DIVISION OF INTERNATIONAL FINANCE
H. 13
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BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

July 6, 1962

CAPITAL MARKET DEVELOPMENTS ABROAD

I. Canada
II. Nine Charts on Financial Markets Abroad

I. Canada: Money and Capital Markets in May and June 1962

Canadian financial markets in May and June were dominated by intense pressures on the balance of payments and on the external value of the Canadian dollar. Official gold and foreign exchange reserves, which had already fallen U.S. $450 million in the first four months of the year, declined by another U.S. $500 million in May and June to a level of U.S. $1.1 billion; the decline reflected doubts of private traders and investors that the par value of 92.5 U.S. cents, fixed for the Canadian dollar on May 2, would be maintained. To defend the new par value, the Canadian Government, on June 24, introduced an emergency austerity program and announced arrangements whereby its foreign exchange reserves would be increased (or potentially increased) by foreign official loans and lines of credit totalling nearly U.S. $1.1 billion.

During the balance of payments pressures in May and June, Canadian interest rates rose more sharply than in any previous two months of the post-war period. The rise stemmed from two factors: (1) an exceptionally heavy loan demand, based at least to a significant extent on the increased need for funds by Canadian exporters to finance domestic operations in the absence of normal repatriation of export earnings through the exchange market, and by Canadian importers anxious to make pre-payments for fear of a further devaluation; and (2) general market anticipations that a tighter official monetary policy would be needed to cope with the balance of payments crisis.

With the Bank of Canada making negligible net open market purchases during May and June, the Canadian chartered banks were forced to meet the extraordinarily heavy demand for loans by massive sales of Treasury bills and Government bonds to the non-bank sector. Market yields on government securities rose (in per cent per annum) as follows:

	April	May		June			
	12	9	23	6	13	20	27
Treasury bills:							
3 months	3.04	3.24	3.50	3.62	3.93	4.92	5.45
6 months	3.24	3.38	3.71	3.83	4.12	5.16	5.73
Bonds:							
1964 (May)	3.58	3.59	4.01	4.05	4.49	5.12	5.34
1965 (Sept)	3.93	3.93	4.29	4.50	4.66	5.32	5.55
1967-68	4.13	4.05	4.18	4.31	4.39	4.74	5.11
1975-78	4.80	4.83	4.97	4.94	4.96	5.07	5.23
1979	4.77	4.77	4.93	4.95	4.98	5.05	5.26
1996-98	4.88	4.84	4.88	4.94	4.97	5.04	5.13

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The local-government and corporate sectors of the bond market participated in the general rise in long-term rates, as the monthly McLeod, Weir index shows (in per cent per annum):

	March 30	April 30	May 31
Provincials	5.20	5.19	5.43
Municipals	5.44	5.38	5.65
Public Utilities	5.18	5.17	5.27
Industrials	5.18	5.15	5.39

Short-term private money rates also rose sharply as the following figures (in per cent annum) show:

	March 30	April 27	May 25	June 15
Finance Company Paper:				
30-89 days	2.75-3.00	3.00-3.25	3.25-3.375	3.50-3.75
90-179 days	3.25	3.375-3.50	3.50-3.625	4.00
Prime commercial rates:				
Demand	3.125	3.25	3.375	3.625
90-days	3.50	3.625	3.75	4.125
Commercial banks rates:				end June
Prime loans	5-1/2	5-1/2	5-1/2	6
Deposits	2-3/4	2-3/4	2-3/4	3

The emergency measures of June 24 were introduced only after substantial exchange losses. After the Canadian dollar temporarily strengthened in early May, selling pressures developed again in mid-May and, just before and following the indecisive election of June 18, speculative selling became intense. Substantial official intervention was required to defend the new fixed rate near the 91.75 U.S. cent support level and exchange losses between June 1 and June 22 amounted to about $393 million, reducing Canada's reserves to $1.1 billion or little more than half the level of October 1961.

The emergency domestic measures introduced on June 24 to strengthen the currency were designed to reduce foreign outpayments and to cut back domestic spending. The principal measures to reduce foreign payments were:

a. A temporary graduated (5 to 15 per cent) surcharge on about half Canada's imports; and

b. Reduction in tourist's duty exemption from about $300 to about $75-100 per year.

The principal measures to curtail domestic spending included:

a. A reduction in Government spending of $250 million (this cut, together with $200 million receipts from import duties will reduce the deficit from an earlier estimate of $750 million to something around $300 million for 1962-63);

b. fixing the Bank of Canada's discount rate at 6 per cent (ending the practice of fixing the discount rate each week at 1/4 of one per cent above the average auction rate for 3-month Treasury bills).

The Government also stated that the Exchange Fund's cash receipts from sales of foreign exchange would no longer be available to the Treasury as a cash accrual but would be earmarked "only for the purpose of financing increases in our reserves."

The $1.05 billion international financial assistance made available to Canada consisted of:

$300 million drawing from the International Monetary Fund;
$400 million line of credit from the Export-Import Bank;
$250 million establishment of reciprocal balances between the Bank of Canada and the Federal Reserve System; and a
$100 million similar arrangement between the Bank of Canada and the Bank of England.

The immediate impact of the emergency measures was favorable as the Canadian dollar rose from the support level of 91.75 U.S. cents to 92.64 U.S. cents on June 27. But in the second half of the week, the exchange rate edged slightly lower to the neighborhood of 92.50 cents.

The Canadian business situation, as far as latest figures show, continued to improve. Industrial production rose in March to 184, and unemployment declined in May, for the fifth consecutive month, to 5.6 per cent. After a pause in February, retail trade rose by 3.5 per cent in March and for the first quarter was 5.7 above the comparable 1961 period.

