Treasury and Federal Reserve Foreign Exchange Operations*

By CHARLES A. COOMBS

On Sunday, August 15, President Nixon announced a major new program of domestic and international economic measures. With respect to international payments, the President introduced a 10 percent temporary surcharge on dutiable imports into the United States and suspended the convertibility of the dollar into gold and other reserve assets.

The major European governments kept their exchange markets closed all of the following week, as they sought to develop some joint policy response to the United States measures. These negotiating efforts failed, and on Monday, August 23, the European governments reopened their exchange markets on an uncoordinated basis. While each government continued to adhere to its pre-August 15 parity, all but the French government suspended their commitments to defend the previous upper limits of their exchange rates. Such continuing intervention by the Bank of France was confined, however, to a segregated market for commercial and official transactions, while all other transactions were diverted to a financial franc market which was allowed to find its own level. The Japanese government initially sought to maintain the rate for the yen by continuing to intervene at the ceiling but was swamped by an inflow of dollars, which by the month end had swollen official reserves by $4.4 billion. On August 28, when official intervention at the ceiling for the yen was suspended, the yen immediately rose by nearly 5 percent, and would have risen even more sharply in subsequent weeks if the Bank of Japan had not repeatedly intervened to restrain the upward trend.

Over the following three and one-half months the spot exchange rates of the major trading currencies moved to widening premiums over their old parities, as shown in the table below:

Currency	Premium over parity Sept. 30	Nov. 30	Dec. 17
Belgian franc:			
Commercial	6.4	8.1	9.8
Financial	6.4	8.1	9.8
British pound	3.5	3.9	5.4
Canadian dollar	7.1	7.7	8.5
French franc:			
Commercial	0.5	0.8	1.0
Financial	3.5	2.4	5.3
German mark	10.4	10.6	12.4
Italian lira	2.1	2.3	4.1
Japanese yen	7.5	10.1	12.3
Netherlands guilder	7.5	9.3	10.5
Swiss franc	3.3	3.3	5.5

The exchange rate structure thus emerging after August 15 was, in most instances, the product of controlled rather than free floating. Many central banks continued to intervene on an *ad hoc* basis, while the market was further strongly influenced by a proliferation of new exchange controls, the United States import surcharge, and sharply conflicting official appraisals of an appropriate realignment of parities. Particularly noticeable was market speculation on whether the United States Government would participate in a rate realignment in the form of an increase in the United States official gold price. As market expectations clustered initially around a 5 percent increase and after the November Group of Ten meeting in Rome on a figure

* This report, covering the period October 1971 to March 13, 1972, is the twentieth in a series of reports by the Senior 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.

Table I

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS
March 13, 1972
In millions of dollars

Institution	Amount of facility
Austrian National Bank	200
National Bank of Belgium	600
Bank of Canada	1,000
National Bank of Denmark	200
Bank of England	2,000
Bank of France	1,000
German Federal Bank	1,000
Bank of Italy	1,250
Bank of Japan	1,000
Bank of Mexico	130
Netherlands Bank	300
Bank of Norway	200
Bank of Sweden	250
Swiss National Bank	1,000
Bank for International Settlements:	
Swiss francs-dollars	600
Other authorized European currencies-dollars	1,000
Total	11,730

closer to 10 percent, foreign currency rates tended to move up to levels compatible with such projected gold parity adjustments.

More generally, the exchange market atmosphere progressively deteriorated from mid-August until the Group of Ten meeting in Rome revived hope of an early alignment of new parities. Serious operating problems were posed for market participants during the floating rate period, more particularly for those dependent upon efficiently functioning forward markets. Moreover, mounting uncertainties and anxieties arising from the proliferation of exchange controls and fears of potential trade restrictions and retaliation had severe and far-reaching repercussions on business confidence in the major trading countries, particularly in those countries where exports contribute heavily to gross national product. As noted by Chairman Burns:

> . . . the dangers were growing of a recession in world economic activity, of increasing recourse to restrictions on international transactions, of a division of the world economy into restrictive blocs, and of serious political frictions among friendly nations. Prompt resolution of the crisis was clearly necessary, and intensive international discussions therefore got under way in the autumn of 1971.

These international discussions culminated on December 18, 1971 in the Smithsonian agreement of the Group of Ten countries, which specified an exchange rate realignment based on an increase in the $35 United States official gold price by 8.57 percent to $38 per ounce. This devaluation of the dollar was accompanied by relatively smaller devaluations of the Swiss franc, the lira, and the Swedish krona against gold, thus slightly reducing their effective appreciation against the United States dollar. The German mark, the Japanese yen, the Dutch guilder, and the Belgian franc were revalued upward by differing amounts, thereby further increasing the appreciation of these currencies against the dollar. The pound sterling and the French franc remained at their previous parities, producing an appreciation of these currencies of 8.57 percent against the dollar. The Canadian dollar continued to float. In the interim prior to Congressional and Parliamentary approval of the new parities, they were put into effect through the notification to the International Monetary Fund (IMF) of "central" rates. Finally, it was agreed that the trading bands surrounding these new central rates would be widened to 4.5 percent.

Currency	*Percentage appreciation of parity against United States dollar*
Belgian franc	11.57
British pound	8.57
French franc	8.57
German mark	13.58
Italian lira	7.48
Japanese yen	16.88
Netherlands guilder	11.57
Swedish krona	7.49
Swiss franc	6.36

Announcement of the Smithsonian agreement was greeted with satisfaction and relief by the exchange markets, rates for a number of major currencies settled at or close to their new floor levels, and sizable reflows of funds to the United States developed through the year-end. Following the turn of the year, however, market optimism shifted to an anxious and even skeptical mood as traders began to ponder the long negotiating path to a restructured international financial system. Market concern focused particularly on the risk that certain foreign central banks might suddenly withdraw from their Smithsonian commitments to defend their currencies at the new upper limits, and successive waves of speculation in January and February drove the mark, the guilder, the Belgian franc, and the yen close to or hard against their official ceilings. The central banks concerned intervened decisively and without hesitation, however, and this demonstration had a reassuring effect. In early March, expeditious Congressional action on a "clean" gold price bill removed another source of uncertainty that had been breeding unsettling market rumors. Simultaneously, the German government took action to control borrowing abroad by German industrial firms, which had been a major source of buying pressure on the mark over the last three years, while the Japanese government reinstated controls on speculative buying of the yen. Finally, the interest rate gap between Europe and the United States began to be squeezed out from both sides, as the United States Treasury bill rate rose significantly while discount rate cuts were announced in Germany, Belgium, and the Netherlands (see Chart I) and recessionary tendencies continued in Europe. Nevertheless, in early March the exchange markets remained nervous, focusing on the many complex issues still to be resolved while awaiting positive indications of basic improvement in the United States payments position. When such evidence of an improving trend materializes, the recovery of the dollar on the international exchanges should be accelerated by a reversal of the enormous foreign currency positions now outstanding.

Starting in early October 1971 the Federal Reserve from time to time purchased modest amounts of Belgian francs in the market (both spot and forward). These funds, together with other franc balances acquired through direct purchases from the National Bank of Belgium and the United States Treasury, were used to liquidate a total of $145 million equivalent of earlier swap drawings on the Belgian central bank (see Table II). Swap commitments to the National Bank were thereby brought down to $455 million as of December 21, while an additional $35 million in Belgian francs is owed to the Bank for International Settlements (BIS). This total of $490 million equivalent remains outstanding as of March 13, 1972. On November 12, the Federal Reserve, using marks held in balances, also made a $10 million paydown on its swap drawings on the German Federal Bank (Bundesbank), reducing those commitments to $50 million equivalent, where they remain. Finally, the System took advantage of flows out of sterling in late December to buy pounds in the market

Chart I
CENTRAL BANK DISCOUNT RATES
January 1971 to March 1972

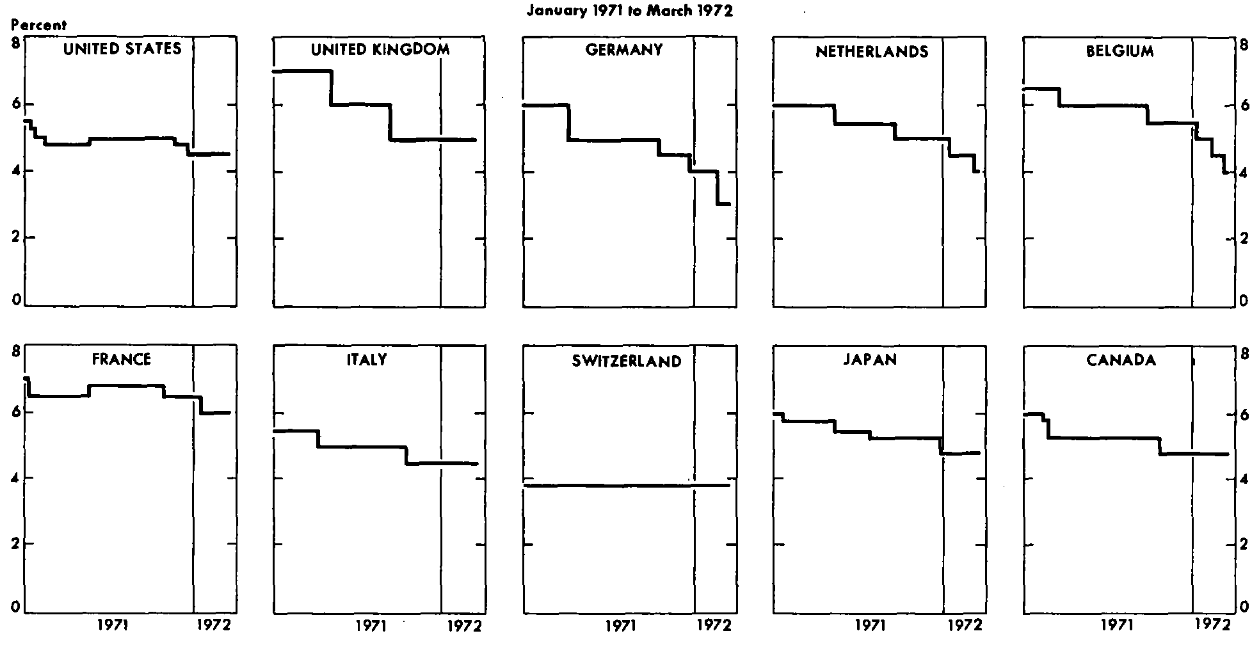


Table II

FEDERAL RESERVE SYSTEM DRAWINGS AND REPAYMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars equivalent

Transactions with	System swap drawings outstanding on January 1, 1971	Drawings (+) or repayments (—)					System swap drawings outstanding on March 13, 1972
		1971				1972	
		I	II	III	IV	January 1-March 13	
National Bank of Belgium	210.0	+335.0 −125.0	+125.0 −205.0	+ 260.0	−145.0		455.0
Bank of England	-0-			+ 750.0	− 35.0		715.0
German Federal Bank	-0-		+ 60.0		− 10.0		50.0
Netherlands Bank	300.0	+130.0 −300.0	+120.0 −250.0				-0-
Swiss National Bank	300.0	+150.0 −450.0	+250.0	+ 750.0			1,000.0
Bank for International Settlements (Swiss francs)	-0-			+ 600.0			600.0
Bank for International Settlements (Belgian francs)	-0-			+ 35.0			35.0
Total	810.0	+615.0 −875.0	+555.0 −455.0	+2,395.0	−190.0	-0-	2,855.0

and repay, prior to the year-end, $35 million of its $750 million equivalent swap indebtedness to the Bank of England; the remaining $715 million equivalent of this sterling debt was still outstanding on March 13. Thus, including the continuing $1,600 million equivalent of commitments in Swiss francs, outstanding Federal Reserve swap drawings totaled $2,855 million as of the date of this report.

