Treasury and Federal Reserve Foreign Exchange Operations*

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Although most of the major industrial countries were beset by inflation and domestic financial strains during the period under review, the foreign exchange markets were generally characterized by quiet and orderly trading, interrupted only briefly by the Canadian recourse to a floating rate early in June. Indeed, the very prevalence of inflationary trends, both here and abroad, left the exchange markets in something of a quandary as to which currencies might eventually fare better or worse.

So far in 1970 the United States balance of payments on official account has shifted from surplus to deficit. Various policy actions taken by the Federal Reserve to relieve the stringency of credit conditions in the United States resulted in a heavy return flow of funds to the Euro-dollar market which, in turn, facilitated the recovery of official reserves in France, Germany, Italy, and the United Kingdom where money remained tight. These shifts in the international flow of funds, in response to differential credit conditions, were reflected in a corresponding shift of creditor-debtor relationships in the Federal Reserve swap network and related credit arrangements. More than $1 billion of Bank of England debts to the Federal Reserve and the United States Treasury outstanding at the beginning of the year were almost fully repaid by the end of June, and since then the Bank of England has had no further recourse to United States credit facilities. The Bank of France debt of $200 million to the United States Treasury was also fully repaid. The Bank of Italy financed heavy reserve losses in January and February by drawing $800 million on the Federal Reserve swap line, but this debt has subsequently been fully repaid, partially by substituting medium-term financing through the Euro-dollar market. As of the end of August, no credits by the Federal Reserve to foreign central banks under the swap network were outstanding (see Table I).

Meanwhile, the Federal Reserve found it necessary to make repeated drawings on its swap lines with the Swiss National Bank, the National Bank of Belgium, and the Netherlands Bank (see Table II). Federal Reserve drawings of $145 million of Swiss francs that were outstanding at the beginning of 1970 could not be reversed through market transactions, as the usual seasonal weakening of the Swiss franc during the early months of the year failed to materialize. Accordingly, the Swiss National Bank agreed to sell, in a direct transaction with the Federal Reserve, the Swiss francs required to clean up the balance, and the swap line reverted to a standby basis. Later in the spring, new flows of dollars to Switzerland required the reactivation of the swap line, in May, in the form of a $200 million drawing of Swiss francs by the Federal Reserve. Through market transactions the Federal Reserve subsequently repaid $30 million of this debt, another $50 million was cleared away through a United States Treasury sale of gold to the Swiss National Bank, and the remaining $120 million was liquidated in August by another direct sale of Swiss francs to the Federal Reserve by the Swiss National Bank.

In the case of the Belgian franc, the Federal Reserve late in 1969 reactivated its swap line with the National Bank of Belgium by drawing $55 million of Belgian francs, and further drawings in 1970 increased such debt to $130 million by early May. Since the swap line had by then been in continuous use for almost six months, the United States Treasury undertook to assist

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Table I

DRAWINGS AND REPAYMENTS BY FOREIGN CENTRAL BANKS AND THE BANK FOR INTERNATIONAL SETTLEMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars

Banks drawing on Federal Reserve System	Drawings on Federal Reserve System outstanding on January 1, 1970	Drawings (+) or repayments (—) 1970 I	II	July 1—August 31	Drawings on Federal Reserve System outstanding on August 31, 1970
Bank of England	650.0	— 650.0			
Bank of France		+ 100.0 — 100.0			
Bank of Italy		+ 800.0	+200.0 —600.0	—400.0	
Bank for International Settlements (against German marks)		+ 136.0 — 136.0	+ 77.0 — 77.0	+ 22.0 — 22.0	
Total	650.0	+1,036.0 — 886.0	+277.0 —677.0	+ 22.0 —422.0	-0-

the Federal Reserve in fully liquidating its Belgian franc debt by drawing Belgian francs from the International Monetary Fund (IMF) and by selling a small amount of special drawing rights (SDR's) to the National Bank of Belgium. The swap line then reverted to a standby basis but, as the flow of funds to Belgium continued, new drawings were made by the Federal Reserve during the summer months for a total currently outstanding of $95 million.

Similarly, a Federal Reserve drawing of $130 million in guilders on the Netherlands Bank that was outstanding as of the end of 1969 could not be reversed through market transactions. Accordingly, it was agreed in May 1970 to clean up the debt through several special transactions, including a United States Treasury drawing of guilders from the IMF together with a small sale of SDR's to the Netherlands Bank. Here again, the flow of dollars to the Netherlands persisted through the summer months, and by September 10 had necessitated new guilder drawings by the Federal Reserve amounting to $220 million. There were no operations in Austrian schillings, Canadian dollars, Japanese yen, Mexican pesos, or the Scandinavian currencies.

Among other developments during the period under review, the Federal Reserve swap network was further enlarged to an $11,230 million total on March 12 as a result of an increase in the swap line with the Bank of Italy from $1 billion to $1,250 million (see Table III). In April, the United States Treasury redeemed at maturity a six-month Swiss franc-denominated certificate of indebtedness equivalent to $54.7 million held by the Bank for International Settlements (BIS) while other foreign-currency-denominated securities were rolled over at maturity, leaving a total of $1.4 billion equivalent currently outstanding (see Table IV). No operations in forward markets were undertaken by either the Federal Reserve or the Treasury.

CANADIAN DOLLAR

The Canadian dollar rose to its effective ceiling of $0.9324 in late December 1969 and, except for a brief easing in February, remained at or very near that level through May (see Chart I). The strength of the Canadian dollar reflected developments in both the current and capital accounts of the Canadian balance of payments. The trade surplus widened substantially, as there was a broad-based increase in exports. In the capital sector, funds were repatriated from the New York stock market, while during the first quarter Canadian borrowing abroad remained heavy. Moreover, relatively high interest rates resulting from the vigorous anti-inflationary policies pursued by the Canadian authorities attracted short-term inflows, including some repatriation of funds previously placed in the Euro-dollar market.

