

Treasury and Federal Reserve Foreign Exchange Operations*

By CHARLES A. COOMBS

Over the past year, international financial markets were swept by successive waves of speculation almost unprecedented in their intensity. The Middle East war, the devaluation of sterling, the massive speculative drive on the London gold market, the French crisis, and continuing payments imbalances among the major trading countries, all subjected the international financial system to severe strains. Yet world trade and payments continued to expand without interruption, as the monetary authorities of the major countries joined forces to deal with each new crisis by further strengthening the cooperative arrangements which have been built up in recent years. Of decisive importance was the agreement reached at the Washington central bank meeting in March 1968 to suspend official intervention in the London gold market and to separate private and official transactions in gold into two distinct circuits. These new arrangements not only insulated official gold stocks from the demands of private speculators but, in conjunction with the Stockholm Agreement on Special Drawing Rights, reaffirmed worldwide official support for maintaining the present official price of gold and the network of fixed parities embodied in the Bretton Woods Agreements.

By midsummer, both the gold and foreign exchange markets had settled down to orderly trading in a reasonably calm atmosphere, although in late August rumors of a mark revaluation generated heavy speculative flows of funds to Germany. On September 9 after the monthly Basle meeting, a communiqué was issued by the Bank for International Settlements (BIS) and a group of twelve

central banks announcing that the BIS, backed by those banks acting where appropriate on behalf of their governments, was making available immediately a \$2 billion medium-term facility to the Bank of England. This arrangement should effectively shield sterling from pressures arising out of conversion of sterling balances by sterling area countries.

As in earlier years, the Federal Reserve swap network provided the first line of defense against speculative pressure in the exchange markets. In order to insure an ample margin of safety against the mounting pressures of "hot" money flows, the network was expanded in several major steps, more than doubling the size of the facilities available in mid-1967, to the present level of nearly \$10 billion of reciprocal credit lines (see Table I) with fourteen central banks and the BIS.

As noted in the previous report in this series, drawings by the Federal Reserve on its swap network partners had risen to a record peak of \$1.8 billion in late December 1967, but reversals in the flow of funds, together with a United States drawing on the International Monetary Fund (IMF) and other special transactions, enabled the Federal Reserve to reduce these commitments to \$557 million by early March 1968 (see Table II). After the gold rush excited new hot money flows over the exchanges, Federal Reserve swap commitments rose once more, reaching a peak of \$982 million by late April. These commitments were completely liquidated during the spring and summer months, largely through Federal Reserve acquisition of sizable amounts of continental European currencies made available by first French and then British drawings on the IMF. By July 3, only \$135 million of debt in Swiss francs remained, and this residual was liquidated through a United States Treasury issue of a Swiss franc security to the Swiss National Bank.

In late July, however, renewed flows of short-term funds

* This report, covering the period March to September 1968, is the thirteenth in a series of reports by the Vice President in charge of the Foreign function of the Federal Reserve Bank of New York and Special Manager, System Open Market Account. The Bank acts as agent for both the Treasury and Federal Reserve System in the conduct of foreign exchange operations.

into Switzerland, in response to a credit squeeze in that country, necessitated new Federal Reserve drawings on the Swiss National Bank totaling \$145 million. This debt was subsequently paid down to \$130 million in August, and as of September 6 represented the only drawings outstanding by the Federal Reserve.

As part of a joint effort to stabilize the exchange markets in the wake of the March gold rush, the Federal Reserve and United States Treasury underwrote forward operations in Swiss francs and Dutch guilders by the central banks of Switzerland and the Netherlands. These operations lifted the total of forward market commitments by the Federal Reserve and Treasury from the \$60.4 million outstanding on March 8 to \$155.2 million by the end of March. In subsequent months, reversals in the flow of funds permitted a complete liquidation of these forward commitments.

One of the noteworthy features of the past six months was the broadening-out of foreign drawings on the Federal Reserve to include central banks not hitherto making use of these facilities. In June, the Bank of France drew

the full \$100 million then available under its standby swap agreement with the Federal Reserve, which was enlarged on July 3, in conjunction with \$700 million of short-term credits from other sources, from \$100 million to \$700 million. In that month, the National Bank of Denmark made its first drawing in the amount of \$25 million on its \$100 million reciprocal credit facility with the Federal Reserve. (This drawing was repaid in early September.) Likewise in June, the Netherlands Bank made two drawings totaling \$54.7 million, also the first use by the Dutch authorities of their \$400 million facility with the Federal Reserve. (The Netherlands Bank repaid the initial \$25 million drawing at maturity early in September.) Late in June, in a type of drawing which has now become routine, the BIS drew a total of \$111 million from the Federal Reserve for financing intervention in the Euro-dollar market to relieve the midyear squeeze. (This BIS drawing, with further minor drawings by the BIS during the summer months, was fully liquidated, and the \$1 billion credit line has reverted to a fully available standby basis.) In June, the Bank of Canada repaid \$125 million against a

Table 1

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars

Institution	Amount of facility January 1, 1967	Increases						Amount of facility September 6, 1968
		May 17, 1967	July 20, 1967	November 30, 1967	December 15, 1967	March 18, 1968	July 3, 1968	
Austrian National Bank	100.0							100.0
National Bank of Belgium	150.0			75.0				225.0
Bank of Canada	500.0			250.0		250.0		1,000.0
Bank of Denmark	—	100.0*						100.0
Bank of England	1,350.0			150.0		500.0		2,000.0
Bank of France	100.0						600.0	700.0
German Federal Bank	400.0			350.0		250.0		1,000.0
Bank of Italy	600.0			150.0†				750.0
Bank of Japan	450.0			300.0		250.0		1,000.0
Bank of Mexico	—	130.0*						130.0
Netherlands Bank	150.0			75.0		175.0		400.0
Bank of Norway	—	100.0*						100.0
Bank of Sweden	100.0			100.0		50.0		250.0
Swiss National Bank	200.0		50.0		150.0	200.0		600.0
Bank for International Settlements:								
Swiss francs/dollars	200.0		50.0		150.0	200.0		600.0
Other authorized European currencies/dollars	200.0		100.0	300.0		400.0		1,000.0
Total	4,300.0	330.0	200.0	1,750.0	300.0	2,275.0	600.0	9,955.0

* New facility.

† Effective on November 27, 1967.

Table II
FEDERAL RESERVE COMMITMENTS

In millions of dollars

Institution	December 31, 1967	March 8, 1968	April 26, 1968	June 30, 1968	July 16, 1968	September 6, 1968
Austrian National Bank						
National Bank of Belgium	105.8*	34.5	55.1			
Bank of Canada						
National Bank of Denmark						
Bank of England						
Bank of France						
German Federal Bank	350.0		275.0			
Bank of Italy	500.0	325.0	500.0	189.0		
Bank of Japan					0	
Bank of Mexico						
Netherlands Bank	170.0†	65.0	20.0			
Bank of Norway						
Bank of Sweden						
Swiss National Bank	250.0	77.0	77.0	135.0		130.0
Bank for International Settlements:						
Swiss francs/dollars	400.0	55.0	55.0			
Other authorized European currencies/dollars						
Total	1,775.8	556.5	982.1	324.0	0	130.0

* Peak commitment of \$150 million reached on November 13, 1967.

† Peak commitment of \$185 million reached on January 4, 1968.

\$250 million drawing in January, and in July the remaining balance outstanding was fully liquidated. Finally, in June, the Bank of England fully repaid a balance of \$1.2 billion in swap debt to the Federal Reserve, utilizing for such repayment a substantial part of a drawing from the IMF, together with dollars from additional acquisitions by the Federal Reserve and United States Treasury of sterling on a covered or guaranteed basis. The \$2 billion swap line between the Federal Reserve and the Bank of England thus reverted to a fully available standby basis. As of the end of June, therefore, five foreign banks had drawn on their swap lines with the Federal Reserve to the extent of \$415.7 million. After subsequent drawings and repayments by these and other banks, the total outstanding had risen to a moderately higher figure by September 6. Since the inception of the Federal Reserve swap network in March 1962, the total of credit provided under the network has amounted to somewhat more than \$15 billion, of which nearly \$6 billion was drawn by the Federal Reserve and roughly \$9 billion by foreign central banks and the BIS.

