

# FEDERAL RESERVE BANK OF NEW YORK



## MONTHLY REVIEW

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## Treasury and Federal Reserve Foreign Exchange Operations\*

By CHARLES A. COOMBS

In mid-July 1972 the exchange markets were still suffering under the impact of the massive flows of funds generated by the sterling crisis. As this speculative wave crested, the Federal Reserve for the first time since August 15, 1971 undertook active intervention in the exchange markets. On United States initiative and with the approval of the German Bundesbank, the first exchange operation was launched on July 19 in the form of repeated offerings by the Federal Reserve Bank of New York of German marks in the New York market. Subsequently, intervention was also undertaken in a second European currency, the Belgian franc. These actions, coupled with the demonstrated readiness of other central banks to defend their exchange rates, helped to generate a gradual strengthening of the dollar over the late summer, despite large accumulating deficits in the United States balance of payments on both trade and overall account. Consequently, fears of a breakdown in the Smithsonian arrangement that had plagued the market for so many months began to recede.

In this setting, the sharp rise in United States money market rates that began in late August was a further boost to market confidence. At about the same time, moreover, the market was beginning to react to signs of improvement in the United States trade position, which had deteriorated badly in the first half of the year. Finally, it became clear that the winds of inflation were blowing increasingly strongly throughout Western Europe at a time when

United States efforts to curb inflation were demonstrating growing success. Thus, as the International Monetary Fund's annual meeting at the end of September approached, the dollar was showing increasing strength and the exchange markets were more relaxed than they had been for some time.

The IMF meeting was conducted in an atmosphere of cooperation that generated new optimism regarding progress on monetary reform and helped further to calm the exchange markets. In particular, the speech of Treasury Secretary Shultz to the meeting was seen as marking a major step forward, as the Secretary set forth a number of specific proposals for consideration in a statement that was widely regarded as conciliatory and cooperative in tone. The Fund meeting concluded with the appointment of a Committee of Twenty, broadly representative of the Fund membership, to consider monetary reform and the appointment of a Committee of Deputies to carry on the detailed discussions looking toward a preliminary report to be ready for the 1973 annual meeting.

At the beginning of October the Swiss authorities decided to sell off some of the dollars they had acquired earlier in the year, in large part with the objective of absorbing excess domestic liquidity. The market interpreted the sales, however, as putting a floor under the Swiss franc and as indicating that other European central banks also would take advantage of any further improvement in the dollar to reduce their holdings.

In general, European monetary authorities saw the improvement of the dollar as providing them with an opportunity to move more forcefully in the fight against increasingly virulent inflation. Thus, over the course of the fall monetary policy in Europe was tightened progressively, both through changes in reserve requirements and through increases in discount rates. The consequent rise in European interest rates became a disturbing influence

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\* This report, covering the period September 1972 to March 9, 1973, is the twenty-second 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 9, 1973**  
 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
<b>Total</b> .....	<b>11,730</b>

on the exchange markets as it threatened to erode the inducement to move funds to the United States. Moreover, in the background loomed the persistent massive trade surplus of Japan. As Japanese official reserves rose steadily day after day, the markets became increasingly persuaded that a further adjustment in the yen exchange rate was unavoidable. Nevertheless, the growing inflow of funds for investment in United States securities markets helped hold the dollar steady with respect to most of the Continental currencies through December. In midmonth, however, there was a sharp setback to confidence with the release of figures showing a deterioration in the United States trade position in November, the first weakening after several months of steady improvement.

January began on a worrisome note, with no significant improvement in the dollar despite the passing of year-end pressures. Later in the month, the exchange market atmosphere deteriorated rapidly, in part because of apprehension over the risk of renewed inflationary pressures in the United States and the sharp drop in United States stock prices. The international financial community, which had been concerned almost exclusively with European infla-

tion, shifted the focus of its attention once again to the problem of controlling the rise in prices in this country. In this context, the markets became concerned that interest rates in the United States might not be permitted to rise sufficiently, even though short-term market rates of interest were rising sharply at the time.

