Treasury and Federal Reserve Foreign Exchange Operations*

By CHARLES A. COOMBS

After consultation with the major trading partners of the United States, Treasury Secretary Shultz announced on the evening of February 12, 1973 that the dollar would be devalued by 10 percent. Almost all of the developed nations maintaining par or central values left them unchanged, thus bringing about a uniform realignment of their exchange rates reflecting the full devaluation of the dollar. In the case of Japan, the yen was allowed to float temporarily to permit an additional appreciation *vis-à-vis* the dollar. Sterling and the Swiss franc remained on the floating basis initiated in earlier months and were joined by the Italian lira.

While there was some initial profit-taking, new flows of funds into marks and other foreign currencies soon resumed. Despite the major adjustment in exchange rates resulting from the dollar devaluation, there continued to be widespread discussion of the possibility of a joint float of the European Community (EC) currencies in the event of renewed dollar inflows. Market worries were further exacerbated by the speculative buoyancy of the floating Swiss franc, which had appreciated significantly more than other European currencies.

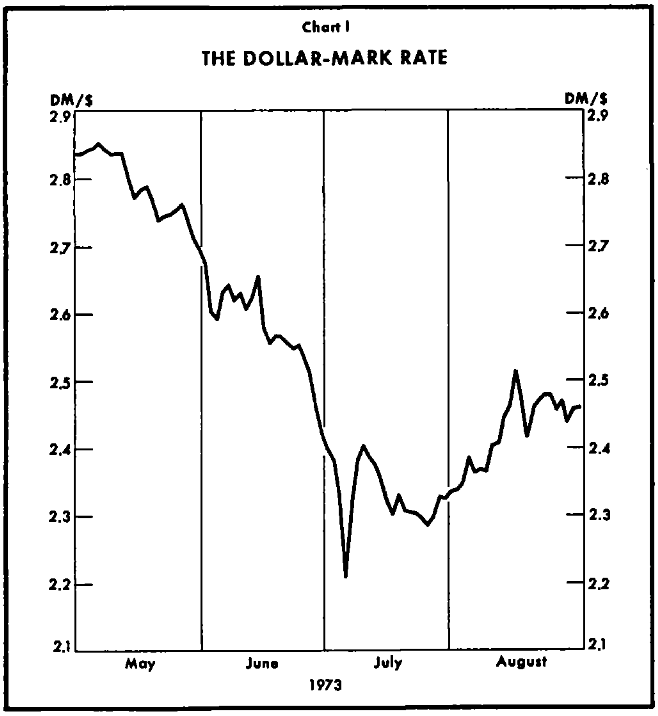
In short, the markets remained entirely unconvinced that the crisis was over, and by February 23 the dollar had fallen to its new floor against the mark, French franc, guilder, and Belgian franc. Then on Thursday, March 1, in a sudden new flight from the dollar, more than \$3.6 billion was dumped on the European central banks. That night the European authorities closed their exchange markets until further notice.

Emergency meetings of the EC and Group of Ten (G-10) Finance Ministers quickly got under way and yielded two major policy decisions. On March 11, five members of the EC—Germany, France, Belgium, the Netherlands, and Denmark—agreed to maintain fixed exchange rate relationships among themselves within a 2¼ percent band, which would be permitted to float as a bloc against the dollar. Norway and Sweden subsequently joined this bloc. In conjunction with this EC decision to establish a fixed-rate bloc, the German authorities revalued the mark by 3 percent. As further protection against new speculative inflows of funds, most countries participating in the EC bloc tightened and extended their existing exchange controls. The Japanese yen, Swiss franc, sterling, and the Italian lira each continued to float independently.

The EC decision to engage in a joint float against the dollar left open a major question whether such a float would be "clean" or subject to intervention by the Federal Reserve and the EC central banks at their discretion. This policy issue was taken up by the Paris meeting of the G-10 Finance Ministers, including Secretary Shultz, who issued on March 16 a communiqué reiterating their determination to ensure jointly an orderly exchange rate system. They agreed in principle that official intervention in the exchange markets might be useful at appropriate times to facilitate the maintenance of orderly conditions. Each nation represented stated that it would be prepared to intervene at its initiative in its own market in close consultation with the countries whose currencies were being traded. To ensure adequate resources for such official exchange operations, it was envisaged that some of the existing swap facilities would be enlarged.

With these new rules of the game, the markets were officially reopened on March 19 and over the next six

* This report, covering the period March through July 1973, is the twenty-third 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.



reached a climax on July 6 (see Chart I), the German mark had been bid up by some 30 percent above the central rate established in February, the French franc and other currencies in the EC bloc by 18 to 21 percent, while the London gold price had shot back up to $127. Meanwhile, trading conditions in the exchange markets had become increasingly disorderly, and by Friday, July 6, a number of New York banks were refusing to quote rates on certain European currencies. Exchange trading was grinding to a standstill.

Such excessive depreciation of the dollar was simultaneously generating further hectic speculation in the international commodity markets and otherwise seriously intensifying inflationary pressures in the United States. Those countries whose currency rates were moving down with the dollar suffered the same inflationary impact while, conversely, those countries whose currencies were appreciating excessively visualized a major and unjustifiable threat to their competitive position in world markets. This was a dangerous situation from almost every point of view and was recognized as such by press commentary around the world.

weeks the dollar improved hesitantly as earlier adverse leads and lags were partially unwound. Despite an improving trend in the United States balance of payments and the frequently voiced view that the dollar was now undervalued, there was no large sustained covering of short dollar positions or reflow of funds. Indeed, the market became increasingly concerned over the worsening United States inflation, forecasts of vastly higher energy imports, and the possible ramifications of the Watergate affair.

While the dollar remained strong against the currencies of this country's two major trading partners—Japan and Canada—a tendency to shift out of dollars in favor of European currencies resumed in early May. By midmonth a new speculative attack had broken out in which soaring gold prices, sliding Wall Street stock prices, and a weakening dollar fed upon each other. Pressure on the dollar in Europe was further intensified by the progressive tightening of German monetary and fiscal policies, as the consequent sharp rise of the German mark began to pull up the other EC currency rates against the dollar. In June and early July, the dollar was driven down in recurrent bursts of heavy selling to levels unjustified and undesirable on any reasonable assessment of the outlook for the United States payments position. As these pressures

Table I

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars

Institution	Increase on July 10, 1973	Amount of facility July 10, 1973
Austrian National Bank	50	250
National Bank of Belgium	400	1,000
Bank of Canada	1,000	2,000
National Bank of Denmark	50	250
Bank of England	-0-	2,000
Bank of France	1,000	2,000
German Federal Bank	1,000	2,000
Bank of Italy	750	2,000
Bank of Japan	1,000	2,000
Bank of Mexico	50	180
Netherlands Bank	200	500
Bank of Norway	50	250
Bank of Sweden	50	300
Swiss National Bank	400	1,400
Bank for International Settlements: Swiss francs-dollars	-0-	600
Other authorized European currencies-dollars	250	1,250
Total	6,250	17,980

Table II

FEDERAL RESERVE SYSTEM DRAWINGS AND REPAYMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars equivalent

Transactions with	System swap commitments, January 1, 1973	Drawings (+) or repayments (−) 1973 I	II	July	System swap commitments, July 31, 1973
National Bank of Belgium	415.0	− 25.0		+ 6.0	396.0
Bank of France	-0-			+ 47.0	47.0
German Federal Bank	-0-	{+104.6 {−104.6		+220.5	220.5
Swiss National Bank	570.0	− 5.0			565.0
Bank for International Settlements (Swiss francs)	600.0				600.0
Total	1,585.0	{+104.6 {−134.6	-0-	+273.4	1,828.4

Note: Discrepancies in totals are due to rounding.

At a meeting of the Bank for International Settlements group of central banks on the following weekend, Federal Reserve representatives wound up earlier negotiations providing for major increases in the Federal Reserve swap lines as well as for new arrangements covering exchange risks on floating rates. On Sunday night, July 8, the governors of the BIS central banks issued a statement noting that the necessary technical arrangements were now in place to implement the Paris agreement of March 16 regarding exchange market intervention to maintain orderly markets. On the following Monday afternoon, in agreement with the United States Treasury, a telephone conference of the Federal Open Market Committee approved a resumption of exchange operations, to be financed if necessary by drawings on the swap lines.