On the other hand, the evidence in some important sectors is not as encouraging as in production and trade. New orders for producers' durables, for example, have been weak during the whole of the current upturn, and construction activity is not particularly buoyant. Moreover, the outlook for the future has become clouded because of the restrictive policies adopted on June 24th. In considerable measure, however, these policies are designed to alter the pattern of Canadian spending away from imports and in favor of domestically produced goods.

Money market. The upward movement in Canadian short-term interest rates which followed the stabilization of the exchange rate on May 2 continued throughout June. The 3-month Treasury bill rose from 3.19 per cent on May 3 to 3.52 per cent on May 31 and to 4.92 per cent on June 21, just before Prime Minister Diefenbaker's initial announcement that a program to meet the exchange crisis would be announced on June 24. (See Table and Chart 1.) The 6-month bill rate also rose during this period, rising from 3.35 per cent on May 3 to 3.71 per cent on May 31 and to 5.16 per cent on June 21. Day-to-day money remained unchanged at 3.00 per cent during most of May; although down slightly in early June, the weekly average rate rose to 3.10 per cent on June 13, to 3.60 per cent on June 20 and to 4.65 per cent on June 27.

The Canadian chartered banks, which sold net $106 million in Treasury bills in April, began buying these securities in moderate amounts in the first half of May but resumed their Treasury bill sales in the latter half of the month. They continued to sell Treasury bills through June 20 and also disposed of large amounts of bonds during this period in order to obtain funds to support a continued high level of loan expansion.

The covered arbitrage incentive in favor of the Canadian Treasury bills, which was reduced to 0.17 per cent on May 10, largely because of the substantial discount on the forward Canadian dollar, moved above the one-half of 1 per cent level in the last two weeks of May as the Treasury bill yield spread widened. However, during the first three weeks of June this incentive again narrowed because the higher yield spread was largely offset by the wider forward discount which developed on the Canadian dollar, and on June 21 a very slight and purely nominal incentive in favor of the U.S. Treasury bill emerged.

After the emergency program was announced, the Canadian Treasury bill yield rose to 5.45 per cent at the June 28 auction. This yield level, combined with a forward discount of about 2.0 per cent, resulted in a covered incentive advantage of about 65 basis points in favor of the Canadian Treasury bill.

The spread in favor of Canadian finance paper increased through mid-June as yields rose somewhat more than on comparable U.S. paper. However, in view of the thin nature of the forward exchange market, it is doubtful whether U.S. investor interest was significant during this period. Comparative yields on 30-to-89 day paper for leading acceptance houses were (in per cent per annum):

	Canada	U.S.	Spread
May 11	3.25	2.75 - 2.88	0.43
May 25	3.25 - 3.50	2.63 - 2.75	0.44
June 15	3.50 - 3.75	2.88 - 3.00	0.69

New bankers' acceptance market. A move to broaden the Canadian money market was initiated with the introduction on June 11 of bankers' acceptances as an instrument providing another means for the efficient employment of funds available for short-term investment. According to newspaper reports, terms of the new bankers' acceptances will range from 30 to 90 days, will be drawn in demoninations of $200,000, $300,000, $500,00 and $1,000,000, and will be dealt in by the 14 Canadian money market dealers who have rediscount privileges at the Bank of Canada and who are authorized dealers in Canadian Treasury bills and bonds maturing within three years. Quoted rates on this new Canadian money market instrument have not yet become available.

Bond market. The recent sharp upward movement in Canadian Government bond yields has been noted in the introduction to this report. (See Table and Chart 6.) This movement, together with the further decline in bond prices as the Bank of Canada lowered its support bids following the adoption of the fixed Bank rate on June 25, resulted in a substantial widening of the spread in Canadian over U.S. bond yields. (See Table.)

According to the monthly report issued by McLeod, Young, Weir and Company, bond yields (in per cent per annum) showed the following movements through the end of May:

	1962			
	Feb. 28	Mar. 30	Apr. 30	May 31
10 Provincial	5.31	5.20	5.19	5.43
10 Municipal	5.54	5.44	5.38	5.65
10 Public Utilities	5.23	5.18	5.17	5.27
10 Industrials	5.28	5.18	5.15	5.39
40 Bond yield average	5.34	5.25	5.22	5.44

According to A. E. Ames & Co., $1,410 million of new securities (exclusive of regular short-term financing) were issued in the period ending May 28; this compares with new issues totalling $1,810 million in the comparable period of 1961. Of the new issues reported through May 28, $104.5 million in corporate and municipal bonds were sold in the U. S. market.

Bank loans and the money supply. The rapid expansion in bank lending continued through June. On June 20, general bank loans outstanding were 20.6 per cent above the same date in 1961, and had increased by 13.9 per cent since the beginning of the year, as compared with a rise of 6.0 per cent in the same period last year. At the end of May, the money supply was 12.1 per cent above its level one year ago. The following table shows the movement in Canadian bank loans and the money supply (in billions of Canadian dollars, seasonally adjusted) for selected end of month dates through May, a period characterized by easier credit and interest rate policies in Canada.

	1960:	1961:					1962:
	July	Dec.	Mar.	June	Sept.	Dec.	May
Bank loans	4.9	5.1	5.2	5.3	5.5	5.7	6.2
Money supply	13.3	13.7	13.9	14.0	14.5	14.8	15.6

The average liquid asset ratio of the chartered banks dropped from 18.0 per cent in March to 17.1 per cent in April. It was maintained at this level in May but declined further to an average of 16.1 per cent in the first three weeks of June. It thus approached closer to the required 15 per cent minimum, whereas it had been as high as 19 per cent in November 1961.

Operations of Canadian banks in non-Canadian currencies. After declining by $115 million in March, non-Canadian dollar deposits rose by $82.5 million in April, the last date for which statistics are available.