On March 3 the United States Treasury redeemed $76.5 million of a maturing $153.0 million equivalent German-mark-denominated note (see Table IV); the maturity of the residual $76.5 million equivalent of the security was extended for a further four months.

STERLING

Sterling remained strong throughout the first half of 1971, and the spot rate held close to the ceiling of $2.42. Britain's balance of payments on current account registered over that period a surplus of about $850 million, and the succession of monthly trade surpluses had a buoyant effect on market expectations. This strong payments performance reflected, in part, the sluggishness of the domestic economy in which unemployment was rising and output was stagnant. Since prices and wages continued to rise at a rapid pace, however, the British authorities maintained a firm grip on monetary and fiscal policy—in particular, keeping domestic liquidity conditions tight—while moving cautiously to stimulate the economy. Interest rates in the United Kingdom remained relatively high and attracted a heavy influx of short-term funds. As both commercial and capital demand converged on the market, the Bank of England was a buyer of dollars on a massive scale throughout the first half of the year. By the end of June the United Kingdom authorities had repaid $1.7 billion in international credits, added $0.5 billion to official reserves exclusive of the special drawing rights (SDRs) allocation, and transferred $1.7 billion to later months through special arrangements. With this improved liquidity position and further reserve gains in July, the United Kingdom was able to make another repayment—of $614 million—to the IMF in early August, thereby reducing its commitments under the 1969 standby arrangement with the Fund to $1 billion equivalent.

Trading in sterling had remained orderly in July, but early in August the pound was caught up in the general wave of speculative demand that hit all major foreign currencies, and the Bank of England had to absorb further heavy offerings of dollars. To provide cover for these inflows, on August 13 the Federal Reserve activated the swap line with the Bank of England, drawing $750 million equivalent of sterling.

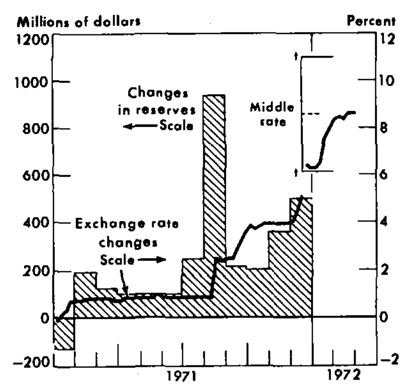
In the week following President Nixon's statement of August 15, the British authorities closed the London exchange market by withdrawing the banks' authority to deal in foreign exchange. On Monday, August 23, the London market was reopened with the $2.42 upper limit being suspended temporarily, although the parity of the pound and the lower limit remained unchanged. On subsequent days, with trading gradually recovering, the sterling rate moved to as high as $2.48¼, a premium of 3.4 percent over par (see Chart II).

Following the floating of the Japanese yen, the British authorities feared a renewed speculative influx to sterling. Consequently, on August 27 the Bank of England announced new measures to deter hot money inflows. These included a prohibition of interest payments by banks in the United Kingdom on increases in sterling balances held by nonsterling-area depositors and a complete ban on additional nonresident deposits with other financial institutions and local authorities. Nonresidents were also prohibited from purchasing additional sterling certificates of deposit

Chart II

UNITED KINGDOM

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*In this and the following country charts, movements in exchange rates are measured as percentage deviations of weekly averages of New York noon offered rates from the official parities at the beginning of 1971. Changes in reserves are computed from the figures shown in the International Monetary Fund's International Financial Statistics. Starting with December 1971 the relevant figures, expressed in SDRs, were calculated on the basis of the new central rates (rather than, as formerly, on the basis of official parities) and that month's reserve changes therefore reflect such valuation adjustments in addition to actual movements in reserve assets.

† Upper and lower intervention limits established in December 1971.

as well as government, government-guaranteed, and local authority securities maturing before October 1, 1976. Finally, permission for the banks to swap foreign currency deposits into sterling for lending to residents was withdrawn. After these measures were announced, the sterling rate fell sharply to around $2.45½, about 2.3 percent above par. On the following Thursday, September 2, the Bank of England reduced its discount rate from 6 percent to 5 percent. Sterling subsequently steadied, and the spot rate fluctuated around $2.46 until mid-September when, with the approach of the IMF annual meeting, it began to rise along with other major European currencies. For the third quarter as a whole, Britain's current-account position had remained very strong, with a surplus of nearly $825 million. Reserves rose by $1,394 million in the third quarter, reflecting not only heavy new inflows but also $398 million of receipts earlier in the year that had been deferred under special arrangements.

The upswing in the sterling rate continued into early October, when in active trading the spot rate rose above $2.49. On October 6 the British authorities announced a further tightening of the exchange controls introduced at the end of August. The earlier ban on additions to the holdings by nonsterling-area residents of specified securities was extended to all such securities, irrespective of maturity, as well as to sterling acceptances, commercial bills, and promissory notes. After a brief dip in response to these steps, sterling rose again on oil company demand to meet tax and royalty payments while Euro-dollar yields declined steeply and domestic money market rates remained relatively firm. British official reserves rose by $197 million in October.

The underlying demand for sterling continued generally strong through mid-November. Following the introduction on November 18 of the Reuss-Javits bill to empower the President to raise the official dollar price of gold by up to 10 percent and the announcement that the Group of Ten would meet in Rome on November 30 and December 1, demand for sterling swelled still further. With the Bank of England holding the spot rate just above $2.49 through the end of the month, British reserves rose by $362 million in November. On Wednesday, December 1, when reports from Rome indicated definite progress in the Group of Ten discussions, a new rush into sterling and other foreign currencies developed. With pressure mounting not only in the spot market but also in the forward market, where one-month sterling reached a premium of almost 8 percent per annum, the Bank of England allowed the spot sterling rate to move up and it crossed the $2.50 level on December 7. With the approach of the December 17-18 meeting of the Group of Ten in Washington,

Table III

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

In millions of dollars

Banks drawing on Federal Reserve System	Drawings on Federal Reserve System outstanding on January 1, 1971	Drawings (+) or repayments (−) 1971				Drawings on Federal Reserve System outstanding on December 31, 1971
		I	II	III	IV	
Bank for International Settlements (against German marks)	-0-	+21.0 −21.0	+6.0 −6.0		+3.0 −3.0	-0-
Total	-0-	+21.0 −21.0	+6.0 −6.0	-0-	+3.0 −3.0	-0-

sterling was bid up even further, to the $2.52 level, and it surged to $2.53¾ as the meeting began on Friday, December 17.

Following the agreement reached in Washington on December 18, the British government announced that there would be no change in sterling's own gold parity. The middle rate for the pound would now be $2.6057, which represented an 8.57 percent appreciation of sterling relative to the dollar, corresponding to the proposed devaluation of the dollar against gold. The Bank of England's official buying and selling rates were set at $2.5471 and $2.6643, respectively, a band of 4.5 percent around the middle rate. At the same time the authorities revoked the stiff exchange control regulations they had announced on August 27 and October 6 to discourage inflows of nonresident funds.

The London exchange market was officially closed on Monday, December 20, with banks in the United Kingdom barred from dealing in foreign currency. After moving to $2.57 in the very thin trading that prevailed in New York that day, sterling eased when the London market reopened, holding around $2.55½ or some ¾ cent above the new floor. The uneasy balance in the market was finally tipped a few days later as some speculative positions began to be unwound and year-end adjustments were made. With the pace of trading quickening substantially, the spot rate fell close to the floor in late December. Taking advantage of this development, the Federal Reserve acquired sterling in the New York market and repaid, prior to the year-end, $35 million of its $750 million equivalent swap indebtedness to the Bank of England.

The outflow of funds from the United Kingdom quickly dried up, however, after the year-end adjustments were completed. Spot sterling moved away from the floor, holding around $2.55 in early January. In addition to the general uncertainty in the exchanges, demand for sterling was buoyed by sizable oil company purchases of pounds and by the sharp drop in Euro-dollar rates at a time when money market conditions in Britain were being tightened by the usual large tax payments falling due during the first quarter. Nevertheless, sterling was still only slightly above the lower limit while most other major European currencies had risen toward, or even above, their central rates. Under these conditions, the market came to view sterling as relatively underpriced, and the possibility that the European Community (EC) countries might narrow the margin of fluctuation between their currencies—and that sterling might be associated in such a move—served to strengthen market sentiment further. A wave of buying consequently developed in mid-January and, over the course of just a few days, the spot rate jumped by 4 cents to reach over $2.59. The market then turned generally quieter, and the sterling rate fluctuated between $2.58 and $2.59 through the end of January. There was a firm undertone, however, reflecting both the seasonal strength for the pound and the decline in Euro-dollar rates relative to money market rates in London. In early February, sterling advanced again, moving above its middle rate. On February 14 the market reacted to the growing threat to the British economy of the extended coal miners' strike by marking sterling back down to just above $2.59, but even this dip proved brief as sterling recovered in the general advance of European currencies that occurred later that week. Following the settlement of the coal miners' strike, sterling held close to its middle rate in quieter trading until another flurry of market activity in early March pushed the rate up well above $2.62.