The exchange markets were meanwhile anticipating such action and by the following Tuesday afternoon, when the Federal Reserve announced an increase in the swap network from $11.7 billion to nearly $18 billion (see Table I), a strong recovery of the dollar against most of the European currencies already had occurred. Against the mark, for example, the dollar had rocketed up by 7 percent from the all-time low reached on the preceding Friday. In large part, the steep rise of dollar rates seemed to reflect market hedging against the possibility of sudden, massive intervention by the Federal Reserve. When intervention on such a scale did not immediately materialize, dollar rates began to slip back and were further seriously depressed during the rest of July by a progressive tightening of the German money markets. On July 26, the call money rate in Frankfurt rose to 38 percent.

Market intervention by the Federal Reserve was in fact initiated on July 10 and continued through the end of the month. Rather than the massive action envisaged by some traders, the Federal Reserve pursued the less dramatic path of trying to assist the market in finding a solid footing from which a strong recovery might then develop once the German credit crunch was relieved, and prospectively good trade figures for the United States for June were released. In this stabilizing effort, the Federal Reserve through frequent intervention in the New York market sold $220 million of German marks, $47 million of French francs, and $6 million of Belgian francs—an intervention total of $273 million—all financed by drawings on the swap lines with the foreign central banks concerned. These drawings increased the System's swap debt from $1,555 million to $1,828 million by the end of July (see Table II). Federal Reserve operations in New York were strongly reinforced by coordinated Bundesbank purchases of dollars in Frankfurt totaling somewhat more than $300 million.

In late July, the market stabilized well above the lows reached earlier in the month. Then, as the Bundesbank took action to relieve the German credit squeeze, the New

York money market tightened, and the June trade figures for the United States showed considerable improvement, the dollar recovered strongly through the first two weeks of August. Since then, the exchange markets have been functioning in more orderly fashion in a much calmer atmosphere. Bid and offer spreads are moving back toward normal, and daily swings in market rates are somewhat less volatile. In early September, dollar rates against the mark and French franc, for example, were some 10 percent and 11⅝ percent above their July 6 lows. After the shocks to confidence in recent years, however, the healing process is bound to take some time, and much will depend on emerging trends in the United States balance of payments and on the degree of success in holding inflation in check in this country. Meanwhile, the market is aware of the joint statement made on July 18 by Chairman Burns and Secretary Shultz that active intervention will take place in the future at whatever times and in whatever amounts are appropriate for maintaining orderly market conditions.

GERMAN MARK

By early 1973, Germany's economic expansion had accelerated and the rate of inflation had reached the highest level in more than two decades. In attempting to curb this inflation, the German authorities were relying heavily on monetary policy instruments and, consequently, were concerned over simultaneously attracting renewed flows into marks from abroad. Therefore, the German government had erected various barriers to ward off capital inflows and to protect the economy from the expansionary impact of such inflows as did occur. These controls could not be airtight, however, and in January and early February of this year, a combination of developments in Europe and the United States had touched off a rush into marks which thereafter broadened into a full-scale attack on the United States dollar.

In conjunction with the February 12 devaluation of the dollar, the German authorities immediately set a new central rate of $0.3448 for the mark, corresponding in full to the change in the special drawing right (SDR) value of the dollar. When regular exchange trading resumed after a two-day closure of the markets, the mark-dollar market was subjected to strong crosscurrents. On the one hand, many dollar holders decided that they were no longer prepared to hold dollar assets. Some foreigners simply sold dollars to return to their own currencies, but many others, including some central banks, shifted from dollars into German marks and other European currencies. This process added substantially to the demand for marks, not only in February but also, in varying volume, virtually throughout the spring and early summer. On the other hand, there remained the massive positions, short of dollars and long of marks, on which profits had yet to be taken. Therefore, after the Bundesbank acted to neutralize the monetary impact of the buildup of mark balances by imposing a 100 percent reserve requirement on excess balances of nonresidents, and the German banks responded by selectively imposing negative interest charges on nonresident balances, reflows out of marks developed. The spot mark eased and, by February 19, the mark reached its new floor against the dollar. Over the next few days the Bundesbank was able to release to the market some $1 billion of its previous dollar intake and as part of this operation sold the Federal Reserve marks sufficient to repay the full $105

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 January 1, 1973	Drawings (+) or repayments (—) 1973 I	II	July	Drawings on Federal Reserve System outstanding July 31, 1973
Bank for International Settlements (against German marks)	-0-	{+11.0 −11.0	{+23.0 −23.0	{+2.0 −2.0	-0-
Total	-0-	{+11.0 −11.0	{+23.0 −23.0	{+2.0 −2.0	-0-

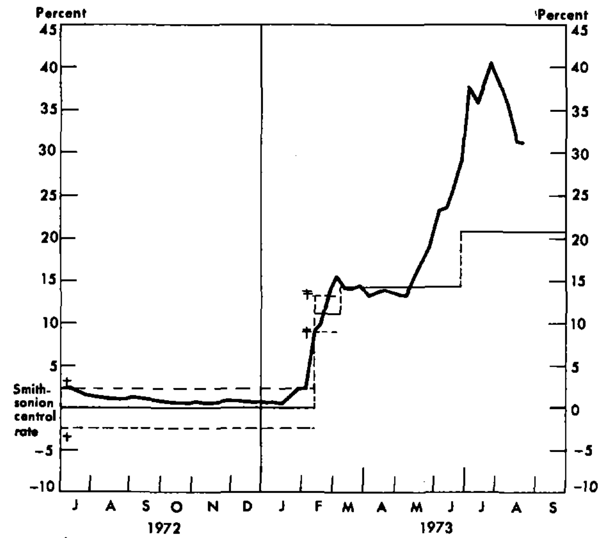
million of Federal Reserve swap drawings incurred before the February devaluation of the dollar.

These reflows out of marks quickly dried up, however, and the balance of forces in the market swung sharply the other way. With the dollar weakening across the board at a time when European officials were openly discussing the possibility of a joint float against the dollar, few traders were willing to take up the heavy volume of dollars being offered in the exchanges. In the two days February 22-23, the mark rose from its floor to its new upper limit and traded near that level through the end of the month. The continuing discussion on both sides of the Atlantic of the exchange rate question—whether the dollar's devaluation had been enough or whether there might be a joint float of the European currencies—kept the market anxious. Pressures came to a head on March 1, when massive amounts of dollars were dumped on the exchanges and the Bundesbank alone took in a record $2.6 billion. The German and other European exchange markets were then closed and official international discussions to resolve the crisis began.

As the market awaited the outcome of these negotiations, the mark fluctuated erratically before drifting back somewhat in very thin trading. On March 11, Common Market officials announced that Germany and four of its EC partners would keep their exchange rate relationships fixed against each other within a 2¼ percent band while suspending the intervention limits against the dollar. As part of this agreement the German authorities revalued the mark *vis-à-vis* the SDR and other participating currencies by about 3 percent. On March 16, in Paris, the United States authorities joined in a broader agreement incorporating these moves and recognizing that official intervention in the exchange markets may be useful at appropriate times to facilitate the maintenance of orderly market conditions.

When the markets were formally reopened on March 19, traders remained in a state of shock over the events of the previous two months. Moreover, the vast uncertainties over how well the market would function under the new arrangements—a mixture of fixed and floating exchange rates plus a spate of new capital controls—initially had a paralyzing effect. As a result, the market was quiet, trading was thin, turnover was small, and day-to-day movements in the mark rate continued to be abnormally wide. Over the previous two months, most market participants had satisfied their normal demand for marks for some time to come, leaving an absence of routine demand for marks once the markets reopened. In addition, some of the long positions in marks were being cut out, as the interest costs of maintaining

Chart II
GERMANY
MOVEMENTS IN EXCHANGE RATE *



* In this and the following currency charts, movements in exchange rates are measured as percentage deviations of weekly averages of New York noon offered rates from the middle or central rates established under the Smithsonian agreement of December 18, 1971.

+ Upper and lower intervention limits established in December 1971.