During the period under review, the United States Treas-

ury increased its indebtedness in foreign currency securities by \$513.1 million to \$2,004.8 million (see Table III). In conjunction with the German government's successive agreements to offset or neutralize part of United States military expenditures in Germany, the Treasury issued to the German Federal Bank in April and again in August two more \$125 million equivalent special 4½-year securities denominated in marks. Also, in conjunction with the new agreement related to military expenditures for fiscal year 1968, in June the Treasury issued a \$125.1 million equivalent of special medium-term securities to six German banks; the mark proceeds were sold to the System to repay the balance of outstanding Federal Reserve swap drawings on the German Federal Bank. On the other hand, by early August, the Treasury had purchased sufficient marks in the market to redeem prior to maturity a 22-month \$50.3 million note previously issued to the German Federal Bank. Thus, as of September 6, total securities denominated in German marks, including those issued to German banks, stood at \$1,050.8 million equivalent. With respect to securities denominated in other for-

eight currencies, the Treasury in July issued a three-month certificate of indebtedness in Swiss francs for \$54.7 million to the BIS and sold a \$133.7 million three-month certificate to the Swiss National Bank in order to refinance United States short-term commitments in Swiss francs. The Treasury used the proceeds of the certificate issued to the BIS to liquidate an outstanding sterling-Swiss franc swap with that institution, and sold to the System nearly all the proceeds of the certificate issued to the Swiss National Bank for repayment of an outstanding swap obligation to that bank.

STERLING

The events leading up to the British government's decision last November to devalue sterling, and the immediate impact of this move on the gold and exchange markets, were discussed in some detail in the previous article in this series (this *Review*, March 1968). By the end of November the initial wave of funds moving back into sterling had permitted the Bank of England to repay \$300 million of the \$1,350 million which had been drawn under its swap line with the Federal Reserve by the time of devaluation.

Further progress in repaying short-term credits was halted, and then reversed during the spring, by a combination of adverse developments. After three years of disappointed hopes, the market maintained a skeptical

wait-and-see attitude concerning sterling's prospects. Hectic speculation in the gold market from November until mid-March kept the exchanges on edge, and sterling reacted sensitively to each new threat to the international financial system. Against this psychological background, the lag in any improvement in the trade account and the nagging fear that the government's program to control expenditures and limit private demand would be thrown off course by labor or political unrest kept sterling generally on the defensive. The forward sterling discount widened sharply at times, not only discouraging any inflow of interest-sensitive funds, but also contributing to withdrawals of maturing short-term placements of foreign funds from London. In addition, several sterling-area countries, having suffered an exchange loss on their reserves as a result of the devaluation, reconsidered the question of diversifying their reserves and began shifting a portion of their holdings out of sterling and into other reserve assets.

In the backwash of the gathering storm in the gold market, the pound dipped below its \$2.40 parity for the first time on March 4 (see Chart I). The following week, amid the climactic scramble for gold in London, the February trade figures for the United Kingdom were announced showing a heavy deficit, with imports at record levels. The next day—the last day of the Gold Pool operations—sterling tumbled to \$2.39. The closing of the London gold market on Friday, March 15, in advance of meetings in Washington by representatives of the central banks active in the Gold Pool, was accompanied by a declaration of a bank holiday the same day. With London closed, there was very little dealing in sterling either on the Continent or in New York. However, when isolated trades began to appear at rates below the \$2.38 floor, the Federal Reserve—under arrangements worked out with the Bank of England—effected small purchases in New York which quickly restored the rate to \$2.3825.

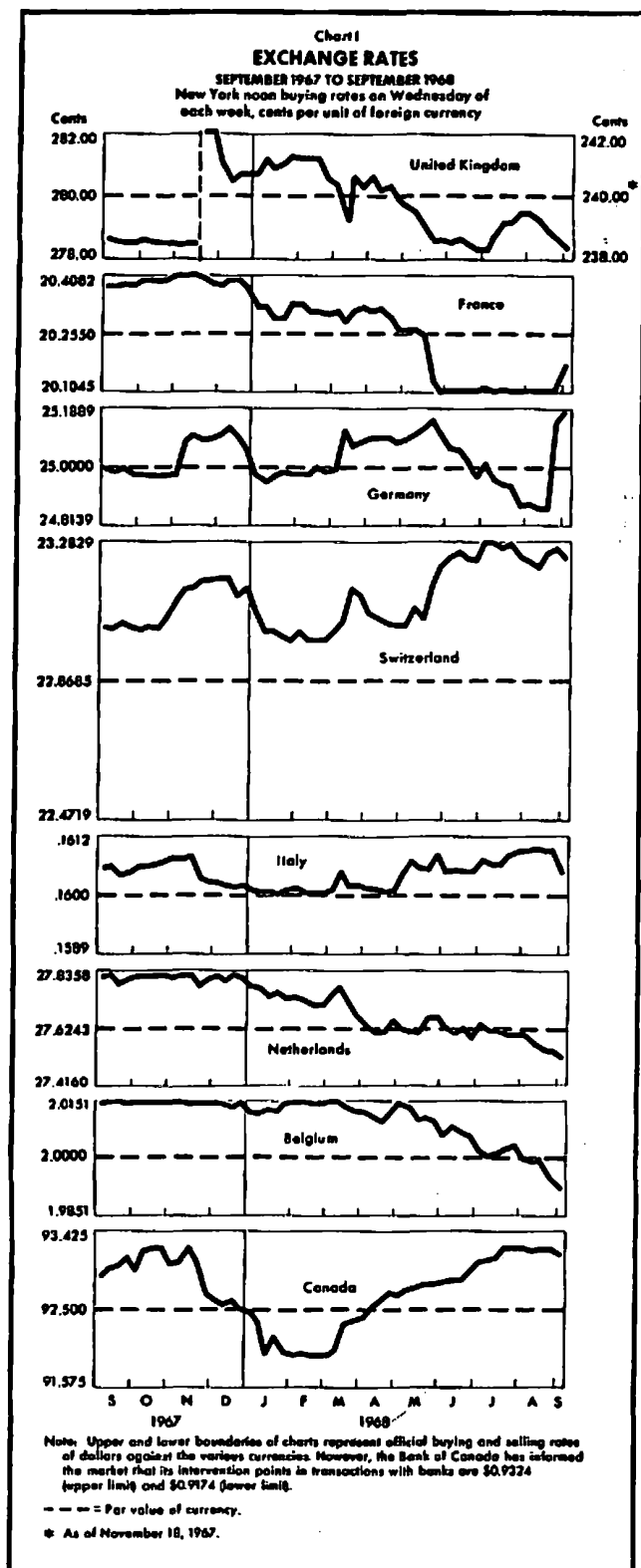
On March 17 the Washington communiqué of the governors of central banks participating in the Gold Pool announced several important decisions in support of sterling and the exchange markets in general. Specifically, the governors "agreed to cooperate fully to maintain the existing parities as well as orderly conditions in their exchange markets . . . [and] to cooperate even more closely than in the past to minimize flows of funds contributing to instability in the exchange markets". Taking note of the importance of the pound sterling in the international monetary system, they also announced that the total of credits immediately available to the United Kingdom authorities (including the IMF standby) would be raised to \$4 billion. As part of this increase, the Federal Reserve

Table III
OUTSTANDING UNITED STATES TREASURY SECURITIES
FOREIGN CURRENCY SERIES
In millions of dollars equivalent

Issued to	Amount outstanding on January 1, 1968	1968 Issues or redemptions (—)			Amount outstanding on September 6, 1968
		I	II	July 1-September 6	
Austrian National Bank.....	50.3				50.3
National Bank of Belgium.....	60.4				60.4
German Federal Bank.....	601.2	124.9	125.5	{ — 50.3 124.4	925.7
German banks.....	0		125.1		125.1
Bank of Italy.....	124.8				125.4
Netherlands Bank.....	0	65.7			65.7
Swiss National Bank.....	210.7	100.1		133.7	444.5
Bank for International Settlements*	152.2			54.7	207.7
Total.....	1,199.6	290.7	250.6	262.5	2,004.8

Note: Discrepancies in amounts are due to valuation adjustments, refundings, and rounding.