In this atmosphere, the January 20 decision of the Italian authorities to introduce a two-tier market for the lira had psychological repercussions extending far beyond the Italian market. The immediate impact was felt in Switzerland, in part because of the close financial ties between the two countries, but also because the Swiss franc among all the European currencies was the only one close to its Smithsonian ceiling. The battle against inflation in Switzerland had for some months been fought largely with monetary policy and, as liquidity conditions had tightened steadily, the Swiss franc had been bid up close to its ceiling. In these circumstances, efforts by Italian banks to adjust to the new exchange system by purchasing Swiss francs to cover outstanding indebtedness contributed to strong demand for francs, and the National Bank took in some \$270 million as the rate moved up to its ceiling. With further heavy dollar inflows expected, the Swiss authorities feared that their anti-inflationary efforts would be undermined if they continued to defend the intervention level. It was decided, therefore, to permit the Swiss franc to float temporarily until the market had a chance to calm down. When the franc immediately jumped well above its Smithsonian ceiling, speculative pressures began to emerge in other markets, particularly in Germany where the mark began to advance rapidly.

In the nervous and uncertain climate that was beginning to develop, the United States and German authorities quickly agreed on a cooperative effort involving intervention in the market by the Federal Reserve to slow the rise in the mark and maintain an orderly market. When data were released on January 24 showing a further increase in the United States trade deficit for December, the mark began to rise more rapidly and the Federal Reserve Bank of New York began offering marks in the New York market. Over the course of the day, some \$30 million of marks was sold at progressively higher rates, and by the close the mark had eased from its peak level of the day. Over the next two days, the Federal Reserve made further modest sales and the mark moved slightly lower.

On the following Monday, German trade data were released showing the substantial growth in the trade surplus during 1972, and the mark again began to move up strongly in heavy demand. The Federal Reserve intervened again in an effort to keep the mark off its ceiling, where a progressive buildup of speculation might well occur. The

market became increasingly gloomy, however, and the mark reached its ceiling on Thursday, February 1, forcing the Bundesbank to intervene for the first time in this period. The Federal Reserve followed up this intervention with additional sales of marks in New York. At the same time, the Dutch guilder also began to rise sharply, and this Bank entered the market and sold guilders to slow the rise in the rate. Until this point, all intervention in the New York market had been for Federal Reserve account, based on existing mark and guilder balances accumulated during the latter part of 1972. On Friday, February 2, the last of the available mark balances was sold and, in addition, mark sales were made for United States Treasury account out of its existing balance.

Over the course of the following week, intervention continued in an effort to keep the mark from rising unduly high above its ceiling in New York in a deteriorating market climate. Reports, though false, that the United States had suggested a floating of the mark and that Germany was considering a two-tier market, and the assertion by a prominent United States Congressman that the dollar was still generally overvalued, contributed to the growing conviction in the market that the existing pattern of exchange rates would not survive. In this atmosphere the flow of funds into Germany assumed increasingly massive proportions. By the close on Friday, February 9, the Bundes-

bank's reserve gain for the seven trading days of the month had mounted to nearly \$6 billion, while sales of marks in the New York market by the Federal Reserve Bank of New York came to a total of \$318.6 million. These sales were covered by \$167.4 million of Federal Reserve balances, \$46.6 million of Treasury balances, and Federal Reserve drawings of \$104.6 million on the swap line with the Bundesbank. In addition, \$20.4 million worth of guilders had been sold.