ǂ Upper and lower intervention limits around new central rate established on February 13, 1973 following proposed devaluation of United Sates dollar. Limits suspended on March 1, 1973.

those positions mounted. Consequently, the mark settled just below its effective central rate of $0.3551 against the dollar and slipped to the bottom of the EC band, where it required support against those currencies at the top of the joint float. Except for a brief reversal in mid-April on a temporary tightening of monetary conditions in Germany, the mark continued to drift lower against the dollar and to exert a drag on other EC currencies through early May.

In May, a new series of events broke the surface calm of the exchange markets and set off a progressive rise of the mark that continued virtually uninterrupted through early July. The precipitous rise in the mark reflected developments in Germany and the United States as well as the dynamics of the exchange market itself. In Germany, the Bundesbank had been striving to maintain its firm grip on domestic liquidity through higher reserve requirements, cuts in discount quotas, hikes in discount and Lombard rates, and limits on access to the Lombard facility. These measures, and expectations in the market that further tightening would be forthcoming, tended to reinforce the demand for marks in the exchanges at a time when the German government also was developing a program of anti-inflationary fiscal measures. At first there were rumors that this program would be accompanied by a further revaluation of the mark, which led to renewed speculative demand for marks. When the fiscal program was announced, however, there was no revaluation and speculation subsided for the time being.

Meanwhile, the United States was suffering from a daily diet of bad news about escalating prices and the Watergate affair. Coupled with successive sharp jumps in the gold price and repeated declines in prices on Wall Street throughout May, these factors brought frequent sharp declines in the dollar.

Against this background, the announcement of a small United States trade surplus for April gave the dollar only a brief lift in late May, and a renewed scramble for marks began following the Bundesbank's announcement of a further 1 percentage point increase in the discount and Lombard rates and the subsequent suspension of the Lombard facility on May 30. By June 5, the spot mark had climbed to $0.3864—nearly 9 percent above its central rate—and had moved up from the bottom of the European "snake", where it had traded since mid-March, almost to the top.

Shortly thereafter, reports of an impending new United States anti-inflation program and, later, the Bundesbank's move to moderate the impact of its May measures by reopening a special discount facility against commercial bills helped turn the mark rate down briefly. But the sixty-day price freeze announced for the United States disappointed the market. Then, on June 26 traders were further disturbed by the United States trade figures for May, which showed a moderate deficit rather than the sizable surplus many had been expecting, and by the Bundesbank's announcement of another move to tighten domestic liquidity—a 25 percent cut in the reserve base for foreign deposits. That day, heavy demand for marks drove the spot rate up almost 2½ percent in a matter of four hours, to a level 12½ percent above the March central rate.

The mark was now spearheading the rise of the Community currencies against the dollar, and substantial intervention in marks by EC central banks was required on June 27 to keep the bloc together. On June 28, the mark was driven up another 3 percent against the dollar and the central banks participating in the fixed-rate bloc had to supply very large amounts of marks against EC currencies, bringing the twelve-day total to $1.5 billion equivalent. On June 29, the German government announced a further revaluation of the mark by 5½ percent in SDR terms.

This move relieved the immediate tensions within the snake but gave little pause to the slide of the dollar *vis-à-vis* the mark. In the first week of July, the mark rose each day to record levels, which market professionals agreed were absurdly high. Nevertheless, efforts of traders to sell dollars against marks and other European currencies intensified, soon reaching panic proportions. By July 6, the markets had fallen into such disarray that spreads between bid and offer

Table IV

UNITED STATES TREASURY SECURITIES FOREIGN CURRENCY SERIES

In millions of dollars equivalent

Issued to	Amount outstanding January 1, 1973	Issues (+) or redemptions (—) 1973 I	II	July	Amount outstanding July 31, 1973
German Federal Bank	306.0	—153.0			172.4
Swiss National Bank	1,232.9				1,384.1
Bank for International Settlements*	170.9				189.5
Total	1,709.8	—153.0	-0-	-0-	1,746.0

Note: Increases in amounts outstanding as compared with January 1 reflect valuation changes on April 30 and upon renewals of maturing securities.
* Denominated in Swiss francs.

rates widened almost to 1 percent and several New York banks refused to deal in marks at all. At its high of $0.4525 that day, the mark had gained more than 9½ percent since June 29 and stood some 30 percent above its February central rate, 45¾ percent above the previous Smithsonian central rate, and fully 65½ percent above its parity before May 1971.

Following the regular monthly meeting of central banks in Basle that weekend, reports circulated that an increase in the Federal Reserve swap lines was in the offing, and as the market developed exaggerated expectations of massive intervention to be launched in support of the dollar, the mark dropped off sharply. By the time the swap-line increases were confirmed on July 10, the spot rate had fallen by about 7 percent. On that day, the Federal Reserve began intervention in the New York market, using marks drawn under the swap line with the Bundesbank, and following up with simultaneous intervention in French francs and Belgian francs, which also were at or near the top of the EC band. The intervention was less dramatic than the market had expected, however, being intended primarily to help the markets regain some sense of balance and stability. Thus, although trading did become more orderly as the Federal Reserve continued to intervene and the Bundesbank began to intervene by buying dollars openly in Frankfurt, the earlier recovery of the dollar was not fully sustained.

After midmonth, German money market conditions came to dominate the exchange market; as banks found themselves short of liquidity, their efforts to meet their reserve requirements touched off renewed heavy bidding for marks. This liquidity squeeze persisted over several days, even though the Bundesbank provided a substantial amount of assistance to the domestic market and intervened in the exchange market to avoid a sharp decline in the dollar rate. The Federal Reserve intervened in New York while, at the same time, other central banks were obliged to intervene to maintain the margins of the snake. On July 26 the squeeze came to a head, and a combined amount of $350 million equivalent of marks was provided through central bank intervention in limiting the rise of the mark, which nevertheless reached $0.4390, some 17 percent above its central rate. The liquidity squeeze then passed and German money rates fell off at the same time that United States interest rates were rising and improved trade figures were released. As the spot mark eased, the Federal Reserve applied gradual pressure, selling marks to keep the rate moving. By the end of July, Federal Reserve intervention in marks amounted to $220.5 million equivalent, while the Bundesbank had bought some $300 million for its own account in support of the dollar.

FRENCH FRANC

Following the announcement on February 12 that the dollar would be devalued, the French authorities reaffirmed the gold parity of the French franc, thereby establishing a par value against the dollar which fully reflected the dollar's devaluation. As the dollar soon came under renewed attack in the exchange markets, the franc rose with most other currencies, touching its new ceiling on February 23. In the general selling of dollars that developed in early March, the Bank of France was obliged to take in some $500 million at the upper limit before the Paris exchange market was officially closed on March 2.

In subsequent days, with all the major European currencies effectively floating during negotiations to resolve the exchange crisis, the franc rate rose more than 2 percent above its new ceiling in exceedingly thin trading. During the negotiations, the French authorities agreed to participate in a collective EC float against the dollar while, at the same time, announcing a barrage of new regulations designed to ward off speculative inflows. These included a ban on interest for nonresident deposits, a 100 percent marginal reserve requirement on those deposits, prohibition on the use of financial francs for nonresident purchases of short-term financial assets, and limitations on certain forward currency transactions by French banks.

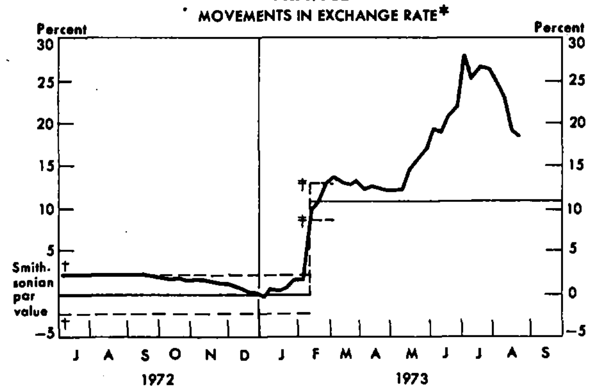
When the Paris exchange market was officially reopened on March 19, trading was light as market participants tried to assess how these new controls would affect their individual operations. For their part, French banks soon responded to the 100 percent marginal reserve requirement by selectively imposing a charge similar to a negative interest rate on nonresident balances. By and large, the controls had their desired effect, as no new rush into francs developed and, indeed, the franc soon began to ease in response to the downward pull of the German mark. Among the EC currencies, however, the franc remained fairly buoyant. By early spring, the French trade balance was strong, thanks to both the competitive edge France had gained through earlier exchange rate realignments and to steady improvements in industrial productivity within France. Thus, as the dollar generally strengthened in late March and through much of April, the commercial franc declined more slowly than its partner EC currencies. The French franc was, therefore, at the top of a fully stretched European snake, with modest sales of francs required to maintain the limits.

