

Treasury and Federal Reserve Foreign Exchange Operations*

By CHARLES A. COOMBS

As of the end of August 1962 the Federal Reserve had negotiated reciprocal currency agreements with seven foreign central banks and the Bank for International Settlements amounting to a total of \$700 million. Since then the network has been extended to include the Bank of Italy, the Austrian National Bank, and the Bank of Sweden. The agreements with the central banks of Sweden and Austria both provide for a \$50 million reciprocal credit facility. The arrangement with the Bank of Italy, initially fixed at \$50 million, has since been raised to \$150 million. During this period the agreement with the German Federal Bank was also increased from \$50 million to \$150 million and the agreement with the Bank of France from \$50 million to \$100 million. As of early March, therefore, the "swap" network had been enlarged to cover ten foreign central banks, plus the BIS, and involved a total amount of \$1,100 million. The amounts and dates of these swap arrangements are shown in Table I.

These swap agreements do not, in themselves, constitute outstanding indebtedness. Rather, they are mutual credit facilities on a stand-by basis. Actual utilization of such swap lines takes the form of drawings, which in general are made only in response to specific short-term needs. When the Federal Reserve initiates a drawing under a swap, it acquires a convertible currency that can provide temporary resources for exchange market operations. In what has been a more typical use, it can purchase from a central bank dollars in excess of those that the bank would ordinarily hold, in effect absorbing or mopping up these dollars

for the period of the swap. Such an operation leaves the total dollar holdings of the foreign country unaffected, but it substitutes dollars sold forward to the Federal Reserve for dollars held "outright"—i.e., without such exchange cover. Therefore, Federal Reserve use of swap facilities can provide a temporary alternative to an enlargement of outright dollar holdings of foreign central banks beyond the point at which conversion into gold would become likely.

Total drawings on the swap arrangements can be and in fact have been initiated not only by the Federal Reserve but also by other central banks. They have exceeded \$600 million since their inception in March 1962. As of the end of February 1963, the net debtor position of the Federal Reserve in all swap agreements combined amounted to considerably less than \$100 million.

The first line of defense against speculation provided by this strengthened swap network has been reinforced by negotiation of a series of Treasury issues of special certificates and bonds denominated in the currencies of the European central banks and treasuries to which they have been issued. Lira bonds taken up by the Bank of Italy now amount to \$200 million equivalent. Mark bonds placed with the German Federal Bank amount to an-

Table I
FEDERAL RESERVE RECIPROCAL CURRENCY AGREEMENTS

Other party to agreement	Amount (in millions of dollars)	Date (of original agreement)	Term (in months)
Bank of France*	100	1962: March 1	3
Bank of England	50	May 31	3
Netherlands Bank	50	June 13	3
National Bank of Belgium	50	June 20	6
Bank of Canada	250	June 26	3
Bank for International Settlements†	100	July 16	3
Swiss National Bank	100	July 16	3
German Federal Bank‡	150	August 2	3
Bank of Italy§	150	October 18	3
Austrian National Bank	50	October 25	3
Bank of Sweden	50	1963: January 17	3
Total for all banks	1,100		

* Increased from \$50 million to \$100 million on March 4, 1963.

† In Swiss francs.

‡ Increased from \$50 million to \$150 million on January 17, 1963.

§ Increased from \$50 million to \$150 million on December 6, 1962.

* This second joint interim report reflects the Treasury-Federal Reserve policy of making available additional information on foreign exchange operations from time to time. The Federal Reserve Bank of New York acts as agent for both the Treasury and the Federal Open Market Committee of the Federal Reserve System in the conduct of foreign exchange operations.

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other \$200 million, while Swiss franc bonds and certificates acquired by the Swiss National Bank and the Swiss Confederation amount to \$129 million. The precise purpose of each issue has varied somewhat from country to country, but one common characteristic is that these issues provide the foreign countries concerned with an advantageous investment medium for past or present balance-of-payments surpluses.