* Denominated in Swiss francs.



swap arrangement with the Bank of England was increased by \$500 million to \$2 billion. At the same time, the British authorities announced that the London gold market would remain closed for the remainder of March.

On Monday, March 18, the decisions set forth in the communiqué brought about a clear change of atmosphere in the exchanges; sterling, in particular, was bid for strongly and rebounded to above par. The next day the British government announced the long-awaited 1968-69 budget, calling for very substantial increases in indirect taxes on consumer purchases, a sharp rise in the selective employment tax (on employment in service industries), and a one-year tax on investment incomes, among other provisions. At the same time the government announced that it would seek legislation to limit annual wage increases to 3½ per cent and to defer or suspend price or wage increases for up to a year. In the wake of a favorable market response to the budget and the Washington communiqué, the Bank of England on March 21 reduced its discount rate by ½ percentage point to 7½ per cent, the first reduction since the move to 8 per cent at the time of devaluation. Along with the strengthening of spot sterling, discounts on the forward pound narrowed from the 10 to 12 per cent range, where they had been on March 13 to 15, to 4 per cent per annum for three-month contracts by early April.

Despite the improved atmosphere in the latter half of March, featured by the successful conclusion of the Group of Ten talks in Stockholm ironing out the last major differences on the Special Drawing Rights facility, the month as a whole had been costly to United Kingdom reserves. The Bank of England drew \$50 million on its swap with the Federal Reserve (bringing the amount outstanding to \$1,100 million) while making use of other sources of credit including the United States Treasury.

April was a much quieter month for sterling and for international markets in general. Nevertheless, another monthly report of a large British trade deficit at a time when observers were looking for clear signs that devaluation was beginning to work created an uneasy undertone in the market, and this grew more pronounced in May. The spot rate gradually drifted below par, and the forward discount began to widen again, reaching nearly 7 per cent by the end of May. At the same time Euro-dollar rates, which had dropped back from the peaks reached at the time of the mid-March gold crisis, began to rise once again, with the rate on three-month deposits moving from just under 6 per cent in early April to over 7 per cent by the end of May (see Chart II on page 192). As a result, the covered incentive to move foreign funds out of local authority deposits into Euro-dollars shot up to nearly 6

per cent, adding to the strains on sterling that reemerged in May.

During this April-May period, United States banks—spurred by tightening credit conditions in this country—turned heavily to the Euro-dollar market in search of funds, adding about \$1 billion to their takings through their branches during the two months. Although the sharp run-up in Euro-dollar rates increased the incentive to switch out of pounds, developments in the United Kingdom were also causing concern. Setbacks for the Labor Party in by-elections, reports of dissension in labor ranks over the continuation of the austerity program, fear—subsequently borne out—that the next monthly trade figures would again look bleak, all added to market pessimism. In the middle of May, the crisis in France added a new dimension of uncertainty to the international monetary situation and helped to demoralize the market even further. As a result of these various disturbing factors, in May the pattern of heavy pre-weekend selling of sterling reemerged for the first time since devaluation at heavy cost to United Kingdom reserves. By mid-June, the Bank of England had drawn a net of \$100 million more under the swap arrangement with the Federal Reserve, raising the total outstanding to \$1.2 billion.

Pressures on sterling subsequently subsided, and it was announced that the United Kingdom would draw the full \$1.4 billion available under the standby credit with the IMF to repay outstanding short-term central bank credits. A substantial part of this IMF drawing was used on June 19 to reduce the \$1.2 billion of drawings then outstanding under the Federal Reserve arrangement. The remainder of these drawings was cleaned up on the same date by means of Federal Reserve and United States Treasury purchases of sterling on a covered or guaranteed basis from the Bank of England. To permit such purchases by the Federal Reserve, the Authorization for System Foreign Currency Operations was amended to increase from \$200 million to \$300 million equivalent the amount of sterling, on a covered or guaranteed basis, that could be held for System working balances. Thus, as of the end of June the \$2 billion swap arrangement between the Federal Reserve and the Bank of England had reverted to a fully available standby basis (although certain other credit facilities, including those from the United States Treasury, were still in use).

During July and August, confidence in sterling was greatly influenced by the ups and downs of the published figures on the United Kingdom trade account. A stabilizing influence on the sterling market was the announcement, early in July, that general agreement had been reached on a new central bank facility to be extended to the Bank of

England, amounting to some \$2 billion and covering a ten-year period, to offset reductions in the sterling balances of overseas sterling countries. After British authorities consulted with sterling area countries, the arrangements were completed at the September central bankers' meeting in Basle. The communiqué from that meeting, issued on September 9, confirmed these developments and noted that twelve central banks, acting where appropriate on behalf of their governments, would join with the BIS in making the facility available to the Bank of England, that the arrangements would be brought into force immediately, and that the earlier swap arrangement of June 1966 is expected to be liquidated and terminated by 1971.

FRENCH FRANC

Late in 1967 the French current account was beginning to recover from the modest deficit that had emerged during the previous year. With this more favorable development in the background, the franc remained above par (\$0.2025½) during the early months of 1968. Nevertheless, there were occasional periods of pressure on the franc, arising from reactions to the new United States balance-of-payments program announced on January 1, shifts of funds into the Euro-dollar market by French banks, and the March speculative stampede into gold. By the end of April the franc had drifted to a level just above par, from which there was little change well into May.

On May 17, however, student rioting broke out, followed shortly by labor strikes in Paris and similar disorders elsewhere in France. Within days the strikes had virtually paralyzed the French economy, and on May 20 the absence of personnel forced nearly all French banks to close. For all practical purposes, this also closed the Paris exchange market and complicated delivery of francs in exchange dealings in other countries. Trading in spot francs continued in those markets, but at sharply lower levels. With the French markets closed, the Bank of France called upon the Federal Reserve Bank of New York to help maintain franc quotations within declared limits by purchasing spot francs for the Bank of France account. Subsequently, the Bank of France made parallel arrangements to cover European markets through the BIS. For a few days the franc fluctuated just above its floor (\$0.2010½), but as the political crisis deepened the rate fell to the floor level and had to be heavily supported. Even though banks were closed in France, speculative flows from France to Switzerland and into the Euro-dollar market grew to substantial volume, and at the end of May the French government imposed exchange controls over resident capital transfers abroad; nonresident

transactions remained free of controls, however.

In early June, the selling abated somewhat after President de Gaulle's call for national elections raised hopes that a beginning was being made toward restoring order in France. Evidence of a scattered return to work by French workers also helped improve the atmosphere. Moreover, the Bank of France was able to resume its regular activities and make its presence felt in support of the franc on the Continent. French banks began operating again, and on June 7 the Paris bourse opened its doors for the first time since May 20.

But the reopening of normal channels of foreign exchange dealings brought with it further selling of francs. Despite the gradual return to work by French workers during the month of June, it was feared that the large wage increases necessary to bring an end to the work stoppage might initiate a wage-price spiral which could seriously weaken French international competitiveness. As a result, selling stepped up, based in large part on a precipitate reversal of commercial leads and lags despite the exchange controls imposed at the end of May. The French government's announcement of a program of temporary import quotas and export subsidies to bolster the franc did little to stem the speculative tide. But the sweeping victory of the Gaullist forces in the elections at the month end cleared away one area of uncertainty besetting the market and, although the selling of francs persisted thereafter, the market fever abated.

