1973. In fact, these changes have virtually eliminated the influence of Regulation Q and U.S. reserve requirements on the Euro-currency system, except that Regulation Q still prohibits interest payments on demand deposits of less than thirty days maturity.

The Foreign Credit Restraint Program has been the other major U.S. legislative action aimed at influencing short-term capital flows. These restraints on U.S. bank and non-bank foreign investment activities carried a number of implications for the Euro-currency market but their impact has been difficult to judge with any degree of precision. In effect, they have had two influences on the market through restricting foreign short-term borrowing from U.S. financial institutions and through restricting the placement of U.S.-dollar deposits abroad by U.S. institutions. These restraints on the ability of U.S. banks to compete in the area of foreign short-term lending provided another incentive for U.S. banks to establish foreign branches through which they could attract Euro-dollar deposits to finance their foreign banking operations. In addition, foreign borrowers were forced to use the Euro-dollar market as a substitute for borrowing from U.S. financial institutions. Finally, these measures required that most of the Euro-dollar deposits used in the banking operations had to be attracted from outside the United States as U.S. institutions were restricted in their ability to place deposits in the market. This, however, was not a complete prohibition on the placement of U.S.-dollar deposits abroad as U.S. individuals could place deposits in the Euro-dollar market directly instead of going through a U.S.-based bank or financial institution. As a result, some leakage of U.S. dollar-deposits to the Euro-dollar market occurred despite this restraint program, but it is impossible to know what the flow might have been without these restraints.



From Table 4-2, it is interesting to note that the flow of deposits to the Euro-dollar market from North America increased significantly during the 1968-69 period when Euro-dollar interest rates were exceptionally high despite the rather severe tightening of the restraint program at the beginning of 1968. Throughout the period under review, however, the United States has been a modest source of Euro-dollar deposits and this must, at least partially, be attributed to the restraint program, particularly when interest rate differentials in favour of Euro-dollars were very large during parts of the period. On the other hand, the U.S. banks and financial institutions subject to the program never fully utilized their ability to invest and lend abroad during the period and always maintained a significant "leeway" below their ceilings. This can be partly explained by their success in transferring most of their foreign business to their foreign branches which were not subject to the program as long as they obtained their funds from outside the United States. One of the obvious impacts of the Foreign Credit Restraint Program was the more active participation of U.S. banks in the Euro-currency markets through their foreign branches in an effort to continue meeting the foreign demand for U.S.-dollar loans, especially that emanating from the overseas affiliates of U.S. corporations.

The U.S. Interest Equalization Tax and the Foreign Direct Investment Restraint Program had their major impact on the Euro-bond market rather than on the short-term market where they had only minor indirect effects. With the imposition of the IET in 1963, it became considerably more expensive for foreigners to borrow in the United States, and this resulted in an attempt to shift this borrowing to Europe where the international Euro-bond market had just started to develop. It was now attractive for foreign borrowers, particularly U.S. subsidiaries operating in Europe, to issue bonds in this new market, despite the higher issue costs and smaller capacity of the Euro-bond market. In 1965, this trend was reinforced by the imposition of the voluntary Foreign Credit Restraint Program and the Foreign Direct Investment Restraint Program which placed ceilings on the volume of funds that could flow out of the United States for foreign investment purposes. Under these conditions, the Euro-bond market in some cases became the only available source of financing for those who had previously relied on the U.S. capital market. When these programs were made mandatory and tightened considerably at the beginning of 1968, the Euro-bond market began to play an even more important role in meeting long-term financing requirements outside the United States. As a result, it appears that these two U.S. legislative programs were instrumental in starting the Euro-bond market and had a major influence on its development and growth throughout the period under review.

These trends appear very clearly in Charts 4-1 and 4-2 which show a substantial expansion of new International Euro-currency bond issues

Table 4-6  
 Purchases by U.S. Residents of Foreign Securities Newly Issued in the United States, by Area, 1962-1972

	1963 <sup>1</sup>		1964	1965	1966	1967	1968	1969	1970	1971	January- September 1972 <sup>1</sup>
	First Half	Second Half									
Western Europe, Including the United Kingdom	195	219	53	35	95	15	42	11	130	—	—
Japan	101	107	57	—	52	4	3	—	—	3	—
Other <sup>2</sup>	60	17	—	—	—	—	—	3	—	—	17
Of which:											
Exempt from IET <sup>3</sup>	—	—	110*	20	52	10	3	—	130	3	—
Subject to IET	—	—	—	19	95	9	42	14	—	—	17
IET Countries, Total	356	343	110	35	147	19	45	13	130	3	17
Canada	458	608	85	700	709	922	957	1,270	775	790	616
Latin America <sup>4</sup>	119	13	23	200	36	68	140	32	117	33	54
Other Countries	61	35	33	115	134	121	176	189	193	304	176
International Institutions	84	—	—	—	179	80	390	164	241	376	274
Other Countries, Total (Exempt)	722	656	141	1,027	1,058	1,191	1,667	1,655	1,326	1,503	1,120
All Areas	1,078	1,000	250	1,063	1,206	1,210	1,712	1,668	1,456	1,506	1,137

(Millions of dollars)

<sup>1</sup> Not seasonally adjusted.<sup>2</sup> Australia, New Zealand, South Africa.<sup>3</sup> Related to export, direct investment, and Japanese exemptions. The latter for \$100,000,000 per year, ran from 1965 to February 1970.<sup>4</sup> Includes inter-American Development Bank issues.

\*Represents commitments made prior to July 18, 1963, the date of inception of the IET.

Source: Request for Extension of the Interest Equalization Tax, Hearings before the Committee on Ways and Means, House of Representatives, 93rd Congress, January 30, 1973.

during 1964, 1966 and 1968 when these programs were either initiated or strengthened. In 1964, the volume of new bond issues almost doubled from the 1963 level after the imposition of the IET. Continued growth occurred in the 1965-67 period after the imposition of the voluntary restraint programs, with new issues in 1967 being more than double those in 1964. This growth was accelerated sharply in 1968 when new issues almost doubled within the space of one year after the move to the mandatory and stronger restraint programs. During this period, the IET was also raised from 15 per cent to 18¾ per cent. As a result, the major impact of these U.S. legislative measures appeared to be concentrated in the 1967-69 period. On the other hand, the reduction of the IET to 11¼ per cent in 1969 did not appear to have much impact on the market. The decline in new issues in 1970 appeared to be more the result of high interest rates and, subsequently, the volume of new issues increased sharply in 1971 and again in 1972 when they reached a record level of almost \$6.9 billion. Therefore, it appears that the IET reduction was not of great importance, partly because the other restraint programs still remained in place.

The impact of the IET is also very evident in the data on U.S. purchases of newly issued foreign securities presented in Table 4-6 for the 1962-72 period. During the second half of 1963, these purchases dropped sharply with almost the entire volume being made up of exempt issues. The volume of new issues subject to the IET sold in the United States remained very low throughout the entire period with the \$95 million sold in 1965 being the only significant quantity of IET securities purchased by U.S. residents. Although the total volume of new foreign securities purchased by U.S. residents remained relatively high during the period, the volume of new Western European and Japanese securities declined sharply because of the IET imposition, while issues from the exempt countries and institutions rose sharply. This obviously meant a shifting of European and Japanese demand (including those of U.S. corporate subsidiaries) to either the Euro-bond or other national markets. From the above Euro-bond market data, it is clear that a substantial amount of the demand for funds was centred on the international Euro-bond market.

From this analysis, it is apparent that the U.S. legislative measures and the changes in them have had considerable impact on the growth and development of both the short-term Euro-currency markets and the Euro-bond market. In the case of the Euro-currency markets, the major impact has resulted from the incentives given to U.S. banks by these various measures to operate more actively in the markets through their foreign branches. Regulation Q and the reserve requirements made it attractive for U.S. banks to use their foreign branches for the collection of Euro-dollar deposits to be used domestically in the United States. The Foreign Credit Restraint Program, on the other hand, encouraged the U.S. banks to establish and use their foreign branches for foreign financing activities that

were restricted for their head offices by the program. The interest Equalization Tax and the Foreign Direct Investment Restraint Program had their major impact through shifting the foreign demand for long-term funds from the United States to the international market. In addition to the IET making it more expensive to finance in the United States, the various restraint program made it virtually impossible for either foreigners or U.S. corporate subsidiaries to finance their European or Japanese activities through borrowing in the United States. On the other hand, the gradual easing of these legislative measures during the past few years has not had a major impact on the growth of these markets even though they have tended to make it easier and cheaper to use the U.S. capital market. As a result, many other factors must also be influencing the growth and development of these international markets in addition to the U.S. measures.

#### **Other Influences on the Growth Pattern**

A number of non-U.S. factors have also had major influences on the growth and development of the Euro-currency system. In general, the advance of communications technology and the spread of multi-national business activity during the period since the mid-1950s have combined to create a greater need for international financial operations and the ability to conduct these transactions quickly and efficiently on a world-wide basis. The absence of highly developed capital markets in many of the major countries of the world and the remaining exchange control systems, in turn, made it attractive to concentrate these activities in an international market system rather than in a number of individual and relatively isolated national capital markets. This international system could respond quickly to changing conditions and could operate with a greater degree of freedom from the national control procedures that still restricted the activities of national capital markets. The U.S. legislative measures added strongly to these trends since they restricted the ability of the large U.S. capital market to fulfill these international financing requirements. One of the fundamental factors favouring the development and growth of the Euro-currency system then was the growth of multi-national banking in response to the large multi-national expansion of non-financial corporations. These corporations required sophisticated international financing arrangements which national markets were either not able or not allowed to provide on an international scale.

One of the major impediments in the way of national markets performing this role was the continued existence of national exchange controls limiting the borrowing and lending activities of bank and non-bank residents of various countries with non-residents. These control procedures took many forms but, in general, severely limited the ability of national capital markets to meet the international financing requirements

of multi-national enterprises. On the other hand, most countries looked favourably upon the growth of "off-shore" banking transactions of an intermediary nature, where banks borrow in a foreign currency for the purpose of re-lending in a foreign currency. This was particularly true in the case of the United Kingdom where the activity was encouraged as a purely banking function; international competition of this type has spread to many countries, mainly through the operations of overseas branches of U.S. banks. In addition, foreign currency deposits are usually exempt from formal reserve requirements and are not covered by regulatory and conventional interest rate limitations, while foreign currency lending to non-residents is usually exempt from bank credit ceilings. As a result, banks of many countries have looked upon the Euro-currency system as a market in which they can compete freely outside their national regulatory and cartel arrangements and which they can use to expand the scope of their international operations without disturbing their national regulatory authorities.

The growth of the Euro-currency markets has also been influenced by a number of direct regulatory measures adopted by various countries aimed at controlling outflows and inflows via the commercial banks. In a number of countries, banks are restricted by ceilings on total net foreign assets and by measures designed to limit the growth of net foreign liabilities. In the case of inflows, these measures have taken a number of forms, including special reserve requirements, prohibitions of interest payments on non-resident deposits, and ceilings on the expansion of bank credit. In general, these attempts to control net foreign asset and liability positions have had the impact of reducing the ability of national markets and banking systems to finance international or national activities through the international movement of funds. However, in most cases, the banks have been free to adjust their gross foreign positions as they wish, which leaves them free to borrow and re-lend foreign currencies in operations outside their countries of residence. In other words, they can undertake a virtually unlimited volume of foreign currency transactions as long as they do not affect their net foreign currency asset or liability positions in a way that would be against the wishes of their domestic regulators. These measures have again favoured the multi-national activities of banks in the international Euro-currency markets.

Attempts to control domestic credit conditions through changes in central bank-lending policies, open market operations, and quantitative ceilings on bank lending have also influenced the growth of the Euro-markets. A tightening of credit conditions in a country makes it more attractive for banks of that country to seek funds abroad, while a loosening of credit makes it attractive to seek foreign outlets for funds. In addition, measures such as credit ceilings are usually only applied to domestic activities, with the banks being relatively free to carry on Euro-currency

borrowing and lending activities with non-residents. In some cases, central banks have taken direct steps to provide funds to the banks under special conditions for the repayment of foreign-currency borrowing. In other countries, measures have been taken to influence the availability and cost of forward exchange cover to the banks. These have taken the form of swap facilities provided by the central banks at special rates to encourage banks to place or keep short-term funds abroad, usually in the Euro-markets; and also have involved direct forward exchange market intervention to influence the cost of forward cover and, hence, the attractiveness of switching between domestic and foreign currencies by banks, non-bank residents, and non-residents.

The recent period of strong speculative activity in the international currency markets also affected the growth of the Euro-currency markets, particularly when the U.S. dollar was under speculative attack. Speculators, under these conditions, wanted to borrow U.S. dollars and often the Euro-dollar market was the most readily available supplier of U.S.-dollar deposits. These funds were then converted into the currency being favoured by speculators at any particular point in time and made available for investment in deposits or securities denominated in that currency. However, during these speculative periods, inflows of funds into the countries whose currencies were appreciating were usually severely restricted by either capital inflow controls or very low rates of return on domestic deposits and securities. As a result, the only place for these converted funds to be invested was often back into the Euro-currency system as non-dollar Euro-currency deposits with banks outside the country whose currency was being used as the speculative medium. This meant that the demand for funds in the Euro-dollar market increased, while the supply of funds in the other Euro-currency markets also increased, thereby acting as a stimulus to the system as a whole.

In the case of the Euro-bond market, the U.S. Interest Equalization Tax and Foreign Direct Investment Restraint Program gave the market its original reason for development, but the lack of other national long-term capital market alternatives to the U.S. market was equally important in ensuring the development of the international Euro-bond market. If viable national alternatives had been available, this new demand diverted from the U.S. market could have possibly been satisfied through the expansion of other national long-term markets. However, due to the existence of exchange controls and the virtual non-existence of long-term capital markets in most of the other major countries, this demand became focussed on an international market arrangement which was free of national controls and which could draw on market expertise from many countries, especially the United States and the United Kingdom whose markets were not available to the international community because of various control measures. In essence, it was a market in which the financial

institutions of these two major countries could participate in satisfying this demand for capital that they could not satisfy through their own domestic operations. The rapid growth of multi-national enterprises also made the international methods of financing more attractive for both bankers and borrowers. In addition, the general absence of withholding taxes on most Euro-bonds made these securities more attractive than national securities to many wealth-holders with an international perspective.

### **Recent Trends and Developments**

Over the past few years, a number of trends have developed in the operations of the Euro-currency system that probably carry with them some long-term implications for this international market system. Since the late 1960s, one of the most apparent trends has been the increasing domination of the market by the foreign branches of U.S. banks. Virtually every U.S. bank of any significance has one or more foreign branches operating to varying degrees in the Euro-currency markets. These branches were established for a number of reasons: to better serve their domestic customers who had multi-national operations; to act as a channel through which the head office of the bank could acquire Euro-currency funds for use in domestic credit operations during periods of tight money; and to establish a competitive presence in the international capital markets through which they could expand their own multi-national activities. In order to make these branches pay their way, the U.S. banks had to operate aggressively in all the areas of activity and be innovative in developing new operating methods and types of activities.

The future prospects of these branches, however, have now been made somewhat uncertain by the removal of the U.S. outflow controls and the new ability of the banks to operate directly from head offices rather than being confined to operating through their foreign branches in their international activities. Because of their dominant position in the Euro-currency system, any massive return to head-office operations could result in a substantial reduction in Euro-currency activity. On the other hand, however, the U.S. head-office banks would probably still have to obtain a substantial portion of the funds used in international activities from sources outside the United States, and could very well find that it is more convenient, and possibly cheaper, to collect these funds through their foreign branches via the Euro-currency markets. Since many of the foreign branches would still be required in any case to service clients and make new business contacts for the head office, they could be allowed to pursue their Euro-currency activities and continue as profit centres instead of simply adding overhead costs to the head-office international activities. In addition, many banks may fear a re-imposition of outflow controls some time in the future and thereby want to preserve their foreign branch operations as insurance against this possibility.

Another significant development has been the tendency over the past couple of years to extend the lending maturity considerably beyond the maturity of deposits, with many banks making medium-term loans (three-five years) on the basis of short-term deposits (three-nine months). There has always been a concern about the tendency of banks operating on the Euro-currency system to rely on the roll-over of deposits for financing loans of somewhat longer terms. This concern has been heightened by the trend towards medium-term bank lending on either a fixed or adjustable interest rate basis. Much of this type of lending is done on a floating interest rate basis which should protect the interest rate margins of the banks after a certain lag, but the possibility of a scramble for deposits exists if there was a substantial withdrawal of funds from the market. This could result in greater instability in the markets and the possibility that some institutions could not obtain enough deposits at favourable rates to cover their long-term lending commitments. Another risk dimension has been added by the fact that a substantial volume of this medium-term lending has been centred on providing credit to governments and governmental agencies in the developing countries of the world. This trend is clearly illustrated in Table 4-5 which shows a five-fold increase in the use of Euro-currencies by countries outside Europe and the United States between 1970 and 1974. All of these funds are not used by developing countries but, by far, the largest proportion would be going into the non-industrialized countries of the world. In addition, this type of lending appears to give rise to a substantial re-depositing of loan proceeds into the Euro-currency system and, hence, a greater multiple creation of credit in the system. This is apparent in Table 4-3 which shows that the supply of Euro-currencies coming from this same group of countries has also increased by about the same amount in this period. In fact, since 1972, these countries became both the dominant sources and dominant users of Euro-currencies.

In an effort to minimize the risk involved in these types of lending, the banks have tended to work together as groups in consortia arrangements. It has always been difficult for a bank in the Euro-currency system to assess the ultimate risk attached to its lending activities because of the chain of transactions involved in most operations, the lack of credit information on borrowers in the international market, and the inability to know how much borrowers had already received from other lenders. In the case of long-term lending, it is even more difficult to assess the risk of default on the part of the borrower or the difficulties in achieving a roll over of short-term deposits during the period of the loan. The lack of credit information in the developing countries and the more unstable political climate involved in many cases makes this risk-assessment process even more difficult for loans to these countries. As a result, major banks have formed consortia lending groups that usually rely on the risk assessment of one



of the major members of the consortium. In other words, if a major U.S. bank is participating in the lending operation, smaller banks tend to rely on their judgment and enter the consortium to provide a portion of the total funds involved. So far, there have been few major defaults or problems arising from this type of lending, but there is increasing concern that interest margins involved in many of these loans do not adequately reflect potential risks associated with this medium-term lending to relatively high-risk borrowers. This danger may have taken on a new dimension since large increases in world oil prices have placed enormous strains on the ability of developing countries to meet their debt obligations as their trade deficits increase sharply and they became less attractive for new inflows of capital. This type of lending has also encroached on the Euro-bond market, and the medium-term loans may have reduced the volume of new Euro-bond issues over the past couple of years by serving as an alternative to long-term borrowing.

Another significant development associated with the turbulent international financial market experience during 1974 was the "tiering" of interest rates in Euro-currency deposits according to the credit stature of the banks receiving the deposits. This element has always been present to some extent in the Euro-currency markets but became much more formalized during 1974. The large flows of funds associated with the massive increase in oil payments to the oil-producing countries and the re-flows of these funds for investment in domestic and international financial markets resulted in considerable strain in the ability of the Euro-currency market, and the banks that operate in it, to absorb these unprecedented inflows of funds. As a result, depositors became more concerned about bank credit ratings and distinguished between banks by demanding higher deposit rates from those banks with the highest perceived risks. This resulted in the development of a multi-tiered interest rate structure for Euro-currency deposits in the inter-bank market, with the largest and strongest banks being able to attract deposits on the lowest tier of rates, and other banks being pushed to progressively higher tiers as their risk-premiums rose in the eyes of depositors. With the return to greater stability in the market, these tiers again narrowed, but it seems that this tiering could now be an important feature of the market during periods of international financial uncertainty.

## 5 International Control of the Markets

The Euro-currency markets, because of their international nature and the freedom with which they operate, have been able to mobilize a large volume of short-term capital and distribute it in accordance with supply-and-demand considerations on a world-wide scale. Although this has generally been a beneficial development, it has also exposed the countries and institutions involved in the market to additional risks and problems. These, in turn, have given rise to demands that the markets be brought under some degree of control by national or international monetary authorities. In this chapter, these risks and problems will be outlined briefly along with the difficulties involved in controlling such a market system. The possible types of control mechanism will then be examined and recent control attempts discussed. Finally, the prospects for further control procedures in the future will be assessed.

### **Risk and Problems in the Markets**

As in any commercial banking operation, the main risk facing an individual bank is the possibility that a borrower may not repay his Euro-currency loan. In addition, there is the danger that a bank may not be able to roll over its Euro-currency deposits at satisfactory rates if its loan maturities exceed into deposit maturities. The risk of default in the Euro-currency system is probably greater than in the case of domestic operations in that the banks are dealing in large unsecured loans often denominated in a foreign currency. These loan proceeds may be used by the borrower for any number of purposes on an international scale over which, because of their unsecured nature, the lending bank has very little control. This risk is compounded by the international nature of the market since it is difficult for an individual bank to determine the soundness of the Euro-currency borrower or the amount that the borrower has borrowed from other banks. Also, the long chain of transactions that is typical of Euro-currency operations makes it difficult for an individual bank to determine the eventual destination of the funds or the use to which they will be put. Consequently, the individual bank must rely on the financial standing of the borrower to which it directly lends and hope that, if a breakdown does

occur through a default somewhere in the chain, the borrower will still be able to meet his Euro-currency obligations. In addition, because their Euro-currency loans and liabilities are often denominated in foreign currencies and the market is international in nature, there is no single institution which individual banks can automatically turn to as a lender of last resort. As a result, the individual banks themselves must be prepared to accept the risks involved and suffer the consequences if errors in judgment are made. In an attempt to minimize and spread these risks, banks are increasingly resorting to consortial arrangements, particularly for medium-term lending activities involving high-risk borrowers.

For an individual country, the problems created by the Euro-currency markets are two-fold: (1) the danger that the domestic banks involved in the market may over-extend themselves and place demands on official foreign exchange reserves; and (2) the fact that the existence of the Euro-currency system has provided another channel through which short-term capital can flow into or out of a particular country and has tended to increase the volume of international short-term capital movements. The major impact of these additional capital flows involving Euro-currencies has been to increase the degree of interdependence between the national capital markets and monetary policies of the countries involved in the market.

In addition, they have at times increased the pressures on exchange rates and official foreign exchange reserves in these countries. Consequently, the possibility of a country being able to institute an independent national monetary policy and isolate itself from monetary developments abroad has been significantly reduced by the existence and operation of the Euro-currency markets. For example, if interest rates rise and a liquidity shortage develops in one country (especially the United States), this will cause funds to flow into this country from the Euro-currency system. Euro-currency rates, because they are uncontrolled and basically determined by supply and demand conditions, will tend to rise sharply in response to any significant outflow of funds. This, in turn, will attract funds into the Euro-currency system from other countries, thereby forcing rates up in these countries and spreading the scramble for liquidity.

### **Difficulties Involved in Controlling the Markets**

These risks and problems to which individual banks and countries are exposed have given rise to the demand for greater control over the operations of the Euro-currency system. This situation has resulted from two characteristics of these markets: (1) the fact that there is no single institution to which participants can turn automatically as lender of last resort; and (2) the fact that the markets have created a set of semi-independent international interest rates over which no single country or

institution has control. It is these characteristics that must be dealt with and altered in any attempts to control the markets.