Such balance-of-payments surpluses, it is important to note, need not necessarily reflect a foreign country's surplus with the United States. Instead, they may represent a surplus in its over-all balance-of-payments accounts with the world as a whole. Nevertheless, because of the role of the dollar as an international reserve currency, such surpluses tend to increase the dollar reserves of the surplus country and hence, if these reserves exceed that country's traditional or legal limits, may create a problem for the United States as banker for the international financial system.

Although the principal surplus countries have already taken a number of actions to neutralize or offset the influx of dollars, especially through debt prepayments and operations in forward markets with their commercial banking systems, the recent introduction by the United States of foreign currency certificates and bonds can be an important further aid in the financing of such international payments imbalances. Issue of foreign currency certificates and bonds by the United States provides this country with an additional source of international liquidity which may be particularly useful during periods of United States balance-of-payments deficits. In addition, insofar as the proceeds of foreign currency borrowing are used by the Treasury to acquire dollars, these dollars may be used to meet fiscal needs which could otherwise require domestic borrowing. The surplus country abroad simultaneously acquires an equivalent source of potential liquidity in the event of a shift from surplus to deficit in its own payments accounts. It is possible that the United States Treasury may undertake similar certificate and bond operations in other European currencies and thereby create in due course a second line of defense behind the swap network. The following account of Federal Reserve and Treasury operations in individual currencies shows the gradual development of these inter-related techniques.

BELGIAN FRANCS

All operations in Belgian francs have been handled by the Federal Reserve on the basis of the \$50 million swap arranged on June 20, 1962 between the Federal Reserve Bank of New York and the National Bank of Belgium. In contrast to all the other swap arrangements, which have

Table II
FEDERAL RESERVE OPERATIONS IN BELGIAN FRANCS
In millions of dollar equivalent

Date	Disbursements	Repurchases	Closing balances (including interest earnings)
June 20, 1962			50.0
August 7, 1962	10.5		39.5
September 17-21, 1962		10.5	50.0
October 11, 1962	10.0		40.0
November 19, 1962	10.0		30.0
December 19, 1962		5.0	35.0
December 28, 1962			
January 4, 1963		14.4	50.0
January 31, 1963	5.0		45.0
February 11, 1963		5.0	50.0

now been placed upon a stand-by basis until drawings are initiated by either party, the Federal Reserve swap with the National Bank of Belgium remains fully drawn, as it has been from the beginning. It thereby provides the National Bank of Belgium with a supplementary dollar balance of \$50 million and the Federal Reserve with an equivalent balance of 2,487 million Belgian francs.

With a continuing ebb and flow of dollar payments between Belgium and the rest of the world, the Federal Reserve has made periodic disbursements of Belgian francs to absorb temporary surpluses of dollars on the books of the National Bank of Belgium, and then quickly reversed these operations as Belgian demands for dollars enabled the Federal Reserve to replenish its Belgian franc balance. Table II above illustrates the reversible flows of funds which have been cushioned by such Federal Reserve exchange operations.

In its turn, the National Bank of Belgium has also used the swap facility. On January 16, 1963, the National Bank disbursed \$5 million of its dollar balance acquired under the swap—which it replenished by January 31—and on February 21, it again made net use of the swap, this time in the amount of \$10 million. Thus, between August 1962 and mid-February 1963, payments swings in the Belgian dollar position of more than \$90 million were smoothly and quietly financed through the swap facility, thereby dispensing with gold payments in an equivalent amount. Such routine employment of mutual credit facilities has represented a noteworthy economy in the use of gold.