For May the Bank of France announced a reserve loss of \$307 million, and in June a further loss of \$203 million was recorded. But sizable credit operations had also been initiated. In June, the Bank of France bolstered its reserves by drawing the full \$100 million then available under its swap line with the Federal Reserve, the first drawing by that bank since the inception of the arrangement in March 1962. In addition, France drew \$885 million from the IMF—representing its gold tranche and other drawing rights resulting from previous Fund use of French francs, including those supplied by France under the General Arrangements to Borrow. (As described in other sections of this report, the Federal Reserve was able to acquire certain currencies drawn by France and used them to reduce System drawings on swap lines with other central banks.) Thus the cost of official support for the franc in May and June came to \$1.5 billion. Part of this reserve loss took the form of gold sales by the French authorities to replenish dollar balances, including \$220 million of gold sold to the United States Treasury.

With the announcement of the June reserve figures in early July, Finance Minister Couve de Murville (later

named Premier) strongly reaffirmed the government's intention to defend the franc parity. As evidence of that resolve, the French authorities broadened their defense of the franc to include an increase in the Bank of France discount rate from 3½ per cent to 5 per cent, a tightening of exchange controls, and new taxes. Shortly thereafter, on July 10, the Bank of France announced a \$1.3 billion package of new credits from the Federal Reserve, the central banks of Belgium, Germany, Italy, and the Netherlands plus the BIS. The United States participation took the form of a \$600 million increase in the Federal Reserve swap line with the Bank of France, raising that facility to \$700 million.

Despite these measures in support of the franc, market pressures continued. Throughout July, there were intermittent bursts of selling, particularly in advance of weekends. Bank of France losses remained substantial but declined significantly from the June level. The large outflows from France in the period brought little upward pressure on other currencies as those funds seemed to remain largely in the dollar market.

In August, the announcement of the July trade results provided some encouragement, with the trade balance rebounding to surplus as the May-June export backlogs were cleared away and imports rose only by a further small amount. Although pressure on the franc in the spot market continued, the reserve drain diminished. On September 4, the French authorities announced the lifting of exchange controls first imposed at the end of May.

GERMAN MARK

Germany's trade accounts remained very strong during the early months of 1968 as they had throughout 1967. It was evident, moreover, that Germany's resurgent growth, as well as its accompanying stimulus to activity in other Common Market countries, was being accomplished with few strains on Germany's productive potential. Thus the downtrend in the spot mark early in the year—resulting from large short- and long-term capital outflows—tended to disguise that currency's underlying strength and the market's potential for a rapid reversal of direction with a new outbreak of speculative demand. During the March gold crisis, speculation on a revaluation of the mark touched off such a burst of demand. The German Federal Bank permitted a sharp rise in the spot rate to make marks more expensive for speculators, but nevertheless had to take in huge amounts of dollars. These heavy shifts of funds into marks would have severely aggravated the strains then being felt in the Euro-dollar market and in sterling had the German Federal Bank not immediately reoffered the dollars

it received to its commercial banks on a swap basis, for repurchase later at attractive rates. The swap rates were equivalent to a premium on the forward mark of 2 per cent per annum, more than $\frac{1}{2}$ per cent below the market; the German Federal Bank concluded \$220 million in swaps at those rates. As the week of March 11-15 progressed, the bank pursued this operation, gradually increasing the premium on the forward mark to 4 per cent per annum.

On Friday, March 15, with unprecedented uncertainties in the exchanges arising out of the closing of the London gold market and the emergency central bank meeting convening in Washington over the coming weekend, speculation seemed to focus on the mark and funds flowed into Germany from all over Europe and the United States. By the close of trading in Frankfurt, the German Federal Bank had purchased \$400 million. After the Frankfurt market closed, the Federal Reserve Bank of New York continued to offer marks for the account of the Federal Bank and sold a moderate amount that afternoon to help meet the spillover of demand. Although the Federal Bank's gross intake of dollars in March amounted to \$800 million, the bank was able to return the bulk of its intake to the market through swap operations with the commercial banks. The Federal Reserve participated in the operation, as it had done in November, by reactivating its swap line with the Federal Bank in order to absorb \$300 million from that bank, thereby providing cover for a part of that bank's forward purchases of dollars.

The firm support for the existing system of currency parities that emerged from the Washington meetings helped to reassure the highly nervous markets. News of the large general expansion in the Federal Reserve swap network, including an increase in the line with the German Federal Bank to \$1,000 million, contributed importantly to the reassurance. Under these circumstances, the underlying liquidity of the Frankfurt market quickly reasserted itself and the spot mark moved lower through the end of March. In order to maintain an orderly market as the earlier heavy speculation unwound, the Federal Bank sold a sizable amount of dollars.

Early in April, market sentiment was buoyed by hopes that President Johnson's peace initiative in Vietnam would bring an early end to that conflict and an easing of its associated strains on the dollar. Moreover, the near-unanimous agreement of the Group of Ten representatives at Stockholm on a plan for Special Drawing Rights further contributed to a strengthening of confidence in the dollar. Rising interest rates in the United States and in the Euro-dollar market after the $\frac{1}{2}$ point increase in Federal Reserve discount rates to $5\frac{1}{2}$ per cent also exerted a strong pull on German short-term funds.

Through April the Federal Bank continued its policy of domestic monetary ease, thereby encouraging German banks to reinvest abroad the proceeds of maturing swap contracts concluded in March. As capital outflows developed, the Federal Bank sold about \$390 million of spot dollars, while permitting the spot mark to slide gradually lower. Moreover, with the German economy still not absorbing all the liquid resources that were being made available in the market, the Federal Bank undertook \$103 million in new swaps with the commercial banks to facilitate short-term investments abroad. Thus the authorities succeeded in returning to the market a very substantial part of the dollars that had flowed in as a result of the maturing of the swap contracts that had been concluded in March.

At the same time, the System began to reduce its swap debt to the Federal Bank, using marks acquired from a correspondent and some from balances to pay down the System's outstanding swap obligations by \$25 million. International currency uncertainties flared up again in May, however, and led to a new round of revaluation rumors concerning the German mark, as market apprehensions over the failure of the United Kingdom trade position to show improvement were compounded by uncertainty over further delay in the proposed United States tax surcharge. Speculative demand for marks boosted the spot rate sharply in early May, and the German authorities once again purchased dollars. But the buying was not sustained and quickly dissipated after the flat denial of any revaluation plans issued on May 10 by Dr. Karl Blessing, President of the German Federal Bank. Meanwhile, the Federal Bank continued with its swap operations. At the end of May the market responded favorably to the statement by Economics Minister Schiller, encouraging German commercial banks to export capital and stressing that the authorities intended to provide sufficient domestic liquidity to support further business expansion in Germany despite the flow of funds abroad. Thus, with official approval and ample resources available, foreign borrowers placed additional issues in the German capital market. One notable example of the broadly equilibrating influence of the outflow from Germany was the Canadian government's five-year borrowing of DM250 million in late May. The borrowing not only served to bolster Canadian official reserves and offset Germany's current-account surplus but at the same time afforded the Federal Reserve the opportunity to purchase a sizable amount of German marks. The Federal Reserve purchased from Canada \$25.2 million equivalent of the proceeds of the borrowing and used them, together with \$25 million more acquired from the market, to reduce its

swap debt to the German Federal Bank to \$225 million equivalent.