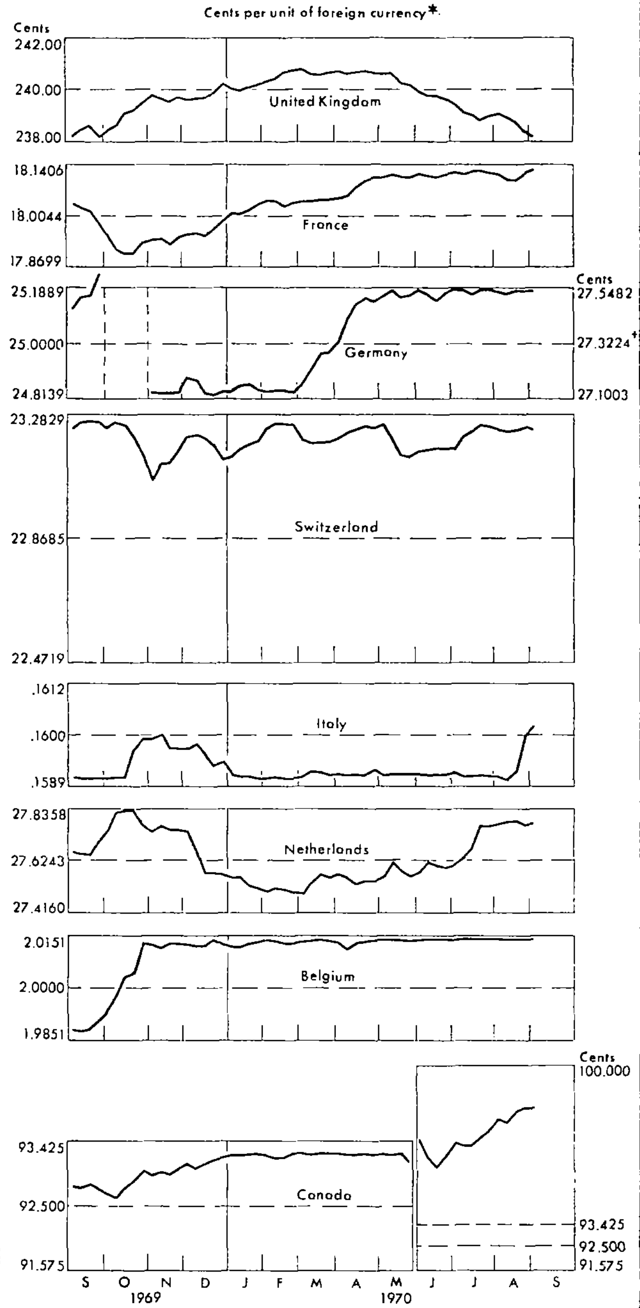
As the exchange markets became increasingly aware of the strength of the Canadian payments position, toward the end of April rumors began to circulate that the Bank of Canada would raise its upper intervention point to the full 1 percent above par allowed by the IMF, or even that the Canadian dollar would be revalued. Consequently, demand for Canadian dollars surged and the Bank of Canada began to purchase United States dollars on a mounting scale.

These heavy purchases of foreign exchange were financed by the drawing-down of government deposits with the chartered banks. As the inflow intensified, however, such deposits began to be depleted, and on May 11 the Canadian authorities announced that they would sell a special issue of bills totaling Can.$250 million. At the same time, the Bank of Canada raised the chartered banks' minimum secondary reserve requirement from 8 percent to 9 percent of deposits. This move immobilized approximately the amount to be raised by the bill issue. In addition, in an attempt to reduce the inflow of short-term funds, the Bank of Canada announced a ½ percentage point decrease in its discount rate from 8 percent to 7½ percent.

The Canadian dollar eased very briefly but then again moved to the ceiling as a rise in the forward premium continued to provide a hedged incentive for short-term funds to flow into Canada. Toward the end of May, however, when the Bank of Canada entered the forward market both on a swap and on an outright basis, the forward premium backed down and the spot rate declined.

Under these circumstances, the market was taken by surprise on Sunday, May 31, when Finance Minister Benson announced that, for the time being, the upper limit for the Canadian dollar would not be defended. Mr. Benson cited the rapid and accelerating accumulation of reserves and the threat of large-scale speculative inflows as reasons for the decision "to permit some appreciation of the market rate of exchange". (Reserves had risen $1.2 billion since the beginning of the year, of which some $622 million—including forward purchases—had occurred in May alone.) Mr. Benson stated, however, that the authorities would intervene to prevent an excessive appreciation, as well as to maintain orderly conditions in the exchange market, and that "the IMF has also been informed of the Canadian government's intention . . . to resume the fulfilment of its obligations under the Articles of Agreement of the IMF as soon as circumstances permit". In order to prevent a rise in the Canadian dollar from being excessively deflationary, the Bank of Canada simultaneously cut its discount rate by a further ½ percentage point, to 7 percent, while the government decided not to proceed with

Chart I
EXCHANGE RATES
SEPTEMBER 1969 TO SEPTEMBER 1970
Cents per unit of foreign currency*



Note: Upper and lower boundaries of charts represent offical buying and selling rates of dollars against the various currencies. Until the end of May 1970, however, the Bank of Canada had informed the market that its intervention points in transactions with banks were $0.9324 (upper limit) and $0.9174 (lower limit). On May 31, 1970, the Canadian authorities announced they would no longer keep the market rate from exceeding the official buying rate of $0.93425, and the boundaries of the Canadian dollar chart from that point on are drawn for graphical convenience only and on a much reduced scale.

* Weekly averages of New York noon offered rates.

— — — Par value of currency.

† As of October 26, 1969.

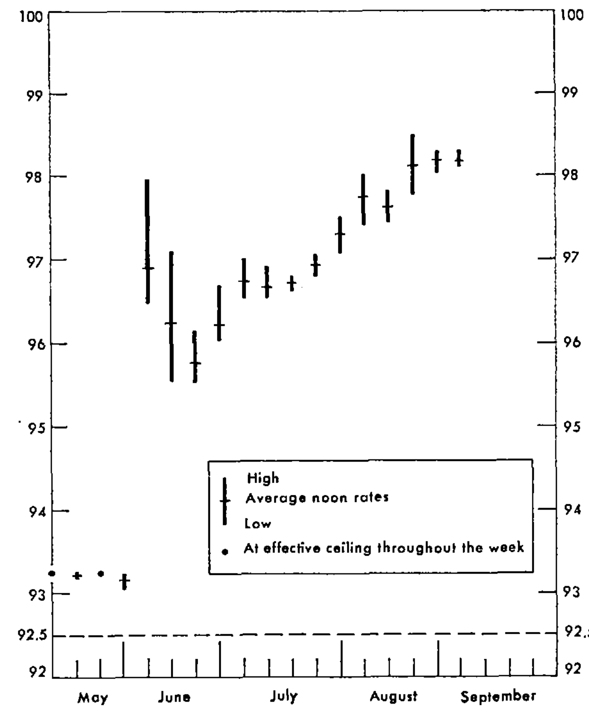
certain consumer credit restraints it had planned to introduce.