NETHERLANDS GUILDERS

As noted in the previous report, a substantial influx of funds into the Netherlands developed in the late spring and early summer of 1962 in response to various factors—a large stock offering by a Dutch corporation, a tighten-

ing of the Amsterdam money market, and, perhaps most important of all, the uncertainties created by the sharp decline in prices on the New York and foreign stock markets late in May. Part of this inflow seemed likely to prove reversible in due course; moreover, there were also in early prospect sizable dollar outpayments by the Netherlands for various special purposes. To bridge the gap, the Federal Reserve drew between June 14 and July 26 the entire \$50 million in guilders available under the swap arrangement negotiated with the Netherlands Bank on June 13 and used these guilder funds to absorb surplus dollars on the books of the Netherlands Bank. These swap operations by the Federal Reserve were supplemented in late July by a resumption of Treasury forward operations in guilders, which reached a total of \$36 million equivalent of forward sales contracts outstanding by the end of August. The Treasury also executed a \$50 million swap with the Netherlands Bank on July 26, of which \$15 million was immediately drawn and disbursed. These System and Treasury operations enabled the Netherlands Bank to avoid purchasing roughly \$100 million of gold from the United States during a period of considerable nervousness in the exchange markets.

By mid-August 1962 the tide had already begun to turn. With an easing of the Amsterdam money market, Netherlands repayments of dollar bank loans and a striking recovery of confidence in the dollar following President Kennedy's Telstar broadcast, the dollar strengthened against the guilder. The Federal Reserve was thereby enabled to accumulate guilders against its liability under the swap drawing. By September 17 the Federal Reserve had paid off the entire \$50 million drawn under the swap, which then reverted to a stand-by basis. A continuation of these exchange market conditions throughout September, most of October, and November also enabled the United States Treasury to accumulate sufficient guilders to pay off its swap drawing prior to maturity and to liquidate at maturity the three-month forward guilder contracts entered into during July and August. When early in October the Netherlands guilder rate rose somewhat, owing to a renewed tightening of conditions in the Amsterdam money market, however, the Treasury sold a small amount of spot guilders to moderate the rise. The Federal Reserve also drew \$10 million of guilders under its swap arrangement to prepare for possible additional operations. No occasion arose to use this guilder drawing, however, and it was liquidated early in 1963. With the exception of this episode and of a brief flurry of speculation during the Cuban crisis, requiring only minimal intervention by the Federal Reserve in the spot market, the dollar-guilder market has remained relatively well balanced during the past six months.

CANADIAN DOLLARS

In June 1962 the Federal Reserve and the Bank of Canada concluded a \$250 million swap agreement which was immediately and fully drawn upon as part of a billion dollar program of international financial cooperation designed to reinforce the Canadian Government's efforts to defend Canada's newly established par value against a speculative onslaught. Announcement of financial assistance on this massive scale, coupled with a Canadian Government announcement of fiscal and other measures to reduce Canada's payments deficit, immediately broke the speculative wave. In succeeding days, the United States Stabilization Fund made market purchases of Canadian dollars in small amounts.

As the liquidation of short positions in Canadian dollars got under way and the historically heavy flow of United States capital funds to Canada resumed, Canadian official reserves registered heavy gains from month to month. After renewing the Federal Reserve swap for an additional three months on September 26, the Bank of Canada took advantage of the continuing return flow of funds to liquidate the swap in three steps: \$125 million on October 31, \$50 million on November 30, and the remaining \$75 million at the December 26 maturity. The swap then reverted to a stand-by facility which may be immediately drawn upon by either party in case of need. The speed and effectiveness of international financial cooperation in repelling the 1962 attack on the Canadian dollar has had a useful chastening effect on speculative activity in exchange markets throughout the world.

AUSTRIAN SCHILLINGS

With the Austrian balance of payments in strong surplus, the reserves of the Austrian National Bank rose by \$211 million during the first nine months of 1962. On October 25 the Federal Reserve entered into a \$50 million swap with the Austrian National Bank and shortly thereafter drew and utilized the full proceeds of the swap to absorb \$50 million of surplus dollars on the books of the Austrian National Bank. During the three months' term of the swap drawing, the Austrian balance of payments remained in surplus, and no reversal of the flow of funds appeared in immediate prospect. Accordingly, at maturity on January 24, 1963, the swap drawing was entirely repaid and was placed on a stand-by basis. Meanwhile, the swap had provided the Austrian National Bank with a satisfactory alternative to immediate purchases of gold. Although no opportunity arose for the customary swing operation, one useful result has been that Austrian

gold purchases have been stretched out over a longer period than would otherwise have been the case.