The month of June brought a further increase in the flow of German capital seeking employment abroad. The Federal Bank provided sizable amounts of dollars for market requirements which in part reflected conversion of the mark proceeds of Canadian and Mexican long-term borrowings. Persistent demand for dollars in Frankfurt depressed the spot mark to parity by late June, and with marks readily available in New York the Federal Reserve and the Treasury accumulated mark balances against outstanding commitments. In addition, the System purchased \$50 million of marks from the German Federal Bank when that bank replenished dollars sold to France in connection with the French drawing on the IMF. These marks, together with market purchases, were used to reduce System swap obligations in marks by \$100 million to \$125 million as of June 21. Finally, near the end of June the United States Treasury issued to German banks special mark-denominated securities equivalent to \$125.1 million. The securities were issued in conjunction with agreements reached with the German government to neutralize part of United States troop-stationing costs in Germany. The System purchased these marks and used them to liquidate the last \$125 million outstanding under the swap line with the Federal Bank.

Market selling of German marks continued unabated in July and early August, partly reflecting reflows abroad from German banks after midyear. By early August the spot mark had declined to \$0.2486½, the lowest level since the 1961 revaluation, and the German Federal Bank had supplied some \$230 million to the market. At the same time, both the Federal Reserve and the Treasury made sizable purchases of marks in the New York market. On August 9, using the proceeds of its recent purchases, the Treasury redeemed in advance of maturity a \$50.3 million equivalent 22-month note held by the Federal Bank. On August 19, in a further transaction related to the German government's agreement to offset or neutralize United States troop costs in Germany, the Treasury issued to the Federal Bank another medium-term security denominated in marks equivalent to \$124.4 million. This security was the first in a new series of four equal quarterly instalments which will eventually total \$500 million. (The fourth instalment of the earlier series of similar securities sold to the Federal Bank had been issued in April.) In addition, the German authorities expected to pay about \$100 million for procurement of military equipment directly from producers in the United States. Thus, including the special Treasury securities issued to German banks in June, as noted above, and the new scheduled purchases by the Fed-

eral Bank, the German government had agreed to offset or neutralize some \$725 million of United States troop-stationing costs in Germany. As of September 6, total United States Treasury securities denominated in German marks stood at \$1,050.8 million. No short-term indebtedness under the Federal Reserve swap line was outstanding, however.

Toward the end of August, heavy speculative buying of marks resulted from renewed market rumors that a revaluation of the mark was imminent. The German authorities promptly rejected such a move, noting that capital outflows from Germany in 1968—particularly long-term outflows—have more than offset Germany's current-account surplus. Nevertheless, within a few days' time, the spot mark rose virtually to its ceiling, and the German Federal Bank had to absorb very sizable amounts of dollars. As in other recent periods of temporary inflows to Germany, the Federal Bank acted to mitigate the impact on international financial markets by rechanneling these dollars to the market through swap transactions with commercial banks. In addition, the United States authorities sold a moderate amount of marks in the forward market.

SWISS FRANC

In 1967, Switzerland attracted very heavy inflows of liquid funds seeking refuge from currency uncertainties arising out of the Middle East war, the devaluation of sterling, and the subsequent speculative rush in the gold markets. With the Swiss National Bank accumulating large amounts of dollars during the year, the Federal Reserve drew heavily on its Swiss franc swap lines with the National Bank and the BIS. In order to accommodate such unusually large drawings and provide for contingencies, resources available under each facility were raised in several steps to \$400 million by mid-December. By the year-end, Federal Reserve drawings on the line with the National Bank had risen to \$250 million, while the \$400 million Swiss franc facility with the BIS had been fully utilized, for a total of \$650 million. Moreover, United States authorities had undertaken a total of \$65.5 million in forward commitments to the market in mid-December, when the Swiss National Bank initiated forward sales jointly for the System and the Treasury in order to deal with emerging speculative pressure in that market. With the turn of the year, following President Johnson's balance-of-payments message, a substantial reflux of funds from Switzerland developed. The reflow enabled the Federal Reserve to purchase sizable amounts of francs directly from the National Bank. These were used, together with moderate purchases in the market and in special transac-

tions, to reduce swap obligations in Swiss francs by \$418 million. Moreover, in early March the Federal Reserve paid off a further \$100 million of its Swiss franc drawings through Treasury issuance of a Swiss franc security. Thus, by March 8 the System's outstanding swap commitments had been reduced by \$518 million from the \$650 million peak to \$132 million. Earlier, in February, the United States authorities had also paid off at maturity the first \$10 million of forward sales contracts falling due to the market, leaving \$55.5 million still outstanding divided evenly between the System and the Treasury.

The renewal of severe tensions in the gold market in March brought a strengthening in the spot franc, although the advance was retarded by demand for dollars to buy gold. After the Zurich markets had closed on March 14, demand for francs intensified with the growing uncertainties in the exchanges, and the Federal Reserve Bank of New York sold moderate amounts of francs for account of the Swiss National Bank. The next day, with the London market closed and traders highly apprehensive over the likely outcome of the weekend meetings in Washington, demand for Swiss francs increased and the Swiss National Bank purchased dollars after indicating to the market that it would sell francs at the official upper intervention point of $\$0.2328\frac{1}{4}$, rather than $\$0.2317\frac{1}{2}$ as it had done in recent years. But the bank's intake was less than might have been expected, given the tense international monetary situation, and it was not necessary for the Federal Reserve to bring its Swiss franc swap lines into play. Demand for forward francs was relatively heavier, however, and the Swiss National Bank, acting jointly for the Federal Reserve and the Treasury, sold a total of \$56 million equivalent of forward francs, raising United States forward commitments to the market to \$111.5 million.

The news of the decisions taken at the Washington meetings calmed the market considerably. One result of those meetings was a further increase in the Swiss franc swap facilities with the Swiss National Bank and the BIS of \$200 million each, bringing the resources available under each arrangement up to \$600 million. In succeeding weeks, liquidity conditions remained relatively easy in the Swiss money market and, with the exchange markets generally calmer during April, it proved possible for the Federal Reserve and the United States Treasury to liquidate \$43 million equivalent of maturing Swiss franc forward contracts, thereby reducing these commitments to \$68.5 million.

The month of May brought a strengthening of the spot franc. Early in the month, market uncertainties arising from a spate of rumors of a revaluation of the mark and growing apprehensions over sterling generated speculative

demand for francs. In addition, there were indications that Italian interests were buying francs to liquidate credits that were becoming expensive relative to loan rates elsewhere. Later in the month the political and economic upheaval in France pushed the Swiss franc still higher. By the end of May, the flight of French capital to Switzerland lifted the Swiss franc to its ceiling and the Swiss National Bank took in a sizable amount of dollars. The System subsequently absorbed most of that intake by drawing \$73 million under the swap facility with the Swiss National Bank, raising Federal Reserve commitments to the Swiss National Bank to \$150 million. On the other hand, the remaining \$55 million of Federal Reserve swap debt to the BIS was fully repaid in May through a Treasury swap of sterling against Swiss francs through the BIS.

In June, quotations on the Swiss franc moved irregularly lower after the middle of the month, as the National Bank provided swap facilities to help Swiss banks meet their midyear needs. Such short-term swaps by the Swiss National Bank reached a total of \$430 million, with the bank reinvesting the entire amount of the dollar proceeds in the Euro-dollar market, either directly or through the BIS. Toward mid-June, the System acquired \$15 million of francs from a correspondent and with these francs reduced commitments to the Swiss National Bank to \$135 million by June 18. In addition, the United States authorities liquidated \$3.0 million of maturing forward commitments to the market, using francs purchased from the Swiss National Bank.

In July, money and credit conditions in Switzerland tightened, as heavy seasonal currency withdrawals drained liquidity from Swiss banks and as the midyear swaps between the Swiss National Bank and the banks ran off. Swiss banks bid strongly for francs to meet month-end needs, and interest rates on one-week money climbed to 8 to 10 per cent per annum.