There are difficulties, however, in establishing a mechanism that can bring about the necessary degree of international control over the Euro-currency markets. The most important is the fact that there is no single institution — either national or international — that can control the market and act as an international lender of last resort. The central banks of the major countries, although they may be able to exert some influence over Euro-currency rates by placing funds in the market either directly or indirectly, are restricted in their attempts to control the markets by the volume of foreign exchange reserves which they are free to place in the markets and, ultimately, by the size of their reserves. This is particularly true of countries other than the United States in the case of the large Euro-dollar market where it is doubtful that any one country (other than the United States) could be successful in controlling the market even if they decided to use a substantial portion of their reserves for this purpose. The U.S. Federal Reserve is in the best position to control this key market in the system because of its power to create U.S. dollar deposits, but it also must find a way for these deposits to flow into and out of the market. This would probably require the maintenance of a substantial position indirectly through the intermediary of U.S. commercial banks or an international institution.

There is also no single international institution with both the resources and authority to effectively control the Euro-currency system. The International Monetary Fund (IMF), although it could conceivably obtain the resources, does not have the constitutional power to participate in the market, let alone control it. The Bank for International Settlements (BIS) has the ability to participate but not sufficient resources of its own to allow it to act as a lender of last resort in a crisis situation. As a result, the only effective method of achieving a degree of control over the markets must involve some form of international co-operation among the national central banks and between the national central banks and the existing international institutions. For example, this could involve the swapping or depositing of U.S. dollars by the national central banks either with their own commercial banks or an international institution for use in the Euro-dollar market. These could take the form of stand-by swap-and-loan arrangements, with an international institution thereby assuring that the funds provided would be used for the desired control purposes. The international institution that would best fill this role would be the BIS because it has experience in the market, a knowledge of the markets' requirements, and close long-standing contacts with the national central banks. In fact, this is the international Euro-currency control structure that has emerged over the past few years.

Another problem involved in establishing control over the markets is the different views held in most of the major countries regarding the foreign-currency operations of their domestic banks as opposed to the views regarding domestic currency business. In most countries, the activities involving the use of domestic currency are highly regulated and controlled by the government and central bank, and generally are protected significantly from foreign competition. On the other hand, most countries view the foreign-currency operations of their banks with less concern, and they favour a highly competitive environment for those activities by encouraging their banks to actively seek this type of international business through less stringent regulations on these foreign-currency operations. This can take the form of lower reserve requirements against foreign-currency deposits, greater operating freedom, and fewer reporting requirements. In other words, it seems that multi-national banking activities are viewed differently from domestic banking operations by the authorities of most countries and, in fact, are used as a form of international competition between countries. As a result, very little uniformity in the regulation and control of foreign-currency operations has developed among the major countries, and this has made it difficult to develop a consistent overall control system for the Euro-currency markets through either the co-ordination of national regulations or the development of co-operative control procedures.

### **Types of Control Mechanisms**

There are basically two types of intervention that could be used in attempting to control the Euro-currency system: (1) at the international level, to control the global growth rate of Euro-currency deposits; and (2) at the national level, to achieve a distribution of Euro-currencies that would avoid the development of monetary disequilibrium at the national level which could lead to the discharge of the Euro-currency market credit potential on a single country. The first type of intervention has been attempted mainly through open-market operations and through requiring Euro-banks to invest certain quotas of their funds in public securities or deposits with central banks or other international institutions. These are aimed primarily at controlling the movement of funds into and out of the Euro-currency markets and at adjusting these flows in order to maintain short-term stability in the markets. The purpose of the investment or reserve requirements is to harmonize the forms of regulation of banking activities conducted in domestic currency and in foreign currencies so that foreign-currency operations do not offer an undue attraction for Euro-banks. The second type of intervention is more difficult to achieve and only harmonization of economic policies and uniformity of anti-cyclical measures could provide an effective guarantee against destabilizing movements of short-term Euro-currency funds. This is the problem

encountered in all short-term capital movements with the Euro-currency markets simply adding a convenient channel through which destabilizing flows could occur if there is not sufficient co-ordination and harmonization of policies at the national level.

Most control attempts in recent years have centred on the first type of intervention with a number of national central banks undertaking co-ordinated open-market operations either directly or through the intermediary of the BIS, and with several other countries enforcing various investment or reserve requirements on the Euro-currency operations of their banks. This system of informal understandings among the central banks arose initially as part of their co-operation in fighting exchange crises, and has now developed to the point where events in the Euro-currency markets are discussed regularly at the monthly meetings of central bankers in Basle. As a result, central bankers have become increasingly prepared to undertake operations that will reduce pressures in the Euro-currency markets, especially those caused by the shifting of liquid funds on the part of their own commercial banks. In fact, these operations have become almost routine at mid-year and year-end when seasonal strains in the markets are greatest.

The particular measures employed in these operations have taken into consideration the prevailing market circumstances and the institutional requirements of the various central banks involved. Some central banks have placed funds directly in the markets or through the BIS, while the Federal Reserve has negotiated a stand-by swap facility with the BIS from which the latter can obtain U.S. dollars for use in the Euro-dollar market. Others have employed swap arrangements with their own commercial banks to channel funds back into the Euro-currency system, or have intervened directly in the forward exchange market in order to reduce the incentive for shifting funds into or out of the Euro-currency markets. In addition, a number of countries have varied reserve and investment requirements of their own banks that deal in the Euro-currency markets to limit or control the flows into and out of the markets, particularly during periods of exchange rate uncertainty.

Although these stabilizing operations on the part of the national central banks and the BIS have been significant in maintaining the viability and orderliness of the Euro-currency markets, the nature of the arrangements is not entirely satisfactory. Because of their informality, these arrangements, with the possible exception of the U.S. swap facility with the BIS, are dependent upon the policy decisions of individual central banks and not solely on decisions taken by a central monetary authority such as the BIS. As a result, the volume and type of assistance available to the Euro-currency system cannot be determined before disrupting events occur. In addition, in circumstances where the needs of the Euro-currency markets conflict with the policy objectives of the central banks, the danger arises

that the national central banks may not give priority to the Euro-currency markets. This is a problem of any *ad hoc* international policy arrangement and would appear to be a continuing difficulty facing any future attempts at controlling this international market system.

The second approach to controlling the markets, through the harmonization of national economic policies, has not made much progress over the past decade for the control of either the Euro-currency system or international capital flows in general. The major currency disruptions of recent years have placed further restraints on this approach with even the European Economic Community failing to make any significant progress in this direction. Fiscal and monetary policies are still jealously guarded by the major countries as domestic policy tools aimed at maintaining internal equilibrium within each country. Under this approach, the external impact of these policies and the differences in policies between countries are almost treated as side-effects that create certain complications from time to time in achieving domestic economic goals. Until this philosophy is changed, there seems little possibility that countries will consciously harmonize fiscal and monetary policies in order to control the Euro-currency system.

#### **Future Prospects for a Control Mechanism**

Future attempts at controlling the Euro-currency system will probably involve further variations of the first approach to the control of the markets. This would include the possibility of larger and more formalized open-market interventions and further attempts at controlling the operations of Euro-banks by national central banks. In the case of direct open-market intervention, the funds needed for this purpose would have to be made available on a more formal basis, such as by means of pre-arranged swaps and stand-by agreements between the national central banks and the BIS. In addition, to be effective, the BIS should be free to call upon these swap funds in accordance with the needs of the Euro-currency system without prior approval of each central bank being required before action could be taken. To undertake this role, the BIS would have to have a substantial volume of funds at its disposal and, because of the size of the Euro-dollar market relative to any of the other individual Euro-currency markets, this would mean a particularly large commitment from the U.S. Federal Reserve System. In fact, the Federal Reserve has already provided a substantial swap facility, and probably the major remaining problem is the need for more formal commitments on the part of the major European central banks and the Japanese.

This open-market intervention approach would seem to be an appropriate method of bringing the markets under a greater degree of control in that it would still allow free-market forces to operate and maintain the great flexibility of the Euro-currency system in meeting credit demands on

a world-wide scale. This, in fact, could be an extremely important characteristic of the Euro-currency markets over the next few years as the major oil-consuming nations cope with the balance-of-payments implications of the large increases in the world oil price. In normal circumstances, those open-market control arrangements would not be activated and the markets left free to find their own levels; but the mere fact that a large volume of funds was behind the market, and could be used as a lender of last resort, could act as a stabilizing influence and prevent serious disruptions to the market as a result of defaults or politically inspired movements of funds. In other words, this approach would allow the markets to operate as freely as possible during normal times and thereby encourage their use in the financing of trade and balance-of-payments imbalances, while at the same time discouraging their use for financing destabilizing short-term capital flows during abnormal periods or for political purposes.

In addition to this open-market approach, national central banks are likely to increasingly control the foreign positions of their banks as part of their overall monetary and exchange rate policy approaches. This is likely to mean a continuing move towards the harmonization of reserve requirements between domestic and Euro-currency deposits as has already occurred in a number of countries, particularly the United States where domestic U.S. banks now face uniform reserve requirements on Euro-dollar deposits and competing forms of domestic deposits. However, foreign branches of U.S. banks do not have to follow any formal reserve requirements in their purely international operations, and whether or not they will have to in the future depends upon the reserve policies adopted by the individual countries within which they operate. It seems likely that each major country will increasingly impose reserve requirements, which are more closely related to their domestic reserve requirements, on foreign banks operating in that country. The problem with this approach is that the reserve requirements are unlikely to be harmonized between countries and this would distort the flow of funds in the Euro-currency system as banks attempted to concentrate their activities in the low-reserve countries. In addition, individual countries are likely to impose more direct ceilings on the Euro-currency activities of their own banks, particularly with regard to their net foreign currency positions. These direct limits could also distort market forces in the Euro-currency system and create problems that would give rise to other forms of intervention in the markets. This form of intervention also points to the fact that attempts to harmonize overall fiscal and monetary policies between countries is unlikely to be an effective method of control for the foreseeable future.



**PART 3**

**Canadian International  
Financial Links**

## **Canadian International Financial Links**

Canada has traditionally had extensive international financial links with other countries which have resulted in large capital movements into and out of the country. Due to the special financial relationship between Canada and the United States, these flows have involved the movement of funds primarily between these two countries. More recently, greater activities have developed involving transactions in the Euro-currency markets. As a result, Canadian Financial markets have become integrated increasingly into the world-wide network of national and international financial markets. The Canadian chartered banks have played a major role in expanding Canada's international financial links and have been the most active Canadian financial institutions in foreign financial markets. In this section, the special U.S./Canada financial relationship will be analysed with particular emphasis on the experience of recent years when Canada had to negotiate the maintenance of the special relationship. In addition, the overall Canadian financial linkage will be examined via an analysis of the capital account of the Canadian balance of international payments. The foreign-currency positions of the Canadian chartered banks will then be analysed in greater detail in determining their role in the internationalization process. The international operations of the Canadian chartered banks will be examined with regard to the benefits and risks associated with these activities, and the policy issues raised by this analysis will be discussed. From this analysis, policy recommendations regarding the international operation of Canadian banks will be suggested.

## **6      The Special Relationship Between the United States and Canada**

Canada has historically been a net borrower of funds from international sources, particularly of long-term funds for both portfolio and direct investment purposes. As a result, Canada has maintained a high degree of freedom for funds to move into and out of the country and has avoided formal exchange controls, except during wartime periods and their aftermath. Initially, this inflow of capital originated mainly from the United Kingdom but as London declined and New York gained in international financial importance, the source of Canadian capital inflows progressively shifted from the United Kingdom to the United States. This tendency was also re-enforced by the increasing dominance of U.S./Canadian merchandise trade and the growing interdependence of the two North American economies. In the mid-1960s, however, this close financial relationship was threatened by the imposition of various capital outflow controls by the United States, and Canada had to negotiate strenuously to maintain the special relationship between the two countries. Although these negotiations were successful from the point of view of maintaining Canadian access to U.S. capital markets, the Canadian authorities had to make concessions to the United States in terms of the Canadian financial relationship with third countries. In this chapter, the historical relationship between the United States and Canada will be outlined briefly, followed by a more detailed analysis of the special Canadian exemptions from the U.S. balance-of-payments program and their impact on the Canadian position in international financial markets.

### **The Historical Relationship**

Because of the large and continuous current account deficit with the United States and the inability to offset this with third-country surpluses, Canada has, of necessity, maintained a relatively "open-door" policy with regard to capital movements between the two countries in both short- and long-term forms. The inflow from the United States has been concentrated in the areas of long-term portfolio and direct investment inflows, with short-term flows being relatively volatile over the years. In fact, there has been a tendency for short-term capital to flow out of Canada to the United

States and for the U.S. capital market to act as an intermediary — absorbing these short-term funds and re-exporting capital to Canada in long-term forms. The largest inflows of capital into Canada have occurred when Canada was undertaking major capital additions to the economy that substantially exceeded the savings capacity of Canadians. During these periods, a substantial volume of inflows took the form of direct investment inflows as U.S.-owned corporations either established or expanded existing subsidiary operations in Canada or took over Canadian-owned business enterprises. The portfolio inflow primarily took the form of new debt and equity issues sold to U.S. investors by Canadian corporations and provincial and municipal governments. The trading in outstanding securities, on the other hand, has been relatively volatile with Canadians often being net purchasers of U.S. securities, mainly equities.

The major Canadian institutions involved in the U.S. capital markets have been the chartered banks, through their New York agencies, and a number of Canadian investment dealers who conduct two-way trading in outstanding Canadian and U.S. securities and participate in the new issues of Canadian debt and equity securities in the United States through their New York subsidiaries. The first New York agency was opened by a Canadian bank in 1855 and all the major banks now have large agency operations in New York. Initially, these agencies were intended to provide liquidity for the Canadian banking system in the absence of a short-term money market in Canada. Over the years, the principal function of these agencies, however, has been to accept deposits from U.S. residents on the head-office books and then re-lend these funds in the U.S. money market, primarily to U.S. brokers and securities dealers. As a result, they did not act to any great extent as a channel for funds to move from the United States to Canada or vice versa. In fact, they were merely an appendage to the U.S. money market with funds being borrowed in the United States and re-invested there after passing through the head-office books in Canada. The Canadian investment dealers and their U.S. counterparts were the main institutional channels through which funds moved between the two countries, although both Canadian and U.S. banks did conduct significant lending operations across the border through their domestic branches and head offices.

U.S. banks (and other foreign banks) operating in Canada have never had any special status in the Canadian financial system and have often taken the form of "suitcase" operations connected to the U.S. head office. The participation of U.S. banks in Canada has mainly been concentrated on the lending side. Until the 1967 Bank Act revision, however, there were no formal restrictions on foreign ownership of Canadian banks, and American and other foreign banks were free to operate in Canada through a wholly or partially owned subsidiary. In fact, a number of foreign banks did operate in Canada, including the Dutch-controlled Mercantile Bank of Canada. The Canadian authorities, however, became alarmed about

foreign ownership in 1963 when the Mercantile Bank was sold by its Dutch owners to the First National City Bank of New York. This concern was reflected in the 1967 Bank Act revision when non-resident ownership in a chartered bank was limited to a total of 25 per cent and to 10 per cent for any single non-resident investor. This legislation effectively prevented any further foreign takeovers of Canadian banks and the establishment of foreign-owned banks in Canada. Foreign banks however, have continued to operate in Canada outside the regulatory system either through the establishment of representative offices or non-bank financial subsidiaries. Recently, they have become much more active in borrowing funds in the Canadian money market and re-lending these funds to Canadian residents as opposed to merely booking loans through their head offices. Similar foreign ownership restrictions have also been applied to federally, and some provincially, chartered trust companies. A number of U.S.-owned brokers and investment dealers have extensive operations in Canada but the self-regulatory agencies have now prohibited any further foreign takeover of Canadian brokers or dealers.

A number of Canadian policy measures, taken in recent years, have also been aimed at influencing the flow of capital into and out of Canada. Although these do not apply only to flows between Canada and the United States, their major impact has been on these flows simply because of the dominance of U.S./Canadian flows. One of these measures was the restriction on pension fund investments in foreign securities introduced in the 1972 income tax reform measures. This has reduced the flow of these funds into U.S. securities, notably equities, and increased their concentration in Canadian securities. On the other hand, the Foreign Investment Review Act could have the impact of reducing direct investment inflows into Canada. Although this legislation only applied initially to takeovers of Canadian corporations, the review-and-approval process has now been extended to all forms of foreign direct investment activity. These measures, however, do not discriminate against flows between the United States and Canada and therefore have not operated to reduce or destroy the special financial relationship between these two countries. The major threat to this relationship came in the mid-1960s when the United States adopted a series of capital outflow control programs<sup>1</sup> which, at first, did not exempt Canada from the various control measures. Canada, however, did successfully negotiate a virtually complete exemption from this program and thereby maintained the unique capital market ties with the United States. In January 1974, these U.S. measures were completely terminated and Canada now enjoys financial relationship with the United States similar to that existing before the initiation of the U.S. program.

1 For details of these programs, see Chapter 3.

### **Special Canadian Exemptions**

At the time of their initial announcement, the Interest Equalization legislation, the Foreign Credit Restraint Program, and the Foreign Direct Investment Restraint Program instituted by the United States were applied to Canada along with all countries. The Canadian authorities reacted in each case by attempting to negotiate a special status for Canada within the framework of these U.S. control measures. In particular, the Canadian authorities sought relief from three of the U.S. restrictions: (1) the Interest Equalization Tax on new Canadian bond issues; (2) the guideline limiting the volume of long-term investments held by U.S. non-bank financial institutions; and (3) the restrictions on direct investment in Canada by U.S. non-financial corporations. In order to be successful in these negotiations, however, the Canadian authorities had to be prepared to make concessions to the United States, which was the price that Canada had to pay in order to maintain the special relationship with the United States.

The IET legislation was of particular concern to Canada because it threatened to cut off, or at least make more expensive, the major external source of long-term capital. As a result, the Canadian authorities entered into negotiations in an attempt to obtain some relief from these proposals. These negotiations culminated in an agreement on July 21, 1963, exempting new Canadian bond and stock issues on the understanding that Canada refrain from building up foreign exchange reserves by means of borrowing in the United States. This in effect implied that Canada could continue to float new issues in the United States as long as foreign exchange reserves did not rise significantly above the U.S. \$2,700 million level existing at the time of the agreement.

The imposition of the Foreign Credit Restraint Program in February 1965 did not create as many problems for Canada as initially it applied only to short-term capital flows. Since short-term flows were not a very dependable source of capital and, in fact, were often outflows, Canada did not attempt, at least very strenuously, to obtain any exemption from this initial program. It was not until December 1965, when the program was extended to cover long-term investments by U.S. non-bank financial institutions and the Foreign Direct Investment Restraint Program was introduced, that the Canadian authorities again attempted to negotiate a special exemption. In particular, the restrictions on long-term bond holdings of U.S. financial institutions threatened to remove the benefit of the Canadian exemption from the IET; while the direct investment guidelines threatened to restrict the flow of direct investment funds to Canada and, possibly, cause an outflow of retained earnings.

In this case, Canada was only partially successful in achieving the desired exemptions. As a result of the negotiations, Canada was exempted from the guideline limiting the long-term bond holdings of U.S. non-bank

financial institutions in return for an undertaking on the part of Canada to reduce its "target" level of foreign exchange reserves to U.S. \$2,600 million (including the net creditor position with the International Monetary Fund). In May 1966, the "target" was again lowered to U.S. \$2,550 million as a result of a special transfer of gold from Canada to the IMF. On the other hand, the U.S. refused to give any concession to Canada on the direct investment restrictions. In order to remove some of the impact of the direct investment guideline and, at the same time, prevent additional pressure on the U.S. balance-of-payments, the Canadian authorities asked Canadian investors not to purchase "off-shore" securities of U.S. corporations (or their non-Canadian subsidiaries) which would be subject to the U.S. Interest Equalization Tax if purchased by U.S. residents. This served to prevent the attraction of capital from Canada by U.S. corporations and thereby the development of any abnormal pressures on the Canadian capital market which could have forced Canadian borrowers to rely more heavily on the United States. If this step had not been taken, a pass-through of funds from the United States to other countries could have occurred via Canada.

It was not until the announcement of the much more severe and mandatory program on January 1, 1968 that the impact of the direct investment restriction became of vital importance to Canada. Under this program, U.S. corporations were to reduce their direct investments in Canada (including retained earnings) during 1968 to 65 per cent of the 1965-66 level. This meant that there could have been a decline in direct investment inflows into Canada and a sharp increase in the outflow of retained earnings from Canadian subsidiaries to their U.S. parent companies. In the foreign exchange market, this was interpreted as a bad omen for the Canadian dollar and the resulting exchange crisis forced Canada to obtain assistance from the IMF and foreign central banks in early 1968. It was with some urgency then that the Canadian authorities entered into this round of negotiations. At this point, it was also apparent to the United States that some steps had to be taken to relieve the pressure on the Canadian dollar.

On March 7, 1968, an agreement was reached between the United States and Canada, providing Canada with a complete exemption from the January 1, 1968 programs and all previous guidelines. In return for this exemption, Canada agreed to maintain foreign exchange reserves around the U.S. \$2,550 million target level, to invest a portion of these reserves in non-negotiable U.S. securities, and to ensure that this exemption did not result in Canada being used as a pass-through for U.S. funds. In order to honour this latter agreement, the Canadian authorities developed a series of guidelines to govern the holding of foreign-currency claims on residents of countries other than the United States and Canada by Canadian banks, other financial institutions, and non-financial corporations. These steps

essentially brought Canada under the umbrella of the U.S. balance-of-payments programs.

The first of these guidelines was instituted on May 3, 1968, when the Minister of Finance requested that Canadian banks keep their total foreign-currency claims on residents of countries other than the United States or Canada from rising above the level held at the end of February 1968, unless the increase was accompanied by an equal increase in foreign-currency liabilities to residents of third countries. Similarly, if there was a decline in the banks' total holdings of foreign-currency liabilities to third-country residents, the banks were to match this with an equal reduction in total foreign-currency claims on residents of those countries. In effect, if the Canadian banks wanted to increase their volume of lending in third countries, they had to do so by attracting more deposits from those third countries. In addition, the banks were asked to limit the increase in their U.S.-dollar liabilities to residents of the United States above the end of February 1968 level to the sum of: (1) the increase in their U.S.-dollar claims on Canadians; (2) the decrease in their U.S.-dollar liabilities to Canadians; and (3) the decrease in their own spot position in U.S. dollars. In other words, they were to accept additional U.S.-dollar deposits from U.S. residents only if they could lend those funds in Canada. This rather strange guideline resulted from the fact that the then commonly used liquidity measure of the U.S. balance-of-payments deficit included short-term outflows in its calculation but not short-term inflows. As a result, the acceptance of deposits from U.S. residents by a Canadian bank increased the U.S. deficit even though the funds were immediately re-invested in the United States. This guideline then was aimed at removing the impact of this particular type of transaction on the U.S. balance-of-payments deficit as measured on the liquidity basis.

Guidelines were also established to govern the volume of foreign-currency claims on residents of third countries held by non-bank financial institutions and non-financial corporations operating in Canada. For financial institutions, these claims were not to rise above the June 30, 1968 level unless the increase was accompanied by an equal increase in total foreign-currency liabilities to residents of third countries, or arose from net earnings of foreign branches or subsidiaries. Non-financial corporations were not to increase their holdings in continental Western Europe in any way that involved a transfer of capital from the United States or Canada. In addition, they were to exercise restraint in making new investments in other countries, except developing countries which were exempt from the guidelines. This system of guidelines remained in effect in virtually unchanged form until they were removed in January 1974 following the removal of the U.S. outflow controls.