ITALIAN LIRE

For most of 1962 Italy remained in a strong balance-of-payments position and would have registered another large official reserve gain in the absence of cooperative action with the United States, involving Italian debt prepayments, United States borrowing operations, and coordinated official action on the exchange markets. The United States and Italian Governments approached this problem in a spirit of mutual cooperation and understanding, with no expectation on either side that the problem could be quickly solved. On the other hand, it was mutually recognized that exchange and related operations designed to minimize the growth in Italian exchange reserves could provide a highly important breathing space during which natural corrective forces, plus policy measures, might gradually take effect.

Even if Federal Reserve swap facilities had been available at the beginning of 1962, it is highly doubtful that this central bank technique to deal with reversible flows would have been utilized at that time. The device actually chosen was that of issuance to the Bank of Italy by the United States Treasury of three-month certificates denominated in lire under a \$150 million line of credit extended by the Bank of Italy. Under this line of credit, the United States Treasury issued a \$25 million lira certificate on January 26, another \$50 million certificate on March 9, and a \$75 million certificate on August 7. The lira proceeds of these issues were only sparingly disbursed in exchange operations during the first half of the year. But, as the Italian balance of payments moved into seasonally heavy surplus during the summer months, the Treasury absorbed the bulk of the inflow by drawing upon the lira balances acquired through the certificate issues. The Italian Government made a highly effective contribution to this program of restraining the rise in Italian official reserves by an advance payment of \$178 million of debt owed to the United States Government.

By the end of October, with the exception of a brief speculative flurry occasioned by the Cuban crisis, the flow of funds to Italy had tapered off to minimal proportions but there was still no early prospect of outflows sufficiently large to enable the United States Treasury to liquidate its lira certificate obligations. Although roll-overs of the three-month lira certificates would have been entirely feasible, it seemed appropriate to acknowledge forthrightly the likelihood that this indebtedness would have to remain outstanding for some time by shifting from short- to

medium-term financing. Accordingly, in October, the Treasury began a program of refunding the \$150 million of maturing lira certificates, which had been rolled over several times at their respective maturities, into fifteen-month lira bonds. These lira bond issues were increased to \$200 million in November in order to offset a sudden increase in Italian official reserves indirectly resulting from institutional reforms in the Italian short-term money market.

While thus taking direct action to cope with the growth of Italian official reserves, the United States Treasury also undertook to share the forward contract commitments undertaken by the Bank of Italy with Italian commercial banks. These forward exchange contracts also provide the Bank of Italy with an important instrument for regulating commercial bank liquidity. Both total contracts outstanding and the share held by the United States Treasury varied considerably over the course of the year. In view of the dual purpose such forward operations may serve, it is possible that these contracts might be permitted to run somewhat beyond the restoration of equilibrium in the Italian balance of payments.

It would have been inappropriate to use essentially short-term Federal Reserve swap facilities to deal with the basic surplus position of Italy during most of 1962. Nevertheless, in anticipation of circumstances in which such Federal Reserve operations might become desirable, the Federal Reserve entered into a \$50 million swap arrangement with the Bank of Italy on October 18 and, on December 6, the arrangement was increased to \$150 million. At the year end, a sizable flow of dollars to Italy developed, mainly as a result of year-end commercial bank window-dressing, which was expected to reverse itself early in the new year. This essentially temporary flow of funds was largely absorbed on December 28 by a Federal Reserve drawing of \$50 million under the swap. The anticipated reflow did occur, and the drawing was repaid on January 21, 1963.