GERMAN MARK

Following massive inflows of funds to Germany in the early months of 1971, the mark was allowed to float on May 10 (see Chart III). The spot mark moved well above its previous ceiling but, when the rate started to settle back in early June, the Bundesbank began selling dollars for marks in order to absorb excess domestic liquidity and to reduce its swollen reserves. At the same time, this policy had the effect of pushing up the mark rate. These dollar sales continued through July, but were suspended in August when the general run on the dollar developed in full force. In early August the mark rate moved up to more than 8 percent above par.

After President Nixon's address on August 15, formal exchange dealings in Germany were suspended through the full week of August 16-20. During the week, consultations proceeded among the EC countries in search of a common basis for the reopening of the exchange markets. When no agreement was reached, the German government reopened the market on August 23 with the mark rate floating as before. As trading volume continued at generally reduced levels, the mark fluctuated closely around the pre-August 15 level until mid-September, after which it rose sharply to a premium of more than 10 percent over par prior to the IMF annual meeting that opened later that month. The Bundesbank began to intervene in both spot and forward markets to moderate the rise in the rate, and by early October the mark had eased in quieter trading. Meanwhile, the Bundesbank had taken in some $240 million spot and another $775 million for forward delivery.

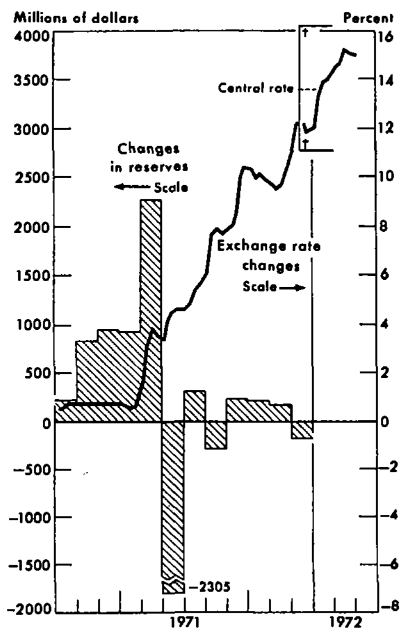
On October 13 the Bundesbank Council lowered the central bank's discount rate from 5 percent to 4½ percent and its "Lombard" rate against secured advances from 6½ percent to 5½ percent, both effective the next day. At the same time, reserve requirements against the commercial banks' domestic liabilities were reduced by 10 percent across the board, effective November 1, but the requirements against liabilities to nonresidents were left unchanged at twice the old rates applying to domestic liabilities, and the additional marginal reserve requirement on liabilities to nonresidents was maintained at 30 percent. Although this easing of monetary policy was partly a response to the slackening of domestic economic activity, the German authorities indicated that their principal concern was the size of the *de facto* revaluation of the German mark, not only against the dollar but against other currencies as well.

The spot rate dropped sharply following these steps but rebounded just after mid-October, when there was a temporary squeeze for domestic liquidity and when rumors again circulated that the mark would soon be revalued by a large amount. German officials attempted to quiet these rumors by repeatedly stressing that Germany would not accept too large a revaluation of the mark, and they reiterated the government's intention of imposing reserve requirements against the foreign borrowings of nonbanking enterprises. Moreover, in view of the deterioration of the forward market that had resulted from the great uncertainty prevailing in international markets, plans were announced to provide insurance to German exporters against forward exchange risks, particularly on longer term contracts. (Such a facility was actually put into effect in early 1972.) These pronouncements helped bring the mark rate down again, and it held at a premium of less than 10 percent over par through the end of October. On November 1, moreover, the cut in the banks' reserve requirements became effective, and the approximately $1 billion equivalent of marks that was thus released contributed to an easing of domestic liquidity conditions. Consequently, the mark continued to decline gradually in quieter trading

Chart III

GERMANY

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart II.

† Upper and lower intervention limits established in December 1971.

during the first half of November.

The introduction in the United States Congress on November 18 of a bill to permit an increase in the dollar price of gold of up to 10 percent aroused market expectations of larger exchange rate adjustments than previously had been anticipated, and there was a new rise in the mark, along with other currencies. In occasionally hectic trading, by November 24 the rate rose to 10.6 percent over par. The market steadied prior to the Group of Ten meeting in Rome on November 30 and December 1, but when reports from that meeting indicated progress toward a general realignment there was a new surge of demand for marks that carried the rate to a premium of almost 13 percent by December 6. The following morning in Frankfurt, after Economics and Finance Minister Schiller intimated that the authorities might move to push the mark rate down, notably through a relaxation of monetary policy, the rate dropped, but it snapped back when the Bundesbank Council took no new measures at its December 8 meeting. In the meantime, the Bundesbank had reentered the spot market, purchasing small amounts of dollars daily over the first two weeks of December, and this steady intervention helped to keep the market orderly. Nevertheless, as the December 17-18 Group of Ten meeting drew nearer, the mark rose again close to 13 percent above par.

Following the Washington meeting, the German authorities kept their exchange markets closed on Monday, December 20, but reopened them the next day, after having established a new central rate for the mark of \$0.3103⅛, an effective revaluation of 13.58 percent against the dollar. At the same time, the government announced that it would set margins at \$0.3034⅞ and \$0.3174⅝, *i.e.*, 2¼ percent on either side of the central rate. None of the restraints against inflows of foreign funds were removed, but the government did announce that it would not avail itself for the time being of the power to impose reserve requirements of up to 50 percent against German firms' borrowings abroad, a power it had sought since last summer and which was finally voted by Parliament on December 17.

Despite the large revaluation against the dollar, no significant movement out of marks developed when trading was resumed in the Frankfurt market on December 21. The spot mark opened somewhat above the new floor in a thin and generally quiet market and then rose later in the day to around \$0.3070, the level that had prevailed just prior to the weekend agreement. In the meantime, German money market conditions had tightened considerably during the first half of December and, when Euro-dollar rates started to decline again, the Bundesbank Council cut both the central bank's discount rate and its Lombard rate on secured advances by ½ percentage point to 4 percent and 5 percent, respectively, effective December 23 and again reduced the banks' reserve requirements against domestic liabilities by 10 percent as of January 1. (The stiff requirements against liabilities to nonresidents, however, were kept unchanged.) This relaxation of credit policy, combined with a modest unwinding of speculative positions, helped to push the spot mark down temporarily to \$0.3047 on December 29.

Early in the new year, however, doubts began to spread in the exchange markets that a durable settlement of the international monetary crisis really had been achieved. With the press and the markets focusing more and more on the many issues remaining to be resolved, the atmosphere deteriorated progressively over the first weeks of January, and almost any news item or rumor was seized upon as a reason for additional selling of dollars. Consequently, there was renewed buying of marks along with other major European currencies. In active trading, heavy demand drove the spot mark through the new central rate on January 13. Buying pressures remained strong for a few days more, but the wave then crested and the markets turned much calmer. Some profit taking developed, but the mark remained well above the central rate through the end of January.

A new wave of intense nervousness swept through the foreign exchange markets on February 1 and 2, triggered in part by a sharp rise in the free-market price of gold. Once again, the mark rate was bid up and as it rose additional buyers were drawn in. Moving quickly to head off an even sharper upsurge, the Bundesbank intervened forcefully on February 2 as activity reached sizable proportions. When demand continued strong the next day, the Bundesbank again entered the market and its sustained intervention soon led to an easing of the rate. Market uncertainties continued, however, and toward midmonth the rate was pushed even higher in a new round of speculation. The Bundesbank again stepped in, dealing heavily in the spot market on February 17, and once more turned the rate downward. On subsequent days, activity was reduced and the mark traded in a narrower range above \$0.3150. Then, on February 24, the German authorities took new measures designed to lessen the inflow of funds and to defend the Washington arrangements. The Bundesbank's discount and Lombard rates were cut once more, by one full percentage point to 3 percent and 4 percent, respectively, effective February 25, while the rediscount quotas of credit institutions were reduced by 10 percent as of March 1. (At the same time, in an essentially neutral move, marginal reserve requirements against nonresident liabilities were raised from 30 percent to 40 percent, but the base period from which accruals in such liabilities are measured was brought forward from November 1970 to November 1971.) For its part, the Ministry of Economics and Finance announced that a 40 percent reserve requirement would be placed against most foreign borrowings of German nonbanking enterprises, retroactive to January 1. In response to these measures, the spot rate fell back somewhat and held below its upper limit through late February and early March.

The Federal Reserve, using marks already held in balances, made a $10 million paydown on its swap drawings on the Bundesbank on November 12, thereby reducing those commitments to $50 million equivalent currently outstanding. On March 3 the United States Treasury redeemed $76.5 million of a maturing $153.0 million equivalent German-mark-denominated note; the maturity of the residual $76.5 million equivalent of the security was extended for a further four months.

BELGIAN FRANC

A strong current account and heavy capital inflows, including a buildup of leads and lags, kept the Belgian franc at or near its upper limit through most of 1970 and early 1971 (see Chart IV). The National Bank of Belgium was accordingly obliged to absorb sizable amounts of dollars from the market. Rather than have these dollars converted immediately against United States reserve assets, the Federal Reserve provided temporary cover through drawings under the swap arrangement with the National Bank. When the inflows to Belgium persisted through the first six months of 1971, $330 million of the longest outstanding swap contracts was settled by use of SDRs and United States Treasury drawings of francs from the IMF, leaving $340 million of swap debt remaining by the end of June. With the huge speculative inflows to Belgium in late July and early August, Federal Reserve commitments in Belgian francs rose to $600 million under the swap line with the National Bank and to $35 million with the BIS under the swap line for authorized European currencies other than the Swiss franc.