The market opened on Monday, June 1, in an atmosphere of considerable nervousness, reflecting the prevalent uncertainty as to how high and for how long the Canadian dollar would float. In hectic trading early that morning in London, the rate rose nearly to parity with the United States dollar but then fell back to the \$0.97-\$0.98 range. A substantial demand for Canadian dollars appeared when the markets opened in North America, primarily from banks covering short positions, but the Bank of Canada intervened to prevent a further run-up in the rate. By late afternoon demand had begun to ebb, and the rate declined to as low as \$0.9655 on June 2. Activity then diminished to abnormally low levels over the remainder of the week. In subsequent weeks, the rate continued to fluctuate widely—reaching as high as \$0.9710 and as low as \$0.9554 (see Chart II). In accordance with the announced policy, the Bank of Canada intervened to dampen the swings, in particular acting to prevent an excessive rise in the rate.

By the end of June the Canadian dollar had settled around \$0.9660, as the market began to feel that this might be close to the level at which a new parity would eventually be established. The rate held fairly steady around that level through mid-July, the daily fluctuations becoming narrower and less erratic.

At that point, however, a new wave of demand built

Chart II
CANADIAN DOLLAR
UNITED STATES CENTS PER CANADIAN DOLLAR *
MAY TO SEPTEMBER 1970



*New York offered rates.

Table II

FEDERAL RESERVE SYSTEM DRAWINGS AND REPAYMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars equivalent

Transactions with	System swap drawings outstanding on January 1, 1970	Drawings (+) or repayments (—) 1970 I	II	July 1-September 10	System swap drawings outstanding on September 10, 1970
National Bank of Belgium	55.0	+ 50.0	{+ 45.0 {—130.0	+ 75.0	95.0
Netherlands Bank	130.0		—130.0	+220.0	220.0
Swiss National Bank	145.0	—145.0	+200.0	—200.0	
Total	330.0	{+ 50.0 {—145.0	{+245.0 {—260.0	{+295.0 {—200.0	315.0

up and in just over a month the Canadian dollar reached $0.9850. The advance mainly reflected the onset of seasonal demand, a pickup in long-term borrowings abroad, and an inflow of short-term funds resulting from a sharp squeeze for balances in Canada. Moreover, the rise in the rate tended to be self-reinforcing in that it encouraged an increasing tendency to cover Canadian dollar commitments. Another factor in the market, starting toward the end of July, was the appearance of professional traders, mainly in European banks, who would move in and out of the Canadian dollar within a single day to take advantage of the wide fluctuations in the rate, their actions clearly aggravating those fluctuations. Finally, in mid-August there was a burst of demand for Canadian dollars, as grain dealers reacted to reports that a substantial portion of the United States corn crop was threatened by blight. Later in the month, as the market calmed again, the rate moved lower. On August 31 the Bank of Canada announced that in view of both external and domestic economic developments it was cutting its discount rate by ½ percentage point to 6½ percent.

Table III

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS
September 10, 1970

In millions of dollars

Institution	Amount of facility
Austrian National Bank	200
National Bank of Belgium	500
Bank of Canada	1,000
National Bank of Denmark	200
Bank of England	2,000
Bank of France	1,000
German Federal Bank	1,000
Bank of Italy	1,250
Bank of Japan	1,000
Bank of Mexico	130
Netherlands Bank	300
Bank of Norway	200
Bank of Sweden	250
Swiss National Bank	600
Bank for International Settlements:	
Swiss francs-dollars	600
Other authorized European currencies-dollars	1,000
Total	11,230

GERMAN MARK

The German authorities' decision on September 29, 1969 to suspend temporarily their intervention at the mark's ceiling and the subsequent revaluation of the mark on October 26 triggered a massive outpouring of funds from Germany; by the end of the year, the German Federal Bank had sold more than $6½ billion in spot market operations. In December, a significant factor in the outflow was the repatriation of funds by United States and European corporations to meet balance-of-payments targets or year-end needs. After this year-end positioning was completed and as Euro-dollar rates declined sharply, the outflow from Germany came to an abrupt halt. The mark then firmed and generally traded above its $0.2710 floor in January, although it eased back close to the floor by the end of February. The Federal Reserve built up its mark balances in February by purchasing $97.6 million equivalent of marks from a foreign central bank.

In the meantime, credit conditions had tightened considerably in Germany, as the monetary authorities had allowed the outflow of late 1969 to constrict domestic liquidity. In the absence of strong action on the fiscal front, however, this liquidity squeeze proved insufficient to check the inflationary forces under way in Germany and the market began to anticipate a further tightening of monetary policy. Accordingly, traders bid more actively for marks in early March, lifting the spot rate slightly above its floor in the process. Nevertheless, the market was surprised by the severity of the measures announced by the Federal Bank Council on March 6: the central bank's discount rate was raised by 1½ percentage points to 7½ percent, its "Lombard" rate on advances against securities by ½ percentage point to 9½ percent, and, to discourage banks from borrowing too heavily abroad, an additional reserve requirement of 30 percent was imposed, effective April 1, on increases in the banks' nonresident liabilities.

The spot mark rate immediately rose sharply in response to this pronounced tightening of monetary policy. Even though the Federal Bank repeatedly raised its day-to-day intervention points, on April 6 it began absorbing dollars from the market for the first time since last fall. After easing temporarily at the month end, the mark began to climb again in May. Borrowing abroad by German banks continued, but on a more limited scale, while borrowings by commercial firms reached major proportions. With this demand for marks reinforced by fears of additional measures of monetary restraint and by rumors that the Federal Bank might raise its official upper intervention point to the full 1 percent above par allowed by the IMF,

Table IV

UNITED STATES TREASURY SECURITIES
FOREIGN CURRENCY SERIES

In millions of dollars equivalent

Issued to	Amount outstanding on January 1, 1970	Issues (+) or redemptions (—) 1970 I	II	July 1— September 10	Amount outstanding on September 10, 1970
German Federal Bank	1,081.6*	−542.0			539.6
German banks	135.5*				135.5
Bank of Italy	125.4	−125.4			-0-
Swiss National Bank	540.6				541.0
Bank for International Settlements†	204.4		−54.7		150.0
Total	2,087.6	−667.4	−54.7	-0-	1,366.1

Note: Discrepancies in totals result from minor valuation adjustments and from rounding.
*Includes valuation adjustments subsequent to the revaluation of the German mark.
† Denominated in Swiss francs.

the spot rate reached its ceiling of $0.2754⅞ on May 13 and the Federal Bank had to purchase a large amount of dollars. A brief easing occurred again in the second half of May, but the rate was rising once more by the month end.