With no immediate prospect of liquidating Swiss-franc swap commitments through market transactions, the United States authorities took action to wind up these commitments by other means. In July the United States Treasury issued to the BIS a three-month certificate of indebtedness denominated in Swiss francs equivalent to \$54.7 million. The Treasury used these francs to reverse its third-currency swap of sterling for francs with the BIS. Subsequently, the Treasury issued to the Swiss National Bank a three-month certificate denominated in francs equivalent to \$133.7 million; nearly all these francs, together with balances, were employed by the System to repay fully the \$135 million commitment still outstanding under the swap line with the Swiss National Bank. The \$600 million facility with the bank thus reverted to a fully avail-

able standby basis. Also during the month, the System and Treasury were able to liquidate at maturity \$29.5 million of forward contracts with the market.

At the end of July credit conditions in Switzerland tightened still further, triggering heavy repatriations of funds to Switzerland and the Swiss National Bank purchased a large amount of dollars in meeting market needs. The System subsequently absorbed nearly all those gains by reactivating its swap line with the Swiss National Bank, drawing a total of \$145 million. The substantial injection of francs resulting from these inflows into the Swiss money market brought an end to the squeeze and an easing in the spot rate. The Swiss market remained comfortably liquid during August and early September, and the United States authorities purchased from the National Bank sufficient francs to meet the last \$36 million due under maturing forward sales contracts with the market. In addition, the System purchased a further \$15 million from the Swiss National Bank and reduced its swap debt to \$130 million.

ITALIAN LIRA

In the latter part of 1967, Italian exports moved strongly upward, reflecting the revival of business activity in Germany and other major markets as well as Italy's remarkable record of price stability in recent years. At the same time, there was a temporary tapering-off of long-term capital outflows coupled with some repatriation of funds induced by the sterling crisis. Italian official reserves consequently continued to rise even after the usual summer buildup. The Federal Reserve absorbed these dollars by drawing on its swap line with the Bank of Italy, and by the end of November System swap commitments in lire had reached \$500 million. The delayed seasonal weakness in the lira finally developed just before the close of the year and continued into early 1968, but with minimal effect on Italian official reserves, and the Federal Reserve had scant opportunity to acquire lire through market transactions. In late February and early March, however, the Federal Reserve acquired \$75 million equivalent of Italian lire and \$100 million equivalent of German marks from the proceeds of Canadian and United States drawings on the IMF; the marks were converted into lire, and the combined proceeds were used to reduce the swap debt to the Bank of Italy to \$325 million in early March.

As a new wave of speculation on the London gold market spread to the exchange markets, inflows of funds to Italy quickly tapered off when the Bank of Italy permitted a rapid rise in the spot rate. The spot lira moved sharply lower after the Washington central bank meeting

restored confidence in the currency parity structure, but there was no significant reflux of funds from Italy as that country's external position remained strong. With little change in the market pattern through April and with the usual spring and summer buildup of Italian official reserves in prospect, the Italian authorities asked the System near the end of April to absorb \$175 million of its dollar holdings by a swap drawing, again raising Federal Reserve swap debt in lire to \$500 million.

As the spring months wore on, however, the increase in Italian official reserves did not develop as expected. A brief period of labor and student unrest, together with political uncertainties arising out of the resignation of Premier Moro, may have induced some outflows of funds. More important, however, were relatively easy credit and liquidity conditions which encouraged large capital outflows, particularly to the Euro-bond market. Such outflows of long-term funds from Italy continued into the summer, largely offsetting the normal seasonal rise of reserves during the tourist season.

The shift toward balance in Italy's external accounts, along with the French and United Kingdom drawings on the IMF in June, provided the opportunity for the Federal Reserve to liquidate the full amount of its outstanding swap obligations to the Bank of Italy by early July. The currency packages put together by the IMF for France and the United Kingdom provided for \$369 million of lire. Of this amount, the System purchased \$141.5 million equivalent directly from the drawing central banks, and the bulk of the remainder was converted into dollars by the Bank of Italy, depleting its dollar holdings. Moreover, in the absence of a large seasonal increase in reserves, the swap drawing effected in anticipation of such reserve increases no longer seemed necessary. Therefore, the System was able to purchase an additional \$351.1 million equivalent of lire from the Bank of Italy. These lire, combined with some \$7.6 million equivalent acquired from a correspondent and in the market, were used by the Federal Reserve to liquidate completely its remaining swap debt to the Bank of Italy.

In early 1965, the United States Treasury had again assumed technical commitments in forward lire, related to the dollar-lira swaps transacted by the Italian authorities with the Italian commercial banks. Earlier operations of this type had been conducted in 1962-64. The Federal Reserve joined in these commitments in November 1965, under an authorization to participate to the extent of \$500 million. No opportunity subsequently appeared to terminate these Federal Reserve commitments through a reversal in the Italian banks' forward positions. Consequently, in line with System policy of limiting exchange

operations to relatively short-term needs, the Federal Reserve in April transferred to the Treasury the total of its technical forward commitments in lire. Such commitments, as they have fallen due, have been rolled over by the Italian authorities.

DUTCH GUILDER

Late in 1967 there were heavy flows of funds to the Netherlands, generated mainly by the sterling crisis but also by a brief liquidity squeeze in the Amsterdam market at the year-end. As part of the concerted central bank effort in November 1967 to restrain speculation, the Netherlands Bank initiated forward sales of guilders totaling \$37.5 million on behalf of the Federal Reserve and United States Treasury. In the same month, the Treasury also executed special temporary swaps with the Netherlands Bank, for \$126 million equivalent, to provide cover for that bank's spot dollar accumulations. Moreover, the Federal Reserve drew several times on its swap line and by early January 1968 System commitments had reached \$185 million. At their peak on January 4, the total of the United States authorities' short-term commitments in guilders amounted to \$348.5 million.

Liquidity conditions in Amsterdam improved significantly with the new year, and Dutch banks responded by moving excess funds back into the Euro-dollar market. The outflow, which gave the Netherlands Bank an opportunity to sell some dollars, did not last long enough for the Federal Reserve and the Treasury to make more than moderate progress in reducing their guilder obligations. Moreover, the Dutch balance of payments, which was in modest surplus in 1967, showed no signs of shifting into deficit. To avoid an undue prolongation of the short-term guilder commitments incurred by the System and the Treasury, a variety of special transactions (recounted in this *Review*, March 1968, page 48) were undertaken with the result that only \$65 million of Federal Reserve swap drawings remained outstanding by early March.

Demand for both spot and forward guilders swelled once again in the wake of the March gold rush. The Netherlands Bank took in about \$100 million through March 15 but swapped out a sizable amount of this intake—selling the dollars spot and repurchasing them forward—in order to mop up excess domestic liquidity. To absorb the bulk of the Dutch reserve gains, the Federal Reserve Bank of New York, acting for the account of the United States Treasury, concluded a special 45-day swap for \$65 million with the Netherlands Bank. In addition to such market swaps, the Netherlands Bank also offered guilders forward on an outright basis, to limit the

tendency for costly forward premiums to result in sales of spot dollars to the central bank. The Federal Reserve and the Treasury underwrote this operation by each taking over \$20.9 million equivalent of guilder forward commitments to the market—in the one-, two-, and three-month maturity ranges. These combined operations by the Dutch and United States authorities helped to reassure the market and restrained further heavy inflows of funds.