As the dollar came under renewed pressure in Europe just before mid-May, the commercial franc joined the other Continental currencies, in setting new highs against the dollar almost every day. Speculative demand focused

Chart III

FRANCE

MOVEMENTS IN EXCHANGE RATE*



* See footnote on Chart I.

† Upper and lower intervention limits established in December 1971.

‡ Upper and lower intervention limits around new par value established on February 14, 1973. Limits suspended on March 2, 1973.

more heavily on the German mark, however, and although the franc rose steadily, by June it was superseded by the mark as the leader of the snake.

At this point, monetary conditions remained more comfortable in France than in several EC countries where monetary policies had been drastically tightened. In addition, French government officials spoke out repeatedly and in strong terms against further appreciation of the franc. Nevertheless, the franc was pulled up further in the wake of other currencies in the common EC float and, as speculation on the mark accelerated in June, the spot rate shot up against the dollar to 11¾ percent above its par value. By this time, heavy demand for marks had put intense pressure on the snake and market professionals, who were coming to question the viability of the fixed-rate band and the commitment of the European banks to support the arrangement, were switching funds from France and other EC countries into Germany. On June 27 and 28, the French franc required heavy intervention to stay within its EC lower limit against the German mark.

The June 29 revaluation of the mark relieved the immediate pressure on the EC band but did nothing to stem the growing pressure on the dollar. Early in July the French government introduced a broad range of credit measures designed both to counter domestic inflation and to bring French money market conditions more in line with those elsewhere in the EC. These measures bolstered the franc against other European currencies as well as against the dollar in an exchange market that was becoming increasingly disorderly day by day. On July 6, as the crisis came to a head, the franc was bid upward against the dollar to a high of $0.2626, almost 21 percent above its par value. On that day, the commercial franc moved exceptionally widely and spreads between bid and offer quotations widened to more than 1 percent. French government spokesmen expressed strong concern about both the level to which the franc had been pushed and the demoralization of the markets.

Following the July 8 communiqué from the BIS meeting in Basle, the market turned around abruptly on rumors of imminent official intervention on behalf of the dollar. Over the next two days, the franc dropped back more than 7½ percent, in part on reports—confirmed on July 10—of substantial increases in the Federal Reserve swap lines. The Federal Reserve in fact resumed intervention the same day, and through July 19 this Bank had sold $47.0 million of French francs in the New York market in conjunction with operations in German marks and Belgian francs. These sales were covered by corresponding drawings on the swap line with the Bank of France. By late July, capital outflows were depressing the financial rate and, as it fell, it dragged the commercial rate along with it. Consequently, the commercial rate sank to the bottom of the EC snake where it required modest support to remain within the band.

SWISS FRANC

Late in January, the Swiss authorities had decided to permit the Swiss franc to float so as to prevent their restrictive monetary policy from being compromised by renewed speculative inflows from abroad. By the time the proposed devaluation of the dollar was announced on February 12, the floating Swiss franc had been pushed up in heavy demand to nearly 8 percent above its Smithsonian central rate. Unlike Switzerland's major trading partners, the Swiss government did not set a new central rate and intervention limits based on the United States devaluation but decided to allow the franc to continue on a floating basis until the markets settled down again. As trading resumed after announcement of the dollar's devaluation, the Swiss market continued to await anxiously indications of the Swiss National Bank's intervention policy. The next week, when the Swiss authorities reiterated their decision not to fix new bench marks for the franc, the market vigorously bid the franc up to almost 15 percent above its Smithsonian central rate in a speculative rush that soon spilled over into other European markets. Although the Swiss National Bank intervened in the spot and forward markets to the extent of $700 million, the speculative onslaught continued. On March 1 the franc was driven up still further to $0.3247, almost 25 percent above the Smithsonian central rate. At this level, the Swiss franc had appreciated some 7 percent against the German mark.

Following the Paris accord of March 16, the Swiss authorities reconfirmed their intention to maintain the independent float of the Swiss franc rather than affiliate themselves with the joint float of the EC countries. Nevertheless, as the National Bank provided some of the Swiss banks' quarter-end liquidity needs by way of $500 million of swaps and additional money market assistance, normal quarter-end exchange market pressures were blunted and the Swiss franc began to ease as the currencies in the EC bloc moved lower. By early April the Swiss franc had come down to $0.3060, still 17½ percent above the Smithsonian rate.

Throughout the rest of the early spring the franc market remained in rough balance, as Swiss banks found themselves more liquid than at any time since the introduction of Switzerland's restrictive monetary policy of late 1972. The banks were feeling the impact of quantitative limits on the growth of bank credit imposed the previous winter; with their ability to lend heavily constricted, they cut deposit rates by ¼ to ½ percent and reduced their dependence on the exchange market for additional funds. Although the authorities provided some liquidity to the domestic market during April, the National Bank was not called upon to provide month-end swaps or other direct month-end assistance to the banks for the first time since November 1972.

Around the middle of May, a convergence of troublesome events disrupted the earlier steadiness in the Swiss franc market. The renewed surge of inflation in the United States, concern about the Watergate investigations, and the soaring gold price touched off vigorous bidding for the Swiss franc, along with other European currencies. By late May the franc had advanced to $0.3245, moving up along with the EC joint float.

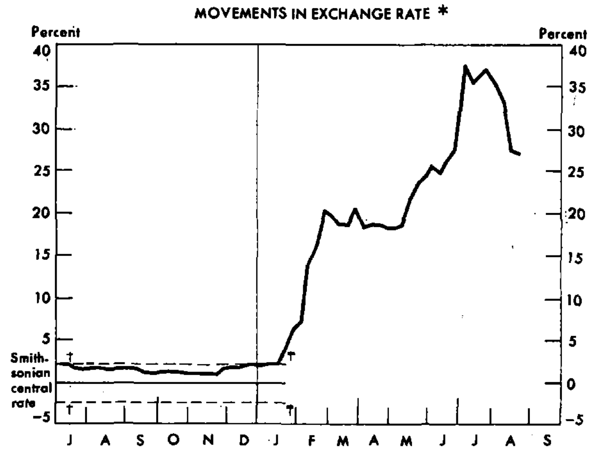
At that point, the market began to question whether the rise in the franc relative to other European currencies, particularly the German mark, had not been overdone. As market attention shifted to the severe tightening of the German money market during June, the rise in the franc lagged behind that of the mark. With the strong rise in the mark exerting a mounting strain on the EC band, speculative money was switched out of Swiss francs into marks at an increasing pace to take advantage of any possible breakdown in the European common float.

The expected revaluation of the mark on June 29 failed to quiet the speculative turmoil. Trading conditions in the exchanges deteriorated alarmingly in the first week of July, as the market lost all confidence in its ability to assess the near-term prospects for dollar rates. Moreover, those who had taken advantage of the relatively low Swiss interest rates in recent years urgently bid for francs to cover their short franc positions, and the spot franc surged to new highs each day in increasingly volatile and disorderly trading. By July 6, the franc was quoted at $0.3774, 45 percent above its Smithsonian central rate. Swiss National Bank Director-General Leutwiler in a public statement that day described the foreign exchange market as being "completely out of control".

After the July 7-8 central bank meeting at the BIS, talk of imminent United States intervention appeared in the Zurich market and soon spread to other financial centers. With the market now hopeful that the dollar would be supported in the exchanges, the franc came on offer both in Switzerland and in New York. By the time the Federal Reserve announced the increase in the swap network on July 10, the Swiss franc had dropped almost 7½ percent from its high on July 6.