The floating of the Canadian dollar on June 1 added a new speculative element to the continuing inflow of short-term funds stemming from interest arbitrage. Thus, even though Germany's current account was undergoing a substantial deterioration, particularly on services, the mark remained extremely strong in June. A characteristic pattern soon emerged, with a bunching of purchases on Wednesdays when value-date considerations favor the mark, followed by an ebbing of demand in subsequent days. The Federal Bank began taking in dollars on Wednesday, June 3. During the following week the market was quite nervous and revaluation rumors, along with the approaching mid-June tax period, led to a large-scale conversion of foreign borrowings by German corporations and triggered the movement into marks of other funds as well. In the most hectic day since the fall of 1969, on June 10, the Federal Bank purchased $640 million at the ceiling, while the rate moved even higher that afternoon in New York after the close of business in Frankfurt. Even though the immediate demand for marks spent itself in this flare-up and activity was again normal during the following days, the market remained unsettled and fearful about the future. In a move aimed at calming these fears, the Federal Bank began offering to sell outright forward marks, and this action helped improve market atmosphere. Nevertheless, the underlying demand for marks remained strong and was further intensified toward the end of June by German commercial banks' positioning to meet increased reserve requirements (effective July 1, these were raised by 15 percent). At the same time, relatively high German interest rates were again pulling in funds from the Euro-dollar market—where rates were declining in response to the partial lifting of Regulation Q ceilings in the United States—and, on July 1, the Federal Bank once more purchased a large amount of dollars.

The heavy inflows of interest-sensitive funds made it clear that Germany could not fight inflation with monetary policy alone in an environment of declining interest rates abroad. Early in July, therefore, the German cabinet decided to tighten fiscal policy, thereby allowing some easing of monetary restraint. Included among the measures taken then were a temporary suspension of accelerated depreciation allowances for industry and the imposition of a refundable 10 percent surcharge on personal and corporate income taxes. Subsequently, effective July 16, the Federal Bank reduced its discount and "Lombard" rates by ½ percentage point to the still very high levels of 7 and 9 percent, respectively. German money market rates remained firm, nevertheless, ranging above 9 percent, so that, against a background of easing Euro-dollar quotations, a considerable interest-arbitrage incentive in favor of Germany persisted. As a consequence, demand for marks dipped but briefly, and the central bank again made large gains in the latter part of July.

Eventually, however, the German money market began to respond to the influx of liquidity from abroad. With domestic interest rates easing as a consequence, demand for marks lessened and the central bank's dollar purchases tapered off by early August. By then, however, the expansion of domestic liquidity had become excessive and threatened to thwart the anti-inflationary efforts of the German authorities. Consequently, on August 12 the Federal Bank Council announced new measures of monetary restraint: effective September 1, increases in bank liabilities above the second-quarter average were subjected to heavy new reserve requirements, and accordingly the additional 30 percent requirement imposed in March on increases in the banks' nonresident liabilities was abolished. With tighter domestic credit conditions in prospect, demand for marks strengthened somewhat and the Federal Bank again had to absorb dollars from the market. The amounts were relatively modest, however, and the general market atmosphere at the close of the period was much calmer than in earlier months.

STERLING

Sterling recovered strongly throughout the fall of 1969, as the British trade position shifted into surplus and a reversal of earlier speculative outflows gathered momentum. Concurrently, monetary policy tightened sharply, and by the year-end spot sterling had reached parity while forward sterling discounts had narrowed substantially. The Bank of England was thereby enabled to make sizable reserve gains during the fall months, and by the year-end its outstanding drawings on the Federal Reserve had been reduced to $650 million from the May 1969 peak of $1,415 million.

Even stronger demand for sterling emerged during the first four months of 1970. Britain's basic payments position continued to run in heavy surplus, and there were further favorable shifts in commercial leads and lags. Moreover, London began to attract very heavy inflows of short-term investment funds, as Euro-dollar rates fell sharply while tight money market conditions continued to prevail in the United Kingdom. The three-month Euro-dollar rate, for example, had reached 11½ percent in mid-December but thereafter declined sharply during the first quarter of 1970 and into April, reaching a low of about 8 percent in mid-April. Deposit rates in the United Kingdom, on the other hand, remained firm early in the year and then moved up in February and early March in response to the mid-March tax squeeze. Inflows during this period were reflected, in part, in a large rise in the sterling balances of the overseas sterling area as well as in some rebuilding of the balances of nonsterling-area countries. In addition, British-based firms with international subsidiaries apparently were bringing funds home to bolster their liquidity positions.

As funds flowed into Britain the spot sterling rate moved well above par and the Bank of England made very sizable reserve gains, which as before were largely devoted to the liquidation of official indebtedness. Drawings on the Federal Reserve swap line were cleaned up through repayments of $300 million in January and $350 million in February, thus restoring the $2 billion swap line to a fully available standby basis for the first time since July 1968. Over the same period and continuing into March, very substantial repayments were made to other creditors, including the United States Treasury (see Table V).

The exceptionally strong performance of sterling during the winter months, and the emergence of a significant interest differential in favor of sterling, had led the Bank of England to reduce its discount rate by ½ percentage point to 7½ percent on March 5. Nevertheless, inflows to London continued as Euro-dollar rates declined further, and the bank rate was cut again to 7 percent in mid-April at the time of the announcement of the United Kingdom budget. The budget was generally well received by the market and, despite the further reduction in British interest rates, sterling continued in good demand, enabling the

Table V

BRITISH SHORT-TERM INDEBTEDNESS TO THE UNITED STATES TREASURY AND FEDERAL RESERVE SYSTEM

Amounts outstanding in millions of dollars

Date	Federal Reserve swap line	June 1966 sterling balances arrangement (System-Treasury)	Treasury credit line of November 1967	Total
1969				
May 13	1,415	310	350	2,075
June 30	1,025	310	350	1,685
September 30	1,100	310	350	1,760
December 31	650	271	350	1,271
1970				
March 31	-0-	154	225	379
June 30	-0-	115	-0-	115
August 31	-0-	115	-0-	115

Note: Certain special credits from the United States Treasury also were liquidated by March 31.

Bank of England to take in more dollars. While some of these gains were added to reserves, most were used to pay off debt, including the final $225 million due under the credit line of $350 million extended by the United States Treasury in November 1967.