SWISS FRANCS

As noted in the previous report, the Treasury's outstanding market commitments in forward Swiss francs amounted to \$146.5 million equivalent at the end of February 1962. As the Swiss balance of payments moved into deficit during succeeding months, the Swiss National Bank purchased a total of \$139 million from the Federal Reserve Bank of New York as agent of the United States Treasury. If the United States Treasury had elected to meet these dollar requirements of the Swiss National Bank by accepting Swiss francs in payment, the increase in the

Treasury's franc balances would have been adequate to liquidate nearly all of its outstanding market contracts in forward Swiss francs. But, in order to avoid re-creating suddenly too much liquidity on the Swiss money market, the Swiss sold gold to the United States Treasury in payment for \$74 million of the dollars needed by the Swiss National Bank and paid for the remaining \$65 million in Swiss francs. The United States Treasury used these Swiss franc balances to liquidate \$55 million of maturing forward contracts. By the end of May 1962, contracts outstanding had been reduced to \$91.5 million equivalent.

In late May 1962, although Switzerland's balance of payments on current account remained in heavy deficit, the flow of funds again shifted heavily in favor of Switzerland as a result of speculation caused by the Canadian devaluation and the precipitous decline in the New York and other stock markets. As a consequence, the Swiss National Bank had to buy dollars in the amount of about \$270 million between May 30 and July 23. This development not only raised the possibility of equivalent purchases of United States gold by the Swiss National Bank, but also excited speculative pressures on the exchange markets. To deal with this troublesome situation, the Federal Reserve in mid-July negotiated stand-by swap arrangements of \$100 million each with the Swiss National Bank and the BIS.

Under these swap arrangements, the Federal Reserve drew a total of \$110 million in Swiss francs which were immediately employed to absorb an equivalent amount of dollars on the books of the Swiss National Bank. Reinforcing this operation, the United States Treasury increased its forward contracts outstanding from \$90 million at the end of June to a peak of \$139 million by August 6. These exchange operations enabled the Swiss National Bank to limit its purchases of gold from the United States to no more than \$50 million during a period of widespread anxiety in the exchange markets. More generally, these operations provided further proof of the ability and determination of the United States and Swiss financial authorities to defend their currency parities against exchange market speculation. By August, partly due to President Kennedy's Telstar statements, the speculative fever had subsided and the Federal Reserve was able to initiate purchases of Swiss francs. Of \$40 million equivalent purchased by October 15, \$25 million was used to pay off—in advance—drawings under the swap with the BIS. These repayments reduced drawings of the Federal Reserve in Swiss francs to \$85 million as of October 24.

This period of gradual liquidation of Federal Reserve drawings on the swaps with the BIS and the Swiss National

Bank was abruptly ended by the Cuban crisis. On October 23, the day after President Kennedy's announcement of the quarantine of Cuba, another heavy inflow of funds into Switzerland developed and was only partially offset by Federal Reserve sales in the market of \$8.6 million in Swiss francs. Additional small sales were undertaken during the next few days. Although the inflow subsided almost as quickly as it had begun, the Swiss National Bank had meanwhile again acquired surplus dollars, this time roughly \$50 million. These surplus dollars were absorbed by combined Federal Reserve-Treasury operations. The Federal Reserve drew an additional \$20 million under the BIS swap and purchased dollars from the Swiss National Bank. (Total Federal Reserve drawings of Swiss francs on the BIS thus rose to \$55 million, while \$50 million remained due under the swap drawing from the Swiss National Bank in July.) The remaining \$30 million of surplus dollars on the books of the Swiss National Bank was sold by it to Swiss commercial banks on a spot basis with cover provided through forward purchases of these dollars by the United States Treasury.