From March 1968 until the ending of the U.S. controls, Canada enjoyed a complete exemption (except for the IET applied to outstanding debt and



equity securities) from the U.S. balance-of-payments program. In order to obtain this exemption, Canada had to make two major concessions: (1) the imposition of an upper limit of U.S. \$2550 million on foreign exchange holdings; and (2) the institution of a guidelines program to control the foreign-currency operations of Canadian banks, financial institutions and corporations with residents of third countries. These concessions had an impact on the international operations of Canadian financial institutions and non-financial corporations, and on the ability of the Canadian monetary authorities to conduct an independent monetary policy. Because of the implied ceiling on foreign exchange reserves, the Canadian authorities were more restricted in their ability to follow a tighter monetary policy than that being followed in the United States, and had to keep Canadian interest rates in line with U.S. rates or below U.S. rates in order to avoid an accumulation of reserves above this target level under the fixed exchange rate system. This limitation was reduced initially by a more relaxed U.S. view of the foreign exchange reserve ceiling and eventually by a virtual ignorance of the ceiling when Canada encountered strong upward pressure on the exchange rate. Finally, this limitation was effectively removed with Canada's move to a floating exchange rate in May 1972.

The impact of the exemption agreements and the Canadian guidelines program on the Canadian banks was to change the nature of their New York agency operations and encourage them to enter into purely international Euro-currency transactions on an increasing scale. Under the guidelines, Canadian banks were not to accept additional U.S.-dollar deposits from U.S. residents unless they could be re-lent in Canada. The traditional type of New York agency operations did not provide much scope for expansion under this guideline and, therefore, the Canadian banks would have to look for outlets for funds in Canada if they were to significantly expand their deposit-taking role in New York. The guideline restricting the flow of funds from Canada to third countries encouraged the Canadian banks to expand their Euro-currency operations by borrowing from and lending to residents of third countries or by borrowing in third countries and lending to Canadian residents. In other words, they were encouraged to increase their liabilities to third-country residents as much as possible so that they could also increase their lending to third countries. Canadian non-financial corporations were also encouraged to finance their expansion in third countries by borrowing in those countries rather than in Canada or the United States. These guidelines then undoubtedly increased Canadian participation in the Euro-currency and Euro-bond markets since 1968. On the other hand, they significantly restricted the ability of Canadians, especially non-bank financial institutions, to invest funds in international Euro-currency securities.

Although the imposition of the U.S. balance-of-payments outflow control programs had initially threatened the continuation of the special

financial relationship between the United States and Canada, the subsequent exemptions granted to Canada and the concessions given by Canada to the United States effectively intensified and formalized this special relationship. In fact, these arrangements, while they were in effect, welded Canada and the United States into a form of monetary union with a common approach to third countries. From mid-1972 to early 1974 however, these arrangements were counter-productive from the Canadian point of view as the Canadian dollar was then under strong upward pressure and Canada was more concerned with avoiding capital inflows than attracting them. As a result, the free access to the U.S. capital market was not a major attraction and the Canadian authorities would have been prepared to give this privilege up if they could have dismantled their outflow guidelines program. With the U.S. dollar under severe speculative attack, however, this was not possible until the United States moved unilaterally to remove their outflow controls in January 1974. The Canadian authorities immediately followed suit and removed the Canadian guidelines program. As a result, the financial relationship between these two countries is now back to its pre-1963 informal state.

## 7 The Market and Institutional Linkage

Historically, there has been an extensive international linkage between Canadian and foreign financial markets and institutions which has resulted in large movements of capital between Canada and other countries, especially the United States. This chapter will attempt to assess the nature of these capital movements over the 1964-74 period, with regard to both market and institutional linkages and to determine the relative importance of the various types of flows and the channels through which they can occur. The capital account of the Canadian balance of international payments will be examined with regard to the institutional channels through which funds can flow. Finally, the position of the Canadian chartered banks in this international linkage will be analysed in detail by examining the published aggregate data on their foreign-currency operations.

### **The Canadian Capital Account**

During the 1964-74 period, the capital account of the Canadian balance of international payments has consistently shown a large net long-term capital inflow which has been partially off-set by net short-term capital outflows except during 1965 and 1974 when there were net short-term inflows. The details of long- and short-term capital movements during the 1964-74 period are presented in Tables 7-1(a) and (b) respectively. In the case of long-term capital flows, there have been two major and consistent sources of capital inflows: net direct investment by foreigners in Canada (up to 1973), and net new issues of bonds abroad by Canadian provincial governments and private corporations. New stock issues by Canadian corporations have also resulted in consistent inflows of relatively small magnitude. Trade in outstanding securities has been relatively volatile with most of the flows involving either Canadian stocks or foreign securities (again mainly stocks). In the case of foreign securities, there was a net outflow up until 1969 when the Canadian tax reform proposals were first published. Since that time, Canadians have been net sellers of outstanding foreign securities.

Table 7-1  
Canadian Balance of International  
Payments — Capital Account

(a) Long-Term Capital Movements, 1964-1974

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
	(Millions of Canadian dollars)										
<b>Direct Investments</b>											
In Canada	+270	+535	+790	+691	+590	+720	+835	+880	+605	+725	+585
Abroad	-95	-125	-5	-125	-225	-370	-295	-220	-380	-775	-675
Net	+175	+410	+785	+566	+365	+350	+540	+660	+225	-50	-90
<b>New Securities — Stocks</b>											
New Issues	+22	+24	+57	+37	+67	+212	+70	+22	+49	+46	+15
Retirements	-58	-7	-4	-1	-5	-2	-4	-4	-5	-10	-5
Net	-36	+17	+53	+36	+62	+210	+66	+18	+44	+36	+10
<b>New Securities — Bonds</b>											
<i>Government of Canada</i>											
New Issues	+43	+28	+32	+20	+288	+40	+26	+27	+29	+12	+13
Retirements	-88	-85	-203	-95	-57	-83	-157	-21	-43	-110	-60
Net	-45	-57	-171	-75	+231	-43	-131	+6	-14	-98	-47
<b>Provinces</b>											
New Issues	+439	+297	+448	+762	+852	+1,063	+527	+725	+1,148	+890	+1,707
Retirements	-66	-31	-65	-61	-76	-91	-111	-318	-216	-244	-196
Net	+373	+266	+383	+701	+776	+972	+416	+407	+932	+646	+1,511
<b>Municipalities</b>											
New Issues	+182	+84	+177	+173	+124	+177	+64	+26	+166	+114	+239
Retirements	-53	-53	-96	-52	-60	-88	-92	-99	-95	-119	-96
Net	+129	+31	+81	+121	+64	+89	-28	-73	+71	-5	+143

<b>Corporations</b>												
New issues	+414	+807	+ 751	+ 315	+ 586	+ 597	+540	+386	+ 364	+325	+ 463	
Retirements	-117	-214	- 131	- 148	- 233	- 176	-188	-374	- 192	-298	- 176	
Net	+297	+593	+ 620	+ 167	+ 353	+ 421	+352	+ 12	+ 172	+ 27	+ 287	
<b>Outstanding Securities</b>												
Canadian Stocks	- 98	-274	- 136	+ 12	+ 114	+ 53	-145	-144	- 62	- 24	- 112	
Canadian Bonds	+ 77	+ 55	- 104	- 57	- 70	+ 2	- 39	- 94	+ 293	+ 31	+ 40	
Foreign Securities	- 52	- 85	- 401	- 432	- 467	+ 102	+ 74	+204	+ 260	+ 52	+ 28	
Government of Canada Loans and Subscriptions	70	- 4	- 11	- 4	- 73	- 67	-108	-156	- 211	-211	- 311	
Columbia River Treaty (Net)	+ 54	+ 32	+ 32	+ 44	+ 88	+ 32	+ 31	+ 24	-	+ 1	-	
Other Long-Term Flows	-124	-151	+ 97	+ 336	+ 226	+ 216	-276	-372	- 53	- 32	- 423	
Total Long-Term Movements	+820	+864	+1,167	+1,355	+1,652	+2,333	+742	+482	+1,657	+373	+1,036	

Source: Statistics Canada, *Quarterly Estimates of the Canadian Balance of International Payments*, Catalogue No. 67-001, quarterly.

Table 7-1 (concluded)  
 (b) Short-Term Capital Movements, 1964-1974

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
							(Millions of Canadian dollars)				
Chartered Bank Net Foreign-Currency Position With Non-Residents	-303	+426	-467	-384	-448	-506	-122	+1,404	+637	-343	-1,354
Non-Bank Holdings of Foreign-Currencies Abroad	-27	-11	-53	+22	+39	-928	-41	-561	-171	-163	+1,610
Canadian Resident Holdings of Foreign Currencies: Total	-330	+415	-520	-362	-449	-1,434	-163	+843	+466	-506	+256
Canadian Dollar Deposits	+28	+31	+11	+24	+72	+52	+26	+92	+136	+145	+592
Canadian Government Demand Liabilities	—	+2	+5	-4	+21	-34	-8	+50	+27	+77	+45
Treasury Bills	-16	+12	-15	+4	+48	+20	-79	-3	+22	-24	+78
Commercial Paper	-11	+10	+4	+13	—	+41	-78	+128	-135	+164	-57
Finance Company Paper	+196	-162	-1	-64	-132	+177	+203	-39	-50	-24	+94
Other Finance Company Obligations	+52	+209	+154	+35	+24	+116	-103	-29	-27	+17	+170
Non-Resident Holdings Canadian Assets: Total	+249	+102	+158	+8	+33	+372	+117	+199	-22	+355	+422
Other Short-Term Flows (Including Balancing Item)	+246	+183	+81	-585	-807	-293	-282	-1,053	-1,406	-707	-547
Total Short-Term Movements	-32	+424	-364	-836	-1,223	-1,355	-328	-11	-967	-858	+631

Source: Statistics Canada *Quarterly Estimates of the Canadian Balance of International Payments*, Catalogue No. 67-001, quarterly.

Short-term capital flows have been much more volatile with no single channel providing a consistent inflow or outflow for the period. However, Canadian residents have been responsible for the largest proportion of short-term capital movements through most of the period, with the possible exception of 1967-1973, when the unclassified flows grouped in the "other short-term flows" category were very important in the short-term flows sector of the capital account. It is unknown whether those unclassified flows were originated by residents or non-residents, but if they are, excluded residents have clearly originated the largest volume of capital movements. In the case of residents, both banks and non-banks have been very active in moving funds into and out of Canada, but the chartered banks have, over the period, been the largest participants. In many cases though banks and non-banks moved funds in opposite directions during the same year. Non-residents, with the exception of 1972, have consistently moved funds into Canada even though, during much of the period, residents were moving funds out of Canada. The vehicles used by non-residents to move funds into the country have varied throughout the period, with Canadian-dollar bank deposits being the only consistent destination for non-resident inflows. The other major instruments used by non-residents in moving funds into or out of Canada have been commercial paper and finance company paper and other obligations. The unclassified short-term capital movements have been consistently outward since 1967 and, in a number of years, have been the largest component in the short-term sector of the capital accounts.

### **Major Institutional Channels**

In the case of long-term capital flows, the major portion of the inflow into Canada has occurred through the new issue of bonds by Canadian borrowers in foreign capital markets. Among Canadian borrowers, the provincial governments have been the major issuers of new bonds abroad over the period reviewed in Table 7-1(a). Canadian corporations have been the next largest foreign borrowers through the issue of new bonds, while Canadian municipalities have ranked third. The relative importance of these three channels for long-term inflows has varied from year to year but the ranking has been consistent over the period, with the exception of 1965 and 1966 when net new issues of corporate bonds abroad exceeded the net new issues of provincial government bonds in foreign markets. The Federal government, on the other hand, had a net retirement of foreign debt over the period, except in 1968 when a substantial volume (\$288 million) of Government of Canada bonds were sold abroad in defense of the Canadian-dollar exchange rate, and in 1971 when new issues exceeded retirements by a modest \$6 million. New issues of stocks by Canadian corporations have also resulted in a consistent, but modest, inflow of capital during the 1964-73 period.

The other significant channel for long-term inflows into Canada has been through the direct investment activities of foreign investors. Direct investment in Canada has been a consistently large source of capital inflows with the volume being relatively constant throughout the period, particularly in the 1966-74 period when the volume of inflows ranged from a low of \$590 million in 1968 to a high of \$880 million in 1971. Off-setting these direct investment inflows has been a consistent outflow of Canadian direct investment abroad which has varied markedly over the period from a low of \$5 million in 1966 to a high of \$775 million in 1973. Even so, there has been a net inflow through the direct investment channel, except in 1973 and 1974, which has consistently been the second most important source of long-term inflows after the inflows resulting from the new issue of bonds abroad. The flows associated with trade in outstanding securities have been rather volatile throughout the period. Trade in outstanding Canadian stocks has resulted in net outflows for every year except the 1967-69 period when modest inflows were recorded. This same trend has also been apparent in trade in outstanding Canadian bonds where modest outflows have dominated the net movements. In the 1972-74 period, however, net inflows into outstanding Canadian bonds, due to the expected and realized appreciation of the Canadian dollar, did occur. Trade in outstanding foreign securities resulted in substantial net outflows until the publication of the Proposals for Tax Reform (White Paper) in 1969 which proposed limits on the ability of Canadian pension plans to invest in foreign securities. Since 1968, there has been a consistent and sizable net inflow as Canadians disposed of foreign securities.

In the short-term capital flows sector of the capital account, as shown in Table 7-1(b), Canadian residents have initiated outflows of short-term funds in every year of the 1964-74 period, except 1965, 1971, 1972 and 1974 when sizable inflows were recorded. On the other hand, non-residents have moved short-term funds into Canada consistently throughout the period except in 1972 when a modest \$22 million net outflow occurred. Among Canadian residents, the chartered banks have been the major institutions involved in the short-term movement of capital into and out of Canada. They have initiated substantial short-term outflows in every year except 1965, 1971, 1972, and 1974 when substantial inflows took place. These inflows through the chartered banks were particularly large in 1971 (\$1,404 million) and 1972 (\$637 million). Non-bank residents have also tended to flow short-term funds out of Canada, except in 1967 and 1968 when small inflows occurred, and in 1974 when a very large inflow took place. Surprisingly, the inflows through the non-banks did not occur in the same year as the inflows through the chartered banks. The largest outflows through the non-banks, however, occurred in 1969 (\$928 million) and in 1971 (\$561 million), which also coincided with large outflows through the chartered banks.



In the case of non-residents, the major channels through which short-term funds moved involved changes in non-resident holdings of Canadian-dollar deposits, commercial paper, and finance company paper and other obligations. Foreign holdings of Canadian-dollar deposits have resulted in a net inflow throughout the period which has showed some tendency to increase since 1967 and particularly in 1974. Finance company obligations were a major vehicle for the movement of foreign-owned funds into and out of Canada until 1970, after which they declined in importance. Offsetting the decline in the use of finance company paper was an increased interest in Canadian commercial paper on the part of non-residents. In fact, movements through the commercial paper channel nearly equalled those through Canadian-dollar deposits during 1971-72 period, although deposits resulted in \$136 million inflow in 1972, while commercial paper gave rise to an outflow of equal size. The other major element in the short-term capital flow sector since 1967 has been the large and consistent outflows recorded in the "other long-terms flows" category. This indicates that there have been difficulties in recording and classifying all the short-term capital flows during this period. Since these large outflows began at the time when U.S. capital outflow controls were erected and corresponding Canadian guidelines established, there is the suspicion (as yet unconfirmed) that these flows represented unrecorded pass-throughs of funds from the United States to other countries via Canada as a result of Canada's exemption from the U.S. outflow controls system.

### **Foreign-Currency Positions of Canadian Banks**

A major channel through which Canadians participate in international financial activities is that involving the foreign-currency operations of Canadian chartered banks. These operations involve the holding of foreign-currency assets and liabilities with Canadian banks by both residents and non-residents of Canada. The dimensions of these activities are given in Table 7-2 where total Canadian-dollar and total foreign-currency assets and liabilities of the chartered banks are compared over the 1964-74 period. Between December 1964 and December 1974, total foreign-currency assets and liabilities increased by 453 per cent and 464 per cent respectively, while total Canadian-dollar assets and liabilities increased by 266 per cent and 263 per cent respectively during the same period. This rapid growth of foreign-currency assets and liabilities has raised the percentages of foreign-currency assets to total assets from 21.7 per cent in December 1964 to 29.5 per cent in December 1974; and foreign-currency liabilities to total liabilities from 21.8 per cent in December 1964 to 30.3 per cent in December 1974. These data clearly indicate that foreign-currency assets and liabilities have been growing at a much faster rate than Canadian-dollar assets and liabilities and have

Table 7-2  
 Total Canadian-Dollar and Total Foreign-Currency  
 Assets and Liabilities of Chartered Banks, Quarterly, 1964-1974

End of Period	Assets				Liabilities				
	Total Assets	Total Canadian-Dollar Assets	Total Foreign-Currency Assets	Foreign as Percentage of Canadian Total	Total Liabilities	Total Canadian-Dollar Liabilities	Total Foreign-Currency Liabilities	Foreign as Percentage of Canadian Total	
(Millions of Canadian dollars)									
1964 - March	21,860	17,761	4,099	23.1	21,860	17,688	4,172	23.6	19.1
June	22,524	18,017	4,507	25.0	22,524	17,916	4,608	25.7	20.5
September	22,842	18,077	4,765	26.4	22,842	17,954	4,888	27.2	21.4
December	23,873	18,694	5,179	27.7	23,872	18,661	5,211	27.9	21.8
1965 - March	23,906	18,990	4,916	25.9	23,905	19,002	4,903	25.8	20.5
June	24,383	19,757	4,626	23.4	24,384	19,725	4,659	23.6	19.1
September	25,259	20,254	5,005	24.7	25,259	20,171	5,088	25.2	20.1
December	26,233	21,196	5,037	23.8	26,233	21,150	5,083	24.0	19.4
1966 - March	26,009	21,042	4,967	23.6	26,010	20,988	5,022	23.9	19.3
June	26,658	21,634	5,024	23.2	26,658	21,555	5,103	23.7	19.1
September	26,954	21,787	5,167	23.7	26,955	21,764	5,191	23.9	19.3
December	28,150	22,507	5,643	25.1	28,150	22,582	5,568	24.7	19.8
1967 - March	28,074	22,824	5,250	23.0	28,057	22,889	5,168	22.6	18.4
June	29,090	23,474	5,616	23.9	29,090	23,599	5,491	23.3	18.9
September	30,008	24,115	5,893	24.4	30,008	24,405	5,603	23.0	18.7
December	31,669	25,199	6,470	25.7	31,670	25,361	6,309	24.9	19.9
1968 - March	31,926	25,266	6,660	26.4	31,926	25,465	6,461	25.4	20.2
June	33,325	26,274	7,051	26.8	33,325	26,568	6,757	25.4	20.3
September	35,176	27,625	7,551	27.3	35,176	28,004	7,172	25.6	20.4
December	36,745	28,939	7,806	27.0	36,746	29,368	7,378	25.1	20.1

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1969 - March	38,230	29,361	8,869	30.2	23.2	38,230	29,652	8,578	28.9	28.9	22.4
June	40,150	30,075	10,075	33.5	25.1	40,151	30,089	10,062	33.4	33.4	25.1
September	41,408	30,243	11,165	36.9	27.0	41,408	30,035	11,373	37.9	37.9	27.5
December	42,632	31,000	11,632	37.5	27.3	42,632	31,002	11,630	37.5	37.5	27.3
1970 - March	42,915	30,973	11,942	38.6	27.8	42,915	30,746	12,169	39.6	39.6	28.4
June	43,925	31,575	12,350	39.1	28.1	43,925	31,669	12,256	38.7	38.7	27.9
September	44,943	32,045	12,898	40.2	28.7	44,943	31,951	12,992	40.7	40.7	28.9
December	47,307	33,616	13,691	40.7	28.9	47,307	33,774	13,533	40.1	40.1	28.6
1971 - March	47,582	34,618	12,964	37.4	27.2	47,583	34,764	12,819	36.9	36.9	26.9
June	50,081	36,762	13,319	36.2	26.6	50,081	37,028	13,053	35.3	35.3	26.1
September	50,969	37,401	13,568	36.3	26.6	50,969	37,682	13,287	35.3	35.3	26.1
December	54,428	39,959	14,469	36.2	26.6	54,428	40,266	14,162	35.2	35.2	26.0
1972 - March	55,895	41,214	14,681	35.6	26.3	55,896	41,274	14,622	35.4	35.4	26.2
June	57,930	43,165	14,765	34.2	25.5	57,930	42,731	15,199	35.6	35.6	26.2
September	59,325	43,982	15,343	34.9	25.9	59,325	43,506	15,819	36.4	36.4	26.7
December	63,222	46,650	16,572	35.5	26.2	63,222	46,204	17,018	36.8	36.8	26.9
1973 - March	65,321	47,737	17,584	36.8	26.9	65,322	47,056	18,266	38.8	38.8	28.0
June	69,761	50,916	18,845	37.0	27.0	69,762	49,942	19,820	39.7	39.7	28.4
September	72,932	52,327	20,605	39.4	28.3	72,933	51,011	21,922	43.0	43.0	30.1
December	79,753	56,455	23,298	41.3	29.2	79,753	55,176	24,577	44.5	44.5	30.8
1974 - March	82,841	57,659	25,182	43.7	30.4	82,842	56,034	26,808	47.8	47.8	32.4
June	87,194	61,451	25,743	41.9	29.5	87,194	58,462	28,732	49.1	49.1	33.0
September	90,624	64,436	26,188	40.6	28.9	90,624	61,964	28,660	46.3	46.3	31.6
December	97,102	68,476	28,626	41.8	29.5	97,102	67,702	29,400	43.4	43.4	30.3
Percentage Increase December 1965- December 1974	307%	266%	453%			307%	263%	464%			

Source: Bank of Canada Review (Ottawa: Bank of Canada, monthly), Tables 7 and 8.