"Call loans" by Canadian banks in the New York market showed little change either in March or in April, although the total rose moderately--by $31 million--in this two-month period. Although data for May are not yet available, however, it would appear that Canadian call loans must have dropped in line with the substantial decline of almost $400 million in total loans in the New York market, as shown by the following estimates (in millions of dollars) of the New York State Banking Department:

	1960 Dec.	1961 Dec.	1962 Feb.	Mar.	Apr.	May
U. S. banks	1,496	1.963	1,775	1,822	1,828	1,430
Foreign agencies	849	859	823	875	959	752
Compare a/						
Canadian	829	809	743	784	848	n.a.
Other (residual)	20	50	80	91	111	n.a.

a/ Call loans, as reported by Canadian banks, converted into U. S. dollars at end-of-month exchange rate.

Foreign trade and balance of payments. On a seasonally adjusted basis, Canadian foreign trade returns showed a larger trade deficit in the first quarter, as the earlier expansion in exports associated with U. S. economic recovery was overtaken by a larger rise in imports. Recent trade estimates (monthly averages in millions of Canadian dollars) have been:

	1961				1962		
	I	II	III	IV	Jan.	Feb.	Mar.
Exports	459.3	473.5	514.4	520.3	506.7	495.5	507.6
Imports	456.7	443.2	495.5	518.9	507.5	508.6	537.9
Trade balance	- 2.6	+30.3	+18.9	+ 1.4	- 0.8	-13.1	-30.3

According to Canadian balance of payments statistics released in late June, the trade deficit amounted to $14 million in the first quarter, as compared with an export surplus of $6 million in the comparable period in 1961. There was the customary large deficit on invisibles account (due to the deficit on dividend, interest and travel accounts) and virtually no net private capital inflow, either in short- or long-term form, as the following figures (in millions of Canadian dollars) show:

	1961		1962
	I	IV	I
1. Current account:			
Merchandise trade	+ 6	+ 60	- 14
Non-merchandise transactions	-344	-332	-349
Current deficit	-338	-272	-363
2. Net private capital flows (short-and long-term)	+443	+407	- 1
3. Change in official reserves	+105	+135	-364

The drying up of capital inflow--evidence of the effects of the general lack of confidence in recent Canadian financial policies--was serious because Canada has thus far depended upon a substantial net capital inflow to offset the deficit on current non-merchandise transactions (dividends, interest, and travel).

Foreign exchange. After the adoption of a fixed rate of 92.5 U.S. cents on May 2, the Canadian dollar strengthened, but only briefly. The currency was almost continuously under selling pressure from the middle of May with the rate being supported at or near its lower support level of 91.75 U.S. cents throughout this period. After the indecisive Parliamentary election on June 18, speculative pressures intensified, and the succession of daily reserve losses culminated in the emergency action taken over the week end of June 23-24.

The most recent reserve losses can be judged from the Prime Minister's statement on June 24 that Canadian holdings then amounted to about $1.1 billion. This means that the Canadian reserve drain had been $393 million since June 1 alone, on top of losses which amounted to $563 million between the end of December 1961 and May 1962. By June 24, therefore, Canadian reserves had fallen to a level almost one-half of the peak total of $2,111 million at the end of last October. These changes in Canadian reserves (in millions of U.S. dollars at the end-of-month) were:

	1961	1962					
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June 24
Gold	946.2	949.6	962.4	963.7	963.2	913.0	n.a.
U.S. dollars	1,109.6	972.3	784.3	745.7	631.6	579.8	n.a.
Total	2,055.8	1,921.9	1,746.7	1,709.4	1,594.8	1,492.8	1,100.0
Change during period	- 23.0	- 133.9	- 175.2	- 37.3	- 114.6	- 102.0	- 392.8

During May the discount on the forward Canadian dollar changed little, so that the widening interest differential resulting from the steady rise in the Canadian Treasury bill yield lifted the incentive to hold Canadian bills (covered for exchange risk) generally above the 50 basis point level at which a movement of funds is considered likely. However, the thin nature of the market for forward Canadian dollars probably precluded any significant inflow of covered arbitrage funds.

Emergency measures to meet foreign exchange crisis. Faced with alarming reserve losses and the urgent need to restore confidence in the Canadian dollar, the Government adopted a program of emergency measures announced by Prime Minister Diefenbaker on June 24. The discount rate of the Bank of Canada, previously set weekly at 1/4 of 1 per cent above the Treasury bill yield, was fixed at 6 per cent, with the rate on loans to money market dealers to be fixed at 1/4 of 1 per cent above the weekly Treasury bill tender rate, but not more than 6 per cent.

The fixing of the discount rate in place of the previous variable rate was related to the four principal measures comprising the Government's program, which involved:

1) The imposition of temporary surcharges on existing import duties for three categories of Canadian imports which affect one-half of all imports into Canada, the remainder being duty-free. A surcharge of 5 per cent applies to the largest category ($2.3 billion of annual imports), and affects goods of a non-essential nature, for which surplus Canadian capacity exists or for which alternative domestic supplies are available. A small category (annual imports of $150 million) consists of luxury items, such as wines and spirits, jewelery, perfume, etc., to which a surcharge of 15 per cent applies. A surcharge of 10 per cent applies to an intermediate group of imports ($650 million annually at recent levels).

2) A reduction in duty-free tourist allowances designed, in line with the import levies, to conserve foreign exchange. The tourist exemption, under which Canadians travelling abroad were permitted duty-free entry of $100 once every four months or (for overseas travellers) $300 once every twelve months was reduced to $25 and $100, respectively, for these two categories.

The Prime Minister estimated that the combined effect of the import surcharges and the reduction in tourist allowances would lead to an improvement of about $300 million a year in Canada's international accounts.

3) A reduction in Government expenditures amounting to $250 million on a fiscal year basis. These proposed reductions will be reflected in revised spending estimates to be placed before the Canadian Parliament and, reportedly, will be concentrated largely in defense spending.