The initial burst of enthusiasm prompted by hopes of massive official intervention wore off quickly, however, and although exchange market conditions generally improved the Swiss franc began to rise again along with other European currencies. A severe stringency then developed in the German money market, prompting unprecedented

Chart IV
SWITZERLAND
MOVEMENTS IN EXCHANGE RATE *



*See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.
‡ Intervention limits suspended on January 23, 1973.

increases in German interest rates and a renewed strong rise of the mark which pulled other European currency rates, including the Swiss franc, along in its wake. After German monetary conditions eased in late July, the spot franc followed the mark down against the dollar. By the end of July the franc stood 34¼ percent above its Smithsonian central rate.

STERLING

During the period under review, the pound sterling was caught up both in the shifting tides of the United Kingdom's domestic and international position and in the speculative storms which swept through the world monetary system. At home, inflation continued to be a major concern and, increasingly, the decline of the sterling rate last year was seen as intensifying the upward pressure on prices. The substantial competitive advantage gained for the British economy *vis-à-vis* other industrial countries through depreciation of the floating pound since June 1972 had not as yet been translated into an improvement in the trade balance, while the worsening terms of trade and boom in commodity prices had escalated import costs. Moreover, the market remained pessimistic over the prospects for Britain's price and wage policies. Abroad, events strongly and unpredictably influenced the sterling rate from time to time, as the market struggled to interpret the implications for sterling of the dollar's weakness and recurrent strains within the EC band. Thus, depending on how these factors interacted, sterling would on some occasions tend to move in parallel with the dollar, and on others to reflect more closely the movements of EC currencies.

Following the February 12 announcement of the devaluation of the dollar, the British government indicated that sterling would continue to float for the time being. Soon after the London exchange market reopened on February 13, the pound was quoted at $2.47¾, up almost 5 percent from early-February levels. Although this rise was less than that for those European currencies with new fixed rates against the dollar, sterling was soon pulled along with the general advance of the continental European currencies against the dollar late in February. By March 1, the pound had climbed to $2.51¾ as a renewed flight from the dollar reached its climax.

The following day, in line with actions taken by their EC partners, the British authorities formally closed the London foreign exchange market while permitting normal trading to continue. That weekend, Chancellor of the Exchequer Barber met with his counterparts from other EC countries in an effort to forge a European solution to the continuing currency crisis. Agreement was reached on some issues but not on the terms and conditions under which sterling might cease to float against the other EC currencies. As reports of this impasse reached the market early on March 6, the pound was marked down to $2.46¼. Later that day, however, the market turned around in response to the Chancellor's annual budget message. Although strongly stimulative, the new budget was less expansionary than the market had feared and also contained provisions to encourage public-sector borrowing in international markets—a measure designed to relieve pressure on Britain's capital market and to bolster Britain's official reserves. This proved reassuring to the market, and there was no adverse reaction to the British government's confirmation that sterling would continue to float independently.

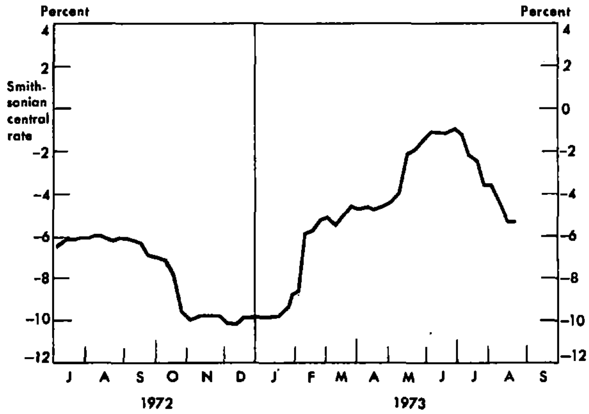
With the formal reopening of the European exchange markets on March 19, sterling, unlike the Continental currencies, was relatively free of exchange controls against inflows of funds from abroad. High rates on short-term sterling assets became increasingly attractive to those who had been holding Continental currencies in forms which were becoming either increasingly expensive or difficult to maintain. In addition, several favorable developments on the labor front lightened some of the market's pessimism over the prospects for success of Phase Two of the government's incomes policy. By April, sterling was also benefiting from growing expectations that the United Kingdom government was prepared to support the exchange rate in order to protect the British economy from a further deterioration of the country's terms of trade. Thus, the $1 billion Euro-bond issue by the Electricity Council and the sizable amounts of additional borrowings abroad by United Kingdom local authorities, all of which would be converted into sterling at the Bank of England under the exchange cover provision outlined in the March budget, were seen as bolstering reserves to permit a defense of the exchange rate despite an expected worsening of the trade accounts.

Consequently, the inflow of funds into London that began in mid-March accelerated even as money market rates in Britain backed off their peak levels. Recipients of sterling payments became more inclined to hold on to these balances while traders were increasingly willing to take on positions in sterling. Even release of figures showing a sharp worsening in the United Kingdom trade deficit in March failed to arrest sterling's progressive strengthening, and the spot rate advanced to the $2.48½ level by mid-April and to $2.50½ by early May. In mid-May, the intensifying speculative pressures against the dollar propelled the pound almost to $2.58 and, as sterling moved to the highest level since June 1972, the Bank of England

Chart V

UNITED KINGDOM

MOVEMENTS IN EXCHANGE RATE *



* See footnote on Chart I.

entered the market to moderate the pace of its advance. The pound briefly turned lower in response to another set of disappointing British trade figures and subsequent announcement of a substantial United States trade surplus for April. But, as the dollar weakened still further in late May and early June, the spot rate was bid up above the $2.58 level.

Meanwhile, however, the steady decline of London money market rates, contrasted with rising rates elsewhere, had eliminated most of the interest incentive for moving into sterling. Moreover, in view of the widely held expectation that the strong upswing in economic activity in Britain would lead to a further deterioration in the external payments position, the market was beginning to question whether current rates for sterling could be maintained. Consequently, the rise in sterling against the dollar in late May had already been less pronounced than the sharp increase in continental European rates, thereby producing a further substantial depreciation of sterling against the EC currencies. During June, the outlook for sterling became increasingly uncertain, especially as it seemed more likely that the government would face stiff union resistance to plans for Phase Three of its incomes policy. Also, London interest rates were continuing to fall, to levels that created strong interest incentives to move out of sterling. As increasingly chaotic trading conditions developed in exchange markets everywhere during the first week of July, sterling was hit by speculative selling. Even as the dollar dropped sharply *vis-à-vis* continental European currencies, sterling declined still further and, when the dollar began to rally, the pound lagged behind.

Then, later in the month sterling again began to slide in a sell-off which soon led to a drop in the rate to below $2.50 on July 26. As market sentiment turned against the pound, the British authorities took strong and decisive action to deal with the buildup of speculative pressures and outflows of funds prompted by a credit squeeze in Germany. To arrest an easing in the banks' reserve positions and to bring British interest rates more into line with those elsewhere, on July 19 the Bank of England called for additional special deposits for the first time since December 1972, requesting British banks to place on deposit 1 percent of the banks' total liabilities. This measure was followed by increases in the Bank of England's minimum lending rate from 7½ percent to 9 percent on July 20 and then to 11½ percent only one week later. Meanwhile, the Bank of England was strongly supporting sterling by intervening in dollars. On Friday, July 27, Chancellor of the Exchequer Barber asserted that sterling had become undervalued and that "I would not hesitate to use our ample reserves to protect our economy". As the British authorities thus made clear their intent to avoid a further severe decline of sterling and the Bundesbank relieved the money market stringency in Germany, the market pressures eased, and by the end of July sterling was trading above $2.50.

BELGIAN FRANC

For Belgium, the exchange market upheaval of late January-early February, leading to the devaluation of the dollar on February 12, occurred at a time of growing concern over domestic inflation. Consequently, from a monetary policy point of view, the heavy inflows of funds at that time were far from welcome. Following the announcement of the United States devaluation, the Belgian government established a new central rate corresponding to $0.024793 for the franc, allowing it to appreciate by the full 11.1 percent change in the dollar parity. Shortly thereafter, the authorities introduced an anti-inflationary package featuring limits on credit expansion. As a result, the franc was already firming when the renewed run on the dollar developed in late February and by early March, the National Bank was obliged to intervene at the new ceiling, taking in an additional $125 million.