Table 7-3  
 Deposit/Capital Ratios for Chartered Banks, Quarterly, 1964-1974

End of Period	Capital			Deposits			Deposit/Capital Ratios			
	Shareholder's Equity <sup>1</sup>	Accumulated Appropriations for Losses	Total Capital <sup>2</sup>	Canadian-Dollar Deposits	Debtures Issued	Total Canadian Deposits	Foreign-Currency Deposits	Including Foreign-Currency Deposits		
(Millions of Canadian dollars)										
1964 - March	1,152	—	1,152	15,922	—	15,922	4,172	20,094	13.8	17.4
June	1,152	—	1,152	16,148	—	16,148	4,608	20,756	14.0	18.0
September	1,152	—	1,152	16,077	—	16,077	4,888	20,965	14.0	18.2
December	1,175	—	1,175	16,697	—	16,697	5,211	21,908	14.2	18.6
1965 - March	1,175	—	1,175	17,008	—	17,008	4,903	21,911	14.5	18.6
June	1,180	—	1,180	17,694	—	17,694	4,659	22,353	15.0	18.9
September	1,180	—	1,180	18,080	—	18,080	5,088	23,168	15.3	19.6
December	1,235	357	1,592	18,594	—	18,594	5,083	23,677	11.7	14.9
1966 - March	1,235	359	1,594	18,429	—	18,429	5,022	23,451	11.6	14.7
June	1,235	361	1,596	18,965	—	18,965	5,103	24,068	11.9	15.1
September	1,236	364	1,600	19,210	—	19,210	5,191	24,401	12.0	15.3
December	1,265	377	1,642	20,016	—	20,016	5,568	25,584	12.2	15.6
1967 - March	1,265	387	1,652	20,309	—	20,309	5,168	25,477	12.3	15.4
June	1,270	389	1,659	20,974	13	20,987	5,491	26,478	12.7	16.0
September	1,270	388	1,658	21,818	13	21,831	5,603	27,434	13.2	16.5
December	1,310	424	1,734	22,663	40	22,703	6,309	29,012	13.1	16.7
1968 - March	1,310	424	1,734	22,785	40	22,825	6,461	29,286	13.2	16.9
June	1,310	424	1,734	23,713	40	23,753	6,757	30,510	13.7	17.6
September	1,322	424	1,746	25,063	40	25,103	7,172	32,275	14.4	18.5
December	1,362	562	1,924	26,379	40	26,419	7,378	33,797	13.7	17.6

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1969 - March	1,370	562	1,932	26,627	40	26,667	8,578	35,245	13.8	18.2
June	1,404	562	1,966	26,793	40	26,833	10,062	36,895	13.6	18.8
September	1,406	562	1,968	26,588	40	26,628	11,373	38,001	13.5	19.3
December	1,502	595	2,097	27,336	40	27,376	11,630	39,006	13.1	18.6
1970 - March	1,515	595	2,110	26,956	40	26,996	12,169	39,165	12.8	18.6
June	1,516	595	2,111	27,819	40	27,859	12,256	40,115	13.2	19.0
September	1,517	595	2,112	28,042	40	28,082	12,992	41,074	13.3	19.4
December	1,596	604	2,200	29,888	40	29,928	13,533	43,461	13.6	19.8
1971 - March	1,596	604	2,200	30,785	40	30,825	12,819	43,644	14.0	19.8
June	1,606	604	2,210	32,673	185	32,858	13,053	45,911	14.9	20.8
September	1,606	604	2,210	33,262	185	33,447	13,287	46,734	15.1	21.1
December	1,738	692	2,430	35,611	190	35,801	14,162	49,963	14.7	20.6
1972 - March	1,745	692	2,437	36,508	285	36,793	14,622	51,415	15.1	21.1
June	1,745	692	2,437	37,773	335	38,108	15,199	53,307	15.6	21.9
September	1,745	692	2,437	38,319	335	38,654	15,819	54,473	15.9	22.4
December	2,004	727	2,731	40,728	498	41,226	17,018	58,244	15.1	21.3
1973 - March	2,031	727	2,758	41,160	608	41,768	18,266	60,034	15.1	21.8
June	2,046	727	2,773	43,662	658	44,320	19,820	64,140	16.0	23.1
September	2,047	727	2,774	44,589	657	45,246	21,922	67,168	16.3	24.2
December	2,222	802	3,024	48,565	657	49,222	24,577	73,799	16.3	24.4
1974 - March	2,229	802	3,031	48,457	657	49,114	26,808	75,922	16.2	25.0
June	2,274	802	3,076	50,764	656	51,420	28,732	80,152	16.7	26.1
September	2,277	802	3,079	53,757	706	54,463	28,660	83,123	17.7	27.0
December	2,465	809	3,274	58,797	780	59,577	29,400	88,977	18.2	27.2

1 Paid-up capital, rest account, and undivided profits at the latest fiscal year-end.

2 Accumulated Appropriations for Losses not available prior to December 1965 and, hence, not included in Total Capital.  
Source: *Bank of Canada Review* (Ottawa: Bank of Canada, monthly), Table 8.

made a major contribution to overall asset and liability growth of the Canadian banks over the past decade.

One impact of the rapid expansion of foreign-currency deposits of the chartered banks has been on the deposit/capital<sup>1</sup> ratios of the banks as illustrated in Table 7-3. In December 1965, the ratio excluding foreign-currency deposits was 11.7 whereas the ratio including foreign-currency deposits equalled 14.9. By December 1970, these ratios had increased to 13.6 and 19.8 respectively and by December 1974 to 18.2 and 27.2. It is apparent from these data that the substantial increase in the overall deposit/capital ratio of the chartered banks during this period was mainly due to the rapid growth of foreign-currency deposits.

As far as individual banks are concerned, Table 7-4 shows that The Royal Bank of Canada has consistently had the largest absolute value of foreign-currency liabilities among the Canadian banks during the 1964-74 period. The Bank of Nova Scotia was next largest until 1973 when the Bank of Montreal expanded its foreign-currency liabilities rapidly. During that period, however, The Bank of Nova Scotia had the highest ratio of foreign-currency liabilities to total liabilities, followed by The Royal Bank of Canada and Toronto Dominion Bank. The Canadian Imperial Bank of Commerce consistently had the lowest ratio among the major banks throughout the period. Table 7-5 indicates that the Bank of Montreal has had the highest deposit/capital ratio among the major banks during the 1964-74 period regardless of whether foreign-currency deposits are included or excluded. All the major banks have encountered a substantial rise in overall deposit/capital ratios (including foreign-currency deposits) during the 1973-74 period, with the Bank of Montreal again recording the most rapid increase. The smaller Canadian banks have also seen their overall ratios rise sharply as they engaged more aggressively in both domestic and foreign-currency operations.

The composition of the foreign-currency assets and liabilities of the chartered banks has also changed significantly with regard to residency and type of holder and place of booking during the 1964-74 period. Table 7-6, showing total chartered bank foreign-currency assets and liabilities by type, indicates that there has been a shift towards greater inter-bank activities on the part of Canadian banks. Deposits with banks have risen from 30.8 per cent of total foreign-currency assets in December 1964 to 52 per cent in December 1974; whereas deposits of other banks have increased from 17.9 per cent of total foreign-currency liabilities to 52 per cent over the same period. The proportions of these components of their foreign-currency assets and liabilities consistently increased until mid-1974 when both started to decline as proportions of total foreign-currency assets and liabilities. This probably reflected the concern about

<sup>1</sup> Deposits include debentures issued and outstanding, while capital is defined as accumulated appropriations for losses, paid-up capital, rest account, and undivided profits.

Table 7-4  
Chartered Bank Foreign-Currency Liabilities, by Bank, 1964-1974, as of December 31st

	1964	1966	1968	1970	1971	1972	1973	1974
The Royal Bank of Canada	1,590	1,697	2,228	3,907	4,174	4,863	6,623	7,089
Canadian Imperial Bank of Commerce	954	1,073	1,140	2,286	2,412	2,517	3,894	4,609
Bank of Montreal	927	883	1,027	2,330	2,537	2,677	4,687	5,498
The Bank of Nova Scotia	1,051	1,204	1,923	2,534	2,720	3,642	4,408	6,300
Toronto Dominion Bank	587	568	957	1,576	1,712	2,257	3,525	4,349
Bank Canadian National	8	8	12	188	211	418	648	722
The Provincial Bank of Canada	1	2	8	45	264	426	555	623
The Mercantile Bank of Canada	93	133	76	63	93	163	145	88
Bank of British Columbia	—	—	6	17	39	55	78	113
Unity Bank of Canada	—	—	—	—	—	—	5	7
Total	5,221	5,568	7,377	12,946	14,162	17,018	24,578	29,401

Source: Chartered Banks of Canada, Statement of Assets and Liabilities (Ottawa: Department of Finance, various issues).

Table 7-4 (concluded)  
 (b) Ratio of Foreign-Currency Liabilities to Total Liabilities

	1964	1966	1968	1970	1971	1972	1973	1974
The Royal Bank of Canada	26.5	24.4	24.3	33.8	30.4	31.4	33.9	31.0
Canadian Imperial Bank of Commerce	16.8	16.0	13.6	22.2	20.0	18.5	22.8	22.8
Bank of Montreal	19.1	16.1	14.7	25.6	24.4	22.8	30.3	29.9
The Bank of Nova Scotia	34.5	32.9	36.9	39.6	37.3	40.2	40.8	44.2
Toronto Dominion Bank	21.8	18.5	21.3	28.1	26.0	28.2	34.3	34.0
Bank Canadian National	0.8	0.7	0.8	9.4	8.8	14.8	19.0	16.3
The Provincial Bank of Canada	0.2	0.4	1.1	4.1	17.4	23.5	26.0	22.7
The Mercantile Bank of Canada	67.4	56.8	39.8	33.5	31.4	36.8	24.2	12.6
Bank of British Columbia	—	—	16.2	13.5	20.7	22.0	23.0	22.5
Unity Bank of Canada	—	—	—	—	—	—	4.9	4.9
Total	21.8	20.0	20.1	27.9	26.0	26.9	30.8	30.3

Source: Chartered Banks of Canada, Statement of Assets and Liabilities (Ottawa: Department of Finance, various issues).



Table 7-5  
Chartered Bank Deposit/Capital Ratios, by Bank, 1966-1974, as of December 31st

	Excluding Foreign-Currency Deposits							Including Foreign-Currency Deposits						
	1966	1968	1970	1971	1972	1973	1974	1966	1968	1970	1971	1972	1973	1974
The Royal Bank of Canada	10.7	12.5	12.3	14.1	14.4	15.7	17.9	14.6	17.0	19.6	21.1	21.8	24.8	27.2
Canadian Imperial Bank of Commerce	12.2	13.4	13.2	14.6	15.3	17.0	19.3	14.8	15.7	18.0	18.6	19.2	22.5	25.6
Bank of Montreal	n.a.	15.8	15.1	16.3	17.4	19.2	22.5	n.a.	18.8	21.3	22.1	23.2	28.5	33.3
The Bank of Nova Scotia	11.2	12.2	11.1	11.4	12.2	13.3	13.3	17.4	20.1	19.7	19.3	21.6	23.9	25.8
Toronto Dominion Bank	13.4	15.5	16.0	15.3	14.7	15.3	15.6	16.7	20.2	22.9	22.8	21.3	24.4	24.8
Bank Canadian National	12.9	15.5	17.8	17.5	17.0	19.5	25.2	13.0	15.7	19.8	19.6	21.3	24.5	30.8
The Provincial Bank of Canada	14.8	17.5	19.6	20.7	21.2	19.2	25.7	14.9	17.7	20.2	25.5	28.1	26.4	33.7
The Mercantile Bank of Canada	8.2	6.5	6.8	11.7	7.9	10.4	11.9	21.3	12.0	12.0	17.9	13.5	14.4	13.6
Bank of British Columbia	—	1.4	6.5	9.8	12.3	16.4	22.4	—	1.9	7.7	12.6	16.1	21.7	29.5
Unity Bank of Canada	—	—	—	—	—	2.8	4.4	—	—	—	—	—	3.0	4.7

1 Deposits include debentures issued and outstanding; capital includes accumulated appropriations for losses, paid-up capital, rest account, and undivided profits.  
n.a. not available.

Source: Chartered Banks of Canada, Statement of Assets and Liabilities (Ottawa: Department of Finance, various issues).

Table 7-6  
Total Chartered Bank Foreign-Currency Assets and Liabilities, by Type, Quarterly, 1964-1974

End of Period	Assets										Liabilities						Net Position
	Loans					Deposits					Deposits of Banks			Deposits of Others			
	Call Loans	% of Total	Other Loans	% of Total	Securities	% of Total	With Banks	% of Total	Other Assets	Total	Deposits of Banks	% of Total	Deposits of Others	% of Total	Total		
(Millions of Canadian dollars)																	
1964 - March	902	22.0	1,573	38.4	499	12.2	1,121	27.3	4	4,099	809	19.4	3,363	80.6	4,172	-73	
June	988	21.9	1,661	36.9	551	12.2	1,300	28.8	7	4,507	862	18.7	3,746	81.3	4,608	-101	
September	1,031	21.6	1,789	37.5	637	13.4	1,330	27.9	-22	4,765	861	17.6	4,027	82.4	4,888	-123	
December	1,017	19.6	2,011	38.8	587	11.3	1,597	30.8	-33	5,179	931	17.9	4,281	82.1	5,211	-33	
1965 - March	824	18.8	2,088	42.5	604	12.3	1,417	28.8	-17	4,916	966	19.7	3,938	80.3	4,903	12	
June	840	18.2	2,117	45.8	575	12.4	1,125	24.3	-31	4,626	1,010	2.7	3,649	78.3	4,659	-32	
September	949	19.0	2,109	42.1	661	13.2	1,326	26.5	-39	5,005	1,240	24.4	3,926	77.2	5,088	-83	
December	732	14.5	2,287	45.4	642	12.7	1,384	27.4	8	5,037	1,260	24.8	3,822	75.2	5,083	-46	
1966 - March	675	13.6	2,441	49.1	588	11.8	1,311	26.4	-48	4,967	1,031	20.5	3,990	79.5	5,022	-54	
June	702	14.0	2,440	48.6	487	9.7	1,523	30.3	-129	5,024	1,026	20.1	4,078	79.9	5,103	-79	
September	811	15.7	2,465	47.7	614	11.9	1,321	25.6	44	5,167	936	17.0	4,254	77.2	5,510	-23	
December	892	15.8	2,622	46.5	621	11.0	1,516	26.9	8	5,643	1,271	22.8	4,297	77.2	5,568	75	
1967 - March	661	12.6	2,511	47.8	598	11.4	1,563	29.8	-83	5,250	1,113	21.5	4,073	78.8	5,168	65	
June	719	12.8	2,549	45.4	578	10.3	1,892	33.7	-122	5,616	1,352	24.6	4,138	75.4	5,491	125	
September	682	11.6	2,577	43.7	794	13.5	1,928	32.7	-89	5,893	1,391	24.8	4,212	75.2	5,603	290	
December	744	11.5	2,658	41.1	788	12.2	2,326	35.9	-46	6,470	1,529	24.2	4,780	75.8	6,309	162	
1968 - March	748	11.2	2,738	41.1	654	9.8	2,543	38.2	-23	6,660	1,595	24.7	4,866	75.3	6,461	199	
June	869	12.3	2,828	40.1	761	10.8	2,687	38.1	-93	7,051	1,715	25.4	5,042	74.6	6,757	294	
September	858	11.4	2,921	38.7	833	11.0	2,959	39.2	-20	7,551	1,971	27.5	5,201	72.5	7,172	379	
December	712	9.1	2,943	37.7	814	10.4	3,263	41.8	75	7,806	2,134	28.9	5,243	71.1	7,378	429	

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1969 - March	655	7.4	3,146	35.5	669	7.5	4,302	48.5	99	8,869	2,429	28.3	6,148	71.7	8,578	291
June	679	6.7	3,560	35.3	590	5.9	5,278	52.4	-31	10,075	2,775	27.6	7,287	72.4	10,062	14
September	678	6.1	3,687	33.0	634	5.7	6,281	56.3	-114	11,165	3,238	28.5	8,135	71.5	11,373	-208
December	676	5.8	3,853	33.1	860	7.4	6,381	54.9	-138	11,632	3,240	27.9	8,390	72.1	11,630	2
1970 - March	540	4.5	4,062	34.0	790	6.6	6,467	54.2	83	11,942	3,567	29.3	8,602	70.7	12,169	-227
June	479	3.9	4,322	35.0	673	5.4	6,724	54.4	151	12,350	4,154	33.9	8,102	66.1	12,256	94
September	429	3.3	4,588	35.6	740	5.7	7,055	54.7	87	12,898	4,451	34.3	8,541	65.7	12,992	-94
December	623	4.6	4,671	34.1	733	5.4	7,526	55.0	138	13,691	4,915	36.3	8,618	63.7	13,533	158
1971 - March	399	3.1	4,787	36.9	574	4.4	7,127	55.0	78	12,964	4,866	37.9	7,953	62.1	12,819	146
June	523	3.9	4,914	36.9	469	3.5	7,336	55.1	77	13,319	5,220	40.0	7,834	60.0	13,053	266
September	637	4.7	5,209	38.4	479	3.5	7,231	53.3	13	13,568	5,481	41.3	7,806	58.7	13,287	281
December	715	4.9	5,315	36.7	516	3.6	7,669	53.0	254	14,469	6,419	45.3	7,721	54.5	14,162	307
1972 - March	763	5.2	5,368	36.6	562	3.8	7,712	52.5	277	14,681	6,447	44.1	8,175	55.9	14,622	50
June	812	5.5	5,357	36.3	492	3.3	7,992	54.1	113	14,765	7,497	49.3	7,702	50.7	15,199	-434
September	876	5.7	5,380	35.1	519	3.4	8,440	55.0	128	15,343	7,381	46.7	8,438	53.3	15,810	-476
December	973	5.9	5,510	33.2	613	3.7	9,524	57.5	-48	16,572	8,411	49.4	8,607	50.6	17,018	-446
1973 - March	658	3.7	5,780	32.9	500	2.8	10,346	58.8	300	17,584	8,523	46.7	9,743	53.3	18,266	-681
June	485	2.6	6,206	32.9	509	2.7	11,227	59.6	418	18,845	9,606	48.5	10,213	51.5	19,820	-974
September	308	1.5	6,644	32.2	529	2.6	12,790	62.1	334	20,605	10,773	49.1	11,148	50.9	21,922	-1,316
December	537	2.3	7,082	30.4	546	2.3	14,759	63.3	375	23,298	13,323	54.2	11,255	45.8	24,577	-1,279
1974 - March	210	0.8	7,751	30.8	676	2.7	16,364	65.0	182	25,182	14,778	55.1	12,030	44.9	26,808	-1,626
June	225	0.9	9,002	35.0	691	2.7	15,898	61.8	-74	25,743	14,410	50.2	14,322	49.8	28,732	-2,989
September	413	1.6	10,308	39.4	656	2.5	14,481	55.3	329	26,188	13,831	48.3	14,829	51.7	28,660	-2,473
December	526	1.8	11,692	40.8	726	2.5	14,885	52.0	796	28,626	15,284	52.0	14,117	48.0	29,400	-774

Source: Bank of Canada Review (Ottawa: Bank of Canada, monthly), Table 12.

the viability of the inter-bank Euro-currency markets after the collapse of a number of banks in early 1974. The other major shifts on the asset side were the decline in call loans from 19.6 per cent of total foreign-currency assets in December 1964 to 1.8 per cent in December 1974, and the fall in holdings of securities from 11.3 per cent to 2.5 per cent of total foreign-currency assets during the same period. Loans to non-banks declined as a percentage of total foreign-currency assets from early 1966 until early 1974 when an upward trend developed in response to the inter-bank market fears. On the liability side, the proportion of non-bank deposits has declined sharply from 82.1 per cent of total foreign-currency liabilities in December 1964 to 48 per cent in December 1974.

With regard to residency, foreign-currency liabilities with residents and non-residents, as illustrated in Tables 7-7 and 7-8, have held relatively constant in their proportions of total foreign-currency liabilities over the 1964-74 period. There has, however, been considerable volatility in these percentages during the period with liabilities to residents rising to a high of 31 per cent in late 1967 and falling to a low of 7.5 per cent in mid-1972, before rising again to the 20 per cent range in 1974. The composition of foreign-currency assets between residents and non-residents has shifted modestly with assets with residents declining from 12.5 per cent in December 1964 to 8.2 per cent of total foreign-currency liabilities in December 1974, while those with non-residents increased from 87.5 per cent to 91.8 per cent during the ten-year period. During the 1964-74 period, there was consistently a net liability position with residents and a net asset position (except briefly in 1972 and 1973) with non-residents, thereby indicating that foreign-currency funds received from residents were being converted back into Canadian dollars and loaned to residents during particular periods when foreign-currency deposits were attractive to residents and the banks. This was most noticeable in 1974 when the Winnipeg agreement placed upper limits on Canadian-dollar deposit rates. These activities do not involve capital inflows or outflows and are merely transactions among residents involving a foreign-currency deposit, usually a swap deposit which the banks undertake to repay in Canadian dollars at maturity. In fact, it can be seen in Table 7-7 that swap deposits have been a significant portion of foreign currency liabilities with residents.

During the 1964-74 period, Canadian banks have increasingly booked foreign-currency assets and liabilities outside Canada. This is illustrated in Table 7-9. In December 1964, 82.4 per cent of foreign-currency assets and 79.2 per cent of foreign-currency liabilities were booked in Canada but, by December 1974, these percentages had declined to 55.1 per cent and 56.8 per cent respectively. This shift in the place of booking occurred throughout the period but was most noticeable after the imposition of the Canadian voluntary capital outflow guidelines in 1968. This phenomenon also reflects the rapid expansion of overseas activities by the Canadian

banks in the late 1960s and early 1970s and their increased participation in the Euro-currency system.

From the data presented in this chapter, it is apparent that the Canadian chartered banks, as of December 31, 1974, received approximately 50 per cent of their foreign-currency funds from, and hold about 50 per cent of their foreign-currency assets with, other banks. In addition, about 80 per cent of the foreign-currency funds were received from non-residents and about 90 per cent loaned to non-residents. Also, about 55 per cent of both the assets and liabilities were booked in Canada. Finally, foreign-currency assets and liabilities equal about 30 per cent of the total assets and liabilities held by the Canadian chartered banks.

Table 7-7  
**Chartered Bank Foreign-Currency Assets and Liabilities  
 with Residents, Quarterly, 1964-1974**

End of Period	Assets	Percentage of Total	Foreign Currency Loans <sup>1</sup>	Liabilities	Percentage of Total	Swapped Deposits <sup>1</sup>	Other Deposits <sup>1</sup>	Net Position
(Millions of Canadian dollars)								
1964 - March	448	10.9	n.a.	749	18.0	410	n.a.	-301
June	508	11.3	n.a.	918	19.9	453	n.a.	-410
September	559	11.7	n.a.	1,104	22.6	611	n.a.	-545
December	647	12.5	n.a.	1,324	25.4	735	n.a.	-677
1965 - March	750	15.3	n.a.	1,163	23.7	609	n.a.	-413
June	823	17.8	n.a.	1,029	22.1	411	n.a.	-206
September	877	17.5	n.a.	1,165	22.9	440	n.a.	-288
December	921	18.3	n.a.	1,213	23.9	543	n.a.	-292
1966 - March	989	19.9	n.a.	1,396	27.8	745	n.a.	-407
June	993	19.8	n.a.	1,456	28.5	735	n.a.	-463
September	984	19.0	n.a.	1,668	30.3	885	n.a.	-684
December	1,013	18.0	n.a.	1,625	29.2	797	n.a.	-612
1967 - March	922	17.6	n.a.	1,434	27.7	648	n.a.	-442
June	916	16.3	n.a.	1,398	25.5	548	n.a.	-482
September	908	15.4	n.a.	1,535	27.4	626	n.a.	-627
December	901	13.9	n.a.	1,957	31.0	894	n.a.	-1,056
1968 - March	873	13.1	n.a.	1,904	29.5	842	n.a.	-1,031
June	848	12.0	n.a.	1,903	28.2	450	n.a.	-1,055
September	840	11.1	n.a.	2,002	27.9	715	n.a.	-1,162
December	846	10.8	n.a.	2,042	27.7	845	n.a.	-1,196

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1969 - March	789	8.9	n.a.	2,216	25.8	929	n.a.	-1,427
June	1,009	10.0	n.a.	3,016	30.0	1,409	n.a.	-2,007
September	1,017	9.1	860	3,390	29.8	1,650	1,670	-2,373
December	1,060	9.1	915	3,274	28.2	1,592	1,606	-2,214
1970 - March	1,131	9.5	941	3,289	27.0	1,702	1,639	-2,158
June	1,194	9.7	1,039	2,805	22.9	1,344	1,486	-1,611
September	1,319	10.2	1,205	3,252	25.0	1,653	1,506	-1,933
December	1,207	8.8	1,164	3,194	23.6	1,771	1,437	-1,987
1971 - March	1,143	8.8	1,031	2,523	19.7	1,351	1,216	-1,380
June	1,082	8.1	988	2,279	17.5	1,091	1,198	-1,197
September	1,183	8.7	1,070	2,034	15.3	953	1,076	-851
December	1,153	8.0	1,009	1,707	12.0	758	998	-555
1972 - March	1,134	7.7	982	1,497	10.2	495	1,119	-362
June	999	6.8	877	1,280	8.4	243	1,138	-281
September	1,033	6.7	890	1,186	7.5	171	894	-153
December	1,043	6.3	941	1,609	9.5	270	1,206	-565
1973 - March	1,140	6.5	1,017	1,658	9.1	314	1,303	-518
June	1,112	5.9	1,073	2,066	10.4	491	1,559	-954
September	1,103	5.4	1,025	2,764	12.6	774	1,935	-1,661
December	1,220	5.2	1,099	3,008	12.2	880	2,022	-1,788
1974 - March	1,424	5.7	1,069	4,051	15.1	1,275	2,278	-2,627
June	1,887	7.3	1,283	6,024	21.0	2,635	2,882	-4,137
September	2,272	8.7	1,765	6,256	21.8	2,865	3,328	-3,984
December	2,359	8.2	1,945	5,062	17.2	1,787	3,250	-2,704

† Data for Swapped Deposits, Other Deposits and Foreign-Currency Loans to residents are averages of Wednesdays in the last month of the quarter rather than end-of-month figures.

n.a. not available.