4) Substantial external assistance, totalling $1,050 million, in order to bolster Canada's reserve position and make possible the maintenance of the 92.5 cent parity. The International Monetary Fund granted Canada a drawing equivalent to $300 million in various European currencies. In addition, Canada may utilize a $400 million line of credit provided by the Export-Import Bank of Washington. The Bank of Canada and the Federal Reserve System have agreed on a reciprocal currency arrangement in the amount of $250 million, and the Bank of England is providing a credit equivalent to $100 million.

Stock market. Since the beginning of May the Canadian stock market, which had earlier shown a much more moderate downward trend, has weakened at about the same rate as the U. S. market. Between May 3 and June 14 the weekly average for the index of industrial stock prices dropped by 15.1 per cent, matching the decline of 15.5 per cent in the New York Standard and Poor Industrial Index during the same period.

Avg. for week ending	DBS Industrials	N.Y. Standard & Poor Industrials
1962 - Apr. 5	339.7	72.59
26	337.2	71.15
May 3	339.1	69.44
June 14	288.0	58.65

Europe and British Commonwealth Section.

Canada: Treasury Bill Yields and Exchange Rates

	3-mo. Treas. bill arbitrage calculation: Canada a/	U.S. a/	Difference	3-mo. Can.$ b/	In favor Can. bill c/	Spot Can $ (U.S. cents)	Finance paper d/: 30-89 days	90-179 days
1961-High	3.34	2.66	0.68	0.45	0.89	101.72	--	--
Low	2.26	2.17	-0.13	-0.56	-0.20	95.91	--	--
1962-May 3	3.19	2.73	0.46	-0.43	0.03	92.78	3-1/4	3-1/2
10	3.24	2.66	0.58	-0.31	0.17	92.52	3-1/4	3-1/2
17	3.36	2.68	0.68	-0.20	0.48	91.91	3-1/4	3-1/2
24	3.50	2.70	0.80	-0.20	0.60	91.84	3-1/4-1/2	3-3/4
31	3.52	2.70	0.82	-0.27	0.55	91.75	3-3/8-1/2	3-5/8-3/4
June 7	3.62	2.64	0.98	-0.55	0.43	91.73	3-3/8-1/2	3-5/8-3/4
14	3.93	2.73	1.20	-1.02	0.18	91.75	3-1/2-3/4	4
21	4.92	2.72	2.20	-2.31	-0.11	91.75	--	--
28	5.45	2.86	2.59			92 53	--	--

a/ Thursday quotations.
b/ Spread between spot and 3-month forward rate in per cent per annum. Discount equals (-).
c/ Net of difference in bill yield less discount on 3-month Canadian dollar.
d/ Friday quotations.

Selected Government of Canada Security Yields

	6-mo. Treas. bills: Canada a/	Spread over U.S. b/	Intermediate bonds (8 yr.): Canada c/	Spread over U.S. d/	Long-term bonds (20 year): Canada e/	Spread over U.S. f/	(35 year): Canada g/	Spread over U.S. h/
1961 - High	3.63	1.15	4.75	1.16	5.19	1.40	5.23	1.59
Low	2.35	-0.11	4.17	0.04	4.80	0.78	4.92	1.14
May 2	3.35	0.53	4.04	0.49	4.74	0.86	4.86	0.92
9	3.38	0.61	4.05	0.50	4.77	0.91	4.84	0.92
16	3.49	0.71	4.03	0.43	4.77	0.91	4.81	0.86
23	3.71	0.93	4.18	0.46	4.93	1.03	4.88	0.88
30	3.71	0.93	4.22	0.54	4.92	1.05	4.95	0.97
June 6	3.83	1.10	4.31	0.64	4.95	1.10	4.94	0.98
13	4.12	1.33	4.39	0.72	4.98	1.14	4.97	1.02
20	5.16	2.37	4.74	1.03	5.05	1.17	5.04	1.06
27	5.73	2.84	5.11	1.28	5.26	1.34	5.13	1.10

a/ Average yield at weekly tender on Thursday.
b/ Spread between Canadian auction rate and composite market yield of U.S. bill on close of business Thursday.
c/ Government of Canada 2-3/4 per cent of June 1967-68.
d/ Spread over U.S. Government 2-1/2 per cent of 1963-68.
e/ Government of Canada 3-1/4 per cent of October 1979.
f/ Spread over U.S. Government 3-1/4 per cent of 1978-83.
g/ Government of Canada 3-3/4 per cent of September 1996 - March 1998.
h/ Spread over U.S. Government of 1990.

Canada: Changes in Distribution of Holdings of Canadian Government Direct and Guaranteed Securities
(millions of Canadian dollars, par value)

	Bank of Canada			Chartered banks		General public		
	Treas. bills	Bonds	Government Total	Treas. bills	Bonds	Savings bonds	Treas. bills	Bonds
May	+ 17	- 22	- 1	+ 63	+ 24	- 33	- 80	+ 1
June	- 74	+ 43	+ 5	+ 33	+ 62	- 22	- 7	+ 37
July	+ 69	+ 21	+ 16	+ 16	+ 11	- 23	- 95	- 37
Aug.	0	+ 21	+ 32	+107	+148	- 29	- 87	- 35
Sept.	+ 16	+ 44	+ 9	- 58	+ 72	- 24	+ 40	+ 42
Oct.	-105	+ 14	- 39	+109	+ 4	+ 4	- 3	- 31
Nov.	- 9	+ 3	-125	- 42	+ 56	+720	+ 48	- 67
Dec.	- 3	+ 32	+ 21	- 48	+111	+ 24	+ 47	- 77
1962-Jan.	- 69	- 1	+ 88	+ 48	+ 57	- 10	- 20	- 19
Feb.	- 42	- 44	- 19	- 8	- 4	- 4	+ 69	- 34
Mar.	+ 30	+ 51	- 51	- 30	+ 43	- 13	- 18	+ 87
April	+ 14	+ 46	-117	-106	- 23	- 17	+ 42	- 31
May	- 8	+ 23	+ 7	- 28	+ 42	- 33	+ 26	- 79

Source: Bank of Canada, Weekly Financial Statistics.