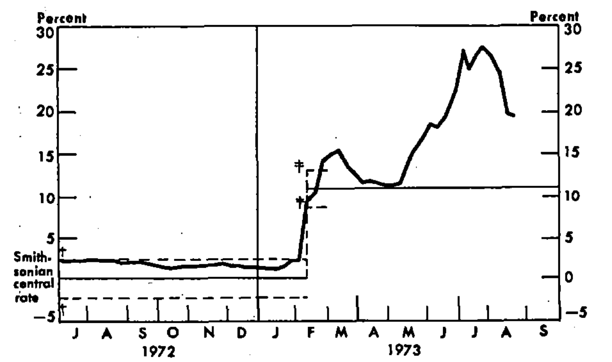
After the official closing of the Belgian market on March 2, trading remained nervous, as the authorities began to devise new regulations to prevent a further accumulation of nonresident commercial balances with Belgian banks. By the time the market was officially reopened, the authorities had established a negative interest charge of ¼ percent per week on any excess of nonresident balances above normal levels. Holders of francs unloaded some balances subject to this charge—thereby pushing down the spot rate—while maintaining their long position in francs by purchasing forward francs—thereby widening the forward premium. Once this adjustment had been completed, the spot franc moved more or less in line with the other EC currencies in late March and early April. Since liquidity conditions were somewhat tighter in Brussels than in Amsterdam, the franc tended to hold firmer than the guilder so that, while the two currencies eased progressively against the dollar through early May, there was occasional moderate intervention to maintain the 1½ percent Benelux band.

Early in May, the National Bank hiked its discount rate by ½ percentage point to 5½ percent, and so the franc had already begun to firm when the new rush out of the dollar began in mid-month. By early June, the franc was some 9 percent above its central rate, but already trailing behind the German mark which had become the focus of speculation. By June 27, as the demand for marks intensified, the franc joined the other currencies requiring substantial support at the bottom of the EC band, while rising to more than 12 percent above its central rate.

The June 29 mark revaluation resolved temporarily the strains on the snake, but in the week that followed there were enormous new pressures on the dollar in all Continental markets. Thus, by July 5, traders were finding it nearly impossible to get quotations or to do normal business. In just one week of extremely heavy demand, the franc had been pushed up some 6 percent to reach $0.029200 in New York, almost 18 percent above its central rate.

The market in Brussels turned dramatically around early the next week, as it did in other financial centers, following the meeting of central bank governors in Basle over the weekend of July 7-8. By the time the Federal Reserve's swap-line increases were formally announced on July 10, the Belgian franc had dropped 5¾ percent from its July 6 highs. In conjunction with intervention in German marks and French francs, this Bank began to sell Belgian francs, at first to consolidate the earlier gains and then to provide resistance to sharp reversals in the dollar rate. Over several days the Federal Reserve sold $6.0 million equivalent of francs, which were obtained by drawings under the swap line with the National Bank. These sales were on a much smaller scale than those of other currencies, reflecting the relatively small volume of trading in Belgian francs in the New York market. When the franc moved away from its upper range of the European band, the Federal Reserve suspended its intervention in francs.

Chart VI
BELGIUM
MOVEMENTS IN EXCHANGE RATE *



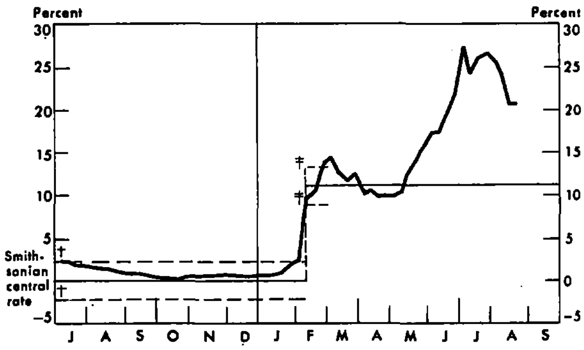
* See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.
‡ Upper and lower intervention limits around new central rate established on February 14, 1973. Limits suspended March 1, 1973.

NETHERLANDS GUILDER

In the aftermath of the February dollar devaluation, the Dutch authorities set a new central rate of $0.3424, and the guilder quickly moved up to trade near this level. The market remained badly shaken by the dollar's second devaluation, however, and when another rush out of dollars developed at the end of February, bids for guilders again flooded the market as traders took advantage of the relatively free access to the Amsterdam market at a time when other centers were being closed off by progressively tighter restrictions. The Netherlands Bank, once again obliged to absorb dollars, took in more than $750 million by the time the authorities officially closed the market on March 1.

Then, as negotiations to devise a European solution to the exchange crisis proceeded, the guilder market turned extremely thin. With traders hesitant to deal in the face of uncertainty over the outcome of these discussions and over possible new exchange controls in the Netherlands, even very small trades provoked wide rate fluctuations. Against this background, the guilder spurted up on the news of another mark revaluation in connection with establishment of a collective EC float against the dollar. Traders soon became convinced, however, of the Dutch government's resolve, in view of the persistently high

Chart VII
NETHERLANDS
MOVEMENTS IN EXCHANGE RATE *



* See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.
‡ Upper and lower intervention limits around new central rate established on February 14, 1973. Limits suspended March 1, 1973.

domestic unemployment, not to revalue the guilder. Moreover, the Dutch authorities, to curb potential speculative inflows, announced that a ¼ percent per week commission would be imposed on further increases in nonresident guilder deposits. As a result, the guilder was already falling back when the market was officially reopened on March 19. Nonresidents, moving to avoid the special commission but reluctant to unwind their positions, sought to switch out of spot and into forward guilders. Consequently, the spot rate soon fell to 1 percent below its new central rate while the forward premium widened sharply.

Even when the bulk of this repositioning had been completed, the guilder maintained its easier tone. By early spring the expansionary effect of the huge first-quarter inflows had brought short-term money rates down to virtually nil in Amsterdam and less than 2 percent in the Euro-guilder market. The Dutch authorities took successive steps to neutralize part of the monetary impact of the earlier inflows by raising the cash reserve ratio to 7 percent and by open market transactions. Nevertheless, they proceeded carefully so as not to hamper a reflow of funds. Therefore, as the immediate strains of the February-March currency crisis receded, funds were increasingly pulled out of Amsterdam by more attractive yields in other European financial centers. In addition, some earlier leads and lags in favor of the guilder were being unwound. These short-term capital outflows more than offset the continuing strength of the underlying payments position and the guilder slid to the bottom of both the EC snake and the narrower Benelux band by early April, requiring support under both arrangements. As nonresident balances subsequently declined to pre-February levels, the Netherlands Bank lifted the special commission.

In May and early June the guilder strengthened against the dollar, although it remained weak relative to other currencies in the EC joint float and continued to require support. With the mark at the top of the EC band, pressure on the guilder intensified. Therefore, even though Dutch interest rates were now noticeably firming following a ½ percentage point increase in the Netherlands Bank's discount rate, the guilder required increasing support to maintain the EC margins as the snake rose rapidly against the dollar. By late June, intervention against marks swelled to major proportions. In the four days prior to the June 29 mark revaluation, the Netherlands Bank was obliged to sell some $400 million equivalent of marks to stay within the band. Meanwhile, the guilder had been pulled up to $0.3831, almost 12 percent above its February central rate.

Following the mark revaluation, the guilder market settled down only briefly, and in the first week in July the guilder was again caught up in the speculative onslaught against the dollar. By July 5, trading had become tumultuous, as the market was flooded with rumors of another mark revaluation, a guilder revaluation, and a third dollar devaluation. As traders rushed from dollars into the European currencies, the guilder was pushed up above $0.4000 on July 6. In the chaotic market conditions prevailing that day, many New York banks refused to trade guilders and quotations were little better than indications, with bid-offer spreads exceeding ½ percent at times.

Release of the Basle communiqué that weekend and subsequent reports of expanded Federal Reserve swap lines helped reassure the market. The guilder dropped back to $0.3765 on hopes of large-scale United States intervention and traded quietly around this level for several days. This relative calm was then interrupted as the German liquidity crunch built up. As the mark moved 2¼ percent above the guilder, the Netherlands Bank again provided support against the German currency.

By the time the German money squeeze abated just before the end of July, the cumulative outflows from the Netherlands had worked to tighten domestic liquidity and thereby to encourage a firming of Dutch interest rates, which the Netherlands Bank validated by progressively raising its discount rate to 6½ percent. As monetary conditions firmed and short-term capital outflows subsided, the strength of the Dutch current account reemerged and the guilder, while easing nearly 2 percent against the dollar, began to move toward the top of the 2¼ percent EC band.