Demand for sterling remained strong through early May, when it was announced that the British trade position had slipped into small deficit in April. Buying then tapered off, and the subsequent call on May 18 for a general election to be held on June 18 brought sterling under some pressure. In succeeding days, the spot rate declined fairly sharply from about $2.4050 to just above par. Sterling firmed at the month end, however, and for May as a whole the reserve position showed a small gain.

The floating of the Canadian dollar on June 1 introduced a new element of uncertainty into the market and, as the British elections drew closer, sterling slipped below par. The decline in the rate was not precipitous, however, and little official support was required. The announcement on June 15 that there had been a second successive trade deficit in May, coupled with growing concern over wage and price developments in Britain, put still further pressure on sterling, and the rate dropped to about $2.3960. Following the June 18 election, however, there was an increase in demand that briefly carried sterling above par and resulted in substantial reserve gains by the British authorities. Consequently, the Bank of England was able in June to make a further advance repayment of credits extended under the June 1966 sterling balances arrangement. Of this repayment, the Federal Reserve and United States Treasury share was $39 million, bringing the total of such repayments to the United States since late 1969 to $195 million. For the first half of 1970 as a whole, United Kingdom reserves rose $264 million, while net repayments on short-term credit facilities totaled $2,619 million and $269 million was repaid to the IMF.

The improvement in the British reserve position in May and June was accomplished despite rising Euro-dollar rates resulting from heavy borrowing from some Continental centers and firm demand on the part of United States banks. Although Euro-dollar rates leveled off by mid-June, the interest comparison remained adverse to the United Kingdom into early July, and for a few days at the beginning of the month there was heavy switching out of sterling, which pushed the spot rate down to nearly $2.39 and brought the Bank of England into the market in support.

Euro-dollar rates then moved lower as a change in Regulation Q by the Federal Reserve Board, in response to pressures in United States financial markets in late June, led to a sharp decline in the Euro-dollar borrowings of United States banks. Consequently, the pressure on sterling eased and the spot rate held above $2.39, despite the threat of a nationwide dock strike. The July 14 announcement of a substantial trade deficit for June, followed the next day by the dock workers' vote to strike, resulted in a further decline in the sterling rate to about $2.3885, but no official support was required. Although the market remained nervous during the period of the strike, there was no significant liquidation of sterling balances and no further slide in the rate. Indeed, the settlement of the strike in late July brought renewed demand for sterling.

The market then entered a period of summer doldrums in August, and through midmonth sterling fluctuated on either side of $2.39 in quiet trading. Late in the month, however, against the background of an adverse seasonal swing, concern about the domestic labor situation brought on some selling of sterling, and the spot rate declined to about $2.3830 by month end.

ITALIAN LIRA

The Italian lira had been subjected to considerable pressure in September 1969 as a result of speculative outflows to Germany, and the Bank of Italy had drawn $300 million on its swap facility with the Federal Reserve. When the German mark was allowed to "float" at the end of September, Italian residents started to unwind their mark positions and, by mid-November, the lira had moved up to par. With this reversal in the flow of funds, the Bank of Italy was able to acquire dollars in the market and liquidate completely its swap drawing from the Federal Reserve.

Late in November, unfortunately, the situation took an abrupt turn for the worse. A rash of labor strikes crippled industrial production, thereby choking off exports while simultaneously pulling in additional imports. This worsening of the current account was accompanied by increased capital outflows. As a consequence, the lira came under heavy selling pressure that persisted until mid-March, and the Bank of Italy had to extend sizable market support even though it had allowed the spot rate to fall to its floor by early January. To cover market losses the Bank of Italy reactivated its swap line with the Federal Reserve, drawing $200 million in late January and an additional $600 million during the course of February, when pressures intensified following the resignation of the Italian government.

In the meantime, however, the Italian authorities had started to take a series of measures to curb the capital outflow, and these were to bring a significant improvement in the situation. In mid-February, the Bank of Italy curtailed the potential for large shifts in commercial leads and lags by limiting prepayments of imports to no more than 30 days and requiring the repatriation of export earnings within 120 days of shipment. The Bank also discouraged the outflow of Italian bank notes by substantially tightening procedures for handling such notes when presented for conversion. At the same time, the Italian authorities began encouraging official entities to meet their capital needs by borrowing abroad. Early in March, the Bank of Italy acted to bring Italian interest rates into better alignment with those abroad by raising both its discount rate and its rate on advances against securities by 1½ percentage points, to 5½ percent, while maintaining the additional penalties of 1½ percentage points on the borrowings of banks making large or frequent use of central bank credit. Domestic liquidity conditions then tightened, and Italian interest rates moved up to more competitive levels. Furthermore, to bolster the Italian authorities' defenses, on March 12 the Federal Reserve's swap arrangement with the Bank of Italy was increased by $250 million to $1,250 million and the United States Treasury extended to the Bank of Italy a special swap facility of $250 million.

There was a clear improvement in the market during the second half of March, reflecting the formation of a new coalition government, tourist travel to Italy over the Easter holidays, and a tapering-off of capital outflows. This stronger tone of the lira persisted until mid-May (even though intermittent strikes helped keep the trade deficit large), and the Bank of Italy was able to purchase a moderate amount of dollars in the market. Furthermore, the Italian electricity authority—ENEL—raised a total of $425 million in the Euro-dollar market in May, and the foreign currency proceeds of the borrowings were added to official reserves. With the help of these funds, the Bank of Italy repaid in May swap drawings of $600 million, thereby reducing its indebtedness to the Federal Reserve to $200 million.

Starting around mid-May, however, the lira again came under some pressure as a result of new strikes and uncertainty about the outcome of the regional and local elections of June 7 and 8. Against this background, there were renewed fears of a devaluation of the lira, and the Bank of Italy had to provide sizable support to the market. Such fears were also evident in the forward market, where the discount on the three-month lira widened from around 1 percent per annum at the end of May to 13 percent early in July. Then, on July 6, the Italian government resigned after less than four months in office, and the political crisis temporarily intensified the pressure on the lira.

To help cover its market losses of late spring and early summer, the Bank of Italy drew an additional $200 million on the Federal Reserve facility in June, thereby raising such swap debt to $400 million. These drawings were fully liquidated by July 10, as the Italian authorities decided to mobilize resources available from the IMF. A $250 million special claim on the IMF was converted into dollars by transferring the claim to Japan and $463 million more, representing Italy's super gold tranche position plus lending under the General Arrangements to Borrow, was drawn directly from the Fund. In a related precautionary operation, the Bank of Italy activated for the first time its special $250 million swap facility with the United States Treasury, drawing $100 million on July 14 and repaying the entire amount on July 17.