Source: *Bank of Canada Review* (Ottawa: Bank of Canada, monthly), Tables 6 and 13.

Table 7-8  
 Chartered Bank Foreign-Currency Assets and Liabilities  
 with Non-Residents, Quarterly, 1964-1974

End of Period	Booked in Canada			Booked Outside Canada			Total <sup>1</sup> with Non-Residents			Net Position
	Assets	Liabilities	Net Position	Assets	Liabilities	Net Position	Assets	Liabilities	% of Total	
(Millions of Canadian dollars)										
1964 - March	2,729	2,354	375	922	1,069	-147	3,651	3,423	89.1	228
June	3,055	2,587	468	944	1,103	-159	3,999	3,690	88.7	309
September	3,231	2,665	566	975	1,119	-144	4,206	3,784	88.3	422
December	3,620	2,802	818	912	1,085	-174	4,532	3,887	87.5	644
1965 - March	3,194	2,591	603	972	1,149	-178	4,166	3,740	84.7	425
June	2,793	2,438	355	1,010	1,192	-181	3,803	3,630	82.2	174
September	3,064	2,686	378	1,064	1,237	-173	4,128	3,923	82.5	205
December	2,962	2,571	391	1,154	1,299	-145	4,116	3,870	81.7	246
1966 - March	2,735	2,217	518	1,243	1,409	-165	3,978	3,626	80.0	353
June	2,611	2,119	492	1,420	1,528	-108	4,031	3,647	80.2	384
September	2,739	1,975	764	1,444	1,548	-104	4,183	3,523	81.0	661
December	3,194	2,334	860	1,436	1,609	-173	4,630	3,943	82.0	687
1967 - March	2,828	2,223	605	1,430	1,529	-99	4,258	3,734	81.1	506
June	3,105	2,436	669	1,595	1,657	-62	4,700	4,093	83.7	607
September	3,236	2,342	894	1,749	1,726	23	4,985	4,068	84.6	917
December	3,789	2,561	1,228	1,780	1,791	-10	5,569	4,352	86.1	1,218
1968 - March	3,699	2,514	1,185	2,088	2,043	45	5,787	4,557	86.9	1,230
June	3,940	2,635	1,305	2,263	2,219	44	6,203	4,854	86.0	1,349
September	4,252	2,766	1,486	2,459	2,404	55	6,711	5,170	88.9	1,541
December	4,548	2,945	1,603	2,412	2,391	22	6,960	5,336	89.2	1,625



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1969 - March	5,277	3,605	1,672	2,803	2,757	46	8,080	91.1	6,362	74.2	1,718
June	5,991	4,006	1,985	3,075	3,040	36	9,066	90.0	7,046	70.0	2,021
September	6,482	4,381	2,101	3,666	3,602	64	10,148	90.9	7,983	70.2	2,165
December	6,752	4,646	2,106	3,820	3,710	110	10,572	90.9	8,356	71.8	2,216
1970 - March	6,680	4,792	1,888	4,131	4,088	43	10,811	90.5	8,880	73.0	1,931
June	6,810	5,161	1,649	4,346	4,290	56	11,156	90.3	9,451	77.1	1,705
September	7,036	5,234	1,802	4,543	4,506	37	11,579	89.8	9,740	75.0	1,839
December	7,685	5,563	2,122	4,799	4,776	23	12,484	91.2	10,339	76.4	2,145
1971 - March	6,809	5,384	1,425	5,012	4,912	101	11,821	91.2	10,296	80.3	1,526
June	6,910	5,571	1,339	5,327	5,203	124	12,237	91.9	10,774	82.5	1,463
September	6,838	5,841	997	5,547	5,412	135	12,385	91.3	11,253	84.7	1,132
December	7,008	6,296	712	6,308	6,158	150	13,316	92.0	12,454	87.9	862
1972 - March	7,079	6,824	255	6,469	6,300	169	13,548	92.3	13,124	89.8	424
June	7,384	7,637	-254	6,383	6,282	101	13,767	93.2	13,919	91.6	-153
September	7,573	7,968	-395	6,737	6,665	72	14,310	93.3	14,633	92.6	-323
December	8,167	8,098	69	7,360	7,311	50	15,527	93.7	15,409	90.5	119
1972 - March	8,105	8,357	-252	8,340	8,251	89	16,445	93.5	16,608	90.9	-163
June	9,224	9,308	-84	8,509	8,447	64	17,733	94.1	17,755	89.6	-20
September	10,324	10,094	230	9,178	9,065	115	19,502	94.6	19,159	87.4	345
December	11,897	11,488	408	10,182	10,081	101	22,079	94.8	21,569	87.8	509
1974 - March	12,082	11,318	765	11,676	11,440	236	23,758	94.3	22,758	84.9	1,000
June	12,155	11,063	1,092	11,702	11,645	57	23,857	92.7	22,708	79.0	1,149
September	12,382	10,989	1,392	11,535	11,415	120	23,917	91.3	22,404	78.1	1,513
December	13,411	11,623	1,788	12,856	12,715	141	26,267	91.8	24,338	82.8	1,929

1 Total positions with non-residents calculated on the assumption that all foreign-currency assets and liabilities booked outside Canada are with non-residents. Source: *Bank of Canada Review* (Ottawa: Bank of Canada, monthly), Tables 12 and 13.

Table 7-9  
**Total Chartered Bank Foreign-Currency Assets and Liabilities, by Place of Booking, Quarterly, 1964-1974**

End of Period	Total			Booked in Canada				Booked Outside Canada				Net Position
	Assets	Liabilities	Net Position	Assets	% of Total	Liabilities	% of Total	Assets	% of Total	Liabilities	% of Total	
1964 - March	4,099	4,172	-73	3,177	77.5	3,103	74.4	922	22.5	1,069	25.6	-147
June	4,507	4,608	-101	3,563	79.1	3,505	76.1	944	20.9	1,103	23.9	-159
September	4,765	4,888	-123	3,790	79.5	3,769	77.1	975	20.5	1,119	22.9	-144
December	5,179	5,211	-33	4,267	82.4	4,126	79.2	912	17.6	1,085	20.8	-174
1965 - March	4,916	4,903	12	3,944	80.2	3,754	76.6	972	19.8	1,149	23.4	-178
June	4,626	4,659	-32	3,616	78.2	3,467	74.4	1,010	21.8	1,192	25.6	-181
September	5,005	5,088	-83	3,941	78.7	3,851	75.7	1,064	21.3	1,237	24.3	-173
December	5,037	5,083	-46	3,883	77.1	3,784	74.4	1,154	22.9	1,299	25.6	-145
1966 - March	4,967	5,022	-54	3,724	75.0	3,613	71.9	1,243	25.0	1,409	28.1	-165
June	5,024	5,103	-79	3,604	71.7	3,575	70.1	1,420	28.3	1,528	29.9	-108
September	5,167	5,191	-24	3,723	72.1	3,643	66.1	1,444	27.9	1,548	33.9	-104
December	5,643	5,568	75	4,207	74.6	3,959	71.1	1,436	25.4	1,609	28.9	-173
1967 - March	5,250	5,186	65	3,820	72.8	3,657	70.8	1,430	27.2	1,529	29.2	-99
June	5,616	5,491	125	4,021	71.6	3,834	69.8	1,595	28.4	1,657	30.2	-62
September	5,893	5,603	290	4,144	70.3	3,877	69.2	1,749	29.7	1,726	30.8	23
December	6,470	6,309	162	4,690	72.5	4,518	71.6	1,780	27.5	1,791	28.4	-10
1968 - March	6,660	6,461	199	4,572	68.6	4,418	68.4	2,088	31.4	2,043	31.6	45
June	7,051	6,757	294	4,788	67.9	4,538	67.2	2,263	32.1	2,219	32.8	44
September	7,551	7,172	379	5,092	67.4	4,768	66.5	2,459	32.6	2,404	33.5	55
December	7,806	7,378	429	5,394	69.1	4,987	67.6	2,412	30.9	2,391	32.4	22

(Millions of Canadian dollars)

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1969 - March	8,869	8,578	291	6,066	68.4	5,821	67.9	245	2,803	31.6	2,757	32.1	46
June	10,075	10,062	14	7,000	69.5	7,022	69.8	-22	3,075	30.5	3,040	30.2	36
September	11,165	11,373	-208	7,499	67.2	7,771	68.3	-272	3,666	32.8	3,602	31.7	64
December	11,632	11,630	2	7,812	67.2	7,920	68.1	-108	3,820	32.8	3,710	31.9	110
1970 - March	11,942	12,169	-227	7,811	65.4	8,081	66.4	-270	4,131	34.6	4,088	33.6	43
June	12,350	12,256	94	8,004	64.8	7,966	65.0	38	4,346	35.2	4,290	35.0	56
September	12,898	12,992	-94	8,355	64.8	8,486	65.3	-131	4,543	35.2	4,506	34.7	37
December	13,691	13,533	158	8,892	64.9	8,757	64.7	135	4,799	35.1	4,776	35.3	23
1971 - March	12,964	12,819	146	7,952	61.3	7,907	61.7	45	5,012	38.7	4,912	38.3	101
June	13,319	13,053	266	7,992	60.0	7,850	60.1	142	5,327	40.0	5,203	39.9	124
September	13,568	13,287	281	8,021	59.1	7,875	59.3	146	5,547	40.9	5,412	40.7	135
December	14,469	14,162	307	8,161	56.4	8,004	56.5	158	6,308	43.6	6,158	43.5	150
1972 - March	14,681	14,622	60	8,212	55.9	8,322	56.9	-109	6,469	44.1	6,300	43.1	169
June	14,765	15,199	-434	8,382	56.8	8,917	58.7	-535	6,383	43.2	6,282	41.3	101
September	15,343	15,819	-476	8,606	56.1	9,154	57.9	-549	6,737	43.9	6,665	42.1	72
December	16,572	17,018	-446	9,212	55.6	9,707	57.0	-496	7,360	44.4	7,311	43.0	50
1973 - March	17,584	18,266	-681	9,244	52.5	10,015	54.8	-770	8,340	47.5	8,251	45.2	89
June	18,845	19,820	-974	10,336	54.8	11,373	57.4	-1,038	8,509	45.2	8,447	42.6	64
September	20,605	21,922	-1,316	11,427	55.5	12,857	58.6	1,431	9,178	44.5	9,065	41.4	115
December	23,298	24,577	-1,279	13,116	56.3	14,496	59.0	-1,380	10,081	43.7	10,081	41.0	101
1974 - March	25,182	26,808	-1,626	13,506	53.6	15,368	57.3	-1,862	11,676	46.4	11,440	42.7	236
June	25,743	28,732	-2,989	14,041	54.5	17,087	59.5	-3,045	11,702	45.5	11,645	40.5	57
September	26,188	28,660	-2,473	14,653	56.0	17,245	60.2	-2,592	11,535	44.0	11,415	39.8	120
December	28,626	29,400	-774	15,770	55.1	16,685	56.8	-916	12,856	44.9	12,715	43.2	141

Source: Bank of Canada Review (Ottawa: Bank of Canada, monthly), Tables 12 and 13.

## 8 International Operations of Canadian Banks

Canadian chartered banks have been involved in international operations for over a hundred years through both the acceptance of deposits and extension of loans denominated in foreign currencies, primarily in U.S. dollars. Until the past decade, however, these were mainly confined to activities in New York and London and to their extensive domestic banking operations in the Caribbean and South America. In addition, some activity also took place through their Canadian head-offices and branches. In New York, the chartered banks operated agencies (the first of which was established in 1855) that accepted deposits from U.S. residents and then re-lent funds to U.S. residents (mainly in the broker call-loan market) after passing them through the head-office books in Canada. As a result, these operations were little more than an appendage to the U.S. money market. Other international operations were mainly concerned with financing international trade with Canada's major trading partners — the United Kingdom and the United States.

During the past decade, the international operations of Canadian banks, as illustrated in the preceding chapter, have changed and expanded dramatically. The geographic scope of their international activities has spread to virtually all areas of the world and is no longer concentrated in New York, London and the Caribbean, even though these remain as important centres of Canadian bank activity. The types of operation have also expanded from branches and agencies to include representative offices, foreign affiliates and subsidiaries, and participation in international consortial banks. In effect, those developments reflected the transformation of Canadian banks from primarily domestic institutions to large and diversified multi-national operations competing with banks of other countries on a world-wide scale.

One factor that led to this rapid expansion of international operations on the part of Canadian banks was undoubtedly the enormous growth of the Euro-currency markets during the past decade. The Euro-currency market — a free market for banking operations on a world-wide scale — has in fact been a visible manifestation of the multi-national expansion of banking. The trend towards multi-national banking operations was

already arising because of the expansion of the multi-national corporations and the rapid growth of international trade; but the Euro-currency market provided a truly international market structure for these activities that was free of the domestic restrictions and controls encountered by banks in their own financial systems. The Canadian chartered banks, because of their size and stature in the international banking community, increasingly undertook Euro-currency operations during the past decade with most of their activity centred in the inter-bank sector of the Euro-currency system. They also expanded their lending activities with multi-national corporations (both Canadian and foreign) and their financing of Canadian foreign trade. As well, they entered a number of domestic financial markets in other countries through foreign branches, subsidiaries, and affiliates.

#### **Benefits and Risks Associated with International Banking Operations**

The benefits derived from international banking operations are difficult to quantify statistically and their assessment must depend upon more generalized considerations. The obvious benefit associated with these operations is the export earnings generated by the banks in providing banking services to foreigners. These take the form of profits earned through the foreign-currency operations of their own branches and subsidiaries operating in the international markets and their share of profits and dividends from affiliates and consortia operating abroad. In the case of affiliate and consortial operations, the direct balance-of-payments impact depends upon the extent to which earnings are repatriated through dividend payments. It is very difficult, however, to obtain an accurate measure of this benefit, particularly in the case of their share of unrepatriated profits in foreign affiliates. A second benefit associated with these export earnings is the higher domestic tax revenues generated by these additional bank earnings associated with international operations. This benefit, however, has been limited by the foreign tax credits provided as an offset for the foreign taxes paid by banks on profits generated through foreign profit centres. To the extent that the establishment of foreign profit centres has been encouraged by withholding tax laws and foreign tax credit systems, the tax benefits from many international operations accrue mainly to foreign governments rather than domestic governments.

Another type of benefit, which is less measurable, is the role played by the banks in financing the international operations and trade activities of residents, particularly corporations. It is often argued that residents of a country would not receive a high priority with banks of other countries in financing their international activities and that the domestic banks provide

a continuous banking link for residents when they operate internationally. In other words, it is claimed that domestic banks have a high priority of giving service that they would not receive elsewhere to resident customers abroad — whether they be domestically owned corporations or domestic subsidiaries of foreign corporations. This is probably true of smaller domestic corporations that do not normally have access to foreign banks but, for major domestic corporations or foreign subsidiaries, this would seem to be a less important factor. It seems that they would choose their international financing from those banks that could give the best service and lending terms. Banks also feel that they must be in a position to offer banking services on a world-wide scale to their domestic multi-national customers, otherwise these customers would use foreign banks more extensively in financing their domestic operations. Finally, the banks claim that this extensive international network is necessary in order to promote activities by residents and domestic exports in the major markets of the world.

The risks involved in international banking operations are normally greater than those associated with domestic activities because of the difficulty in assessing credit standings, the lack of information about borrowers and lenders, the highly volatile nature of international funds, the foreign exchange transactions involved, the large size of the transactions, and the administrative problems associated with world-wide operations. These risks can be effectively broken down into four categories: credit, roll-over, foreign exchange, and mismanagement.

Credit risks exist in all types of banking activity, but the difficulties involved in obtaining credit information about borrowers and lenders and the long chain of transactions that are often involved in international lending operations make international credit risks somewhat more difficult to assess than domestic credit risks. In effect, it is difficult for a bank to determine the security behind its loans to international borrowers, whether banks or non-banks. Many banks have attempted to minimize this risk by operating extensively in the inter-bank sector of the Euro-currency markets. In the past, these have been relatively risk-free types of operations, but with the influx of smaller banks into the Euro-currency system and the recent failures of a number of banks, this inter-bank market has not proven to be as risk-free as expected. In the inter-bank market, the lender has no way of determining the eventual destination or use of the funds by a non-bank borrower and must rely on the credit standing of the bank to which the funds are lent initially as protection against default. This means that the borrowing bank must be considered strong enough to meet its obligations even if problems develop further along the chain of lending and borrowing transactions. Also, the ability of the borrowing bank to obtain foreign currency to meet its obligations is an important factor in determining the risk attached to inter-bank lending. It was on the basis of

these factors that the banks in the Euro-currency system were allocated among the various interest rate tiers that developed over the past couple of years. On the other hand, lending to non-banks directly allows the banks a better opportunity to assess the ultimate security behind its loan if it is in a position to obtain adequate credit information about the borrower, particularly with regard to the extent of borrowing from other banks. Lending to non-banks that are well known to the bank could be less risky than lending to small Euro-currency banks, but it is still probably more risky than lending to a major world bank in the inter-bank market. In general though, the margins on non-bank lending are considerably wider to reflect this greater risk.

Roll-over risks are associated with banking operations in which a bank borrows short-term funds and then re-lends them on a long-term basis. This gives rise to two types of risks: a margin squeeze if short-term interest rates rise before the maturity of the loan; and a similar margin squeeze from a higher risk premium specific to the institution resulting from a changed assessment of the bank's portfolio by lenders. The first margin risk has been reduced by the wide-spread use of floating interest rates (tied to the inter-bank Euro-currency rates) on the long-term loans. As long as the inter-bank Euro-currency market determined a single inter-bank rate, this system worked relatively well. But with the development of a multi-tiered, inter-bank market in recent years, many banks could not renew their deposits at the inter-bank rate used in the calculation of a new floating long-term rate, particularly in the case of consortial loans where the rate is set by the major banks in the group. The second type of margin squeeze associated with deposit roll overs is also a threat during a period of funds volatility, as depositors may by-pass some banks in favour of others based on their assessment of the credit risks attached to their deposits with each bank. As a result, by-passed banks would be forced to a higher tier in the market in order to obtain their required deposits from other lenders. The degree of this risk depends on the willingness and ability of the major countries to stand behind the Euro-currency markets and of the major banks to lend to the smaller banks in order to tide them over shortfalls in their deposit roll overs.

Foreign exchange risks in international banking operations can arise in two ways: by a mismatching of spot foreign-currency assets and liabilities in terms of currencies; and by the adoption of speculative forward exchange positions by a bank on its own account. If a bank does not match its assets and liabilities closely in terms of currencies, it is exposed to the risk of exchange rate changes that alter the value of their assets relative to the value of their liabilities. These exchange rate changes could reduce (or increase) the profit on borrowing and lending operations below (or above) the net interest margin earned on these operations. By adopting an open forward exchange position on its own account, a bank is undertaking an

obvious speculative operation in an effort to make speculative gains as a result of exchange rate changes. Losses on these latter types of operations have in fact been the major source of international banking problems over the past year as exchange rates became volatile and unpredictable under the floating exchange rate system and highly volatile international monetary conditions. Many of these activities, according to the banks involved, were unauthorized transactions undertaken by employees of the banks; this indicates the difficulties involved in controlling these operations either internally within individual banks or externally by national banking regulators.

Mismanagement risks arise if there is either insufficient internal supervision within the banks or insufficient external surveillance by the regulators, or both. The management problems are certainly greater in the case of world-wide, multi-national operations than in the case of purely domestic operations. Some decentralization of decision making is necessary but adequate head-office supervision is also required and it is this combination that is difficult to achieve in a fast-changing international environment. In order to minimize this risk, a bank must ensure strict enforcement of head-office policies, have highly trained personnel in the overseas operations, operate an extensive reporting and authorization system, and undertake adequate auditing and monitoring activities by head-office personnel. In the recent bank failures and losses by major banks, mismanagement by officials of the banks has been an important ingredient and this has brought to the attention of both bankers and regulators the need for adequate supervision of international banking operations. In order for the regulators to play a significant role, however, an extensive and up-to-date information base must be available to them if they are to keep pace with rapidly changing international banking operations.

### **International Activities of Canadian Banks**

The foreign-currency operations of the Canadian chartered banks can be broken down into three basic categories: the foreign-currency operations in Canada with residents of Canada; financial operations in the domestic markets of other countries; and international banking activities conducted across national boundaries on a world-wide basis. The extent of foreign-currency operations with residents depends on the relative attractiveness to residents of foreign-currency deposits and loans compared to Canadian-dollar deposits and loans. Over and above market factors, the attractiveness may also be influenced by distortions in the Canadian financial system, such as the Winnipeg agreement, that make certain types of foreign-currency operations more attractive to residents and Canadian banks than otherwise would have been the case. In addition, swap deposits with residents are attractive to Canadian banks since they are exempt from



cash reserve requirements and allow greater interest rate discrimination between customers. The degree to which Canadian banks undertake activities within domestic financial markets in other countries depends on their freedom to enter those markets and their ability to compete in them under the regulatory structure imposed by those countries. The growth of their international banking activities depends upon their ability to compete on a world-wide basis with the other major banks of the world. This, in turn, is a function of their ability to attract foreign-currency deposits in the international market, to find outlets for these funds, and to service their multi-national customers, both foreign and Canadian.

The foreign-currency operations with residents are conducted almost entirely through the Canadian branches of the chartered banks with, apparently, only minimal activity with residents occurring through their operations in other countries.<sup>1</sup> In order to undertake the other two aspects of their foreign-currency operations, the Canadian banks have established extensive operations abroad in the form of agencies, branches, representative offices, subsidiaries, affiliates, and consortia. The agency operations are confined to the United States, where each of the major Canadian banks has an agency located in both New York and San Francisco. These agencies cannot accept and book deposits on their own account, but instead book deposits through the head offices of the banks which in turn lend the funds back to the agency for on-lending, usually to U.S. residents. The foreign branches of Canadian banks are much like domestic branches in terms of their relationship to head office and are able to book both deposits and loans on their own account. These branches vary from purely domestic operations in the host country (e.g. in the Caribbean region) to purely international operations with residents or non-residents of the country in which they are located. In many cases, depending upon the regulatory framework of the country, a combined domestic and international business is conducted. Representative offices, on the other hand, are not really banking offices at all but instead are information-gathering and dissemination units through which business for other operations of the bank is attracted. Normally, these are located in countries or financial centres where a direct Canadian banking operation is not permitted due to regulatory restraints.