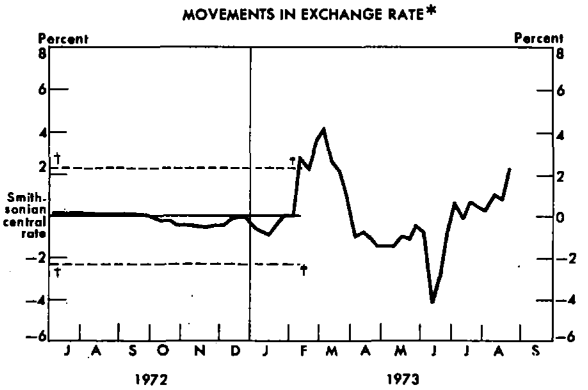
ITALIAN LIRA

Coming into 1973 the Italian economy was beset by sluggish growth and high unemployment coupled with rising inflation. This economic situation, against a background of political uncertainties and social unrest, provoked leads and lags against the lira and outright capital flight. After a long series of speculative attacks on the lira, on January 22 the Italian authorities had introduced a two-tier market for the lira, split between a commercial market in which the authorities would continue to intervene in support of the Smithsonian limits and a financial market where the lira would float freely. In the ensuing upheavals in the exchanges in late January and early February, the commercial lira remained under selling pressure, while the financial lira moved to a substantial discount.

The Italian authorities responded to the February 12 announcement of the proposed devaluation of the dollar by allowing the commercial lira to float, thereby withdrawing for the time being from the joint EC snake arrangement. When trading resumed on February 14, the commercial rate—at \$0.001765—was some 2⅝ percent above its abandoned Smithsonian central rate; at this level it had appreciated far less than the currencies of Italy's major European trading partners, which had moved up by 10 percent or more. At the same time the discount on the financial lira narrowed somewhat.

When the dollar fell under attack again in late February, the outlook for the lira was still beclouded by concern over the domestic labor situation. But as the rush out of dollars reached a climax on March 1, the lira also came into demand, and the commercial rate briefly rose as far as 9 percent above its Smithsonian central rate. This advance was not sustained, however, when in the subsequent negotiations it became apparent that Italy would not join the common European float against the dollar but would continue to float independently. Consequently, by mid-March the lira had slipped back to some 2¼ percent above the Smithsonian level for a further net depreciation against most European currencies.

Chart VIII
ITALY
MOVEMENTS IN EXCHANGE RATE*



*See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.
‡ Intervention limits suspended on February 13, 1973.

Except for a temporary boost late in March, the lira remained vulnerable to renewed selling pressure and it weakened late in April on release of figures showing a further widening in the trade deficit in January and February. With concern over the Italian economic and political situation continuing to overhang the market, the lira did not participate in the sharp upsurge of European rates against the dollar in early May. Indeed, the Bank of Italy continued to operate intermittently to keep the commercial rate from depreciating further against the currencies of its EC partners.

Toward the end of May and the first week of June the atmosphere in Italy's exchange market had turned even more sour. The long-simmering government crisis came to a head almost simultaneously with release of April balance-of-payments figures showing a sharp and contraseasonal deterioration in the overall current account. The Bank of Italy intervened only occasionally in the market, and in seven trading days the commercial rate tumbled about 7 percent while the financial lira fell even more sharply as capital outflows from Italy swelled.

On June 18, the caretaker government announced a package of credit measures designed to restore confidence in the lira and reduce the Italian inflation rate to levels prevailing in the rest of Europe without choking off Italy's incipient industrial recovery. These measures included a steep increase in the penalty charge for repeated use of the Bank of Italy's discount facility. Moreover, to redirect longer term investment into the securities markets, the Italian commercial banks were instructed to invest no less than 6 percent of end-of-1972 deposits in designated public and private bonds during 1973.

While making these announcements, the government noted the size of net official reserves and possible credits available under the EC and Federal Reserve swap networks. In addition, it announced supplementary central bank facilities and indicated that there would be further borrowing by state enterprises in the international markets. As a result, the market became persuaded that the Bank of Italy, its resources now bolstered by the additional credit facilities, would shortly resume intervention in support of the lira, and the spot rate strengthened along with other European currencies into early July. Meanwhile, the political situation had stabilized with the formation of a new coalition government under Premier Mariano Rumor. In addition, the Italian Foreign Exchange Office decided to unwind dollar swaps with the commercial banking system instead of renewing them as had been expected, a move which both underscored the magnitude of the exchange resources available and tightened domestic liquidity. Nevertheless, the Bank of Italy continued to intervene heavily in the market to keep the lira in line with other European currencies.

In late July, the Rumor government announced details of its new anti-inflation program, including a three-month freeze on selected food and industrial prices, and ceilings on the growth of bank loans for certain categories of clients. Also featured in the package was a massive $2 billion long-term Euro-dollar borrowing by several Italian public institutions that was designed to bolster official reserves. New exchange controls were also introduced to discourage destabilizing speculation in the exchange. The controls required that Italian residents put up to 50 percent of any foreign investment in a noninterest-bearing account with the authorities, that prepayment for imports be financed in foreign exchange, and that commercial banks maintain not only a balanced foreign exchange position overall, but separate balanced positions in United States dollars, EC currencies, and other currencies. The market reacted favorably to these announcements, and the lira soon began to improve in the exchanges.

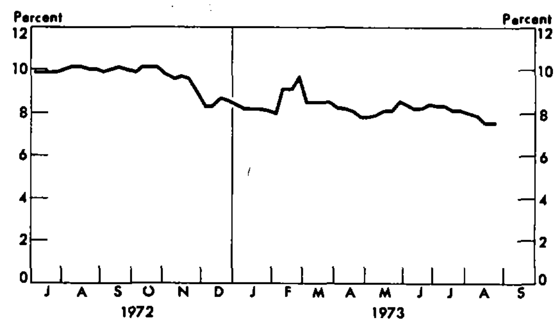
CANADIAN DOLLAR

In February, heavy demand for Canadian dollars erupted at the time of the devaluation of the United States dollar but, once that episode passed, the market relationship between the two North American currencies remained largely free of the speculative influences that afflicted other exchange markets. In fact, during the period under review, the spot Canadian dollar moved roughly in line with the United States dollar *vis-à-vis* European currencies. In general, the underlying forces affecting Canada's payments position were in rough balance, as a rise in imports stemming from more rapid expansion of the domestic economy was largely offset by a surge of exports, mainly commodities and raw materials. As a result, movements of the exchange rate over the spring and early summer mainly reflected shifting interest rate differentials in the nexus of Canadian and United States financial markets and the Euro-currency markets. Consequently, the Canadian dollar traded generally around $1.00 through early July. Then, following the particularly sharp run-up of interest rates in the United States in late July and early August, which was not matched in Canada, the spot rate eased to around the $0.99½ level.

Chart IX

CANADA

MOVEMENTS IN EXCHANGE RATE*



*Measured as percentage deviations from the $0.92½ official parity established in May 1962. The Canadian dollar has been floating since June 1, 1970.

JAPANESE YEN

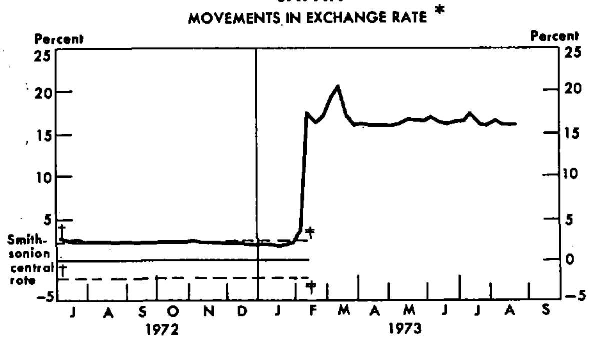
When the dollar was devalued on February 12, the Japanese authorities announced that they would permit the yen to float temporarily. The authorities nevertheless remained prepared to moderate rate movements in the Tokyo exchange market. Soon after trading resumed on February 14, the yen was in heavy demand and the spot rate was driven up to a level more than 17 percent above the Smithsonian central rate. Activity then subsided, and the yen edged lower through the end of February. When heavy pressure against the dollar reemerged in Europe, the Japanese authorities, acting in concert with the Europeans, decided to close the Tokyo market on March 2.