In early August the lira again needed support, but a better tone emerged following the formation of a new government led by former Finance Minister Emilio Colombo on August 6. Indications of the programs to be proposed by the new government brought a strengthening of market confidence in the lira, and there was some covering of short positions. Late in the month the government announced its new fiscal program, including a hike in gasoline prices, higher excise taxes, and several measures to increase productivity. By the end of August the spot rate had risen well above par and the Italian authorities had begun to accumulate dollars from the market.

FRENCH FRANC

In the year that has elapsed since the franc's devaluation in August 1969, the French authorities have been able to liquidate completely $1.5 billion in short-term international indebtedness, to repay in full the foreign exchange deposits that French commercial banks had been required to hold at the Bank of France, and to add $952 million to official reserves, while allowing the franc rate to move from close to its floor to near its ceiling. This impressive achievement, although partly based on drawings on the IMF totaling $985 million, reflects primarily the dramatic improvement in France's balance-of-payments position since mid-October 1969—a turnabout from massive deficit to substantial surplus.

The rapid recovery of the franc was largely attributable to an effective combination of French monetary and fiscal policy in support of the devaluation as well as to developments abroad. Beginning in the fall of 1969 the authorities undertook a vigorous anti-inflationary program —cutting back public spending, curbing consumer credit, encouraging savings, and, more broadly, moving to a firmly restrictive monetary policy. This stringent program was maintained with only minor relaxations, even after the external situation had turned around. Second, the speculative flows prior to the devaluation were followed after that event by opposite movements which contributed to the franc's strength: leads and lags and other short-term flows were reversed, while consumption and imports, which had risen sharply in anticipation of a devaluation, receded markedly in the latter part of 1969. Third, the subsequent revaluation of the German mark reinforced the new parity of the French franc, initially by triggering a reflow of funds out of Germany. Finally, the severe price and wage inflation experienced by virtually all industrialized countries helped mitigate the balance-of-payments effects of France's own inflation and of the additional pressures exerted on domestic prices as a result of the devaluation.

Against this background, the French franc strengthened significantly and in January moved above par as Euro-dollar rates began to decline steeply while French monetary conditions remained taut. Moreover, the French trade position was steadily improving and reached approximate balance by spring. In April, demand for francs increased markedly as confidence steadily improved, and the Bank of France added considerably to its reserves.

The franc maintained its strength in May and June, and the Bank of France again made large dollar purchases, particularly at the month end. To offset the domestic monetary effects of these inflows, the Bank of France in early June raised commercial bank reserve requirements by 1 percentage point. In view of the strengthening of the franc, travel allowances and some other limitations on the use of foreign currencies were relaxed in the spring and in midyear, but the main body of the exchange controls introduced in the autumn of 1968 remains in effect. The swing into external surplus enabled the authorities to move in mid-1970 toward a somewhat less stringent policy domestically; some quantitative credit controls were relaxed, tax and credit restrictions on the purchase of a number of durable goods were eased, and some budgetary funds that had been frozen earlier were released. In order to limit the expansionary effects of these measures, however, the authorities once again raised reserve requirements by 1 percentage point in early July to 7.5 percent for sight deposits and to 2.5 percent for time deposits of up to three years' maturity.

There was a further strengthening of demand for the French franc at the end of July, mainly reflecting a bunching of conversions of export receipts prior to the August vacation period, and the spot rate reached a new post-devaluation high. In August, the rate eased marginally in an inactive market until late in the month when the Bank of France cut its discount rate by ½ percentage point to 7½ percent. This further evidence of official confidence in the recovery of the franc helped bring about a firming in the spot rate during the closing days of August.

During 1970 the Bank of France used its reserve gains to reduce further its international indebtedness. By the end of April it had fully liquidated its short-term credits from foreign central banks. At the same time, the Bank of France also cleared away its debt to the United States Treasury under the November 1968 facility, repaying the total of $200 million by April 24: $70 million in February, $55 million in March, and $75 million in April. Then, as a result of the increase in official reserves, France was required to make a repayment of its outstanding indebtedness to the IMF; this payment, amounting to $246 million, was made on September 2.

SWISS FRANC

In late 1969 and early 1970, the Swiss authorities took a number of steps to combat the inflationary pressures generated in part by an export boom. Late in December the government decided to complete its Kennedy-round tariff cuts during the spring of 1970 rather than in 1971 and 1972 as originally scheduled. Then in January the National Bank and the commercial banks agreed, under the existing restrictions on credit expansion, to reduce further the permissible rate of growth in bank credit during the first half of 1970. Meanwhile, bank liquidity had been progressively tightening, and this squeeze became evident in January when the usual seasonal weakening of the Swiss franc caused by the reversal of year-end flows failed to materialize. Consequently, the Federal Reserve was unable to acquire through the market the Swiss francs needed to liquidate the System's swap debt of $145 million to the Swiss National Bank.

In February, with relative calm prevailing in the markets, the Federal Reserve and the Swiss National Bank agreed that the time had come to clear up the System's Swiss franc swap debt, which had been outstanding since October. Consequently, during the month the National Bank sold $140.7 million of francs directly to the System against dollars. The Federal Reserve used these francs and some from balances to repay the $145 million swap debt, thereby restoring the swap arrangement to a fully available standby basis.

Toward the end of February, monetary conditions again tightened in Switzerland and, when the franc rose to its ceiling, the Swiss National Bank had to absorb some dollars from the market. Following this injection of liquidity into the domestic market, the franc eased but, in March, Swiss commercial banks began to repatriate funds from abroad to meet heavy quarter-end requirements. The National Bank decided to accommodate this quarter-end demand through swaps with the banks (buying dollars spot against sale for delivery in early April), in order to prevent the spot rate from running up to the ceiling. By entering into $418 million of swaps, the National Bank forestalled large uncovered spot purchases of dollars. After the end of the quarter, there was no easing in the market as credit remained tight. At this point the Swiss and United States authorities agreed that the Treasury should redeem at maturity a six-month Swiss franc-denominated certificate of indebtedness equivalent to $54.7 million held by the BIS. The National Bank consequently sold the necessary francs to the Treasury against dollars.