Subsidiaries are foreign financial corporations in which a Canadian bank owns more than 50 per cent of the outstanding voting shares, with many being wholly owned. Many of these subsidiaries are concerned with providing banking and trust services in the Caribbean (through extensive branch operations of their own), the United States, and the United

<sup>1</sup> It is impossible to tell from the aggregate data the extent to which business booked outside Canada by the banks involves Canadian residents either on the lending or borrowing side, since there is no residency breakdown available for the foreign-currency assets and liabilities of the chartered banks booked outside Canada.

Kingdom. Others have been established as domestic and/or international banking operations in Europe, the Middle East, and the Far East, with taxation considerations often being an important reason for their establishment. In many cases, the establishment of a subsidiary also allows the banks to undertake activities in other countries that they are not allowed to in Canada, such as the provision of trust services. Affiliates and consortia are foreign financial corporations in which a Canadian bank holds a minority interest along with another shareholder or group of shareholders. For the purpose of this study, the term affiliate is restricted to those situations in which the Canadian banks share ownership with primarily local investors and the institution conducts a relatively localized business within the country or region in which it is located. A consortium, on the other hand, is an institution in which ownership is shared by a group of major world banks (including a Canadian bank) and which conducts business on a broad international scale through its offices in major financial centres.

The Canadian banks have in fact participated in two types of international consortial operations: through their ownership in consortial banks established with other major banks to undertake world-wide deposit collection and lending operations; and through their participation in temporary consortial arrangements pertaining to particularly large or risky loan operations in partnership with other major world banks. The major purpose of these consortial operations is to allow the undertaking of activities in partnership with other banks that could not be conducted, either because of their size or nature, by an individual bank operating alone. In the case of the consortial banks, operations often involve merchant banking, underwriting, leasing, and other activities that individual banks would find difficult to do on their own. The temporary consortia are mainly concerned with the spreading of risk attached to particular types of large lending operations, most notably to private or public entities in the developing nations of the world. By forming a consortium, no single bank has a very large risk exposure in any particular lending transaction and, by entering a number of these consortial groups, a bank can diversify its risks across a large number of lending operations involving different partners and different borrowers. The consortial banks also offer risk-sharing and diversification advantages but this is not their only reason for existence as is the case in the formation of consortial groups. Often, consortial group loans are of a long-term nature and carry with them the need to diversify the maturity mismatching risk as well as the credit risk involved in this type of lending. All the major Canadian banks have ownership in one or more international consortial banks and have participated in numerous consortial groups. In addition, the smaller Canadian banks have used consortial groups as a vehicle to expand their international operations and as an alternative to establishing extensive international operations abroad.

All of the major Canadian chartered banks has adopted a somewhat different approach in establishing their international operations as illustrated in Tables 8-1 to 8-5. Each of these banks have two agencies in the United States and a full service trust and banking subsidiary in New York. In addition, the Toronto Dominion Bank, the Canadian Imperial Bank of Commerce, and the Bank of Montreal have wholly owned banking subsidiaries in California, through which they conduct full domestic banking services within that state. All of them, except Toronto Dominion, have extensive branch and subsidiary banking operations in the Caribbean, with The Royal Bank and The Bank of Nova Scotia being particularly important in this area of activity. These operations were among the first and most traditional international activities conducted by Canadian banks abroad and still provide a major part of the banking services available in the Caribbean countries. It is in the area of international operations and domestic operations in other major countries that the greatest differences develop between the international operating structures of the major Canadian banks. The Royal Bank of Canada, the bank with the largest international operations, has used subsidiaries, affiliates and consortial operations to a much greater extent than branches as their major vehicles for international activity; whereas The Bank of Nova Scotia has expanded internationally, primarily through branches. The Royal Bank has ownership participation in three major consortial banks; interests in a number of affiliates in Europe, the Far East, Latin America, and Australia; and wholly owned subsidiaries in the Far and Middle East. The Bank of Nova Scotia, on the other hand, participates in only one consortial bank; has very few affiliates and subsidiaries in Europe, the Far East, and the Middle East; but does have an extensive branch network throughout these regions, especially in Europe. The Toronto Dominion Bank has largely taken the affiliate and consortial route with particularly large holdings in two major consortial banks. Canadian Imperial Bank of Commerce has taken a relatively balanced approach and has used branches, subsidiaries, affiliates, and consortia about equally in their international operations. Bank of Montreal has few branches internationally but has used representative offices to a much greater extent than the other major banks, as well as using subsidiaries, affiliates, and consortia to a modest degree.

The time pattern of these structural changes and developments in the international operations of the Canadian banks is also of significance in explaining the growth and composition of their foreign-currency assets and liabilities. Traditionally, the international operations of the Canadian banks were concentrated in their agency operations in the United States, their domestic Caribbean banking and trust operations, and their subsidiary operations in the United Kingdom. These resulted in a relatively modest level and growth of foreign-currency assets and liabilities up until the late 1960s. At that point, the Canadian banks began a major expansion

Table 8-1  
The Royal Bank of Canada — International Operations,  
as of December 1974

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
1 New York	<b>Europe</b>	<b>United States</b>	<b>United States</b>	<b>Europe</b>	<b>Europe</b>
2 San Francisco	1 London — 2 branches	1 Chicago 2 Dallas 3 Los Angeles 4 New York	1 Royal Bank of Canada Trust Co. — New York — 100% (Full Service)	1 Adela Investment Co. S.A. — Luxembourg — 1.7%	1 Libra Bank — London — 9% (1972)
	<b>Caribbean</b>		<b>Caribbean</b>	2 Banque Belge pour l'Industrie S.A. — 25%	<i>Other Participants</i>
	1 Antigua		1 Royal Bank of Jamaica Ltd. — Kingston — 75%	3 Bank Hans Bugarot — Brussels (Full Service)	(a) Chase Manhattan Bank — U.S.A.
	2 Bahamas	<b>Europe</b>	2 Royal Bank Trust Co. (Barbados) Ltd. — 100%	3 Brockselschen A.G. — Dusseldorf	(b) National Westminster Bank — U.K.
	3 Barbados	1 Paris			(c) Credito Italiano — Italy
	4 Cayman Islands	2 Frankfurt			(d) Mitsubishi Bank — Japan
	5 Dominica	3 London			(e) Westdeutsche Lan- desbank — Germany
	6 Dominican Republic	4 Amsterdam			(f) Swiss Bank Corp. — Switzerland
	7 Grenada	<b>Far East</b>	3 Royal Bank Trust Co. (Cayman) Ltd. — 100%		(g) Banco Espirito Santo e Commercial de Lisboa — Portugal
	8 Guadeloupe	1 Hong Kong	4 Royal Bank Trust Co. (Guyana) Ltd. — 100%		<i>Principal Business</i>
	9 Guayana	2 Tokyo	5 Royal Bank Trust Co. (Jamaica) Ltd. — 75%		(a) Financing in Latin America
	10 Haiti	3 Sydney	6 Royal Bank Trust Co. (Trinidad) Ltd. — 81.6%		
	11 Jamaica		7 Royal Bank Trust Co. (West Indies) Ltd. — Nassau — 100%		
	12 Martinique		8 Royal Bank of Trinidad and Tobago Ltd. — 81.6%		
	13 Montserrat				
	14 Puerto Rico				
	15 St. Croix				
	16 St. Kitts				
	17 St. Lucia				
	18 St. Vincent				

Table 8-1 (continued)

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
<b>Latin America</b>	1 Argentina — 3 2 Belize — 5 3 Brazil — 4 4 Columbia — 6		9 West Indies Trust Corp. Ltd. — Nassau — 100% 10 RBC Investments Ltd. — 100% — Nassau 11 Royal Bank of Canada International Ltd. — Nassau	4 Bishops International Bank — Nassau — 68% (1973) <b>Far East</b> 1 Private Investment Co. for Asia S.A. — Tokyo 0.8% 2 Industrial Resources Sdn. Bhd. — 30% — Kuala-Lumpur (Finance Company) 3 Inchroy Credit Corp. — Brunei (Finance Company) 4 Traders Royal Bank — Manila — 30% (Full Service) 5 Inchroy Credit Corp. — Hong Kong — 30% 6 Cathay Trust Company Ltd. — Bangkok	(b) Short-, medium- and long-term Euro-currency loans (c) Underwriting debt and equity securities (d) Syndicating of major loans (e) Short-term Euro-currency deposits (f) Financial counselling
			<b>Europe</b>	1 Royal Bank of Canada (France) — Paris — 100% (Full Service) 2 RBC Finance B.V. — Amsterdam — 100% (Off-shore lending) (1973) 3 Royal Bank of Canada Trust Corp. Ltd. — London — 100% 4 Royal Bank of Canada (Channel Islands) Ltd. — Guernsey — 100%	2 Orion Group — London (1970) Orion Bank Ltd. — 20% Orion Multinational Services Ltd. — 16.67% Orion Term Bank Ltd. — 20% Orion Lease Holding Ltd. — 16.67% Orion Pacific Ltd. — 15%
			<b>Far East</b>	1 Royeast Investments Ltd. — Hong Kong — 100% (Investment Company) (1973)	<b>Other Participants</b> (a) Chase Manhattan Overseas Banking Corp. — U.S.A. (b) Credito Italiano — Italy
			<b>Latin America</b>	1 Banco International S.A. — Sao Paulo — 50% (Full Service) 2 Banco Royal Venezolano C.A. — 20% — Caracas (Full Service)	

**Middle East**

- 1 Royal Bank of Canada (Middle East) S.A.L. — Beirut — 100% (Full Service) (1970)
- 2 Roy mideast Investments Limited — Beirut

**Australia**

- 1 IMFC Discounts — Adelaide — 25.1% (Money Market Activities)
- 2 Investment & Merchant Finance Corp. Ltd. — (Merchant Banking)
- 3 Royanst Limited — Sydney

- (c) Mitsubishi Bank — Japan
- (d) National Westminster Bank — U.K.
- (e) Westdeutsche Landesbank — Germany

*Principal business*

- (a) International investment and issue bank
- (b) Medium-term finance

**Africa**

- 1 Equator Bank Limited

- 3 Interunion — Banque — Paris — 9.7%

*Other Participants*

- (a) Banque Belge pour l'Industrie — 4.82% — Belgium
- (b) Banque Commerciale de Bale — 2.63% — Switzerland
- (c) Banque de Bruxelles — 9.70% — Belgium
- (d) Banque de l'Union Européenne Industrielle et Financière — 19.5% — France
- (e) Bayerische Vereinsbank — 9.70% — Germany
- (f) La Centrale Finanziaria Generale — 4.73% — Italy

Table 8-1 (concluded)

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
					(g) Hambros Bank — 4.84% — U.K.
					(h) Marine Midland Bank — 19.4% — U.S.A.
					(i) Ste. Financière Desmarais pour l'Industrie et le Commerce — 9.7% — France
					(j) Tokai Bank — Japan — 5.6%
					<i>Principal Business</i>
					(a) Euro-currency short-, medium- and long-term lending
					(b) Foreign exchange and trading in deposits
					(c) Euro-bond issue

Table 8-2  
The Bank of Nova Scotia — International Operations,  
as of December 1974

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
1 New York	<b>Caribbean</b>	<b>United States</b>	<b>United States</b>	<b>Europe</b>	<b>Europe</b>
2 San Francisco	1 Antigua	1 Chicago	1 Bank of Nova Scotia	1 Adela Investment Co.	1 United International
	2 Bahamas	2 Houston	Trust Co. — 100% —	S.A. — Luxembourg	Bank Ltd. — London
	3 Barbados	3 Los Angeles	New York (Full Service)	2 Eurofinance — Paris	(1970) — 10%
	4 British Honduras	4 New York			
	5 Cayman Islands		<b>Caribbean</b>	<b>Caribbean</b>	<i>Other Participants</i>
	6 Christiansted	<b>Far East</b>	1 Bank of Nova Scotia	1 Bermuda National Bank	(a) Banco de Bilbao —
	7 Dominican Republic	1 Jakarta	International Ltd. —	— Hamilton (1969)	Spain
	8 Haiti	2 Hong Kong	100% — Nassau	(Full Service) — 40%	(b) Bank Mees and
	9 Grenada	3 Tokyo	2 Bank of Nova Scotia	Bermuda National	Hope — Netherlands
	10 Guyana	<b>Latin America</b>	Jamaica Ltd. — 70% —	Executor & Trustee	(c) Banque Française du
	11 Puerto Rico	1 Buenos Aires	Kingston	Co. Ltd. — Hamilton	Commerce Extérieur
	12 St. Croix	2 Mexico City	3 Bank of Nova Scotia	3 Maduro and Curiel's	— France
	13 St. Lucia	3 Rio de Janeiro	International	Bank N.V. — Nether-	(d) Bayerische Hypo-
	14 Trinidad		(Curacao) N.V. —	lands — 30% — Antilles	theken und
	15 Virgin Islands		100% — Netherlands	(Full Service) (1970)	Wechselbank —
	(Brit)	<b>Europe</b>	Antilles		Germany
	16 Virgin Islands	1 Oslo	4 Bank of Nova Scotia	<b>Far East</b>	(e) Credit du Nord —
	(USA)		Trinidad & Tobago —	1 Private Investment	France
	17 St. Martins		70% — Trinidad	Company for Asia —	(f) Crocker National
			5 Bank of Nova Scotia	Tokyo	Bank — U.S.A.
			Trust Company	2 P.T. Private Develop-	(g) Privatbanken i
			(Bahamas) Ltd. —	ment Fin. Co. of	Kjobenhavn —
			60% — Nassau	Indonesia — Jakarta	Denmark





- 3 Bank of Nova Scotia  
Int. (U.K.) Ltd. —  
100% — London
- 4 Bank of Nova Scotia  
Trust Co. Channel  
Islands Ltd. — 100% —  
Jersey
- 5 Bank of Nova Scotia  
Trust Co. (U.K.) Ltd. —  
100% — London

**Far East**

- 1 BNS International (HK)  
Ltd. — 100% —  
Hong Kong (1973)
-

Table 8-3  
Toronto Dominion Bank — International Operations,  
as of December 1974

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
1 New York 2 San Francisco	<b>Europe</b> 1 London — 2 2 Frankfurt	<b>United States</b> 1 Chicago 2 Houston 3 Los Angeles 4 New York	<b>United States</b> 1 Toronto Dominion Bank of California — San Francisco — 100% (Full Service) (1971) 2 Toronto Dominion Bank Trust Co. — New York — 100% (Full Service)	<b>United States</b> 1 Environtech Inc.  <b>Europe</b> 1 Arbutnot Latham Holdings Ltd. — London — 5 + % (1972) 2 Allied Irish Investment Bank — Dublin — 15%	<b>Europe</b> 1 Midland and International Banks Ltd. — London — 26% (1963)  <i>Other Participants</i> (a) Midland Bank — U.K. — 45% (b) Commercial Bank of Australia — 10% (c) The Standard Bank — U.K. — 19%
	<b>Middle East</b> 1 Beirut	<b>Far East</b> 1 Djakarta 2 Hong Kong 3 Tokyo 4 Bangkok		<b>Far East</b> 1 Toronto Dominion Bank Investments (U.K.) Ltd. — London — 100% (1972)	
	<b>Far East</b> 1 Singapore	<b>Latin America</b> 1 Mexico City 2 Sao Paulo		Consolidated Investments Ltd. — Hong Kong — 40% (1969) (a) Hang Lung Bank Ltd. — Hong Kong (b) Hong Kong Industrial and Commercial Bank Ltd. — Hong Kong (c) Overseas Trust Bank Ltd. — Hong Kong	
					<i>Principal Business</i> (a) Medium-term lending (b) Medium-term Euro-currency market (c) Issues negotiable certificates in dollars and sterling
					2 World Banking Corp. Ltd. — Luxembourg — 31.65%

- 2 United Malayan Banking Corp. Ltd. — Kuala Lumpur — 10% (1971)
  - 3 International Trust and Finance Company — Bangkok
  - Middle East**
    - 1 Toronto Dominion Bank (Middle East) S.A.L. — Beirut (Full Service)
- Other Participants*
- (a) Bank of America — U.S.A.
  - (b) Banque Lambert — Belgium
  - (c) Banque Nationale de Paris — France
  - (d) Commerzbank A.G. — Germany
  - (e) F. Van Lanschot Bankers — Netherlands
  - (f) Skandinaviska Enskilda Banken — Sweden
- Principal Business*
- (a) Corporate deposits in dollars and other currencies
  - (b) Short- and medium-term credit
  - (c) Underwriting international issues
  - (d) Credit syndicates
  - (e) Trust services through subsidiary
  - (f) Inter-bank deposits

Table 8-4  
Canadian Imperial Bank of Commerce — International Operations,  
as of December 1974

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
1 New York 2 San Francisco	<b>Caribbean</b> 1 Antigua 2 Bahamas 3 Barbados 4 Cayman Islands 5 Grenada 6 Jamaica 7 St. Lucia 8 St. Vincent 9 Trinidad and Tobago	<b>United States</b> 1 Chicago 2 Dallas 3 Los Angeles 4 San Francisco	<b>United States</b> 1 California Canadian Bank — 100% — San Francisco (Full Service) (1966) 2 The Canadian Bank of Commerce Trust Co. — 100% — New York (Full Service)	<b>Europe</b> 1 Adela Investment Co. S.A. — Luxembourg 2 Credit Commercial de France S.A. — Paris (Full Service)	<b>Australia</b> 1 Development Finance Corp. Ltd. — 2.1% — Sydney
		<b>Europe</b> 1 Brussels 2 Milan 3 Zurich		<b>Caribbean</b> 1 Arawak Trust Co. (Cayman) Ltd. — Cayman Islands 2 Arawak Trust Co. Ltd. — (Bahamas) Ltd. — Nassau	<i>Other Participants</i> (a) Bank of Adelaide — 1.5% — Australia (b) Commercial Bank of Sydney — 7.3% — Australia (c) Cie., Lambert — 1.8% — Belgium (d) Dai-ichi Kangyo Bank — 2.1% — Japan (e) Hill, Samuel & Co. — 5.3% — U.K. (f) Manufacturers Hanover — 13.1% — U.S.A. (g) Nomura Securities — 2.1% — Japan
	<b>United States</b> 1 Portland 2 Seattle	<b>Far East</b> 1 Hong Kong 2 Tokyo	<b>Caribbean</b> 1 The Canadian Bank of Commerce Trust Co. (Caribbean) Ltd. — 100% — Jamaica 2 The Canadian Imperial Bank of Commerce Trust Co. (Cayman) Ltd. — 100% — Cayman Islands 3 Canadian Imperial Bank of Commerce Trust Co. (Bahamas) Ltd. — 100% — Nassau	<b>Far East</b> 1 Private Investment Co. for Asia — Tokyo 2 Canadian Eastern Finance Ltd. — Hong Kong	
	<b>Europe</b> 1 London 2 Frankfurt 3 Paris				

*Principal Business*

(a) Merchant banking

- Europe**  
 1 Commerce International Trust — 100% — London (1971)
- Far East**  
 1 Commerce International Finance Co. (Asia) Ltd. — 100% — Hong Kong
- Australia**  
 1 Canada Australia Investment Co. Ltd. — Sydney  
 2 New Hebrides Trust Co. — Vila
- Latin America**  
 1 Banco Finasa de Invermento S.A. — Sao Paulo
- Europe**  
 1 International Energy Bank — London
- Other Participants*  
 (a) Republic National of Dallas — U.S.A.  
 (b) Barclays Bank — U.K.  
 (c) Bank of Scotland — U.K.  
 (d) Banque Worms S.A. — France  
 (e) Société Financière Européenne — France
- Principal Business*  
 (a) Energy development financing
- 2 Banque Arabe et Internationale d'Investissement — Paris (1973)
- Other Participants*  
 (a) Banque Nationale de Paris — France  
 (b) Union Bank of Switzerland — Switzerland  
 (c) Société Financière Européenne — France
- Principal Business*  
 (a) Merchant banking

Table 8-5  
Bank of Montreal — International Operations,  
as of December 1974

AGENCIES	BRANCHES	REPRESENTATIVE OFFICES	SUBSIDIARIES	AFFILIATES	CONSORTIA
1 New York 2 San Francisco	<b>Caribbean</b> 1 Cayman Islands	<b>United States</b> 1 Chicago 2 Houston	<b>United States</b> 1 Bank of Montreal (California) — (100%) — San Francisco (Full Service) 2 Bank of Montreal Trust Co. — (100%) — New York (Full Service)	<b>Europe</b> 1 Banque Trans-atlantique — 10% — Paris (Full Service) (1968) 2 Joh. Berenberg Gossler & Co. — 10% — Hamburg (Full Service) (1968)	<b>Australia</b> 1 Australian International Finance Corp. — 20% — Melbourne (1970)
	<b>Europe</b> 1 London 2 Amsterdam	<b>Europe</b> 1 Dusseldorf 2 Milan 3 Paris 4 Madrid			<i>Other Participants</i> (a) Australia and New Zealand Banking Group — 20%
	<b>Far East</b> 1 Singapore				(b) Crocker National Bank — 20%
	<b>Latin America</b> 1 Mexico City	<b>Far East</b> 1 Hong Kong 2 Tokyo 3 Jakarta 4 New Delhi	<b>Caribbean</b> 1 Bank of Montreal — (Bahamas and Caribbean) Ltd. — (100%) — Nassau 2 Bank of Montreal Jamaica Ltd. — 100% — Kingston	<b>Far East</b> 1 Fidorinvest — 7% — Indonesia	(c) Irving Trust Co. — 20%
		<b>Latin America</b> 1 Buenos Aires 2 Rio de Janeiro	3 Bank of Montreal Trust Corporation Cayman Ltd. — 100% — George Town		(d) Mitsubishi Bank Ltd. — 20%
		<b>Australia</b> 1 Sydney			<i>Principal Business</i> (a) Medium-term loans in Euro-, Australian, and other major currencies
		<b>Middle East</b> 1 Beirut	<b>Europe</b> 1 First Canadian Financial Corporation B.V. — Amsterdam (Off-shore lending)		(b) Bridging and short-term loans
					(c) Underwriting of credit risks

(d) Leasing of  
equipment

**Far East**  
1 First Canadian Financial  
Corporation Limited —  
Hong Kong

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of their international activities centred on an increased role in the Euro-currency markets and a greater interest in domestic banking operations in Europe. In some cases, this primarily took the form of international branching (Nova Scotia), investment in consortial banks (Toronto Dominion and Royal), and the opening of representative offices (Montreal). The peak in consortial investment activity occurred in the early 1970s with most of the major banks forming their principal consortial arrangements at that time. Undoubtedly, it was this major expansion of international operations abroad that led to the sharp increase of foreign-currency asset and liability growth in the late 1960s and early 1970s. This expansion of operations outside Canada also accounts for the trend towards greater booking of business with non-residents outside Canada during this and subsequent periods. The greater participation by Canadian banks in the Euro-currency market as a result of these new international operations also explains the rapid growth of their foreign-currency assets and liabilities with other banks. The greater use of affiliate and consortial arrangements, however, has also served to understate the foreign positions of Canadian banks since their proportion of foreign-currency assets and liabilities of these affiliates and consortia are not included in the foreign-currency asset and liability data available from Canadian sources. In these cases, only the foreign-currency assets representing their investment in the affiliate or consortia are included in the Canadian data.