Canadian banks: Non-Canadian Currency Assets and Liabilities
(in billions of Canadian dollars)

	Deposits			Assets				
	Banks	Others	Total	Deposits with banks	Call loans	Securities	Other loans	Total
End of year								
1957	.3	1.5	1.8	.4	.6	.4	.5	1.9
1958	.4	1.7	2.1	.3	.6	.5	.7	2.1
1959	.5	1.9	2.4	.4	.7	.5	.8	2.4
1960	.7	2.0	2.7	.5	.8	.6	.8	2.7
1961	.7	2.8	3.5	1.0	.8	.7	1.1	3.6
End of Quarter								
1961: I	.6	2.3	2.8	.6	.7	.8	.7	2.8
II	.6	2.8	3.3	.8	1.0	.7	.8	3.3
III	.6	2.9	3.5	.9	.8	.9	.9	3.5
IV	.7	2.8	3.5	1.0	.8	.7	1.1	3.6
End of month								
1961: Oct.	.7	3.0	3.7	1.0	.9	.8	.9	3.6
Nov.	.7	3.2	3.9	1.0	.9	1.0	1.0	3.9
Dec.	.7	2.8	3.5	1.0	.8	.7	1.1	3.6
1962: Jan.	.8	3.0	3.8	.9	.8	1.1	1.0	3.8
Feb.	.8	3.1	3.9	.9	.8	1.2	1.0	3.9
Mar.	.8	3.0	3.8	.9	.8	.9	1.1	3.7
Apr.	.7	3.1	3.8	.9	.9	.9	1.1	3.8