Following President Nixon's speech on August 15 the Belgian authorities kept their exchange market closed for a full week. After the EC decision to open markets again on August 23, the Belgian government decided to allow the official franc to float. In addition, Belgium entered into an agreement with the Netherlands to limit the spread in

Table IV

UNITED STATES TREASURY SECURITIES
FOREIGN CURRENCY SERIES

In millions of dollars equivalent

Issued to	Amount outstanding on January 1, 1971	Issues (+) or redemptions (—)					Amount outstanding on March 13, 1972*
		1971				1972	
		I	II	III	IV	January 1-March 13	
German Federal Bank	539.6					—76.5	535.5
German banks	135.5						153.0
Swiss National Bank	540.6	+249.7	{—790.5‡ {+831.7‡	+333.0			1,216.4
Bank for International Settlements†	150.0		{—150.0‡ {+157.5‡				166.7
Total	1,365.7	+249.7	{—940.5‡ {+989.3‡	+333.0	-0-	—76.5	2,071.6

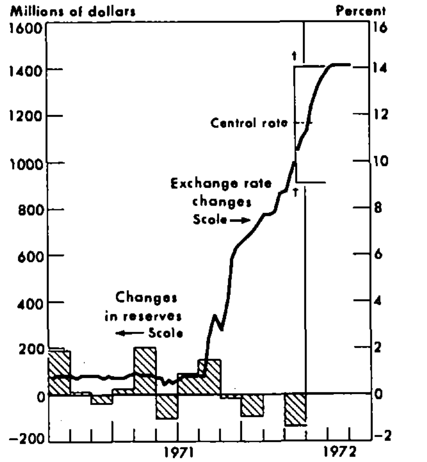
Note: Except where otherwise indicated, discrepancies in totals result from minor valuation adjustments and from rounding.

*To present a more realistic valuation, on December 31, 1971 the United States Treasury provisionally valued its foreign currency obligations to reflect market exchange rates as of that day. The amounts outstanding shown in this column conform with the Treasury's new valuation except for those securities that have been renewed so far in 1972, in which case the relevant market rate at the time of each renewal was used.

†Denominated in Swiss francs.

‡Transactions related to activation by the Swiss National Bank of the revaluation clause covering all outstanding Swiss-franc-denominated securities of the United States Treasury at the time of the Swiss franc's revaluation in May 1971.

Chart IV
BELGIUM
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart II.

†Upper and lower intervention limits established in December 1971.

the rate between the Belgian franc and the guilder to 1.5 percent. Once the market opened, the official rate advanced to almost 3.5 percent over its dollar parity, coming into line with the rate in the financial franc market.

As trading in the Belgian franc became more orderly, the National Bank on September 15 suspended its request of June 1971 that any increase in the Belgian commercial banks' net external liability positions beyond a specified limit be matched by noninterest-bearing Belgian franc deposits with it, and the funds that had been blocked under that measure were returned to the banks. Similarly, a prior request that the banks exercise restraint in their foreign borrowing was suspended. A few days later, the National Bank announced that the quantitative restrictions on the expansion of short-term bank credit would be allowed to expire at the end of September, since the risk of inflationary excess demand for goods and services had been sharply reduced. Finally, the National Bank lowered its discount rate from 6 percent to 5½ percent, effective September 23. In the latter part of September the franc rate advanced to a premium of almost 7 percent over the official parity when European currency rates generally were bid up prior to the IMF annual meeting.

After the Fund meeting, exchange rates tended to ease but the Belgian franc soon turned back upward again, reflecting in part an improvement in Belgium's current-account position. Moreover, liquidity in the Brussels money market was being tightened by a Belgian Treasury borrowing. These pressures continued through the month and, with Euro-dollar rates declining concurrently, the uncovered interest-arbitrage differential shifted in favor of Brussels in late October. Consequently, by early November the spot rate had reached a premium of 7.8 percent over par.

Meanwhile, the Federal Reserve had begun a program of modest purchases of Belgian francs in the market in order to reduce gradually the outstanding swap debt in that currency. These purchases enabled the System to repay $60 million equivalent of franc drawings in October and $20 million in November, cutting the total indebtedness to $555 million.

In mid-November the Belgian franc was caught up in the wave of foreign currency buying that followed the introduction in the United States Congress of a bill to empower the President to raise the dollar price of gold by up to 10 percent. The spot franc advanced another 1 percent by November 24 and, after easing briefly, participated in the general rise of European currencies that developed in early December. By midmonth the franc had reached a premium of 10 percent above par, as traders sought to anticipate the level which might emerge from a possible currency realignment coming from the Group of Ten meeting in Washington on December 17-18.

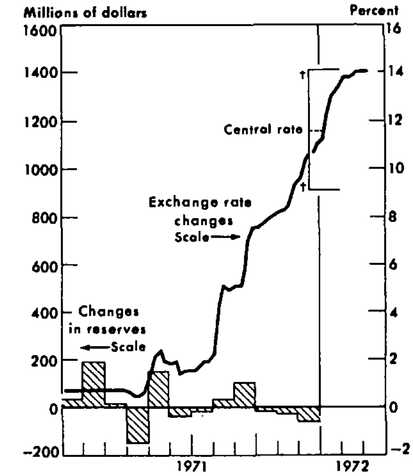
In early December, the System had made further progress in reducing its Belgian franc swap commitments, using francs acquired from United States Treasury balances, directly from the National Bank of Belgium at times when the Belgian government needed dollars for current payments, from the market, and from deliveries on forward market purchases made earlier in the fall. By December 21, a further $65 million equivalent had been repaid, reducing the outstanding swap commitment in francs to the present total of $490 million. Of these, drawings of $455 million are on the National Bank of Belgium and one of $35 million is on the BIS.

Following the Washington meeting, the Belgian authorities kept their market closed on Monday, December 20, and announced that as of the next day the franc's central rate would be set at $0.022313, an appreciation of 2.76 percent against gold and an effective total revaluation of 11.57 percent against the dollar. New intervention points were established at 2¼ percent above and below the central rate, except that Belgium and the Netherlands (which revalued by the same percentage against the dollar) decided to maintain the close link between their currencies by continuing to intervene when necessary to keep the rate between the franc and the guilder within a 1.5

percent spread. When the Brussels exchange market was reopened on December 21, the Belgian franc held well above the new floor, little changed from the level it had reached during the preceding week. Thereafter the rate rose gradually and by the year-end, when Euro-dollar quotations once again fell below comparable domestic interest yields, it reached the new central rate.

In view of the continuing decline in international interest rates and the increasingly pronounced slowdown of domestic economic activity, the National Bank reduced its lending rates by ½ percentage point effective January 6, the basic discount rate being lowered to 5 percent. Nevertheless, the franc strengthened further as Euro-dollar rates continued their sharp retreat. The rise gained momentum in mid-January, and the spot franc rose to around 1.5 percent above the central rate. Although trading volume then diminished, the franc moved even higher over the subsequent two weeks as domestic liquidity conditions in Belgium began to tighten. At the end of the month and in early February, there was another round of heavy buying of currencies as there were growing doubts in the markets over the durability of the Washington agreement and the willingness of European central banks to absorb dollars in defense of the new rates. Effective February 3 the National Bank cut its lending rates by a further ½ percentage point, with the basic discount rate set at 4½ percent. The demand for francs remained strong, however, and the National Bank intervened in the market on several occasions during February, partly through swap transactions —buying spot dollars against resale forward—and partly through outright purchases of spot dollars in defending the new ceiling rate when a speculative surge developed just after midmonth. These purchases, along with similar operations by other central banks at that time, helped calm the market somewhat. Effective March 2 the National Bank further reduced its lending rates, cutting the basic discount rate by ½ percentage point to 4 percent and consolidating its other rates at 5 percent. Nevertheless, the franc rate remained at or close to its upper limit.

Chart V
NETHERLANDS
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart II.

† Upper and lower intervention limits established in December 1971.

DUTCH GUILDER

When the German mark was floated early in May 1971, the Dutch government felt it had no alternative but to float the guilder as well. The guilder rate subsequently moved to a premium over its previous ceiling (see Chart V), but did not rise in relative terms as far as the mark, since the underlying payments situation for the Netherlands was not particularly favorable and since the Netherlands Bank remained out of the market when the Bundesbank began actively to push dollars out into the exchanges. The guilder nevertheless was subjected to the same speculative influences as other European currencies and rose sharply in the general run on the dollar in early August to as high as 5.1 percent over par.

In the week of August 16-20, official fixings in the Dutch exchange market were suspended, and Dutch and foreign banks dealt guilders only in limited amounts to meet customers' immediate needs. In New York the rate at one point touched $0.2950, or 6.2 percent over par. When the Amsterdam market reopened on August 23, the Dutch authorities continued to permit the guilder rate to float, as it had done since May 10, but under an agreement between the Netherlands and Belgium the central banks of the two countries stood ready to intervene in each other's currency in order to maintain the rate between their currencies within a 1.5 percent spread. By early September the guilder rate was holding at just over $0.2900.

During September the Dutch authorities took additional steps to discourage capital inflows. Effective September 6, a so-called "closed circuit for bonds" was introduced, whereby purchases of guilder-denominated bonds by nonresidents from residents could be made only with guilders obtained through the sale of such bonds by nonresidents to residents. Effective September 15, the Netherlands Bank lowered its discount rate by ½ percentage point to 5 percent, explaining that the reduction had been made in support of the measures directed at countering foreign capital inflows. The spot guilder rate nevertheless rose strongly in the second half of September, moving up along with most other European currencies, and it held around $0.2975, almost 7¾ percent over par, until mid-October.

In the meantime, the Amsterdam money market was tightening up with the onset of the period of seasonally heavy tax payments, and Dutch residents began to liquidate their German mark positions to meet domestic cash needs. Even though the authorities supplied liquidity to the domestic market by means of purchases of Dutch government securities, the guilder rate rose further, to a level 8.5 percent above par by mid-November. The run-up in the rate also had the result of reinforcing the market's bullish outlook for the guilder, so that when domestic liquidity conditions eased sharply in mid-November, following the Dutch government's monthly payments to municipalities, the guilder rate softened only slightly in response. Moreover, a few days later the guilder was caught in the widespread upswing of foreign currency rates triggered by the introduction in the United States Congress on November 18 of a bill to empower the President to raise the official dollar price of gold. The guilder rate soared to a premium of almost 10 percent over par by late November. After a sharp setback in response to initially discouraging reports of the outlook for the November 30-December 1 meeting of the Group of Ten in Rome, the guilder rate rebounded in the generalized buying of foreign currencies which greeted the progress made at that meeting, and held around a 10.5 percent premium by the time the Group of Ten convened in Washington for their next meeting on December 17-18.

Following the Washington meeting, the guilder along with the Belgian franc was effectively revalued by 11.57 percent against the dollar, and new official intervention rates 4½ percentage points apart were established for each of the two currencies in line with the practice adopted by the other major countries. The Benelux countries, however, also decided to maintain their prior agreement to hold the rate between the guilder and the Belgian franc within a spread of 1.5 percent. There was little, if any, outflow of speculative funds from the Netherlands when the Amsterdam market was reopened on December 21. The scope for a reflux of nonresident guilder holdings was not large in any case. Since the guilder had been floating for some seven months, nonresident guilder holdings were not very sizable; in addition, the Dutch authorities had discouraged some inflows of foreign funds by, among other measures, the closed circuit for bonds. The guilder rate thus did not weaken, as the new pattern of exchange rates emerged, but began to rise during late December and early January.