### **The Risk Exposure of Canadian Banks**

In order for banks to defend themselves against the risks associated with international activities, they must develop systems and policies for credit assessment; attempt to match their foreign-currency assets and liabilities in terms of maturities and currencies; and institute sound management techniques for their international operations. In order to deal with the credit assessment risk Canadian banks have, in the past, concentrated over 50 per cent of their international foreign-currency activities in the inter-bank sector of the Euro-currency markets. This would indicate a relatively cautious credit policy on the part of Canadian banks in their international operations. The fact that Canadian banks were apparently not affected in any significant way by the recent bank failures in Europe and the United States further confirms the use of prudent lending policies. Although the data on the loss record associated with their international operations are not available publicly, all of the major Canadian banks indicated in interviews that their international loss experience has not been unsatisfactory or out of line with their domestic loss experience. Finally, their conservative credit policies would appear to be confirmed by the fact that they have been criticized in international circles for being too cautious and conservative in their international operations. Over the past few years, this conservative approach may have been a major virtue of the Canadian

chartered banks as far as their international operations are concerned. Since the recent foreign bank failures, however, a number of Canadian banks have indicated that they are taking an even more cautious attitude towards inter-bank lending and are considering an expansion of their direct lending activities to non-bank borrowers, especially large multinational corporations whose credit rating they can determine relatively accurately. This trend was reflected in the asset data for the last half of 1974 and for 1975 when lending to non-banks increased relative to lending to other banks.

As far as the matching of foreign-currency asset and liability maturities is concerned, the Canadian banks appear to have mismatched them to some degree over all maturities. In the up-to-one-year maturities, liabilities have exceeded assets, especially in the up-to-29 days and the 30-89 day categories. In the one-year-and-over category, on the other hand, there seems to have been a significant mismatching in the other direction with assets maturing in over one year substantially exceeding the liabilities with the same term to maturity. This was illustrated in a one-time maturity analysis of selected foreign-currency assets and liabilities prepared by the Inspector General of Banks as of July 31, 1974 and outlined in Table 8-6. In this analysis, it was found that the most significant mismatching occurred in the longer maturities with 19 per cent of the total foreign-currency assets of the Canadian banks having a term to maturity of greater than one year, whereas only 2 per cent of the foreign-currency liabilities were of this maturity. As a result, foreign-currency assets with maturities longer than one year exceeded liabilities of comparable maturity by approximately \$4 billion as of the date of the analysis. Most of the mismatching of maturities occurred in the case of assets and liabilities from business with non-resident depositors and borrowers other than banks, with 46 per cent of the assets in this category having a maturity of over one year and only 3 per cent of the liabilities having a similar maturity. Mismatching was also significant in the case of transactions with residents where 25 per cent of the assets were over one year in maturity compared to only 1 per cent of the liabilities. In the case of non-resident banks, the mismatching was relatively minimal with 6 per cent of the assets and 2 per cent of the liabilities having maturities of over one year. In the 90-day to one-year maturity, however, assets with non-resident banks with this maturity equalled 36 per cent of total assets in this category, while liabilities only equalled 27 per cent of total liabilities of this group. As a result, the mismatching of maturities in the case of non-resident banks was somewhat shorter in term than was the case with non-banks and residents. In the case of liabilities exceeding assets, most of the mismatching occurred in the 30-day and 30 to 89-day maturities and involved transactions with non-residents other than banks, and with residents.

Table 8-6  
**Canadian Chartered Banks: Maturity Analysis of Selected Foreign-Currency Liabilities and Assets<sup>1</sup>**  
 (Remaining term to maturity as at July 31, 1974)

	Liabilities				Assets				Net										
	Up to 30 Days	30 to 90 Days	90 to 364 Days	364 Days and Over	Up to 30 Days	30 to 90 Days	90 to 364 Days	364 Days and Over	Up to 30 Days	30 to 89 Days	90 to 364 Days	364 Days and Over	Total						
Non-Residents																			
Banks	1,288	4,051	4,249	3,683	335	13,607	940	3,485	4,377	5,510	985	15,299	-348	-566	128	1,827	650	1,692	
Others	719	2,145	2,193	2,005	243	7,304	1,163	473	893	1,157	3,191	6,874	444	-1,672	-1,300	-848	2,948	-430	
Total	2,007	6,196	6,442	5,688	578	20,911	2,103	3,958	5,270	6,667	4,176	22,173	96	-2,238	-1,172	979	3,598	1,262	
Residents <sup>2</sup>	481	1,596	1,825	2,020	45	5,967	932	68	93	193	430	1,716	451	-1,528	-1,732	-1,827	385	-4,251	
Total	2,488	7,792	8,267	7,708	623	26,878	3,035	4,026	5,363	6,860	4,606	23,889	547	-3,766	-2,904	-848	3,983	-2,989	
Non-Residents																			
Banks	9	30	32	27	2	100	6	23	28	36	6	100							
Others	10	29	30	27	3	100	17	7	13	17	46	100							
Total	10	30	31	27	3	100	9	18	24	30	19	100							
Residents	8	27	31	34	1	100	54	4	5	11	25	100							
Total	9	29	31	29	2	100	13	17	22	29	19	100							

(Millions of Canadian dollars)

(Percentage distribution)

<sup>1</sup> Includes negotiable interest rate assets with term to maturity calculated to next renegotiation date.

<sup>2</sup> Based upon the banks' report on positions booked in Canada only. It is reasonable to assume that very little business with residents is booked at foreign branches and agencies.

Source: Inspector General of Banks, Ottawa.

Since the data reflects the situation on only one specific date in 1974 and cannot be compared with data during other years or even other periods of 1974, it should be interpreted with care. Even so, it would seem to indicate a significant mismatching of maturities on the part of Canadian banks during unsettled international monetary conditions in 1974. Consequently, the Canadian banks were exposed to the two types of margin squeezes outlined earlier, at least during the period surrounding mid-1974. Since the term to maturity of negotiable interest rate assets was calculated only to the next renegotiation date in the analysis, it is apparent that Canadian banks did not use this device extensively enough to eliminate the risk of a margin squeeze resulting from a rise in short-term interest rates before the maturity of the assets concerned.

The Canadian banks were also exposed to the other type of margin squeeze arising from a higher risk premium being placed on transactions with them by lenders under conditions of mismatched maturities. If, at the time of deposit roll over, lenders became concerned about the standing of Canadian banks and raised the risk premium in renewing their deposits, Canadian banks could be forced to a higher tier in the multi-tiered Euro-currency market. Consequently, they would suffer a margin squeeze on their long-term foreign-currency lending activities. The extent of such a threat depends on their ability to maintain a low-risk premium on their borrowing operations. In fact, this seems to have been the case as evidenced by their ability to operate on the lowest tier of the Euro-currency markets even during the turbulent international conditions encountered in 1974. The factors that appeared to determine low-risk premiums were: size, extent of domestic deposit base, and overall deposit/capital ratios. Deposit/capital ratios, in particular, appeared to take on new importance in attracting funds from the oil-producing countries during 1974. In the case of the Canadian banks, they were able to continue attracting deposits at the lowest tier rates even though they had relatively high deposit/capital ratios compared to many other major world banks. This would seem to indicate that their size and large stable domestic deposit base were important factors in determining the risk premium attached to deposits with Canadian banks by international lenders; these aforementioned factors outweighed the relatively higher deposit/capital ratios in the determination of risk premiums. Moreover, the absence of foreign exchange controls in Canada and the likelihood of a continuing absence of controls were probably additional contributing factors in favour of deposits with Canadian banks. Their relatively high deposit/capital ratios, however, have been a cause of some concern to Canadian banks, and a number of them have recently made rights offerings to their shareholders in order to increase their capital base for further expansion.

In the case of foreign exchange risks, the Canadian banks have not had a significant exposure to exchange rate changes since the major proportion

of both their foreign-currency assets and liabilities appear to be dominated in U.S. dollars. This is certainly evident by the data in Table 8-7 which shows a breakdown of their foreign-currency assets and liabilities booked in Canada between those in U.S. dollars and those in all other foreign currencies.

**Table 8-7**  
**Chartered Bank Foreign-Currency Assets and Liabilities**  
**Booked in Canada, by Currency, as of December 31st, 1969-1974**

	Assets		Liabilities	
	United States Dollars	Other	United States Dollars	Other
1969	7,667	134	7,820	99
1970	8,717	175	8,616	141
1971	7,843	318	7,728	276
1972	8,802	410	9,386	321
1973	12,283	833	13,800	696
1974	14,887	883	15,987	698

Source: *Bank of Canada Review* (Ottawa, Bank of Canada, monthly).

Unfortunately, similar data for their foreign-currency assets and liabilities booked outside Canada are not available. However, on the basis of their large Euro-currency system involvement, and since the Euro-dollar market is the dominant part of the Euro-currency system, it seems safe to conclude that a large proportion of these assets and liabilities are denominated in U.S. dollars. In any case, it appears that the Canadian banks have not mismatched their foreign-currency assets and liabilities in terms of currencies to any significant extent, and their net exposure in any particular currency, other than the U.S. dollar, would be minimal.

One of the main ways by which Canadian banks could have open foreign exchange positions on their own account would be through their swap deposit operations with residents of Canada. In the case of swap deposits, the bank accepts a deposit denominated in a foreign currency from a resident and agrees to repay the depositor in Canadian dollars after a fixed period of time. If the foreign-currency funds are re-invested by the bank in foreign-currency assets, the bank would have an uncovered commitment to convert the funds back into Canadian dollars upon the maturity of the deposit. In order to avoid this open position, the bank would have to sell an equivalent amount of foreign currency forward at the time of receiving the foreign-currency deposit and for the same period as the deposit. On the other hand, if the foreign-currency funds were converted back into Canadian dollars and lent to residents, no forward covering would be required. Open forward or spot positions could also be established in many other ways, all of which would imply a speculative motive on the part of the

bank. Considerable monitoring of the foreign exchange positions of the Canadian banks has been conducted by the Inspector General of Banks, initially regarding only their positions booked in Canada, but more recently including their total world-wide foreign-currency positions. From data provided by the Inspector General of Banks, it appears that the banks have maintained a minimal foreign exchange exposure over the past few years with their short spot positions being traditionally somewhat more than covered by long forward positions. From the data available for their total net foreign-currency positions in 1974, it appears that their net spot and forward positions have been less than one-half of one per cent of total spot and forward foreign-currency assets and liabilities. Thus, the data would appear to confirm statements made by the banks during interviews that they do not intentionally maintain open foreign exchange positions on their own accounts and that they attempt to balance their foreign-currency positions on a daily basis. As a result, it seems safe to conclude that the Canadian banks have a minimal exposure to foreign exchange risks in their foreign-currency operations.

In order to minimize mismanagement risks in their international operations, the Canadian banks appear to have adopted an extensive system of management supervision and surveillance. Foreign agencies, branches, and subsidiaries are considered as profit centres and are required to operate within head-office guidelines and policy directives covering credit granting, foreign exchange trading, and money-market operations. These entities, however, do have a degree of independence and are responsible for their own operations. The head-office supervision of their operations is exercised through the establishment of and adherence to comprehensive credit analysis and review procedures, periodic accounting and management reports, budgeting and planning systems, periodic visits by head-office supervisory personnel, and internal and external audit reviews. In accordance with policy directives, the decision-making process is effectively shared between the foreign branch, agency, or subsidiary, international regional offices, and the Canadian head office of the banks. In the case of foreign exchange operations, all the major banks indicated in interviews that they concentrate foreign exchange activities in only a few major branches, mainly in Toronto, Montreal, New York, and London, with all other branches closing out their foreign-currency positions to the major branches, often on a daily basis. The effectiveness of their system of foreign exchange control seems to have been confirmed by the fact that Canadian banks (unlike a number of major European banks that suffered large losses from unauthorized foreign exchange dealings by their employees) have apparently experienced no problems in this area. Overall then, the Canadian banks seem to have an excellent management record in their international operations and have been successful in attracting highly trained personnel to these operations, within both their head offices and foreign offices.

### The Regulatory Environment

The foreign-currency operations of Canadian banks are not specifically regulated under the Bank Act, and banks do not have to hold specific cash or liquidity reserves against their deposits denominated in foreign currencies. The Inspector General of Banks, however, under the provisions of the Bank Act, does have broad supervisory powers over the foreign-currency operations of Canadian banks. In performing this supervisory role, the Inspector General of Banks collects a substantial volume of data on the international operations of the Canadian banks and has established a number of regular reporting procedures. In addition, *ad hoc* requests for information on foreign-currency transactions are also made from time to time. However, the data base for a complete monitoring of these activities is still lacking in many respects. In particular, information regarding the foreign-currency assets and liabilities booked outside Canada is very incomplete with regard to residency of holder, type of holder, and currency of denomination. Other types of data are monitored but not published, including large loan transactions, foreign exchange positions, and most recently maturity data. As a result, it appears that there has not been extensive supervision of the international operations of Canadian banks on the part of Canadian regulators but instead a rather *ad hoc* system of audits and spot checks aimed at discovering any obvious problems or errors in decision making by the banks. Consequently, the banks themselves have been given the prime responsibility of ensuring the ongoing viability of their international banking operations with a minimum of supervision and interference on the part of Canadian regulators.

There are a number of aspects of foreign regulatory measures, however, that affect the international operations of Canadian banks, including: the regulatory framework established by other countries for foreign banks operating within their jurisdiction; the regulatory framework established by other countries in order to control the international operations of their domestic banks; and the attempts to place greater control over the activities of international consortial banks by the countries in which they are located.

The extent to which Canadian banks can expand their international operations, through establishing branches, subsidiaries, and affiliates abroad, depends largely on the regulatory framework established in other countries for the operation of foreign banks within those countries. This framework has been under active review in a number of countries, most notably in the United States. The benefits to be derived from the international operations of Canadian banks depends to a considerable degree on their ability to establish viable operations in other countries within the regulatory frameworks of those countries. This raises the problem of reciprocity between Canada and other countries since in many cases the regulatory framework facing Canadian banks in other countries

depends upon the reciprocal treatment offered to foreign banks in Canada. As a result, the type of reciprocity offered to foreign banks in Canada must be such as to achieve an appropriate domestic banking structure in Canada and to encourage the expansion of Canadian banks abroad to the desired degree. If reciprocity involved a tight system of controls over foreign bank activity in Canada, it could significantly harm the expansion of Canadian banks in other countries if those countries applied stiffer regulations against Canadian banks in retaliation. On the other hand, a complete opening of the Canadian banking system to foreign banks would pose domestic competitive and other considerations. It seems that the need for reciprocity in the expansion of Canadian banks abroad is centred in a few countries and, even then, is confined mainly to the problem of opening branches, rather than establishing representative offices, subsidiaries or affiliates.

Another area of concern is the attempt by a number of countries to place limitations on the international activities of their domestic banks. Most of the proposals appear to centre on the establishment of specific deposit/capital ratios for the foreign-currency operations of their banks. For example, in Germany, it has been proposed to limit the difference between foreign-currency assets and liabilities to twenty per cent of the sum of a bank's share capital and published reserves. Recently, the international markets seem to be in the process of establishing market determined ratios for the books of all countries beyond which major depositors will not place deposits with the banks. This would seem to be the best approach from the Canadian point of view and there is evidence that this will force Canadian banks to increase their capital base and reduce the risk to Canadian depositors. However, if others do impose ratios on their banks and interfere with the market determination of appropriate ratios, Canada may have to consider a similar course of action in order to avoid distorted flows into Canadian banks.

Finally, attempts have been made over the past year by a number of countries, notably the United Kingdom, to obtain commitments from the shareholder banks to stand behind their affiliates and consortia located within their boundaries even though the shareholders have no legal liability beyond their shareholdings. In the case of the Canadian banks, such undertakings would significantly add to the international risk exposure of the banks beyond that shown in the published Canadian data, which only include their shareholdings among foreign-currency assets and take no account of their share of the assets and liabilities of the affiliate or consortia. This raises the question of the extent to which the Canadian regulators should monitor or control the investments by Canadian banks in these types of operations with regard to the types of business conducted, the strength of other partners in the venture, and the degree of control exerted by the Canadian bank in the operations of the affiliate or



consortia. This has been further enhanced by the participation of the Bank of Canada in the Basle Agreement, in which the major central banks agreed to support the international operations of their major domestic banks in the case of liquidity or other difficulties. The inclusion of Canadian bank interests in affiliates and consortia could significantly increase this commitment by the Canadian authorities.

### **Margins and Profitability**

Between 1964 and 1974, inter-bank operations with other major world banks have been the most rapidly expanding type of operation undertaken internationally by Canadian banks. These operations involve the acceptance of foreign-currency deposits from foreign banks and the re-lending to other foreign banks in return for the interest margin between the deposit and lending rates. In order to obtain a gross interest margin on these operations, the Canadian bank has two choices: it can re-lend the funds at a longer maturity than the deposit it received; or it can re-lend to a higher risk bank. In fact, the Canadian bank may base its operations on some combination of these two choices by lending at somewhat longer maturity to a somewhat higher risk bank. Deposit and lending operations of this type are confined almost exclusively to the Euro-currency markets and are conducted in large wholesale amounts in a very competitive market environment. As a result, the interest margin available for any particular type of inter-bank operation is determined in the market place with individual banks having little influence on the determination process. In order to achieve its desired interest margin on inter-bank operations, an individual bank must make policy decisions as to what type and extent of risk it is prepared to expose itself to under current market conditions. In other words, if the risk attached to operations that yield its minimum margin target increases, the bank must decide either to accept the higher risk or withdraw from these types of operations.

The achievement of interest margins through maturity mismatching has been an element in traditional banking operations and the acceptance of this risk has varied between banking systems. In the initial stages of the Euro-currency market development, it was a relatively important method of achieving margins, particularly when the banks involved in the market were all of relatively equal credit standing. More recently, with the influx of many small- to medium-sized banks into the Euro-currency markets, the acceptance of higher credit risks has become a significant factor in margin achievement. With Euro-currency rates on deposit and lending operations being essentially negotiated rates based on maturity and risk, the large banks with the highest credit rating could attract deposits at lower rates than the smaller banks and then re-lend some of these funds to the smaller banks at a margin without mismatching maturities. The extent of such operations and the impact of different bank credit ratings have

become more obvious during recent years when the Euro-currency market developed into a multi-tiered market structure with each bank being assigned by market forces to a particular tier based on the market's view of its credit rating. During these periods, the interest rate differentials between the various tiers became wide from time to time when international monetary conditions were very unsettled and the major banks often took advantage of these wide margins by lending to the higher tier banks. Throughout this period, the major Canadian banks remained among the banks on the lowest tier of the Euro-currency markets and effectively took advantage of the margins offered by lending to the higher tier banks.

Operations with non-banks involve the acceptance of deposits from individuals, non-financial corporations and non-bank financial corporations that are both resident and non-resident to Canada. They also involve the extension of loans to non-financial corporations in Canada and other countries, to Canadian and foreign multi-national corporations on a world-wide basis, and to foreign governments and their agencies. Again margins are achieved by the acceptance of credit risks, or a mismatching of maturities, or both. In this area, the mismatching of maturities has probably been a relatively important method of achieving margins because of the desire by non-banks for long-term loans compared to the typical deposit maturity structure. Also, of course, the risk attached to non-bank lending is generally higher than that associated with inter-bank lending and gross margins must reflect this. As a result, the gross margins desired and achieved by banks on their non-bank lending operations were considerably larger than those achieved in the inter-bank Euro-currency market. In addition, their non-bank lending operations are somewhat more personalized than the impersonal wholesale operations of the inter-bank market. A considerable volume of non-bank operations is also concentrated in their domestic retail banking operations in the Caribbean where relatively high margins can be achieved.

The gross interest margins achieved by Canadian banks as a whole in their foreign-currency operations have been relatively modest compared to those achieved on their Canadian-dollar operations during the 1964-73 period, as outlined in Table 8-8.

The margins are calculated on the basis of the average gross margins achieved in the various types of international operations and approximate the desired overall margin of one to  $1\frac{1}{4}$  per cent as expressed in interviews with officials of Canadian banks. In fact, the gross margins on their operations probably vary from a low of about  $\frac{1}{2}$  per cent on inter-bank and foreign government lending operations to a high of 2 to 3 per cent on non-bank lending operations. Despite the relatively low gross margins, the foreign-currency operations have contributed significantly to the overall balance of revenue performance of the Canadian banks. The major banks

**Table 8-8**  
**Average Gross Interest Margins on Canadian-Dollar**  
**and Foreign-Currency Operations of Canadian Banks, 1964-1973**  
**(For fiscal years ended October 31st)**

	Loan Yield		Deposit Yield		Gross Margin	
	Canadian	Foreign	Canadian	Foreign	Canadian	Foreign
	(Per cent)					
1964	5.86	4.18	1.89	3.18	3.97	1.00
1965	5.69	4.53	1.96	3.46	3.73	1.07
1966	5.90	5.25	2.13	4.16	3.77	1.09
1967	6.38	5.42	2.31	4.40	4.07	1.02
1968	7.48	5.71	2.98	4.69	4.50	1.02
1969	8.48	7.48	3.57	6.41	4.91	1.07
1970	9.08	8.39	3.95	7.54	5.13	.85
1971	8.13	6.89	3.39	5.76	4.74	1.13
1972	7.96	6.10	3.22	4.91	4.74	1.19
1973	8.59	7.77	3.61	6.66	4.98	1.11

Source: Inspector General of Banks, The Chartered Banks Statement of Revenue, Expenses, and Other Information, various fiscal years.

involved in international activities have indicated that 20-25 per cent of their balance of revenue has arisen from foreign-currency operations in recent years. One of the reasons for this profitability is that international operations have relatively low overhead, involving a minimum of staff and facilities to undertake the wholesale type of activities involved. However, this is not an exceptional profit performance in light of the fact that foreign-currency assets account for approximately 30 per cent of total assets. Moreover, because of the low gross margins associated with foreign-currency lending, a few major losses could have a substantial impact on the overall profitability of international operations. Essentially, the foreign-currency operations of Canadian banks are high volume/low margin types of operation in which it is difficult to offset the impact of major losses. Therefore, for the long-run viability of international operations, the Canadian banks must attempt to carefully match the margins they can achieve with the risks they have to undertake in their international operations.

#### **Taxation Influences on the Structure of International Operations**

A number of aspects of both the Canadian and foreign taxation systems have played a role in shaping the structure of the international operations

of Canadian banks. The three main taxation areas affecting their international operations are:

- (i) the withholding tax charged on gross interest income by Canada and other countries on a reciprocal basis and the exemption of interest paid on foreign-currency deposits held at Canadian banks from the Canadian withholding tax;
- (ii) the method by which foreign tax credits are allowed against domestic taxation by Canada and other countries; and
- (iii) the provisions regarding the foreign source income of Canadian banks and the taxation of dividends paid from that income.

Withholding taxes on investment income flowing between countries are usually established on a reciprocal basis with each country matching the withholding tax imposed by the other. For example, if Canada imposes a 15 per cent withholding tax on investment income paid to foreigners (including gross interest earned by foreign banks on loans to Canadians), other countries will usually impose a 15 per cent withholding tax on similar investment income flows of Canadians remitted from those countries. Usually, the rates and types of income flows subject to withholding taxes are established through bilateral tax treaties with each foreign country. As far as the Canadian banks are concerned, there are two significant aspects of the withholding tax arrangements between Canada and other countries: the application by Canada of withholding taxes to gross interest paid by residents on bank loans from abroad rather than to the net interest received after deducting the cost of the funds loaned; and the exemption of interest paid to non-residents on foreign-currency deposits held at Canadian banks along with the absence of this exemption on foreign-currency deposits held at other Canadian deposit institutions. The application of a withholding tax to gross interest income from foreign loans is reflected in similar provisions of foreign taxation authorities regarding bank loan interest flows to Canada; this means that this income is being treated as investment income rather than business income against which costs could be charged before the tax rates were applied. The exemption of interest on foreign-currency bank deposits is a universal element of withholding tax provisions of major countries, but the refusal of the Canadian tax authorities to extend this exemption to other Canadian deposit institutions gives Canadian banks a significant advantage over the other domestic institutions in attracting foreign-currency deposits.