Underlying credit conditions in Switzerland remained very tight throughout April and into early May. In view of the pressures on the Swiss capital market, the three large Swiss banks decided at the end of April to suspend temporarily the placement of new issues for foreign borrowers. In mid-May, a large repatriation of funds finally eased the domestic liquidity situation. This inflow of dollars, however, considerably increased the Swiss National Bank's dollar holdings at a time when they were already large. To provide cover for some of the most recent dollar accruals, on May 15 the Federal Reserve reactivated its swap facility with the Swiss National Bank, drawing $200 million equivalent.

For the rest of May, Swiss monetary conditions were relatively easy, and pressure also lessened somewhat in the capital market as a result of the temporary suspension of new foreign issues. The Swiss franc rate consequently remained well away from the National Bank's intervention point.

The floating of the Canadian dollar on June 1 reawakened latent market fears that the Swiss franc would be revalued or allowed to float. Against this background, there were several bursts of demand for francs early in June, and on such days the franc rate rose sharply in hectic trading. A full-scale speculative rush did not materialize, however, and the passage in mid-June of a bill—to be effective in September—requiring Swiss exporters to make noninterest-bearing deposits helped ease pressures. When once again, in late June, the Swiss National Bank assisted the commercial banks with their midyear liquidity needs by entering into $479 million in swaps, the market calmed further. Domestic liquidity conditions nevertheless remained relatively tight in July, and the Swiss franc began edging higher. Near the month end the spot rate was bid up to the ceiling and the National Bank had to absorb dollars from the market. Thereafter, demand for Swiss francs lessened and a somewhat easier tone prevailed through August.

With a view toward repaying the $200 million swap drawing made in mid-May, the Federal Reserve had begun to accumulate modest amounts of Swiss francs, occasionally in the market and also directly from the Swiss National Bank against Italian lire held in balances. (The National Bank has a recurrent need for lire, arising from remittances made by Italian workers in Switzerland.) Using such franc balances, on July 6 the System prepaid $15 million of swap debt to the Swiss National Bank. Additional franc balances were accumulated in July and early August. The Federal Reserve and the National Bank at that point decided to clear the swap line once again through direct measures. Accordingly, $50 million equivalent of the swap debt was repaid through a United States Treasury sale of gold to the Swiss National Bank. Then, on August 25, the System purchased $120 million equivalent of francs from the National Bank and used those francs plus $15 million from balances to restore the swap arrangement to a fully standby basis.

DUTCH GUILDER

Beginning in late September 1969 there were heavy speculative inflows into the Netherlands as the market assessed the risk that the guilder might follow a revaluation of the German mark. After the German Federal Bank, on September 29, suspended its intervention at the mark ceiling, the buying of guilders intensified and became increasingly heavy through October. By the time the mark was formally revalued on October 26 the Netherlands Bank had been forced to absorb $785 million from the market. Part of these reserve gains was used by the Netherlands Bank to repay $109.7 million in Dutch drawings then outstanding on the swap line with the Federal Reserve. To provide cover for some of the Netherlands Bank's additional dollar intake, the Federal Reserve in turn reactivated the swap facility, drawing the full $300 million equivalent. In addition, the United States Treasury made a special one-week swap of $200 million with the Netherlands Bank.

Immediately following the revaluation of the mark in late October, the Dutch authorities made known their decision not to revalue the guilder and the spot rate quickly moved away from the ceiling as speculative positions began to be unwound. By November 5 the Netherlands Bank had sold slightly more than one third of the dollars it had purchased in October. Consequently, the United States Treasury had no difficulty in repaying its $200 million swap, and the Federal Reserve repaid $70 million equivalent of its indebtedness on November 6, thereby reducing its outstanding swap debt in guilders to $230 million. Further repayments were made in November and December, reducing the System's outstanding debt in guilders to $130 million by the year-end.

The guilder remained soft during the first quarter of 1970, as the Dutch current account turned seasonally weak and domestic credit conditions eased somewhat, but there was no significant selling pressure and no opportunity for further reductions in the Federal Reserve swap drawing. By late April the guilder was showing signs of renewed strength and the outlook for further reversal of the swap drawing was not promising. Since the remaining swap debt had been outstanding for six months, the System sought alternate means of repayment. On April 29, the Federal Reserve sold German mark balances directly to the Netherlands Bank to acquire $60 million of guilders. The guilders were used to reduce swap drawings to $70 million. Then, on May 15 the United States Treasury drew $60 million of guilders from the IMF and sold them to the System. At the same time the Treasury sold 10 million SDR's to the Netherlands Bank which in turn sold $6.8 million of guilders to the Federal Reserve. These guilders, plus a small amount from balances, were used to repay the outstanding $70 million drawing, thereby restoring the swap line to a fully available standby basis.

The guilder market entered a new phase with the floating of the Canadian dollar, which briefly rekindled some of last autumn's fears and nervousness in the exchange markets. The market's initial agitation and hectic trading died down by mid-June, but the underlying atmosphere remained tense with the guilder once again being regarded as a candidate for revaluation. Against this background, considerable foreign interest developed in new guilder bond issues being floated in the Dutch capital market. Moreover, a favorable shift of leads and lags developed, and there was a significant capital inflow in connection with an industrial take-over. Early in July, the spot guilder rate moved up through par and the Netherlands Bank soon began to purchase considerable amounts of dollars from the market. To deal with this dollar inflow, the United States Treasury sold $20 million of gold to the Netherlands Bank and the Federal Reserve reactivated its swap line on July 24, drawing a total of $75 million equivalent of guilders in July. The capital inflow intensified in August, and the Federal Reserve drew an additional $145 million, bringing System swap drawings in Dutch guilders to $220 million equivalent. In late August, monetary conditions eased in the Netherlands and the guilder market turned quieter.

BELGIAN FRANC

During the turbulent period preceding the revaluation of the German mark in October 1969, there were heavy speculative flows of funds to Belgium as the market also considered the Belgian franc a candidate for revaluation. Although the speculative outburst was quelled in late October by a firm government statement rejecting revaluation, the underlying demand for francs remained very strong. With the spot rate holding close to its ceiling, the National Bank absorbed dollars from the market throughout the rest of 1969. To provide cover for some of these dollar gains, the Federal Reserve reactivated its swap line with the National Bank, drawing a total of $55 million equivalent of Belgian francs in November and December.