With interest rates falling in foreign centers, the Netherlands Bank reduced all its lending rates by ½ percentage point as of January 6, the discount rate being cut to 4½ percent. Domestic money market rates declined in response, but the guilder rate soon began to advance again, in part reflecting sizable direct investment inflows and an improvement in the current account as economic activity slowed down in the Netherlands. To a much larger extent, however, the demand for guilders stemmed from the exchange markets' growing concern over the viability of the exchange rate realignment negotiated in Washington. The guilder was pushed through its $0.3082 central rate on January 10 and, one week later, it had reached $0.3128½. Tensions in the exchanges then relaxed temporarily, while at the same time money market conditions were considerably eased in the Netherlands by the government's usual midmonth payments. The guilder consequently developed a somewhat softer tone but by late January was strengthening once more in response to renewed domestic money market pressures.

Early in February, when a surge in the free-market price of gold upset the exchange markets, the guilder rose almost to the upper intervention level, but the pressure was less intense than on other foreign currencies and the Netherlands Bank did not have to intervene. Moreover, by that time, the Dutch authorities had begun to offset the liquidity squeeze in the Amsterdam money market by open market purchases of Dutch Treasury bills. When the supply of such bills dried up, the Netherlands Bank decided to augment domestic liquidity by entering into foreign exchange swaps with its commercial banks and, over the course of several days starting February 9, bought dollars spot against sales for delivery one and three months hence. These operations relieved some of the upward pressure on the spot rate until a new wave of exchange market uncertainty pushed the spot guilder to the ceiling just after midmonth, and the Netherlands Bank purchased a modest amount of dollars. The guilder traded just away from its upper limit through the end of February. Effective March 2 the Netherlands Bank cut its discount rate by a further ½ percentage point, to 4 percent, explaining that this move was taken in view of the decline in interest rates abroad. The guilder rate nevertheless remained at or close to its upper limit.

SWISS FRANC

In May 1971, the Swiss franc was revalued by 7.07 percent (see Chart VI), the first change of the franc's external value in thirty-five years. Despite extremely liquid monetary conditions in Switzerland as a result of the inflows prior to the revaluation, the continuing uncertainty in the exchange market through the rest of the spring and the early summer left Swiss banks reluctant to shift funds into the Euro-dollar market and discouraged traders generally from unwinding their long franc positions. Under these circumstances, the National Bank took measures to calm the market and to absorb excess Swiss franc liquidity. In one operation, the National Bank sold $250 million to Swiss commercial banks on a swap basis, on condition that the dollars be invested in certificates of deposit with United States banks; cover for this operation was provided by means of a Federal Reserve swap drawing of $250 million equivalent on the line with the Swiss National Bank, thereby reactivating the arrangement. Late in May, reflows did develop and the banks began to purchase substantial amounts of dollars from the central bank. These outflows ceased early in June, however, when the Swiss franc and other European currencies moved up in response to the rise in the German mark, following the initiation of dollar sales by the Bundesbank. Subsequently, the franc market became quieter and the rate declined later in June and in July, falling almost to the National Bank's selling rate for dollars.

The relative quiet in the Swiss franc market was broken in early August. With other major currencies partly insulated by either exchange controls or floating rates, the Swiss franc began to bear the brunt of the speculative attack against the dollar. The National Bank accordingly negotiated an agreement with the major Swiss banks, which would prohibit interest payments and set 100 percent reserve requirements against additional nonresident deposits. But the inflows continued to mount rapidly, and the franc rate was pushed to the National Bank's buying rate for dollars. After taking in large amounts of dollars, the National Bank announced on August 9 that the franc proceeds of any further dollar sales to it would be placed in blocked accounts until the agreement with the banks could be implemented. The Swiss authorities were nevertheless faced with further massive offers of dollars through August 13. In all, the National Bank's reserves rose by some $2.1 billion in the first two weeks of August. To provide cover for the intake, the Federal Reserve drew in full its Swiss franc swap lines, raising such commitments in francs from $250 million to $1,600 million (of which $1 billion was drawn on the National Bank and $600 million on the BIS), and the Treasury issued a $333 million Swiss-franc-denominated note.

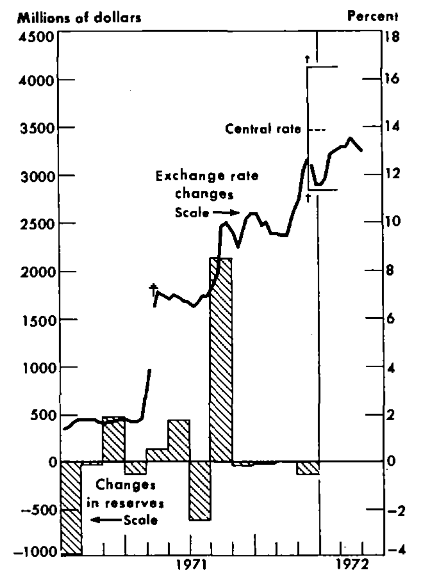
On August 16, following President Nixon's speech, the Swiss National Bank suspended its exchange operations, thus allowing the franc to float. Then, the National Bank immediately imposed the previously agreed 100 percent reserve requirement against increases in the banks' foreign liabilities and prohibited the payment of interest on additional short-term deposits in francs made by nonresidents, both measures retroactive to July 31. With the National Bank extending the suspension of its exchange operations from day to day during the week of August 16-20, commercial banks carried on only limited dealings among themselves for immediate needs.

When the other European markets were reopened on August 23, the Swiss National Bank kept its market officially closed. This left the Swiss franc effectively floating, since the commercial banks remained free to trade in foreign currencies. In the general uncertainty and nervousness that prevailed in the markets, the franc rate rose sharply, moving to 3.6 percent over par by August 26. That day the National Bank announced it had reached an agreement with the three large Swiss banks to discourage speculative inflows. Under the terms of this agreement, the banks could buy a daily maximum of $2 million from any one customer when the spot rate was between

Chart VI

SWITZERLAND

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart II.

† Upper and lower intervention limits established in December 1971.

‡ New exchange parity.

$0.2525¼ and $0.2531⅝ and $1 million at rates of $0.2531⅝ or higher. The franc proceeds of any sale in excess of these amounts would be blocked in noninterest-bearing accounts for three months. The following day the National Bank reached an agreement with the Swiss Bankers Association to extend to all foreign-owned balances the interest-payment ban on foreign funds that had flowed into Switzerland since July 31; originally, the ban had applied only to funds with a maturity of less than six months. These and earlier restrictions on dealing in francs, along with the uncertainties generated by an effective floating rate, kept both the size and number of transactions far below normal. Speculative flows especially were sharply curtailed by the dealing limits set by the National Bank. In addition, with the rise in Euro-dollar rates and the downward drift of the German mark, the spot franc backed away sharply. On September 8 the Swiss government asked Parliament for emergency authority to take various additional measures to defend the franc if this should again become necessary, such as the power to impose negative interest rates on hot money inflows or to declare the voluntary agreement with the large banks to be legally binding on all Swiss banks, and these powers were granted by Parliament on September 29.

The franc rate began rising after mid-September and by the month end reached the level at which the agreement to limit franc sales to individual customers became operative, but trading continued to be generally quiet. With the holding of speculative positions in francs made expensive by the ban on interest payments, funds began to trickle out of Switzerland in early October, largely for investment in the Euro-currency market. This modest outflow continued over the following weeks, pushing the spot rate back down to the $0.2500 level by late October, some 2 percent over par, and holding it there through mid-November.

Shortly thereafter, the Swiss franc was caught up in the new burst of speculation in all major European currencies and it advanced to $0.2533, a premium of 3.4 percent over par. With the rate at this level, the agreement that limited each of the three large Swiss banks' daily sales of francs to any one customer again came into force, and trading volume became very thin. Nevertheless, with the news of progress by the Group of Ten at the Rome meeting, a new upswing of exchange rates developed on December 2 and, as the franc also came in demand, the National Bank suspended the agreement to limit exchange dealing at prescribed levels. The spot rate rose well beyond the previous levels, reaching a premium of some 5.4 percent in Switzerland on the morning of December 7. Thereupon the National Bank again asked the Swiss banks to limit the sales of francs to individual customers but this time to $1 million equivalent a day, regardless of the rate at which the franc was trading. As previously, any francs sold in excess of the agreed-upon limit were to be blocked in noninterest-bearing accounts with the National Bank. With the new arrangement in effect, trading turned very thin once more and the spot rate receded, only to rise again in the flurry of activity preceding the December 17-18 Washington meeting of the Group of Ten.

Following that meeting the Swiss authorities fixed a central rate for the franc of $0.2604⅛—in effect, a revaluation of 6.36 percent against the dollar from the franc's parity that was established on May 10, and of 13.88 percent from the parity in force prior to Switzerland's revaluation on that date—and announced new intervention points at rates 2¼ percent on either side of the new central rate. The establishment of these rates, effective Tuesday, December 21, marked the official reopening of the Swiss market for the first time since August 13. Actual trading conditions were little changed, however, except for the abolition of the December 7 agreement limiting franc sales to any one customer to $1 million a day. The August 16 restrictions, in particular, remained in effect; that is, increases in the banks' net foreign liabilities over the July 31 levels continued to be subjected to a 100 percent reserve requirement, while interest payments on nonresidents' deposits made after July 31 were still prohibited. When trading began on the morning of December 21, the franc held just above $0.2580, the level to which it had risen before the Group of Ten meeting in Washington, but then began to ease gradually. By late December modest outflows from Switzerland had brought the spot rate down almost to the new floor, but there was no substantial liquidation of franc positions. The Swiss banks maintained their highly liquid positions as the year-end approached. Moreover, as time passed there were growing market doubts over the durability of the exchange rate realignment. This concern was reinforced by extensive press coverage of the various issues that remained to be resolved and of the difficult negotiations that still lay ahead.