Chart 1

INTEREST ARBITRAGE, UNITED STATES / CANADA

Thursday figures

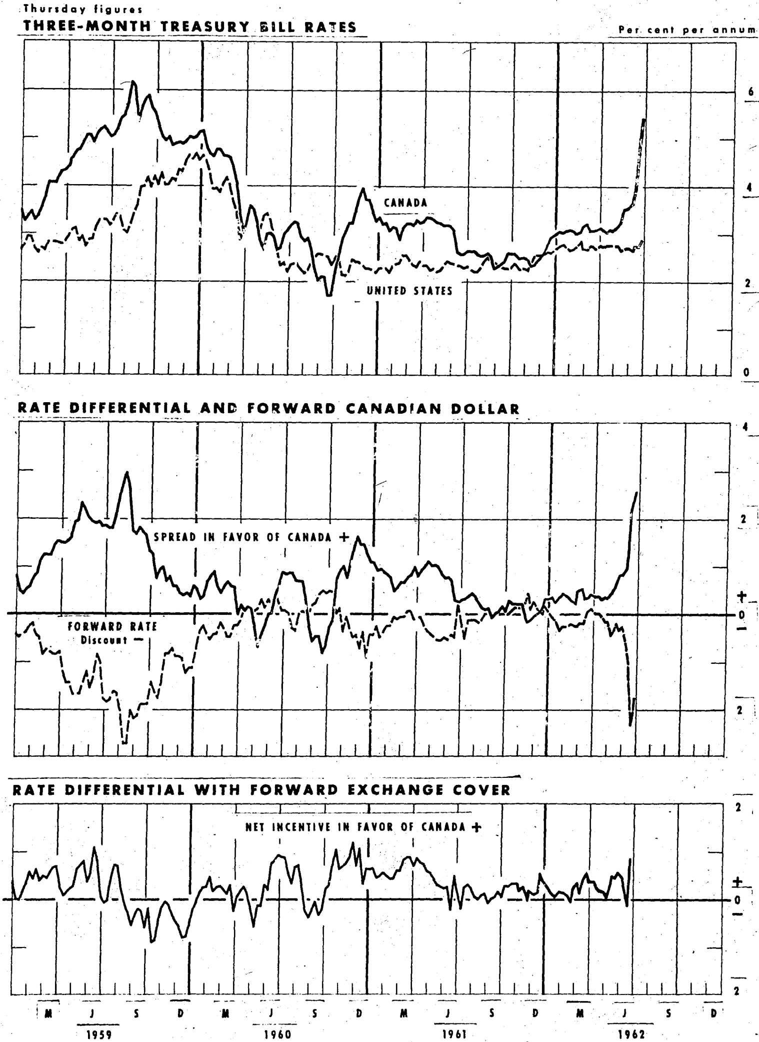

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Chart 2

INTEREST ARBITRAGE, NEW YORK/LONDON

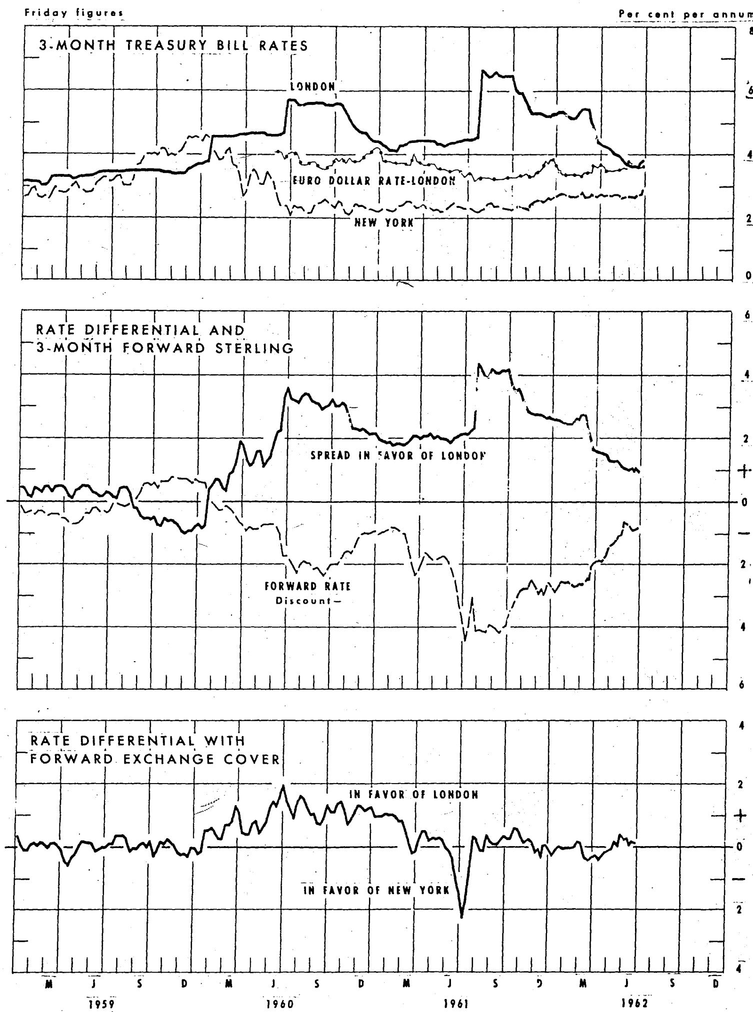
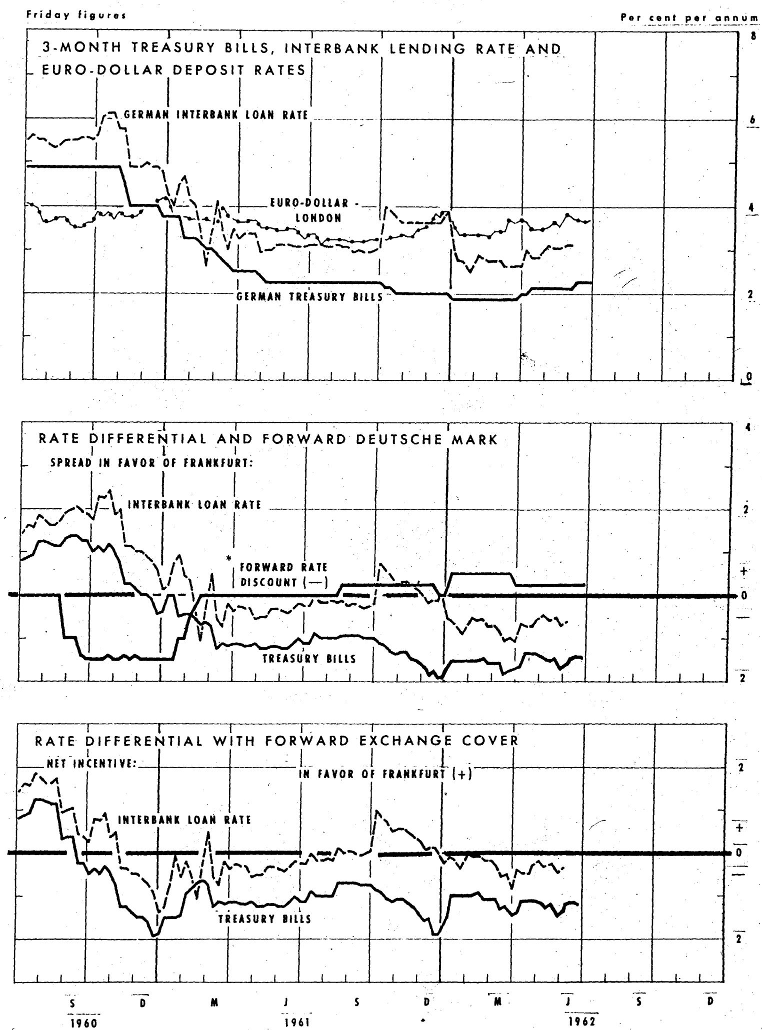