Buying pressure on the Belgian franc persisted after the turn of the year, reflecting tight credit conditions domestically and a large surplus on current account. As a consequence, the spot rate held at or near its ceiling and the National Bank continued to absorb dollars from the market. The Federal Reserve provided cover for these inflows by further drawings on the swap line equivalent to $30 million in February, $20 million in March, $10 million in April, and $15 million in early May. Federal Reserve indebtedness under the swap facility was thus raised to $130 million by May 5.

A need for dollars by the Belgian government made possible a partial repayment of these drawings when the Belgian National Bank purchased $30 million from the Federal Reserve against Belgian francs on May 12. At that point it seemed unlikely, however, that further significant reduction in the remaining indebtedness of $100 million could be effected through similar operations or through a reversal of market flows. Since the swap line by then had been in continuous use by the Federal Reserve for some six months, it was agreed that alternate financing should be arranged, in keeping with the principle that use of central bank credit should not be unduly prolonged. Accordingly, on May 15 the United States Treasury drew $90 million of Belgian francs from the IMF and sold the francs to the Federal Reserve. At the same time the Treasury sold 10 million SDR's to the Belgian National Bank, which in turn sold $8.8 million of Belgian francs to the Federal Reserve. The System used the francs so acquired, plus a small amount from balances, to repay completely the remaining $100 million swap debt.

As had been anticipated, the Belgian franc remained quite firm through the spring and summer months, reflecting a strong current-account position. In July exaggerated reports of the Group of Ten discussions on exchange rate flexibility led to further speculation over a possible revaluation of the Belgian franc. Consequently, the National Bank had to absorb dollars from the market periodically during the summer. To cover the bulk of these reserve gains, the System reactivated its swap line, drawing \$20 million equivalent at the end of June, \$55 million in July, and \$20 million in August, for a total of \$95 million currently outstanding.

EURO-DOLLAR MARKET

Tensions in the Euro-dollar market lessened considerably during the period under review. Late in 1969, interest rates began an across-the-board retreat. The three-month rate, for example, moved from 11½ percent in mid-December to 8 percent by mid-April (see Chart III). During the next two months, rates moved up, reaching levels well above 9 percent for most maturities, but over the summer months receded once again.

Initially, the drop in Euro-dollar rates from their near-record levels reflected the reversal of year-end pressures. The continued downtrend in rates, however, which occurred despite very heavy switching of funds into sterling investments, was mainly attributable to the progressive reduction of Euro-dollar borrowings of United States banks through their own foreign branches (see Chart IV). United States banks' takings declined steadily from mid-January through the first quarter, as alternate domestic sources of funds were being tapped. At first, United States banks obtained a steadily rising amount of funds through the issuance of commercial paper by affiliated holding companies or subsidiaries. Then, as United States monetary policy moved toward a stance of less stringent restraint, and yields on United States Treasury securities fell below the recently increased rate ceilings on CD's of similar maturities in February and March, commercial banks were able to increase sharply their sales of CD's to a broad spectrum of investors. Consequently, outstanding Euro-dollar borrowings fell by \$2.3 billion to \$12.0 billion between mid-January and April 1. Indeed, if United States banks had not been reluctant to run their Euro-dollar takings below reserve-free base levels established under an amendment to Regulation M, the decline in borrowings and in Euro-dollar rates might have been more precipitous.

Starting in mid-April, however, the decline in Euro-dollar rates was reversed, and by the middle of June most quotations had risen to well over 9 percent. This tightening of the market reflected in part the liquidity squeeze in Germany and France, which drew funds into those countries, and the takedown of two large Euro-dollar issues by the Italian electricity authority. More generally, there was a pronounced change in market expectations, stemming in part from growing fears regarding the liquidity situation in the United States. During this period, United States banks' liabilities to their own foreign branches rose modestly, averaging around \$12½ billion in the second half of May and through June.

Effective June 24, in a move aimed at facilitating the refinancing by the banking system of maturing corporate commercial paper borrowings following the failure of the Penn Central Transportation Company, the Board of Governors of the Federal Reserve System suspended Regulation Q interest rate ceilings on time deposits of \$100,000 or more with maturities of thirty to eighty-nine days. Euro-dollar rates immediately receded as the System's action helped ease money market strains and allayed some of the fears regarding a potential liquidity

Chart III

SELECTED INTEREST RATES IN THE UNITED STATES THE UNITED KINGDOM, WEST GERMANY AND THE EURO-DOLLAR MARKET

THREE-MONTH MATURITIES EXCEPT WHERE OTHERWISE NOTED

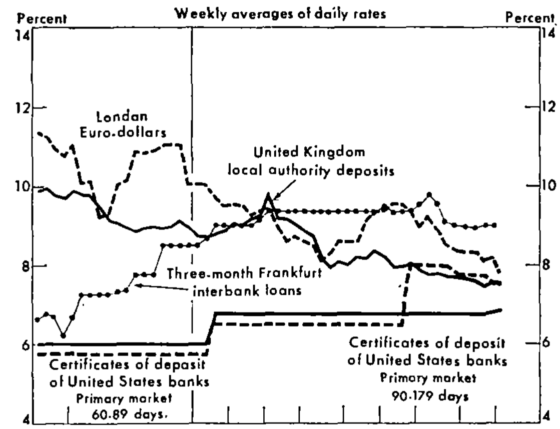
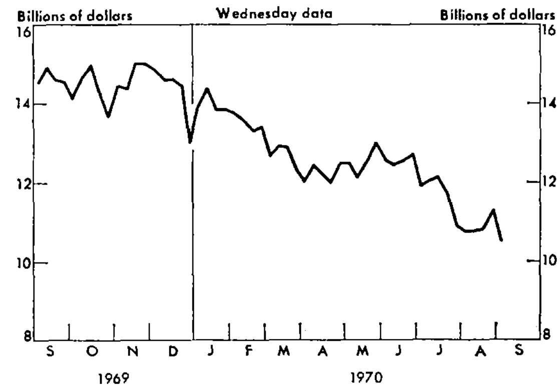


Chart IV

UNITED STATES BANKS' LIABILITIES TO FOREIGN BRANCHES



crisis in the United States. With the surge in United States banks' sales of large CD's that followed the partial suspension of Regulation Q ceilings, the banks were able to curtail sharply their Euro-dollar borrowings through their own overseas branches; such liabilities fell below $11 billion by late July, more than $4 billion under the November 1969 peak. Meanwhile, money market conditions also had relaxed appreciably in Germany, following the large inflow of funds to that country and the reduction in the German Federal Bank's discount rate on July 15. Consequently, Euro-dollar rates declined fairly steadily over the summer months, with the three-month rate falling as low as 7¾ percent in early September.