These Treasury forward contracts posed certain problems. In view of the approaching year-end window-dressing period for the Swiss commercial banks, it seemed advisable to shorten the usual ninety-day term of such contracts to no more than two months. As these contracts moved toward maturity and with no reversal in the flow of funds appearing, consideration was given to using part of United States outright holdings of German marks to acquire Swiss francs. While there was, of course, no obstacle to United States market sales of these German marks for Swiss francs, such sales might well have resulted in a parallel transfer of dollars from German to Swiss hands. As a result, the entire operation might have become self-defeating. To escape at least temporarily this potentially perverse consequence of the use of the dollar as an international currency, a three-month swap between the United States Treasury and the BIS of German marks for Swiss francs was devised, and this enabled the Treasury to liquidate at maturity the \$30 million of one- to two-month Swiss franc forward contracts falling due in December.

In the period since the Cuban crisis, the Federal Reserve has acquired modest amounts of Swiss francs, and those only recently. This delay was mainly a result of the seasonal reflux of funds to Switzerland for window-dressing purposes during the closing months of the year. Accordingly, the Federal Reserve swap drawings on the BIS and the Swiss National Bank have been rolled over at maturity with a continuing expectation by all parties concerned that the current-account deficit of Switzerland will in time bring

about a reversal of the flow of funds, thereby permitting liquidation of the swap drawings.

On the other hand, considerable progress has been made in reducing Treasury forward contracts outstanding by a partial funding of these obligations. This was accomplished through a new device, i.e., the issue by the United States Treasury of medium-term obligations denominated in Swiss francs. After inauguration of the Treasury's forward operations in July 1961, a substantial proportion of these forward contracts had been acquired through the market by the Swiss Confederation which for several years has been running sizable budget surpluses and understandably has been desirous of investing savings thereby drawn from the Swiss public in earning assets, such as United States Treasury bills on a covered basis. Since the Swiss Confederation's investment plans reached well beyond the three-month range, repeated roll-overs of the three-month forward contracts with the United States Treasury to facilitate such investment were recognized by both sides as an unnecessary complication. The decision was accordingly reached to provide a more direct investment outlet for the Swiss Confederation in the form of Swiss franc bonds. This method of investment enabled the Confederation to avoid recourse to the exchange markets and lessened the risks that its investment operations would become confused by the public with other Treasury and Federal Reserve exchange operations.

On October 18, 1962, therefore, the United States Treasury issued \$23 million equivalent of fifteen-month bonds denominated in Swiss francs and carrying a rate of interest roughly midway between United States and Swiss market rates. The proceeds of this bond issue, plus a draft upon the Treasury's cash balance in Swiss francs, were immediately used to pay off \$25 million of maturing forward contracts held by the Swiss Confederation. On November 8, a second issue of Swiss franc bonds, this time in the amount of \$28 million for a sixteen-month maturity, was undertaken. Again the proceeds were used immediately to liquidate \$31 million of forward contracts held by the Swiss Confederation. Still a third issue of Swiss franc bonds, this time for \$30 million, with a sixteen-month maturity, was placed with the Swiss Confederation on January 24, 1963, and the proceeds were used to pay off an equivalent amount of forward contracts held by the Confederation. As a result of these successive bond issues, which might of course be enlarged to provide an investment outlet for further budget surpluses of the Confederation, the outstanding Swiss franc forward contracts placed by the United States Treasury in the market were reduced to no more than \$53 million. This reduction provides leeway for additional operations in the forward mar-

ket to cope with speculative pressure or other adverse developments.

The United States Treasury also undertook a somewhat related operation in October 1962 by issuing five- and eight-month certificates to the Swiss National Bank to absorb \$48 million equivalent of commercial bank funds which had been sterilized by the Swiss authorities in order to restrain inflationary pressure on the Swiss market. By mobilizing such idle funds, the United States Treasury substantially reinforced its Swiss franc balances available either for intervention in the exchanges or for conversion into gold at a fixed price. (The announcement of this certificate issue, as well as the first issue of Swiss franc bonds, occurred at the very beginning of the Cuban crisis and seems to have had a useful stabilizing effect on the exchange markets at a highly critical moment.) In the future, it is possible that both the United States Treasury and the Swiss National Bank may find it desirable to enlarge the issue of such certificates so as to draw into effective international use further amounts of the Swiss commercial bank funds sterilized at the Swiss National Bank.