Chart 3
INTEREST ARBITRAGE FOR GERMAN COMMERCIAL BANKS



Note: Special forward rate available to German commercial banks

Chart 4

INTEREST ARBITRAGE, FRANKFURT / LONDON

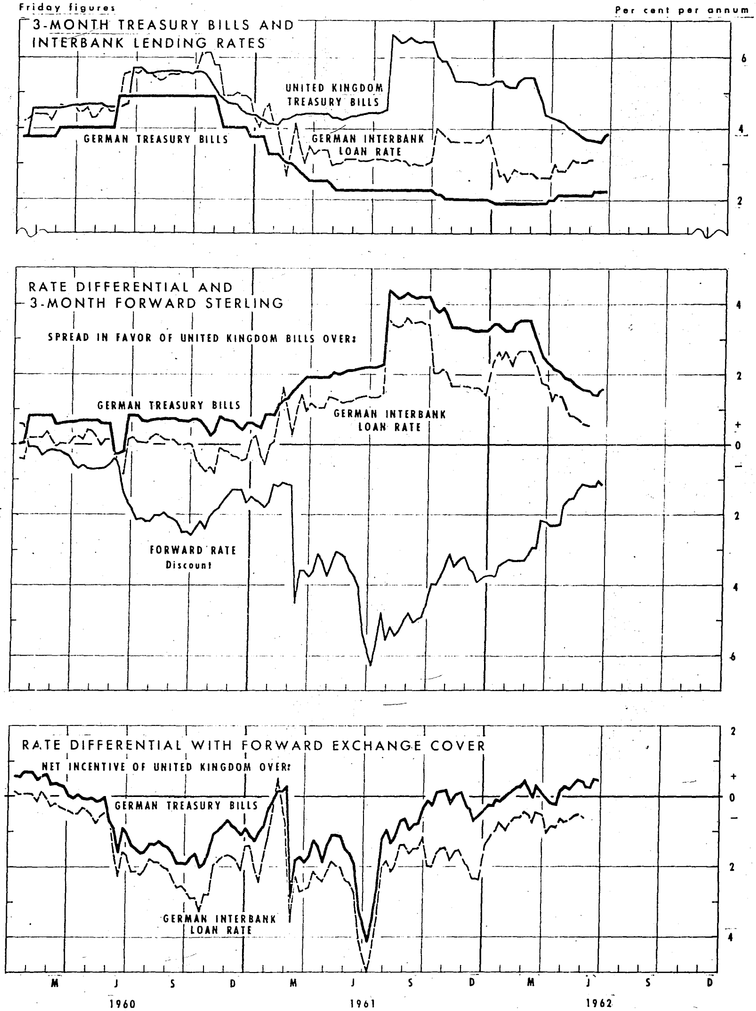


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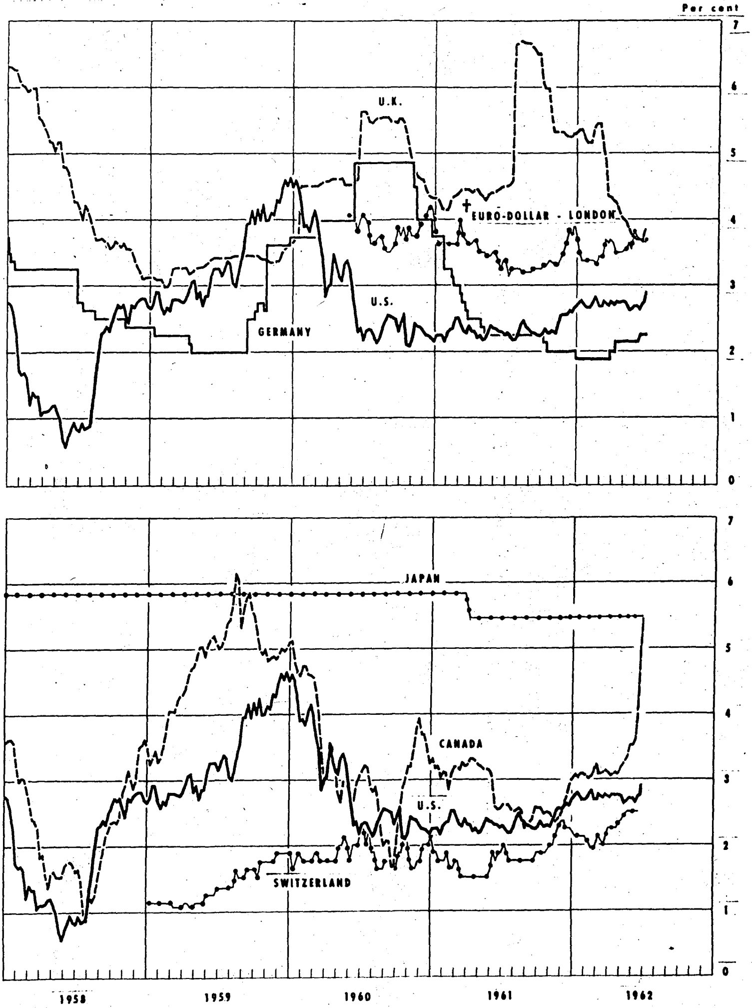
Chart 5
SHORT-TERM INTEREST RATES *



* 3-month treasury bill rates for all countries except Japan (3-month interbank deposit rate) and Switzerland (3-month deposit rate)