The March 16-17 Washington meeting of the Gold Pool central banks marked a major turning point. (One of the agreements reached that weekend was a further increase in the swap facility between the Federal Reserve and the Netherlands Bank to \$400 million.) The guilder market resumed a more normal trading pattern, as attractive yield incentives favoring investments in Euro-dollars were restored. A sizable reflux abroad soon developed, bringing about an easing of spot guilder rates at a time when the forward premium on guilders was also narrowing as speculative influences abated. Moreover, commercial firms became buyers of foreign exchange to rebuild balances and to meet current requirements. With this reversal of pressures in the guilder markets, the Netherlands Bank sold a substantial amount of spot dollars over the rest of March and into April, replenishing those losses through purchases from the United States Treasury and the Federal Reserve. The Treasury used the guilders so obtained to liquidate its \$65 million special swap with the Netherlands Bank in advance of maturity, and by the end of April the System had also purchased sufficient guilders to repay the last of its swap drawings with the Netherlands Bank. The United States authorities were also able to liquidate the forward guilder contracts falling due to the market in April and May. The last \$10.7 million of these obligations was covered in early June, when the United States purchased from France part of the guilder proceeds of the French IMF drawing.

Moreover, additional conversions of the guilders drawn from the IMF by France and the United Kingdom reduced the dollar balances of the Netherlands Bank to such an extent that the bank in turn drew a total of \$54.7 million under the swap line with the Federal Reserve to replenish its holdings. This was the first time the Netherlands Bank drew on its swap line with the Federal Reserve since the inception of the swap arrangement in 1962. In addition, the Netherlands Bank bolstered its dollar balances by selling \$30 million of gold to the United States Treasury.

With the underlying Dutch payments position roughly in balance, the spot guilder fluctuated in response to changing liquidity conditions in Amsterdam during May and the early part of June. On July 1 the Netherlands

Bank announced that it had concluded an arrangement with the government to purchase directly up to 400 million guilders in Dutch Treasury bills. This operation helped bridge the seasonal decline in government receipts, which coincides with money market stresses resulting from increased note circulation at the time of summer vacations in the Netherlands. Thus, sizable repatriations of foreign assets were avoided. With the guilder largely insulated from money market pressures, the spot rate eased below par in July and declined further through early September. On September 6, the Netherlands Bank liquidated a maturing \$24.9 million swap drawing on the facility with the Federal Reserve, leaving \$29.8 million outstanding from the June drawings.

BELGIAN FRANC

Belgium also experienced inflows of funds during the sterling crisis last fall, and the National Bank of Belgium took in sizable amounts of dollars at the upper limit for the Belgian franc. To cover these accumulations, the Federal Reserve drew on the swap line, with swap commitments totaling \$130.8 million by the end of November, while the United States Treasury issued a \$60.4 million medium-term franc-denominated note to the Belgian authorities. In addition, as part of the concerted central bank effort to maintain orderly markets after the sterling devaluation, in December the National Bank sold some \$11.8 million of forward Belgian francs for the account of the Reserve System and the United States Treasury. Thereafter, speculative buying pressure on the Belgian franc subsided quickly, while a revival of business activity in Belgium, and the consequent growth of import demand, contributed to a demand for dollars and to an easing of the spot franc from its ceiling. During this period, the National Bank of Belgium occasionally sold dollars in the market and, to recoup these losses as well as to anticipate dollar needs of the Belgian government, the bank sold francs to the Federal Reserve. The System, in turn, used the francs to reduce its swap commitments to \$80.8 million by late January. The franc firmed again in February, and it was only through a series of non-market transactions (described in this *Review*, March 1968, page 49) that by early March the Federal Reserve swap commitment was lowered to \$34.5 million and the System and the Treasury forward contracts were reduced to \$5.0 million equivalent.

On March 7, the National Bank cut its discount rate by $\frac{1}{4}$ percentage point to $3\frac{3}{4}$ per cent to promote a lower level of interest rates in Belgium and to stimulate economic activity. But in the following week a violent

burst of speculation in the gold and foreign exchange markets pushed the franc to the National Bank's upper intervention point. By March 15 the bank had taken in nearly \$60 million. The Federal Reserve absorbed most of this inflow by additional drawings on the swap line; by March 19, System drawings outstanding reached \$80.1 million.

In the calmer atmosphere immediately following the Washington meetings, however, Belgian banks soon began to channel funds back into dollar investments. As the National Bank provided occasional support in the spot market and replenished its dollar holdings through purchases from the System, gradual progress was made reducing the swap debt to a level of \$43.1 million by early June. Moreover, the System and the Treasury were able to purchase sufficient francs from the Belgian National Bank to liquidate the remainder of their forward franc commitments with the market.

In June, the French and British drawings from the IMF gave rise to a series of official transactions in Belgian francs, with the net result that francs made available by the National Bank to the IMF were purchased by the United States authorities in sufficient quantity to liquidate all remaining Federal Reserve indebtedness under the Belgian franc swap line.

During the summer months, the spot Belgian franc continued to edge downward as a result of the economic recovery and the maintenance of relatively low levels of short-term interest rates in Belgium, compared with the attractive yields in the Euro-dollar market. In July, the spot franc dipped below par (\$0.02000) and the National Bank intervened to slow the decline. As part of this operation, the National Bank utilized \$20 million under its Federal Reserve swap line, the first such utilization since 1963.

CANADIAN DOLLAR

The Canadian dollar came under heavy speculative attack during the winter months of 1968. Although Canada's trading position remained strong, market sentiment had been badly shaken by the devaluation of sterling and the subsequent gold rush. The market was particularly disturbed by apprehensions that the new United States balance-of-payments program announced on January 1 would adversely affect direct investment in Canada and the balance of short-term capital flows between the two countries, despite Canada's continued free access to the United States bond market under the new program. In February, political uncertainties added to market tensions as the Canadian government encountered temporary

difficulties in getting legislative approval for its anti-inflationary fiscal program. Losses in official reserves in January and February were heavy, and the Canadian authorities accordingly reinforced their reserve position by drawing \$250 million under the \$750 million swap facility with the Federal Reserve and \$426 million from the IMF. At the same time, the bank rate was raised to 7 per cent on January 21.

In early March, as the gold rush resumed, the Bank of Canada was again forced to intervene in the exchange market on a large scale. In an effort to curb speculative pressures, fiscal measures designed to limit domestic demand were reintroduced into (and subsequently passed by) Parliament and were immediately backed up by a bolstering of Canada's international credit lines. New international credits of \$900 million, over and above the \$500 million still available under the Federal Reserve swap line, were made available by the United States Export-Import Bank, the German Federal Bank, the Bank of Italy, and the BIS. At the same time the United States Government made clear its wholehearted support for Canada's program to defend the \$0.9250 parity by granting Canada a complete exemption from the restraints on capital flows announced in the President's January 1 program. The Canadian Minister of Finance assured the United States Government that this exemption would in no way impair the effectiveness of the President's program. In addition, the Finance Minister announced the intention to invest Canada's holdings of United States dollars—apart from working balances—in United States Government securities which do not constitute a liquid claim on the United States. Effective March 15, the Bank of Canada raised its discount rate by $\frac{1}{2}$ percentage point to $7\frac{1}{2}$ per cent. The previous day, most Federal Reserve banks had also announced a $\frac{1}{2}$ point rise in discount rates.