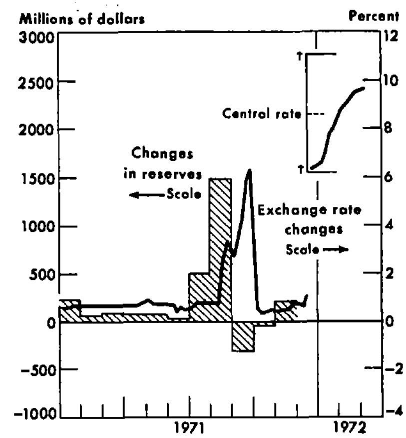
In this wary atmosphere the franc rate continued to hold slightly above the floor well into January, even though domestic monetary conditions had eased considerably once the need for year-end liquidity had passed. In mid-January the spot franc began to rise along with other European currencies, although it tended to lag somewhat. Several rounds of heavy buying brought it near the central rate by early February and pushed it briefly above that level in mid-February. Subsequently the market turned generally quieter, but in early March the Swiss franc was again trading around its central rate. As of the date of this report, the full $1.6 billion equivalent of Federal Reserve drawings in Swiss francs remained outstanding.

FRENCH FRANC

By early 1971, the French balance of payments had shown a strong recovery following the devaluation of 1969, with substantial improvement in both the current and capital accounts. Although market demand for the franc was occasionally swollen by the generalized speculative buying of most European currencies during the first half of the year, defensive measures taken by the French authorities helped keep such pressure within bounds. In late June and early July, however, rumors circulated that the French authorities might be amenable to a widening of the trading margins against the dollar and, for the first time in 1971, the speculative focus shifted to the French franc. The spot rate was quickly driven to the ceiling (see Chart VII), and the Bank of France had to take in substantial amounts of dollars from the market. To avoid an even heavier influx the Bank of France lowered its domestic intervention rates, pushing French money market yields well below similar Euro-dollar quotations. The authorities also absorbed some of the newly created domestic liquidity through a further hike in minimum reserve requirements. Despite these measures and strong denials of the rumors by French officials, heavy demand for francs continued through July, and the Bank of France recorded a reserve gain of $498 million for that month. With these and earlier reserve gains the French authorities were able to repay $609 million to the IMF on August 9, thus clearing away the last of France's indebtedness to the Fund.

The large inflows continued in early August and the French authorities took further steps to stem the tide. Reserve requirements were again raised, and there was some relaxation of existing exchange controls on outpayments. In addition, the banks were instructed not to increase their net external indebtedness or decrease their net claims *vis-à-vis* nonresidents from current levels. In this connection, the banks were expected to refrain from accepting new deposits in francs from nonresidents whose motivation for holding francs appeared to be speculative. With the franc already in strong demand, this measure was interpreted by the market as evidence of the French authorities' unwillingness to accumulate additional dollars and, in the ensuing confusion, quotations for francs in markets outside France moved above the official ceiling. The Bank of France quickly acted to clarify the instructions, and the market calmed somewhat. Nevertheless, in the general run on the dollar taking place at the time, the demand for francs was unrelenting, and the Bank of France continued to take in dollars on a daily basis through Friday, August 13.

Chart VII
FRANCE
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart II.
† Upper and lower intervention limits established in December 1971.

Following President Nixon's speech on August 15, the French exchange market was closed for the week of August 16-20. The French government reopened the market on Monday, August 23, on the basis of a two-tier exchange system. The Bank of France would defend the franc at the prescribed intervention points only in the official market, through which trade and trade-related service transactions as well as governmental transactions would be effected. All capital transfers, as well as tourist and most other service transactions, would thereafter be strictly segregated in a financial market where the franc rate would be allowed to find its own level. At the same time, measures were taken to prevent leads and lags from developing in the future, including strict limitations on hedging transactions in the forward exchange market and a requirement that imports (other than machinery) be paid for within three months from their entry into France, importers being given one month to comply with this new rule. Given the inevitable complexity of these exchange regulations, trading in the official franc market was very limited at first, with wide spreads in quotations, but commercial business picked up fairly rapidly. Trading was slower to develop in the financial franc market, where the rate moved to a 2.5 percent premium over that of the official franc. In the wake of the floating of the yen on August 27, renewed demand developed for the official franc—the only major currency still kept within its prescribed limits—and the Bank of France again had to absorb dollars.

In September, there was some reversal of the previous flows into francs, as the French exchange regulations, which were further elaborated, began to bite. In particular, French exporters and importers had to unwind some of the leads and lags built up prior to mid-August. With the official franc rate dropping below the ceiling, the Bank of France sold substantial amounts of dollars, and reserves declined by $318 million in September. The financial franc rate, which had reached a premium of 4 percent over the official rate, gradually eased off to a premium of 2¼ percent by late September.

The selling of francs continued in October, as some speculative positions taken three months earlier—in July—were being unwound. The official franc rate edged down almost to par by mid-October, but the market for francs was exceedingly thin, and in one burst of demand on October 21 the rate rose almost to the ceiling before settling back. French official reserves declined by a further $38 million for the month as a whole.

Rate movements were even more volatile in the financial franc market. After moving up in early October, the financial franc rate resumed its decline, as expectations of a franc revaluation or upward float receded and as French monetary policy moved gradually but steadily toward ease. The rate fell especially sharply—to 1½ percent over the official franc rate—on October 20, when the securities currency market was abolished and French residents were allowed to buy foreign-held securities freely with currencies purchased in the financial franc market. (Formerly, such portfolio investments had to be effected for the most part with currencies purchased from other residents liquidating foreign securities holdings.) Subsequently the financial franc firmed again, fluctuating around a premium of 2 percent over the official franc rate, but was held in check by additional steps taken by the authorities. The Bank of France further lowered its domestic money market intervention rates, confirming the easing of its policy on October 28 when it cut its rates on discounts and secured advances by ¼ percentage point to 6½ percent and 8 percent, respectively. Then, on November 16, nonresidents were allowed to import into France and to sell in the Paris stock market French shares held abroad, the proceeds of these sales being credited to financial franc accounts.

Shielded by France's severe exchange control regulations, the franc was not subjected to heavy pressure until late in November, when the market began to see prospects for a devaluation of the dollar against gold that would result in an effective revaluation of the franc against the dollar. This shift in expectations led to a surge of demand for francs—notably by French corporations hastening to convert their export proceeds—which drove the spot rate to the ceiling, and the Bank of France had to intervene heavily during the last week of November. For the month as a whole, French official reserves increased by $222 million. With the Group of Ten meeting in Rome closing on an optimistic note on December 1, the buying of francs increased markedly, and the Bank of France's market intake mounted. To stem this rush into francs, on December 3 the French authorities drastically tightened their exchange controls against the inflow of funds, while liberalizing them for outflows. Among other measures, Finance Minister Giscard d'Estaing announced that, effective one week later, nonresidents would be allowed to use their holdings of official or financial francs only for the settlement of authorized transactions with residents, and that such balances would no longer be convertible into foreign currencies or usable to acquire domestic money market instruments. Furthermore, the authorities reserved the right to transfer any increase in such balances over the November 30 levels into blocked accounts. In addition, permission was granted to nonresidents to borrow funds of up to two years' maturity from French residents without prior authorization from the Bank of France, and the restrictions placed on the forward covering of imports were somewhat liberalized.

These measures had an immediate effect on the market and on the following two trading days, as the spot rate dropped, the Bank of France was able to sell some dollars. Strong demand for francs soon resumed, however, as foreign exchange markets around the world were caught up in speculative ferment in anticipation of the approaching Group of Ten meeting in Washington. The official rate rebounded to the ceiling on December 9 and held there over the subsequent days.

On December 14, following their meeting in the Azores, Presidents Nixon and Pompidou issued a communiqué stating that they would "work toward a prompt realignment of exchange rates through a devaluation of the dollar and revaluation of some other currencies". This statement that the United States was now prepared to raise the dollar price of gold as part of a broader settlement greatly increased market expectations of a break in the international monetary impasse at the Group of Ten meeting in Washington. The news of the Azores agreement hit the Paris market late on the afternoon of December 14, and the next day there was a heavy demand for francs; with the spot rate at its upper intervention point, the Bank of France was obliged to absorb dollars. The demand pressure was also strong in the forward market, and at one point the premium on one-month forward francs rose to over 30 percent per annum. After Paris closed on Friday, December 17, the spot franc surged to $0.1890 in New York.

On Monday, December 20, the French government kept its exchange market closed and announced that the franc's parity expressed in gold would remain unchanged. At the same time, a new central rate was established for the franc at $0.1954¾, fully reflecting the proposed devaluation of the United States dollar against gold. Although the French authorities maintained the two-tier system, they eased or abolished many of the exchange controls imposed since early August. Thus, the December 3 regulations providing for the nonconvertibility of franc balances held by nonresidents and for the possible blocking of additions to such franc holdings were lifted. The August 3 prohibition on increases in the banks' net external debtor positions or decreases in their net creditor positions *vis-à-vis* nonresidents was likewise eliminated. Furthermore, the National Credit Council rescinded its August 17 order prohibiting interest payments on nonresident franc deposits of less than ninety-one days, and the Bank of France reduced its reserve requirements and eliminated differential requirements on resident and nonresident liabilities.

Most market participants had not expected so large an appreciation of the franc against the dollar, and profit taking brought the franc under heavy selling pressure as soon as the Paris exchange market was reopened on December 21. With leads and lags beginning to be unwound, the French authorities sold a considerable amount of dollars in the market as the spot franc edged downward almost to its new floor. Selling pressure on the franc let up in the last days of December, and early in 1972, with doubts beginning to develop in the markets over the durability of the Washington agreement, the franc rate began to advance. The financial franc, in the meanwhile, had fallen below the official franc's floor on December 21 as speculative positions were unwound, but it subsequently converged with the official franc.