GERMAN MARKS

In the case of Germany, the flow of funds to Europe during June 1962 after the widespread stock market declines was reinforced by a tightening of the German money market in connection with a tax payment date. With the exchange markets already nervous because of the Canadian dollar crisis and the stock price declines, a sharp rise in the German mark rate might have aggravated market uncertainties, especially against the background of very weak dollar rates in other exchange markets. Consequently, in a program of market intervention fully coordinated with German Federal Bank operations and designed to moderate the increase in the mark rate, the Federal Reserve sold a sizable amount of marks in New York between June 20 and July 11.

On August 2, the Federal Reserve and the German Federal Bank concluded a \$50 million swap agreement, thus giving the System access to additional marks on a stand-by basis. The upward pressure on the mark eased, however, as was to be expected in view of Germany's fairly well-balanced payments position. Thus, when renewed tension over the Berlin situation pushed the German mark rate slightly below par at the end of August, the Federal Reserve was able to rebuild its balances and the United States Treasury also acquired a small amount of additional marks.

The market for German marks remained quiet during the rest of 1962, except for a brief period in early Decem-

ber when repatriation of funds by German banks for year-end statement purposes and to meet a tax payment date temporarily forced the rate up. In these circumstances the Federal Reserve again intervened on a small scale. By early February 1963 the rate had again receded, and the Federal Reserve was able to rebuild its holdings.

Although German payments swings have recently been relatively small, past experience with very large flows of funds between Germany and other financial centers suggested the desirability of increasing the size of the swap facility between the Federal Reserve and the German Federal Bank. Consequently on January 17, 1963 this first line of defense was reinforced by expanding it to \$150 million, on the usual stand-by basis.

In January and February 1963, the Treasury extended the scope of its foreign currency borrowing operations in marks by issuing four medium-term bonds denominated in marks to the German Federal Bank. These bonds, which had maturities of up to two years and totaled \$200 million equivalent, provided the German Federal Bank with a mark investment medium for some of the excess exchange reserves it had accumulated while Germany had very substantial surpluses in its international payments.

FRENCH FRANCS, POUNDS STERLING, AND SWEDISH KRONOR

No Federal Reserve drawings and disbursements remain outstanding under the swaps with the Bank of France, the Bank of England, or the Bank of Sweden.

CONCLUDING COMMENT

During the past two years—a period of recurrent pressure on both the dollar and sterling—the international financial system has demonstrated a high degree of flexibility and resilience in absorbing the successive shocks of the mark and guildcr revaluations, the Berlin crisis, the attack on the Canadian dollar, world-wide stock market declines, and finally the Cuban crisis. These emergency situations were dealt with quickly, and perhaps with increasing effectiveness, by cooperative action by the major central banks and treasuries on both sides of the Atlantic and by the International Monetary Fund. The London gold market arrangements, central bank forward operations, provision of central bank credit facilities either

on the "Basle" *ad hoc* basis or through more formalized stand-by swap facilities, United States acquisition of foreign exchange and intervention in the exchange markets, massive Fund credits to the United Kingdom and Canada, and, most recently, United States Treasury issuance of certificates and bonds denominated in foreign currencies—all these have proved their usefulness in offsetting and restraining speculation at times of severe pressures. Those who might be tempted to speculate against any major currency are now confronted with the prospect of coordinated defensive action by central banks, treasuries, and the IMF, which are capable of mobilizing impressive resources in support of any currency under attack.

No central bank or treasury official concerned with these defensive arrangements has any illusions that such devices provide any substitute for policy action to correct basic imbalances in the payments accounts of the countries involved. But it is equally recognized that such defenses against speculation can and do provide a margin of time during which appropriate policy solutions can be developed and carried out in an orderly manner.