The impact of the withholding tax provisions on the operations of Canadian banks depends largely on the system of foreign tax credits allowed by the Canadian taxation authorities. Generally, foreign tax credits allowed by the major countries to their residents on income earned abroad are the lesser of the domestic or foreign tax paid on the foreign source income. Differences between countries arise, however, in the

methods by which the foreign tax credit can be calculated. Basically, there are two methods: the "global" method which treats all foreign source income as if it were derived from one foreign country and all foreign taxes on such income as if they were paid to one foreign country; and the "per country" method which treats the income and taxes paid on a country-by-country basis without any aggregation. Under the "global" method, if a bank had operations in a number of low tax rate countries, the average foreign tax rate could be below the rate in the bank's country, making a full tax credit possible for all foreign taxes paid. The major country using the "global" method is the United States, whereas Canada uses the "per country" method. The following examples illustrate the differences between the two methods.

**"Global" Method for a U.S. Bank**

Country	Taxable Profit	U.S. Tax	Foreign Taxes <sup>1</sup>
A	\$100	\$ 50	\$75
B	100	50	NIL
A + B	\$200	\$100	\$75

Tax Credit = \$75  
 Net U.S. tax payable = \$25  
 Total tax payable = \$100

**"Per Country" Method for a Canadian Bank**

Country	Taxable Profit	Canadian Tax	Foreign Taxes <sup>1</sup>
A	\$100	\$ 50	\$75
B	100	50	NIL
A + B	\$200	\$100	\$75

Tax Credit: For A = \$50  
 For B = NIL  
 Total = \$50  
 Net Canadian Tax payable = \$50  
 Total tax payable = \$125

<sup>1</sup> Including withholding taxes paid to the foreign country.

Foreign source income of Canadian banks is taxed in a number of ways by the Canadian tax authorities. Profits of branches, agencies, and some wholly owned subsidiaries are generally taxed at full Canadian corporate tax rates with a foreign tax credit equivalent to the lesser of the Canadian or foreign tax paid on these profits being given to the banks as a deduction from their total Canadian tax payable. In the case of foreign affiliates in which they have at least 10 per cent ownership, profits of the affiliate are

taxed in their country of residence and dividends received by a Canadian bank from that affiliate are exempted from Canadian taxation. After 1976, this exemption will depend on whether it is paid from exempt or taxable surplus which, in turn, depends on whether or not Canada has a tax treaty with the country in which the affiliate is resident and/or the country where the profits were generated. If there is a tax treaty with the country of residence and the business profits have been earned in that country or other treaty countries, the dividend paid to the Canadian bank would be tax exempt. If there is no tax treaty, the tax status of the dividend would depend on the tax credit allowed on the basis of the foreign taxes paid on the underlying business income by the affiliate.

The combination of the withholding taxes that are imposed by other countries on gross interest income of Canadian banks (to reflect the Canadian imposition of a similar withholding tax on foreigners) and the limited foreign tax credit allowed by the Canadian authorities under the "per country" method of calculation have limited the ability of Canadian banks to conduct international lending operations from their Canadian head offices and branches. The following example illustrates this limitation:

- Assume:** Loan interest rate = 10%  
 Net spread = 1%  
 U.S. withholding tax = 15% of gross interest  
 Canadian tax = 50% of net spread

**Loan of \$1,000 to a U.S. Borrower  
 Booked in Canada**

Gross Interest	\$100
Cost of Funds	(90)
Net Spread	10
Less:	
U.S. Withholding Tax — 15% of \$100	(15)
Canadian Tax — 15% of \$10	(5)
Total Tax	(20)
Canadian Foreign Tax Credit (lesser of Canadian or foreign tax)	5
Final Tax Cost	(15)
Profit or (Loss)	(5)

As a result of this situation, the Canadian banks have attempted to find ways of reducing or eliminating the impact of withholding taxes on gross

interest in their international lending operations. Two basic methods of accomplishing this have been available to the banks:

- (i) establish agencies, branches, subsidiaries, or affiliates in countries to whose residents loans are going to be made so that interest income would be taxed locally on a net instead of a gross basis; and
- (ii) establish international lending operations in countries that have no or only minimal withholding taxes on gross loan interest paid to non-residents and which, in turn, face no or only minimal withholding taxes on the part of other countries.

All the Canadian banks have adopted the first of these methods as evidenced by their establishment of world-wide networks of branches, subsidiaries, and affiliates through which they can channel a large part of their foreign lending operations and avoid the withholding tax problem where it applies. This is also reflected in the growth of assets booked outside Canada from approximately 20 per cent of total foreign-currency assets to approximately 50 per cent during the 1964-74 period. On the other hand, the fact that approximately half of the foreign-currency assets held against non-residents were booked in Canada as at June 30, 1974 indicates that the withholding tax and foreign tax credit problems have not been insurmountable in booking international business in Canada even though they may have limited the banks in the case of lending to some countries.

The second method of minimizing the withholding tax on gross interest has also been used by the Canadian banks. One example would be the establishment of an off-shore lending corporation in a low withholding tax country. Such an institution would be purely an international lending vehicle drawing on funds provided by other institutions within the parent bank group. The fact that the country of residence does not impose a withholding tax on interest paid to non-residents facilitates the channelling of funds from other entities in the group through this off-shore lending institution. In addition, minimal withholding taxes are imposed by most countries on interest income paid into this country, thereby allowing the parent Canadian bank to minimize the impact of withholding taxes on its overall international lending operations. Moreover, if this country only imposes minimal withholding taxes on dividends paid to Canadians, the parent bank could receive dividends from its subsidiary with minimal deduction of withholding taxes. Under present Canadian taxation laws, these dividends would also be tax exempt in Canada.

Another method of effective international tax planning would be for a Canadian bank to establish holding companies in countries with low dividend withholding taxes in relation to Canada and which also face low dividend withholding taxes on the part of other countries. Also, countries should be chosen that do not tax dividends received by resident companies from companies outside the country in which they hold a substantial

interest. In order to take advantage of this, a Canadian bank could incorporate a holding company in one of these countries which owns the shares of other subsidiaries. A reduction in foreign withholding taxes from those which would have been imposed on dividends paid directly to Canada would result. In addition, the country would impose only a minimal withholding tax on dividends paid to Canada and not tax dividends when received from the foreign subsidiaries. Under present Canadian law, the dividends received by the Canadian bank from its holding company also would not be taxable. Even after 1976, the proposed changes in the Canadian legislation would allow the receipt of tax-free dividends from countries with which Canada had tax treaties.

It seems evident from these examples that taxation considerations have played a significant role in shaping the structure of the international operations of Canadian banks and that international tax planning has become an important element of their operations. In general, tax influences have reduced the importance of the Canadian head offices and branches of the banks in their international activities, and encouraged the development of widespread international networks of branches, subsidiaries, and affiliates through which they can conduct their international operations more effectively from a taxation point of view. To the extent that the result is the generation of profits and tax revenues in other countries, Canadian tax revenues from the international operations of Canadian banks have probably decreased from what they would have been if the profits had been generated through the head offices or Canadian branches because of the tax credit allowed against Canadian taxes for the foreign taxes paid by the banks. Moreover, the Canadian tax revenues are reduced by the fact that affiliates and subsidiaries can pay dividends to the parent Canadian bank tax free after paying taxes in the foreign country of residence. In effect, the withholding tax laws and the method of calculating foreign tax credits have probably resulted in an overly complex international banking structure on the part of Canadian banks at the expense of Canadian tax revenues. In their attempt to avoid tax problems, the banks have transferred much of their tax payments to foreign governments and reduced their tax liabilities to Canadian governments from what they would have been if a larger proportion of the profits were generated through their Canadian operations.

### **Issues Raised for Canadian Regulators**

There is no evidence, to date, that Canadian banks have encountered any unusual difficulties in their international operations and, in fact, they have remained among the most highly regarded banks in the international banking community. However, the Canadian banks do have a major international exposure relative to the size of their domestic operations and, as a result, the Canadian regulators will have a continuing concern for their



international operations and will need to keep abreast of problems and developments if a sound domestic financial system is to be maintained. In particular, the Canadian regulators will need to determine the benefits and risks associated with a further expansion of the international operations of Canadian banks and to develop a satisfactory control and monitoring system within which this could take place.

The benefits derived from international expansion by Canadian banks must always be weighed against the risks to which the domestic Canadian banking system is being exposed by that expansion. These risks have been brought to the attention of both government regulators and the public by the widespread concern about the viability and stability of the Euro-currency system and the international banking activities involved in its operations during the recent period of unsettled and difficult international financial conditions. The major fear is that a relatively isolated problem in the Euro-currency system could lead to a chain reaction of defaults and losses that could pull down a number of banks and set off an international financial panic that would also spread to domestic operations of the major world banks. The extent to which this could happen would depend upon the degree of support given the Euro-currency system by the major central banks and the degree to which the international operations of the major banks would be supported by their respective central banks. Undoubtedly, this danger would only arise in the case of severe international monetary disorder, but with the large balance-of-payments financing problems now facing the major industrial countries with their accompanying threats of trade and exchange controls, such a possibility cannot be completely ignored by the regulators. Even under less severe conditions, a more moderate loss — arising from the credit, roll over, foreign exchange, or mismanagement risks to which the banks are exposed — could virtually eliminate the earnings and taxation benefits associated with these operations because of the high volume/low margin nature of international banking activity. It is clear then that the Canadian regulators, in determining how far the Canadian banks should be allowed to expand their international operations, must attempt to balance the expected benefits of further expansion with the additional risks posed for the domestic banking system by that expansion. This gives rise to two further issues: the extent to which the banks should be allowed to rely on their stable domestic deposit base in promoting international expansion; and the extent to which their international operations should be supported in case of severe international problems.

It is clear that one of the major advantages of the Canadian banks in expanding their international operations has been their extensive domestic deposit base. Not only is this deposit base primarily retail in nature and widespread geographically but it is also largely covered by a deposit insurance system. This gives Canadian banks a unique domestic deposit

base among the banks of the major countries. In the United Kingdom, the major banks have a widespread retail deposit base but no deposit insurance; while in the United States, the banks have deposit insurance but few have a geographically spread retail deposit base. This advantage has become increasingly clear over the past year when the multi-tiered Euro-currency rate structure developed and the Canadian banks were able to continue operating on the lowest tier of rates while many other banks of comparable size, but without this domestic deposit advantage, moved to higher tiers. Undoubtedly this was not the only reason for these developments but it appears to have been one important factor. This stable deposit base in their domestic operations has also allowed the Canadian banks to operate over the years on relatively high deposit/capital ratios compared to many other major banks. In the last few years, the rapid expansion of foreign-currency deposits has further increased these ratios to the point where Canadian banks have relatively high ratios, particularly when compared to U.S. and British Banks of comparable size. In 1975, however, a number of Canadian banks expanded their capital base and reduced their deposit/capital ratios in response to this continuing expansion.

A key question in this regard is the extent to which the deposit insurance system on domestic deposits of \$20,000 or less has given the Canadian banks a competitive advantage internationally when combined with their large retail deposit base. In addition, the increase in the deposit/capital ratios via the large expansion of foreign-currency deposits has changed the theoretical security of both domestic depositors with balances over \$20,000 and the deposit insurer who now must share the existing capital base with foreign-currency depositors to a much greater extent. If these conditions have arisen due to international expansion based on the stability of their domestic deposit base rather than on the international expertise of Canadian banks, the issue of limiting the expansion of foreign-currency operations would have to be considered. A number of countries are attempting to deal with this issue and in some cases specific deposit/capital ratios have been proposed. Another alternative would be to limit the proportion of a bank's capital that could be used to support international operations. The disadvantage of such limitations is that they place artificial, rather than market, limitations on the participation of Canadian banks in international activities. It is also doubtful that they mean much in terms of domestic deposit safety in light of lender-of-last-resort commitments and the deposit insurance system.

The possibility of a Canadian bank encountering severe problems in international operations raises two further issues for Canadian regulators. One is the extent to which lender-of-last-resort privileges should be maintained when the illiquidity of a bank results from its foreign-currency operations, and the other is the legal, moral, and political liability of the

Canadian government to the depositors of a bank that appears to be on the verge of failure as a result of international difficulties.

Lender-of-last-resort privileges are made available to banks in order that they may avoid high short-term transaction costs in the event of a liquidity squeeze. In this situation, the long-term assets of the bank are sufficient — if sold in an orderly way or in the case of very imperfect markets allowed to reach maturity — to cover all liabilities. If, however, the bank is forced to sell off assets on an emergency basis and to use securities as collateral for loans, rumours may spread that the bank is weaker than in reality is the case. Withdrawals of short-term deposits in response to these rumours may lead to a forced liquidation of the bank, a general loss of confidence in bank deposits, and an increased preference for currency and gold over deposits. The central bank forestalls this by lending to the bank in question. Higher rates are charged the longer the period of indebtedness and the larger the number of return visits to the lending window. The bank, therefore, prefers to reduce its asset size rather than maintain central bank credit.

It seems that the Bank of Canada would have little choice but to maintain lender-of-last-resort privileges if Canadian depositors started to lose confidence in a bank because of illiquidity in its international operations. It would obviously be in the interest of the authorities to remove the source of the decline in confidence regardless of the unit of account in which the liabilities were denominated. The removal of lender-of-last-resort privileges, with regard to the foreign operations of a bank, could only be done if the foreign operations were split off from the Canadian business so that Canadian depositors of the bank were entirely clear of liability in the event of losses on foreign business. On the other hand, the maintenance of this privilege could force the Bank of Canada to take monetary and exchange rate actions that run counter to the current policy of the government. If, for example, government policy was attempting to maintain the value of the Canadian-dollar exchange rate, it may not be inclined to create Canadian-dollar deposits to be used by the chartered banks to demand foreign exchange. Nevertheless, if the lender-of-last-resort action was necessary to maintain confidence in the Canadian banking system, it would seem short-sighted not to maintain this lending and use other policy tools to support the exchange rate. One obvious vehicle would be for the Bank of Canada to arrange a short-term line of international credit, essentially acting in place of the chartered bank.

In the event that a chartered bank appeared to be failing due to losses on its international operations, then the real question of the commitment of the Canadian taxpayer to depositors in a foreign unit of account arises. In the case of a bankruptcy arising from international problems, the Canadian taxpayer could be left with a substantial liability to domestic depositors if the deposit insurance system could not withstand such a loss.

Under these conditions, the Canadian government could either support the bank by advancing the necessary foreign exchange or pass legislation limiting the bank's liability on foreign deposits to its holdings of foreign assets. The latter would be an emergency solution that could spell the end for any international banking by other Canadian banking institutions and would have to be viewed in that regard. In fact, if the difficulties were associated only with a single bank, it would seem preferable that the bank be permitted to go bankrupt. Another approach to the issue would be to consider either the extension of the deposit insurance system to deposits of any size and in any unit of account or the adjustment of deposit insurance rates to reflect the international exposure of each Canadian bank. If the insurance premiums could be varied so as to capture the alleged risk differential between foreign and domestic business, this approach would have the advantage of specifying the contingent liability of the Canadian taxpayer and rewarding him accordingly.

## 9 Conclusions and Recommendations

Although the Canadian banks have generated significant benefits from their international operations and appear to have coped well with the greater risks involved in those activities during periods of turbulent international monetary conditions, there is a need for some regulatory modifications in light of the relatively large international exposure of the Canadian banks and the likelihood that major uncertainties will continue to exist in the international monetary system over the next few years. The risks attached to the international operations and the behaviour of Canadian banks, however, do not warrant direct prohibitions or limitations on foreign-currency activities but instead a more active monitoring and supervision role on the part of Canadian regulators.

### **Informational Recommendations**

The Canadian regulators have become increasingly involved in monitoring the foreign-currency activities of the Canadian chartered banks over the past few years but a comprehensive data base for these operations is still not available either to the regulators or the Canadian public. As a result, the following information collection and publication recommendations are suggested:

- 1 All data collected on the foreign-currency assets and liabilities of the chartered banks should cover their world-wide operations and not just the assets and liabilities booked in Canada, which amount to only about 50 per cent of the total. In particular, information on the residency of holders, the type of holders, the currency of denomination, and the geographical distribution of foreign-currency assets and liabilities booked outside Canada should be collected and published on a monthly basis similar to the data currently being published for the assets and liabilities booked in Canada. This would provide a more meaningful picture of their total foreign-currency operations. In this context, great care should be taken to avoid double-counting arising from the shifting of assets and liabilities between operating units of the same bank. Data regarding the capital investments by Canadian banks in foreign

subsidiaries, affiliates, and consortia should be clearly segregated from other marketable securities and loans.

2 Data on the maturity structure of foreign-currency assets and liabilities of the Canadian banks should be collected and published monthly in a format similar to that used for the one-time analysis conducted as of July 31, 1974. This appears to be the area in which the Canadian banks have exposed themselves to the greatest risks, and regular monitoring of their maturity positions should be undertaken by the Canadian regulators.

3 Data on foreign exchange positions should continue to be collected and this data for the banking system as a whole should also be published on a monthly basis.

4 Data on the international loss experience of the banks should be collected and published on a comparable basis with domestic loss experience of the banks.

5 In view of the recent attempts to obtain commitments from Canadian banks to support the activities of their foreign affiliates and consortia beyond their commitments as shareholders, a system of monitoring should be established to assess the on-going viability of foreign subsidiaries, affiliates and consortial arrangements of Canadian banks, including the submission of annual financial statements of each entity and notices of any changes in ownership either on the part of the Canadian bank or its foreign partners. Information regarding changes in directors and types of business undertaken should also be disclosed to the Canadian regulators on a regular basis. These operations and the degree of commitment should also be fully disclosed in the annual reports to shareholders of the Canadian banks.

This more extensive data base would allow the Canadian regulators a much greater opportunity to assess the benefits being derived from the international banking operations and the extent to which the banks were exposing themselves and the domestic banking system to the credit, roll over, and foreign exchange risks involved in these international operations.

### **Taxation Recommendations**

The Canadian withholding tax provisions (and those reciprocated by other countries on Canadian lenders) and the country-by-country foreign tax credit system used in Canada have significantly influenced the structure of international operations established by Canadian banks and the degree to which other Canadian deposit institutions can participate in foreign-currency activities. In general, the withholding tax provisions, through the

application of withholding taxes by most countries to gross loan interest on foreign-currency bank loans to non-residents, and the exemption of only foreign-currency bank deposits from the Canadian withholding tax provisions have forced the Canadian banks and other deposit institutions to establish profit centres off shore. This, in turn, has resulted in the major share of tax revenues generated from these activities accruing to foreign governments rather than Canadian governments. As a result, the following withholding tax recommendations are made:

1 The exemption of foreign-currency bank deposits from the Canadian withholding tax provision should be extended to include the deposits of other Canadian deposit institutions that are prepared to take on the powers and responsibilities of banks.

2 The Canadian tax authorities should undertake to negotiate with other major countries the reciprocal removal of the withholding tax on the gross interest received on bank loans to non-residents by re-classifying this income as business income rather than investment income. This removal should also apply to interest earned on loans by other Canadian deposit institutions that have accepted the powers and responsibilities of banks.

These recommendations would provide for equitable treatment of all Canadian deposit institutions that have the powers and responsibilities of banks in the collection of foreign-currency deposits, and would encourage the generation of profits from foreign-currency operations in Canada, rather than abroad, with a consequent greater tax benefit for Canadians.

### **Deposit Insurance Recommendations**

In recent years it appears that the Canadian banks have relied heavily on the existence of their stable domestic deposit base in the expansion of their foreign-currency operations. One of the factors providing this stable domestic deposit base has been the Canadian deposit insurance system which insures a large proportion of the geographically spread Canadian-dollar retail deposits of the Canadian banks. This combination has placed Canadian banks in a unique competitive position in international financial markets and probably contributed to a more rapid expansion of international activities than would have occurred in the absence of these factors. To a considerable extent, the Canadian taxpayer, as the ultimate insurer of deposits under \$20,000 in Canada, has been carrying the greater risks associated with the continued expansion of international banking activities and, in effect, by doing so has allowed Canadian banks to pay lower rates on their foreign-currency deposits than would have been the case in the absence of deposit insurance. Also, the deposit insurance premiums have been the same for all deposit institutions that belong to the

Canada Deposit Insurance Corporation (CDIC) and have not reflected the degree of international risk exposure of individual institutions, particularly banks.

In response to this situation, it is recommended that deposit insurance premiums be adjusted for each institution, or group of institutions, to reflect the degree of international risk exposure, possibly on an annual basis. This adjustment should be determined by a formula based on the foreign-currency liability position of the institution or group of institutions. The result would be to raise the cost of foreign-currency funds to Canadian banks in order to recapture the advantage given by the Canadian deposit insurance system. At the same time, it would compensate the Canadian taxpayer for the contingent liability associated with foreign-currency operations which he has assumed through the operation of the deposit insurance system. However, this would only be one element in calculating variable insurance premiums for each class of institution and the minimal loss record of the banks in their domestic operations would have to be considered in any such calculation as an offset to their greater international exposure.



## Bibliography

- BAUM, Daniel Jay, *The Banks of Canada in the Commonwealth Caribbean*, New York: Praeger Publishers, 1974.
- CLENDENNING, E. Wayne, *The Euro-Dollar Market*, Oxford: Oxford University Press, 1970.
- DUNN, Robert M. Jr., *Canada's Experience with Fixed and Flexible Exchange Rates in a North American Capital Market*, Montreal: Private Planning Association of Canada, 1971.
- EINZIG, Paul, *The Euro-Dollar System*, London: MacMillan and Company Limited, 1964.
- EINZIG, Paul, *Foreign Dollar Loans in Europe*, London: MacMillan and Company Limited, 1965.
- FREEDMAN, Charles, *The Foreign Currency Business of the Canadian Banks: An Econometric Study*, Ottawa: Bank of Canada, 1974.
- GALBRAITH, J.A., *Canadian Banking*, Toronto: The Ryerson Press, 1970.
- KLOPSTOCK, Fred H., *The Euro-Dollar Market: Some Unresolved Issues*, Princeton: Princeton University, No. 65, 1968.
- MACHLUP, Fritz, *Euro-Dollar Creation: A Mystery Story*, Princeton: Princeton University, No. 16, 1970.
- MAYER, Helmut W., *Some Theoretical Problems Relating to the Euro-Dollar Market*, Princeton: Princeton University, No. 79, 1970.
- ROBINSON, Stuart W., Jr., *Multinational Banking*, Leiden: A.W. Sijthoff International Publishing Company, 1972.
- SWOBODA, Alexander K., *The Euro-Dollar Market: An Interpretation*, Princeton: Princeton University, No. 64, 1968.

### Articles

- BANK OF ENGLAND, "U.K. Banks External Liabilities and Claims in Foreign Currencies", *Quarterly Bulletin*, Vol. IV, 1964, pp. 100-108.
- KINDLEBERGER, C.P., "The Euro-Dollar and the Internationalization of U.S. Monetary Policy", *Banca Nazionale Del Lavoro, Quarterly Review*, Vol. XXII, 1969, pp. 3-15.
- KLOPSTOCK, Fred H., "Euro-Dollars in the Liquidity and Reserve Management of United States Banks", *Federal Reserve Bank of New York, Monthly Review*, Vol. L, 1968, pp. 130-138.
- READING, Brian, "Euro-Dollars — Tonic or Toxic", *The Bankers' Magazine*, Vol. CCIV, 1967, pp. 233-237.

**Other Documents**

*Who Owns What in World Banking 1973-4*, London: The Banker Research Unit, 1973.

THE BANKER, various issues.

EUROMONEY, various issues.

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