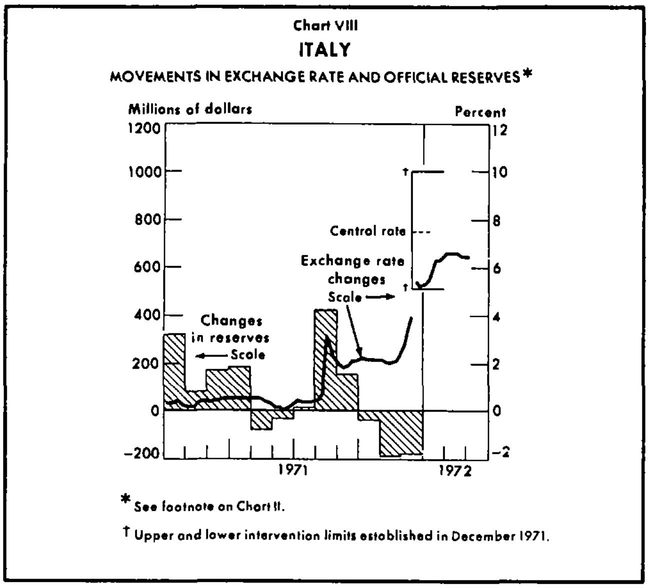
In January the French authorities took a number of steps to stimulate the domestic economy, including reductions by the Bank of France in its rates on discounts and secured advances by ½ percentage point to 6 percent and 7½ percent, respectively. While these measures might have been expected to bring about some decline in the franc rate, there was simultaneously a general strengthening of European currencies against the dollar, and the spot franc quickly rose to a level only slightly below the central rate. An additional burst of speculation in early February lifted the franc somewhat above the central rate, and it continued to rise through much of the month with the Bank of France on the sidelines. Once again a modest premium emerged for the financial franc. By early March the commercial franc had risen close to the new ceiling.

ITALIAN LIRA

In the several rounds of speculation in favor of other European currencies during the earlier months of 1971, the Italian lira was largely neglected. Early in August, however, the lira was drawn into the general run on the dollar; the spot rate rose to the ceiling on August 9 (see Chart VIII), and the Italian authorities had to intervene on a number of days during that week. After President Nixon's speech on August 15, the Italian authorities also kept their exchange market closed for a week, while intensive consultations took place within the EC. The lira rate moved up substantially in the New York market—which remained open—but trading was extremely thin and the range between bid and offered rates was very wide. When Italy reopened its exchange market on August 23, the authorities announced that they would no longer intervene at the official limits, although they might enter the market at other rates if this seemed advisable. Demand for lire was quite strong at first, as the tourist season was in full swing, receipts had been backed up during the week of August 16-20, and leads and lags shifted in Italy's favor. The lira held at a premium of roughly 2 percentage points over parity, before settling back somewhat. For the month as a whole, Italian reserves rose by $424 million.

In mid-September, in view of the high rates prevailing in the Euro-dollar market at that time and of the availability of domestic credit, the Italian Electricity Authority (ENEL) decided to prepay in November the $300 million Euro-dollar loan it had contracted in May 1970. Additional Euro-dollar loans of minor amounts were also beginning to be repaid by other Italian official entities, which had been very heavy borrowers during the preceding year and a half. These transactions absorbed some of the sales of dollars in the Italian market, and the lira rate remained fairly steady even though other European currencies rose strongly against the dollar later in September. On balance, Italian reserves increased by $146 million in September.

The lira market remained generally quiet in October and much of November, and the spot rate held steady as a number of opposing influences tended to cancel each other out. (Official reserves declined by $42 million in October.) On the one hand, seasonal factors were now turning strongly



adverse for Italy's current account, purchases of foreign exchange to repay international borrowings were exerting a drag on the spot rate, and growing political and labor uncertainties were also tending to weaken the lira. Moreover, acting on both internal and external grounds to ease domestic credit conditions, on October 14 the Bank of Italy cut its discount rate from 5 percent to 4½ percent and its rate against secured advances from 5 percent to 4 percent. On the other hand, the upswing in the exchange rates of most other EC countries, at a time when discussions were being actively pursued among Common Market officials as to means of narrowing the trading bands between their currencies, tended to check any decline in the lira rate.

Although both political and economic tensions grew during November, the Italian lira was bid up during the last ten days of the month on market expectations that it would move higher in any settlement of the international monetary situation. Despite continuing large repayments of Italian borrowings abroad, including ENEL's $300 million prepayment, official reserves declined by only $193 million. Then, following the Rome meeting of the Group of Ten countries the lira rose sharply in the first days of December, the spot rate reaching a premium of 3.3 percent over par. Fearing that the defensive measures taken at that time by the French government might deflect a heavy stream of speculative funds toward Italy, the Italian authorities introduced stiff exchange control regulations of their own. Effective Monday, December 6, the Italian banks were instructed to refuse conversion of foreign currencies into lire, unless the proceeds were required for normal trade or service transactions or for nonspeculative capital transactions backed by the appropriate documentation. A few days later, on December 15, the major Italian banks agreed to cease paying interest on all nonresident lira deposits. Nevertheless, demand for lire continued unabated, and the spot rate rose to a premium of more than 4 percent by December 17, when the Group of Ten meeting began in Washington.

Following that meeting, the Italian authorities established a central rate of $0.0017193⁄4 for the lira, representing a 7.48 percent appreciation against the dollar (slightly less than the dollar's proposed devaluation against gold) with new margins of 2¼ percent on either side. At the same time, they retracted the tough exchange control regulations introduced as of December 6. After the Italian market was reopened on December 21, the rate soon settled near its new floor. Nevertheless, the pressure was not intense, and official support was modest.

A prolonged presidential election in December concluded with the installation of Giovanni Leone late in the month. The formation of a new government proved to be difficult, however, and ultimately Parliament was dissolved and new elections were set for the spring. These political uncertainties and the social and economic problems awaiting the attention of the government, together with continued prepayments of foreign loans and a possible shift of leads and lags in favor of the dollar, had a depressing influence on the lira rate. Thus, although the rise of other EC currencies pulled the lira upward, in January and February the rate eventually settled somewhat below its central rate and held there through early March.

JAPANESE YEN

With a continuing massive payments surplus and growing speculation over the possibility of a revaluation, the Japanese yen was in heavy demand throughout the early months of 1971 (see Chart IX). The Japanese authorities responded with a variety of measures, including a sharp tightening of their exchange controls against inflows of funds and some easing of controls on outflows. Nevertheless, in the general speculative atmosphere that developed in late July and the first half of August, demand for the yen mounted rapidly and the Bank of Japan bought large amounts of dollars each day.

Following President Nixon's August 15 speech, dealers around the world were more than ever convinced that a revaluation of the yen was imminent. With European exchange markets closed and the Japanese remaining open during the succeeding week, the Bank of Japan had to absorb dollars on a massive scale despite reinforcement of exchange controls. Finally, after further very large exchange gains on August 26 and 27, the Japanese authorities decided to "suspend temporarily the existing fluctuation margin for buying and selling quotations of foreign exchange, while maintaining the present parity of the yen". The vast inflow during August was reflected in a $4.4 billion gain in official reserves for the month as a whole.

In Tokyo, on August 28, the spot yen immediately rose to a premium of 5.5 percent over par. The rate pushed steadily higher through September, despite substantial further purchases of dollars by the Japanese authorities and some additional tightening of exchange control measures. As a consequence of these measures, banks experienced considerable difficulty in effecting yen payments, and trading in Japanese yen dropped to nominal levels in New York, while in early September the yen was suspended from official trading in Frankfurt, Germany. The Japanese authorities subsequently eased their restrictions slightly, but some payments problems persisted through September. By the end of that month, the yen rate had risen to a premium of 7.5 percent over par while Japanese reserves had increased by a further $870 million.

In September, the Japanese government also approved a package of measures designed to help small- and medium-sized enterprises facing difficulties as a result of the United States import surcharge, and provisions were also made to facilitate the acquisition of forward cover by such firms. Since the foreign exchange banks were prohibited from borrowing additional dollars from abroad and the forward market was in disarray, the Japanese authorities had begun in June to place dollar deposits with the foreign exchange banks to enable them to purchase export bills. Such deposits amounted to $1.2 billion by early October, and additional deposits were subsequently placed with the banks to facilitate the provision of forward cover for the small- and medium-sized enterprises.

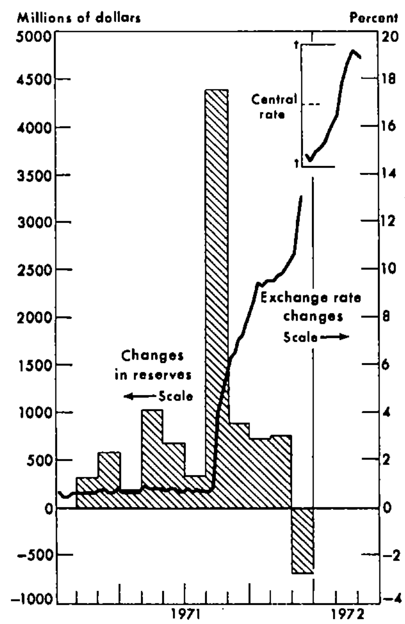
The yen rate continued its rapid advance during the first half of October but then steadied at a premium of nearly 9.5 percent over par, as the unwinding of some earlier commercial leads and lags and net sales of Japanese securities by foreigners exerted a dampening effect on the demand for yen. Over the course of October, Japan's official reserves rose by $716 million. The market remained in better balance early in November, but in the general rise of currencies which developed later in the month the yen also came into heavy and sustained demand. By the end of November the spot rate had risen to a premium of more than 10 percent over par, despite continuing official intervention that added a further $736 million to Japanese reserves. Demand stepped up further in December, as the date of the Washington meeting approached and—after having been briefly driven to a premium of as high as 15 percent—the yen was quoted in New York at 12.3 percent over par on the day the meeting convened.

Under the agreement reached by the Group of Ten on December 18, the central rate for the yen was established at $0.003246¾, an effective revaluation of 16.88 percent against the dollar. The Japanese authorities kept the Tokyo exchange market closed on Monday, December 20 and, in line with actions taken by other countries, abolished some of the measures introduced earlier to block the inflow of funds. The main body of Japan's severe exchange control regulations, however, was left intact. When the Tokyo market reopened on December 21, the spot rate was quoted just above the new floor and a moderate outflow developed. This reflux intensified a few days later, and the Bank of Japan had to extend considerable support before it came to an end. Late in December the Bank of Japan lowered its discount rate by ½ percentage point to 4¾ percent, in a move designed to

Chart IX

JAPAN

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



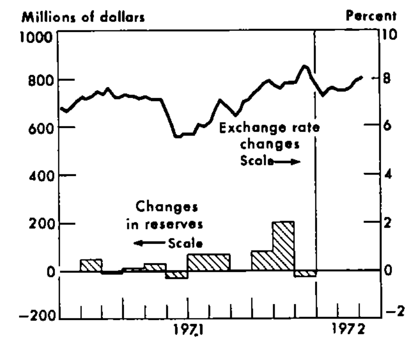
*See footnote on Chart II.

† Upper and lower intervention limits established in December 1971.

soften the domestic impact of the yen's effective revaluation and to help stimulate the Japanese economy.