† 3-month rate for U. S. dollar deposits in London

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Chart 6

LONG-TERM BOND YIELDS

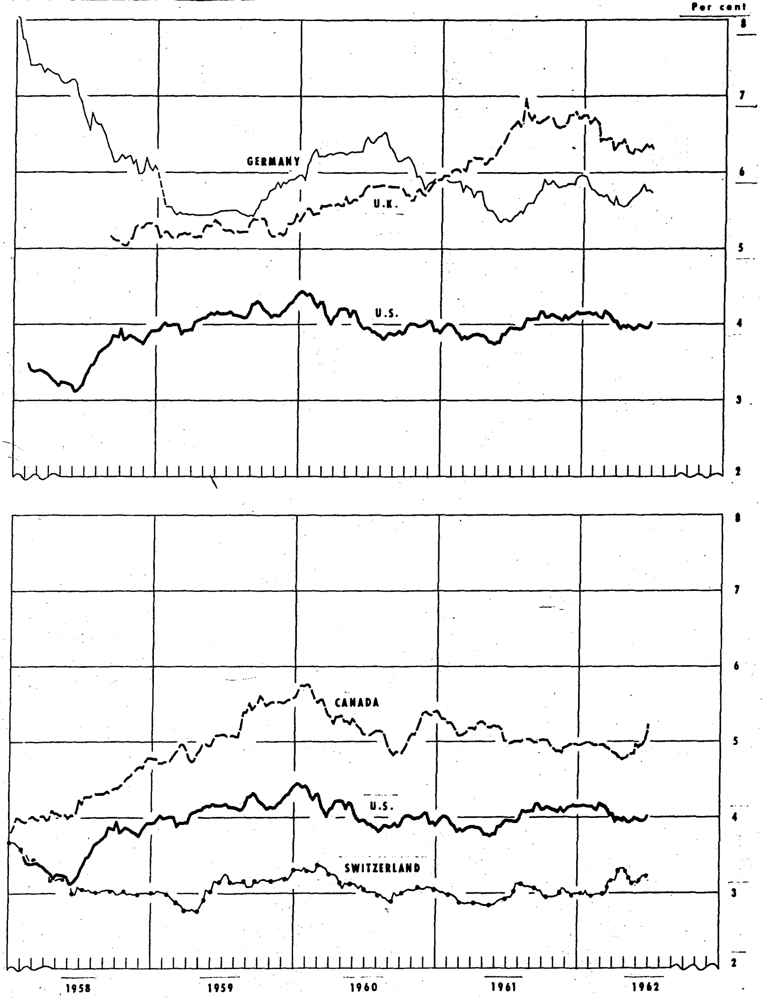
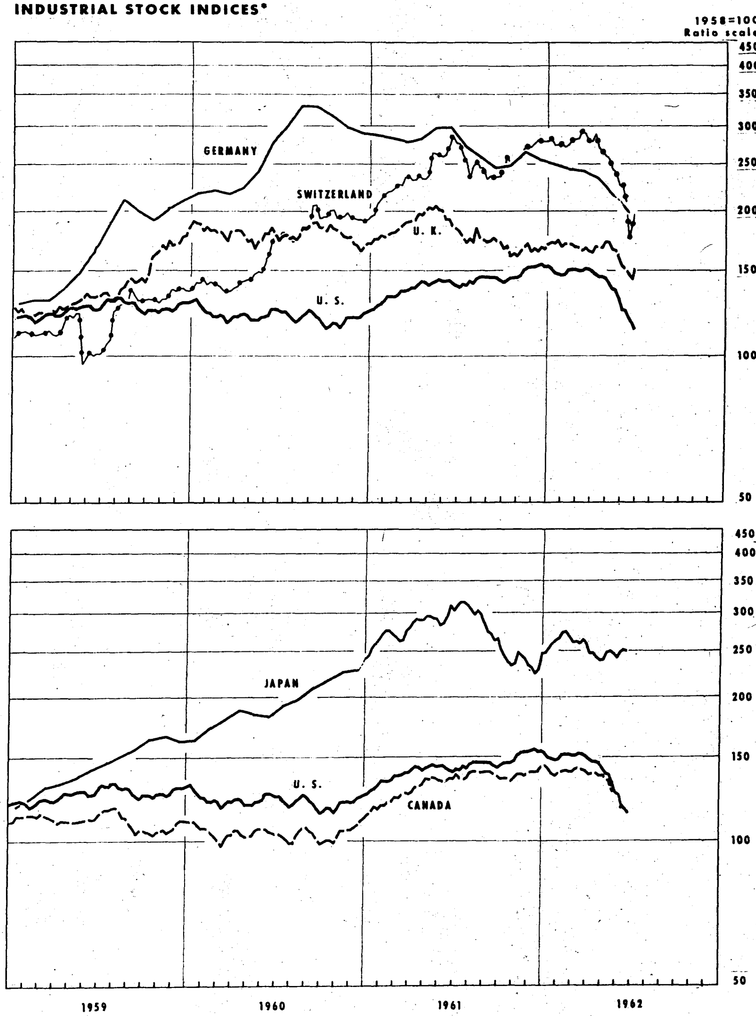


Chart 7

INDUSTRIAL STOCK INDICES*



* Note: Japan: Index of all stocks traded on Tokyo exchange

Chart 8

SPOT EXCHANGE RATES - MAJOR CURRENCIES AGAINST U.S. DOLLAR

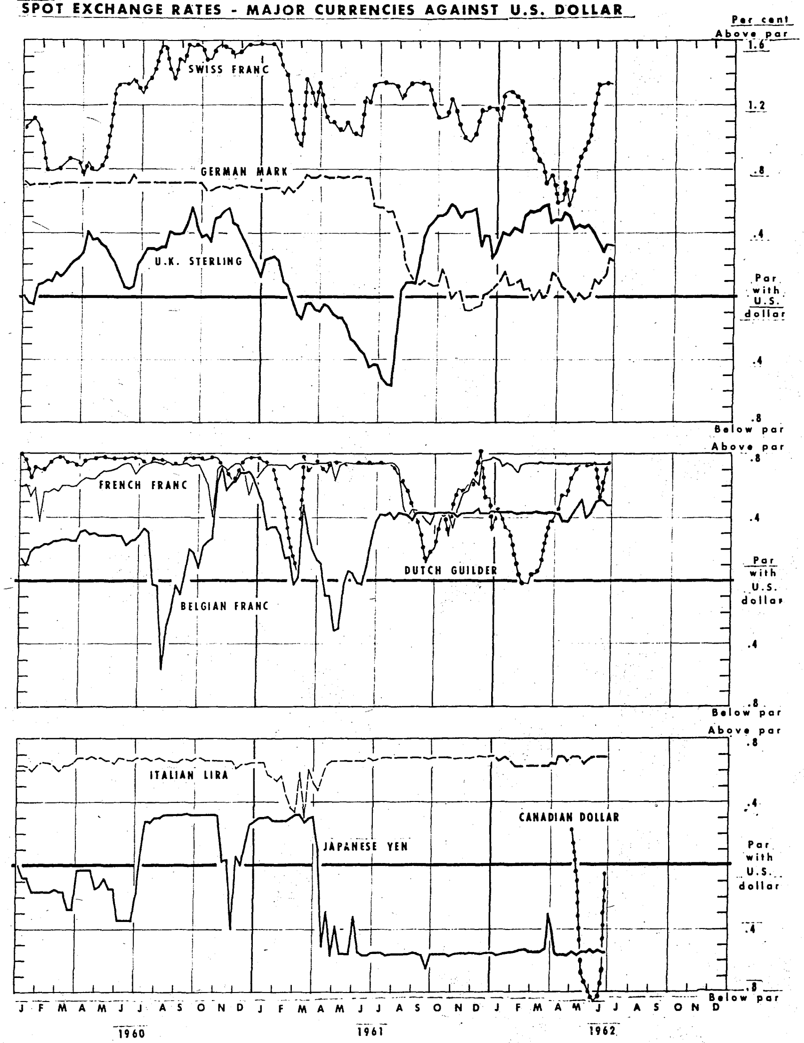


Chart 9

3-MONTH FORWARD EXCHANGE RATES