With the markets closed during the first half of March, there were no interbank transactions in Tokyo either in spot or forward dealings. Following the March 16 Paris communiqué of the Group of Ten Finance Ministers, normal trading in yen was resumed and a strong reversal of earlier speculation in favor of the yen started to emerge. By late March the dollar had strengthened in Tokyo in response to a variety of factors. The rapid expansion of the Japanese economy and the 1971 revaluation of the yen had already stimulated import demand, particularly for raw materials and industrial commodities, and the boom in world commodity prices produced a further escalation in the cost of Japanese imports. At the same time, various official limits on export growth instituted last year were beginning to have a restrictive effect. Moreover, the leads and lags built up in the months prior to the floating of the yen were now being unwound, a sign that the market did not expect a further sharp rise of the yen rate in the near future. Furthermore, long-term capital outflows swelled, as Japanese interests stepped up their participation in international financial markets, nonresidents liquidated a sizable amount of their investments, and Japanese firms also increased their direct investment abroad. All of these factors combined to generate a persistent demand for dollars in Tokyo, and the Bank of Japan, intervening at some 16 percent above the Smithsonian central rate, sold about $4 billion of reserves between mid-March and the end of June.

These shifts in the Japanese payments position so dominated developments in the Tokyo market that there was little response to a series of discount rate increases by the Bank of Japan, which brought the rate to 6 percent from 4¼ percent by early summer. Furthermore, there was only a slight reaction to the buildup of pressures on the dollar in Europe in May. Dealers expressed concern over the implications for the yen of the June 29 revaluation of the mark, but the Japanese authorities quickly responded by emphasizing that the German action, designed to correct an isolated problem within Europe, should have no impact on the yen.

When the dollar came under pressure early in July, however, the yen market became fearful of the threat posed by deteriorating market conditions elsewhere and the spot yen was bid up as much as 5 percent. Trading then settled down following the BIS communiqué and subsequent enlargement of the Federal Reserve swap network. The yen then backed off to earlier levels and, over the remainder of July, the Bank of Japan resumed its dollar sales in the exchange market.

Chart X
JAPAN
MOVEMENTS IN EXCHANGE RATE *



* See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.
† Intervention limits suspended on February 14, 1973.

EURO-DOLLAR

The deepening crisis in the exchanges early this year, not unlike monetary disturbances in the past, left a distinct mark on supply and demand patterns as well as on rates in the Euro-dollar market. As traders and investors in many parts of the world increasingly covered their dollar exposure by means of forward sales, banks in Europe and elsewhere that had purchased those forward dollars from their customers sought to even out their positions by borrowing Euro-dollars and selling the spot proceeds in the exchanges. Speculative borrowing of dollars for conversion into stronger currencies was also an important market factor early this year. In addition, some Euro-dollar investors, notably in less developed countries without well-functioning forward markets for their own currencies, decided to reduce their stake in the market by sizable amounts.

These changes in the pattern of supply and demand, together with rising United States money market rates, drove Euro-dollar rates steadily higher. By the end of February, the one-month Euro-dollar rate was above 9½ percent, up from about 6 percent at the beginning of the year. The currency crisis, in turn, induced a massive movement of funds from the United States into the market, as foreign banks withdrew balances previously placed and borrowed heavily on outstanding credit lines with United States banks or from their agencies, branches, and other affiliated institutions in this country. At the same time, these foreign subsidiary institutions in the United States and, to a lesser extent, United States banks repaid large amounts of maturing dollar borrowings that they had previously drawn from the market. Supplies in the market were also enlarged by additional deposits, particularly from governments and central banks in several developing countries.

In the wake of the February crisis and the dollar's devaluation, the authorities of several continental European countries introduced a variety of regulations in defensive moves to deter further speculative inflows into their countries. Some of them imposed stiffer reserve requirements and even negative interest charges on increments to nonresidents' deposits at domestic banks. Several governments, moreover, imposed additional restrictions

Chart XI

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

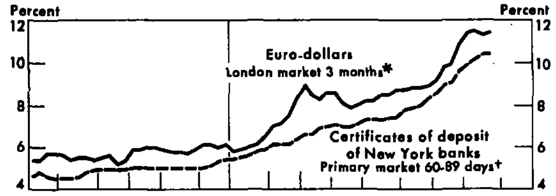
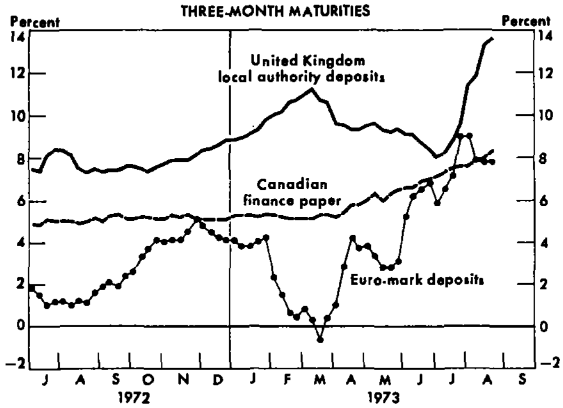


Chart XII

SELECTED INTEREST RATES IN THE UNITED KINGDOM, WEST GERMANY, AND CANADA

THREE-MONTH MATURITIES



*Weekly averages of daily rates.
†Wednesday data.

on corporate borrowings from the Euro-dollar market and in some cases prohibited such borrowings altogether, forcing banks operating in the market aggressively to seek new customers in other overseas loan markets. In the process, they not only relaxed already low credit standards, but also permitted interest rate margins to narrow further.

Substantial demands for Euro-dollar loan facilities continued to originate among traditional users, large amounts being employed for the financing of trade with eastern Europe and for British direct and portfolio investment abroad. In the spring and summer these borrowings were augmented when both the British and Italian governments, to cushion balance-of-payments pressures, encouraged public bodies in their countries to draw very large amounts from the market. In the United Kingdom, the Chancellor of the Exchequer announced in his budget statement of early March that certain public bodies would again be allowed official exchange cover facilities for foreign currency borrowings. As a result, local authorities and public corporations began to enter into very heavy borrowing commitments, the Electricity Council alone contracting for a $1 billion ten-year loan. Similarly, several Italian state institutions raised very large loans in the medium-term Euro-dollar market. These borrowings served to replenish monetary reserve holdings in the two countries.

In the United States, the Board of Governors of the Federal Reserve System made several regulatory changes that are now beginning to affect the demand of banks in the United States for Euro-dollar balances. In mid-May, the Board amended Regulations D and M to reduce from 20 percent to 8 percent the reserve requirements applicable to certain foreign borrowings of United States banks to the extent that they exceed the applicable reserve-free base of each bank. In addition, the reserve-free bases would be phased out. On June 1, the Board requested the agencies, branches, and nonmember bank subsidiaries of foreign banks to maintain voluntarily reserves of 8 percent against any increases above the May level in net funds obtained from banks abroad, including their head offices and other directly related institutions. The revision in the rules for United States banks and the reemergence of a market incentive for United States banks to acquire Euro-dollars in lieu of purchasing Federal funds contributed to a step-up in their borrowings from their foreign branches.

Euro-dollar rates, which had been surprisingly stable during the period of exchange rate disturbances in the spring and early summer, began to escalate again late in July as exceptionally high money market rates in Germany exerted a strong pull on rate levels in other money markets. Moreover, money market rates in this country were also rising to very high levels. Throughout August, rates for three-month Euro-dollars remained in the 11¼ to 11¾ percent range.

The international monetary uncertainties, together with soaring interest rates in the short end of the Euro-currency market, resulted in a severe contraction of the Euro-bond market, most notably its dollar-denominated segment. Indeed, during the periods of greatest currency unrest it became extremely difficult, if not impossible, to offer successfully to the public even mark-denominated issues. On balance, however, the pressure on the dollar seemed to have encouraged a further expansion of the role of other currencies in this market. Moreover, many of the needs of traditional Euro-bond borrowers are now being met by the medium-term Euro-currency market.