The yen continued to hold quietly near its floor in the first days of 1972 and, in view of the generally satisfactory behavior of the market, on January 5 the Japanese authorities announced a further and more substantial relaxation of exchange controls. Among other measures, the authorities eliminated the requirement of prior approval by the Bank of Japan for any prepayment of Japanese exports, the curbs on outstanding balances in convertible free-yen accounts, the guideline restraining borrowing of Euro-dollars and other short-term funds by Japanese banks, and the special restrictions on the accounts of brokers. Even though other measures limiting the foreign positions of Japanese banks were retained, this easing of the exchange control regulations resulted in two days of very heavy demand for yen and the Bank of Japan stepped in to stabilize the market. The speculative pressures that hit the markets late in January brought a sharp demand for yen, particularly for prepayment of Japanese exports, and the rate rose steadily, reaching almost to its upper limit by February 24, while the Bank of Japan intervened to moderate the rise. At that point, the Japanese authorities moved to alleviate some of the pressure by reintroducing controls over prepayments of exports. Thereafter, trading in the yen was more balanced, and the rate held steady through early March.

Chart X
CANADA
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart II.

CANADIAN DOLLAR

The Canadian dollar had been floating since June 1970 and was not drawn into the exchange market upheavals of the spring and early summer of 1971. The spot rate ranged fairly widely (see Chart X), but the Bank of Canada maintained a policy of intervening only to moderate movements in the rate and not to defend a particular level. During the general run on the United States dollar in early August, however, the Canadian dollar also was in strong demand, moving up to close to $0.99. Following President Nixon's August 15 address, the Canadian exchange market remained open. At first, as with other currencies, the Canadian dollar was bid up against the United States dollar, nearly reaching $0.99½, but it quickly dropped back as concern grew that the new United States 10 percent import surcharge might cut deeply into Canadian exports. By the following week the rate had declined to around $0.98½, and it remained easy through early September.

On September 7 the Canadian government established a special fund of Can.$80 million, upon which Canadian companies meeting certain conditions could draw to offset adverse effects on employment as a consequence of the United States import surcharge. The Canadian dollar traded quietly through the rest of September but began to move up sharply in October, as Canadian banks started adjusting their exchange positions for the annual reporting date, October 31. When the spot rate reached the $1.00 level, the Bank of Canada cut its discount rate by ½ percent to 4¾ percent effective October 25, referring to both domestic and external considerations in explaining the move. In early November, liquidity conditions in Canada eased, leading to some reversal of previous inflows and to a softening of the spot rate to around $0.99½ by midmonth. On November 19, in a further step to protect Canadian industry from the effects of the United States import surcharge, the Canadian government approved a plan under which the General Adjustment Assistance Board would be authorized to guarantee a total of Can.$150 million of bank loans to qualifying companies and to lend directly up to Can.$8 million to individual firms. Moreover, on November 30 the Bank of Canada reduced the chartered banks' minimum secondary reserve ratio from 9 percent to 8.5 percent.

As other major currencies rose strongly against the United States dollar in the second half of November, there was also some intermittent upward pressure on the Canadian dollar, but heavy buying of Canadian dollars did not develop until the conclusion in early December of the Group of Ten meeting in Rome. At first, the Bank of Canada resisted a further increase in the rate but subsequently allowed it to rise. In heavy demand, the Canadian dollar was pushed to as high as $1.00½ and remained strong until the December 17-18 meeting of the Group of Ten.

The communiqué at the conclusion of the Washington meeting reported that general agreement had been reached on the pattern of exchange rates and noted that "Canada intends temporarily to maintain a floating exchange rate and intends to permit fundamental market forces to establish the exchange rate without intervention except as required to maintain orderly conditions". The Canadian markets were open on Monday, December 20, and the spot rate immediately rose to nearly $1.00¾, but expectations of a further appreciation dissipated rapidly, and the Canadian dollar dropped back over succeeding days. Sizable interest and dividend payments on United States investments in Canada also began to exert a depressing influence on the spot rate, which fell below the $1.00 level on December 23.

After easing further early in January, the Canadian dollar settled at around $0.99½ through the rest of that month and most of February. A resumption of short-term capital flows to Canada tended to offset the seasonal weakness of Canada's current account, leaving the market in rough balance. Toward the month end, substantial new Canadian wheat sales to the Soviet Union were announced and the exchange market turned more bullish for the Canadian dollar. The spot rate was bid back to the $1.00 level and even higher in early March when arbitrage flows to Canada added to the demand.

EURO-DOLLAR

Euro-dollar rates were bid up sharply in late April and early May of last year (see Chart XI), largely reflecting heavy speculation in continental European currencies. In June and July, there was some unwinding of those speculative positions and Euro-dollar rates gradually declined. But, as the run on the dollar developed in late July and early August, Euro-dollar rates were pushed upward rapidly, and on August 17 (the settlement date for currencies purchased on Friday, August 13), three-month deposits were at 10 percent per annum, seven-day funds at 20 percent, and overnight funds reached above 40 percent. After the initial squeeze was met, Euro-dollar rates receded somewhat. Nevertheless, with the widespread uncertainties over the ultimate outcome of the negotiations to resolve the many issues raised by the United States measures of August 15, investors stayed short of dollars. Euro-dollar rates consequently remained several percentage points above those on comparable investments in national financial centers.

In August the United States Treasury began to repay the $3 billion of special certificates that had been placed with the foreign branches of United States banks earlier in the year. By the end of September, only some $1 billion of the Treasury's certificates remained outstanding. Most of the funds repaid by the Treasury were not returned to the Euro-dollar market, however, since United States banks acted to maintain their reserve-free Euro-dollar bases by increasing their own liabilities to branches from about $1 billion in mid-August to around $2.5 billion by the end of September (see Chart XII). Among European official borrowers, the Italian Electricity Authority (ENEL) announced in September it would prepay $300 million of its earlier longer term borrowings in the Euro-dollar market.

In October, following a brief quarter-end squeeze, Euro-dollar rates began an across-the-board retreat which lasted into early November. In part this reflected the continued repayments of official borrowings, as the United States Treasury completed the runoff of its special certificates while ENEL and other Italian official entities li-

Chart XI

INTEREST RATES IN THE UNITED STATES AND THE EURO-DOLLAR MARKET

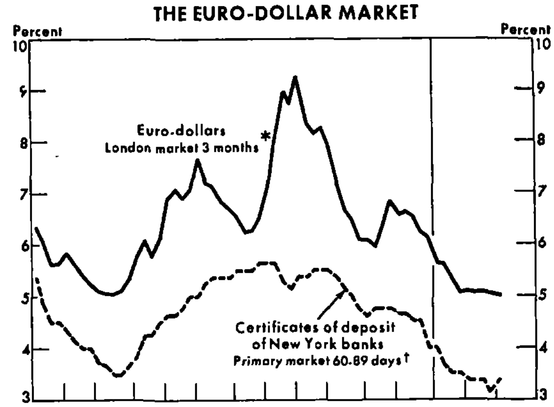
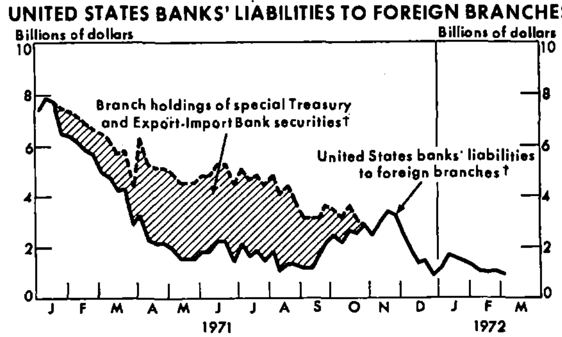


Chart XII

UNITED STATES BANKS' LIABILITIES TO FOREIGN BRANCHES



* Weekly averages of daily rates.

† Wednesday data.

quidated indebtedness. More importantly, however, Euro-dollar rates reacted to a fairly widespread decline in short-term interest rates, especially in the United States. By early November, the three-month Euro-dollar rate had dropped back below 6 percent and, at the short end of the maturity range, the overnight Euro-dollar rate had fallen into line with, and occasionally below, the Federal funds rate in the United States. Taking advantage of this increased availability of Euro-dollars, large United States banks began some modest rebuilding of their borrowings, and from the end of September through mid-November the banks' liabilities to their branches rose by nearly $900 million to $3.4 billion. Nevertheless, the market remained fairly thin, as many investors preferred other currencies to dollars given the risk that exchange rates might move up sharply against the dollar.

Such an exchange rate movement did in fact develop later in November and early December, as expectations began to grow that a parity realignment might soon be reached and that it would result in a more substantial change in exchange rates against the dollar than previously had been anticipated. Once again the Euro-dollar market began to tighten, with the three-month rate reaching as high as 7 percent late in November. Shorter rates rose as well and, as the overnight rate rose well above the Federal funds rate (United States rates were continuing to decline, with a second ¼ percent cut in Federal Reserve discount rates starting on December 13), United States banks once again ran down their liabilities to their foreign branches, returning nearly $2 billion to the Euro-dollar market between mid-November and mid-December. This reflow helped mitigate the rise in Euro-dollar rates and, compared with the earlier periods of speculation during the year, the squeeze on the Euro-dollar market in late November-early December was relatively mild. Moreover, there was little evidence of the usual year-end pressures on the market, as European banks that normally bring funds back from the Euro-dollar market for window dressing and other positioning at that time were already very liquid in their own currencies. And on December 9 the Office of Foreign Direct Investment (OFDI) of the Department of Commerce announced that United States corporations could postpone until the end of February 1972 the report on their positions for the end of 1971.

Early in 1972, there was a further decline in short-term interest rates in the United States and other major countries. During this period, demand for Euro-dollars was slack, partly reflecting the slower pace of growth of economic activity in Europe. At the same time, banks in the United States continued to run off their Euro-dollar liabilities, and other borrowers, again particularly the Italian official entities, were also liquidating Euro-dollar debts. Consequently, Euro-dollar rates declined further; the three-month rate settled to about 5 percent in late January and held around that level through the end of February. By that time, United States interest rates had begun to firm while rates in several European centers were declining, with cuts in central bank discount rates in Germany, Belgium, and the Netherlands in late February and early March. In addition, the German government imposed a 40 percent reserve requirement on most foreign borrowings by German nonbanking firms; these firms previously had been massive borrowers in the Euro-dollar market. Early in March, the market remained generally easy and the three-month rate edged down to about 4¾ percent.