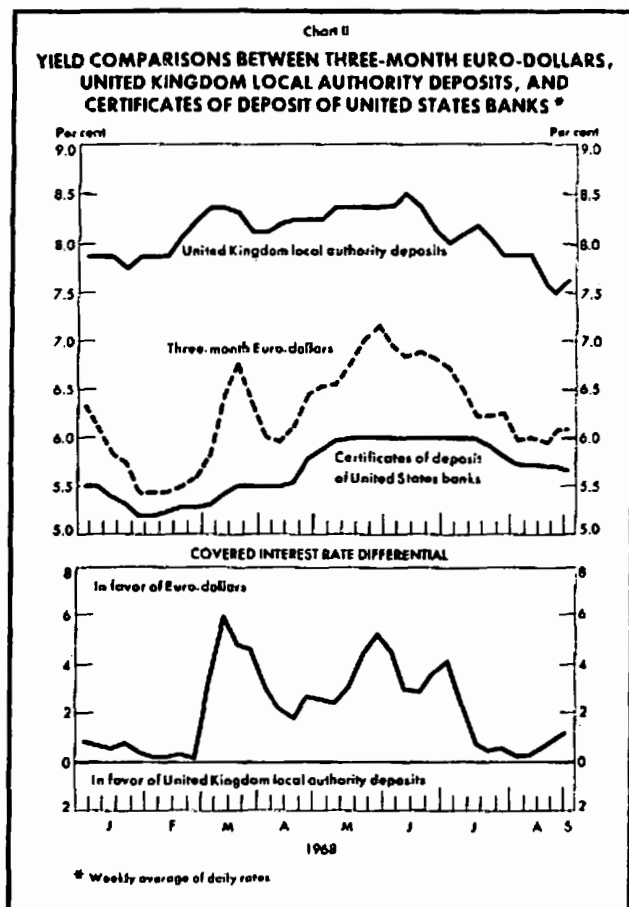
These strong measures to protect the Canadian dollar began to exert their full effect as soon as the March 16-17 Washington meetings cleared away doubts about central bank resolve to defend the existing international payments system. Announcements following the Washington meetings that the Bank of Canada's swap facility with the Federal Reserve had been increased to \$1,000 million provided further assurance of the capacity of the Canadian authorities to maintain the existing parity. For the first time since the November devaluation of sterling, more normal influences began to emerge in the exchange market for Canadian dollars. The market responded favorably to a large calendar of Canadian borrowings in New York, suggesting sizable forthcoming demand for Canadian dollars. Moreover, a Province of Quebec loan in Europe also suggested that Canadian bor-

rowers could tap new capital resources in Europe where monetary conditions had eased as a result of official policy actions designed to foster renewed business expansion on the Continent. With a sharp turnabout in market sentiment toward the Canadian dollar, the Canadian authorities took in sizable amounts of dollars toward the end of March, and thus offset some of the losses sustained early in the month. Buying pressure gathered momentum in April, as demand for Canadian dollars was strengthened by the resumption of normal monthly conversions of export earnings by Canadian paper and grain companies. Thus, the Canadian authorities were able to report substantial reserve increases in April and May. In May and June, the Government of Canada made new issues of bonds in the United States, Italy, and Germany in a total amount of \$262 million equivalent. As the exchange market situation continued to improve in late June, the Bank of Canada repaid \$125 million of its \$250 million obligations under the Federal Reserve swap line, and on July 1 reduced its bank rate $\frac{1}{2}$ point to 7 per cent.

After a brief lull early in July, there was renewed buying of Canadian dollars as banks began to undo forward positions against the Canadian dollar which had been undertaken during the peak of the speculative attack in January. The Bank of Canada supplied the needed liquidity to the market but gradually permitted the spot Canadian dollar to advance to its effective ceiling (\$0.9324). The prospect of sizable provincial borrowings abroad and rumors of a possible new grain deal with the Soviet Union appeared as further bullish factors. Against this favorable background, the Bank of Canada announced on July 26 that it was lowering its discount rate by a further $\frac{1}{2}$ per cent to $6\frac{1}{2}$ per cent. With this announcement the Canadian authorities also revealed that the Bank of Canada had repaid the final \$125 million outstanding on its swap line with the System, thereby placing the entire \$1,000 million facility on a standby basis. At the same time, it was reported that the \$100 million short-term facility with the BIS and the facilities of \$150 million each with the Bank of Italy and the German Federal Bank had been terminated without having been utilized. The Canadian dollar remained at or near its effective ceiling through August and early September and, effective September 3, the Bank of Canada reduced its discount rate to 6 per cent. At the end of August, the Canadian official reserves stood at \$2,590 million, a gain of \$345 million since the end of March.

EURO-DOLLAR MARKET

During the fall of 1967, concerted central bank action to minimize the impact of massive repatriations of funds



shielded the Euro-dollar market from the repercussions of the sterling crisis and the subsequent wave of speculation in gold. Joint operations by the German, Swiss, Dutch, and Belgian central banks, and the Federal Reserve in cooperation with the BIS, brought some \$1.4 billion of resources into play toward the end of 1967, limiting upward movements in Euro-dollar rates. In the early months of 1968 Euro-dollar rates eased sharply (see Chart II), despite the announcement on January 1 of the more stringent United States balance-of-payments program. Sizable reflows from France, Germany, and Switzerland—and the heavy pressure on the Canadian dollar—resulted in substantial shifts of funds into the Euro-dollar market. Moreover, the upsurge in Euro-bond flotations produced temporary accumulations by the borrowers—in large part affiliates of United States corporations—who placed them in short-dated deposits. At the same time the market's skeptical attitude toward the pound led to wide discounts on forward sterling that made short-term invest-

ments in sterling unattractive. Thus, despite record interest rate levels in the United Kingdom and the ample liquidity in the Euro-dollar market, funds moved not into sterling assets but in good part were absorbed by United States banks' branches for placement with their head offices in the United States.

In early March, the speculative upheaval in the gold market inflamed market apprehensions over currency parities and the general stability of the international financial structure. In this atmosphere, Euro-dollar rates jumped to 7 per cent. Once again, however, the central banks of Germany, the Netherlands, and Switzerland, acting in concert with United States authorities, returned substantial amounts of funds to the Euro-market, simultaneously making forward exchange available and thereby curbing the tendency for wider forward premiums in major Continental currencies to pull further funds from the Euro-dollar market. The German Federal Bank, for example, resold nearly \$800 million to the market in swap operations through the end of March. In addition, the Netherlands Bank by March 15 had made available \$41.8 million of forward guilders, partly in swap transactions but also on an outright basis, and the Swiss National Bank made available \$56 million equivalent of forward francs. The Federal Reserve underwrote the forward commitments in guilders and Swiss francs, and participated in the German operations by drawing \$300 million on its swap line to absorb dollars from the Federal Bank, thereby providing cover for part of that bank's forward purchases of dollars.

News of the decisions taken at the Washington meetings strongly bolstered market confidence in currency parities. (At that time the Federal Reserve swap facility with the BIS, under which Euro-dollar placements can be made, was increased to \$1 billion.) Prospects for stability were further improved late in the month by the President's peace initiative and the agreement at Stockholm on a plan for Special Drawing Rights. Under the influence of these developments, Euro-dollar rates drifted down from their mid-March peaks until the swing toward higher interest rate levels in the United States began in April to exert a strong pull on short-term funds in Europe.

Substantial amounts of funds continued to flow into the Euro-dollar market from the Continent during the spring, notably from Germany where three-month inter-bank loan rates of about $3\frac{1}{2}$ to $3\frac{3}{4}$ per cent per annum were indicative of the relatively low investment yields in major Continental markets. Moreover, in May large amounts of funds were drained from London as growing apprehensions over the pound precluded uncovered investments in sterling, and sharply widened the discount for forward pounds, which created an unusually large interest

incentive for shifting funds into dollars on a covered basis. Outflows from France starting after mid-May seem also to have gone largely into dollars. On the demand side, United States banks' branches continued to absorb funds for placement with their head offices and, without undue strain on the market, in the quarter ended in June increased their takings to more than \$6 billion, compared with about \$4 billion at the beginning of the year.

Euro-dollar rates moved upward in May as United States interest rates advanced and as international currency uncertainties temporarily unsettled the market, before rates eased in early June. With the approach of midyear, however, and indications of a possible develop-

ing squeeze of exceptional stringency in Switzerland, rates began to rise once more. Undue pressures were effectively countered, however, as the Swiss National Bank bought \$430 million on a short-term swap basis from Swiss commercial banks and rechanneled the dollar proceeds to the Euro-dollar market, directly or through the BIS. The Federal Reserve backed up the operation by providing to the BIS \$111 million for placement in short-term deposits in the Euro-dollar market. With midyear pressures out of the way, and expectations of easier monetary conditions in the United States following passage of the tax surcharge, Euro-dollar rates subsequently eased considerably.