With intensive international negotiations under way, the decision was made over the weekend to close the European and Japanese exchange markets on the following Monday and Tuesday. On the evening of Monday, February 12, Treasury Secretary Shultz announced that the dollar would be devalued by 10 percent and that, in addition to those currencies already floating, it was understood the Japanese yen would be allowed to float temporarily. During the international discussions, it became clear that there was widespread agreement that the exchange rate realignment should be fully adequate to accomplish the common objective of placing international payments firmly on the road to equilibrium. In recognition of this agreement, almost all developed nations then operating on the basis of par values or central values allowed the market relationships between their currencies and the dollar to reflect the full devaluation of the dollar. When the ex-

**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, 1972	Drawings (+) or repayments (-)					System swap drawings outstanding on March 9, 1973
		1972				1973	
		I	II	III	IV	January 1-March 9	
National Bank of Belgium .....	455.0		- 20.0	{+ 10.2 {- 10.2	{+ 35.0 {- 55.0	- 25.0	390.0
Bank of England .....	715.0		- 52.0	-663.0			-0-
German Federal Bank .....	50.0			- 50.0		{+104.6 {-104.6	-0-
Swiss National Bank .....	1,000.0		-300.0		-130.0	- 5.0	565.0
Bank for International Settlements (Swiss francs) ....	600.0						600.0
Bank for International Settlements (Belgian francs) ..	35.0				- 35.0		-0-
<b>Total</b> .....	<b>2,855.0</b>	<b>-0-</b>	<b>-372.0</b>	{+ 10.2 {-723.2	{+ 35.0 {-220.0	{+104.6 {-134.6	<b>1,555.0</b>

**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, 1972	Drawings (+) or repayments (-)				Drawings on Federal Reserve System outstanding on December 31, 1972
		1972				
		I	II	III	IV	
Bank for International Settlements (against German marks).....	—0—	{+8.0 {-8.0}	{+6.0 {-6.0}	{+1.0 {-1.0}	{+4.0 {-4.0}	—0—
<b>Total</b> .....	—0—	{+8.0 {-8.0}	{+6.0 {-6.0}	{+1.0 {-1.0}	{+4.0 {-4.0}	—0—

change markets reopened, the European currencies traded well below their new central rates, but there was no immediate unwinding of the earlier flows of funds.

At the beginning of the following week, however, the dollar reached its ceiling against the mark and the Bundesbank was able to sell nearly \$1 billion while the Federal Reserve covered its swap commitments. Nevertheless, it was clear already that the devaluation had come as a profound shock to dollar holders around the world. Thus, while some traders took profits in marks and Swiss francs, there were significant new flows of funds into those currencies. Despite the major adjustment in exchange rates as a result of 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 any renewed inflow. Moreover, the market situation was exacerbated by the continued floating of the Swiss franc, which by then had appreciated significantly more than other European currencies.

In short, the markets were unconvinced that the crisis was over, and indeed by Friday, February 23, the dollar had fallen to its new floor against the mark, French franc, guilder, and Belgian franc. After the weekend there was a brief respite, but on Thursday, March 1, there was an unprecedented rush into the Continental currencies in which European central banks had to purchase more than \$3.6 billion to maintain the exchange rate limits. That night it was announced that the exchange markets would be officially closed until further notice, and arrangements were made for an emergency meeting of the European Finance Ministers over the weekend. Exchange markets in Europe and Japan remained officially closed during the week of March 5-9, with the dollar generally quoted below

its new floor rates in light trading.

During the period under review, the United States authorities made further progress in paying down foreign-currency indebtedness incurred prior to August 15, 1971. In view of the calmer conditions that emerged for the dollar late last summer, the Federal Reserve began a program of systematically purchasing in the market on a modest daily basis, first Swiss francs and later Belgian francs, and by early 1973 had made aggregate swap repayments of \$135 million equivalent to the Swiss National Bank and \$80 million to the National Bank of Belgium (see Table II). A \$35 million equivalent Belgian franc swap commitment to the BIS was consolidated at maturity in November with commitments to the National Bank of Belgium. As of March 9, System swap commitments totaled \$1,555 million equivalent, or 49 percent less than the \$3,045 million peak of August 1971. For its part, the United States Treasury repaid at maturity three German mark-denominated securities with marks either in balance or purchased from the Bundesbank (see Table IV). Other foreign-currency-denominated securities were renewed when they matured. As of March 9, outstanding United States Treasury foreign-currency-denominated securities totaled nearly \$1.6 billion equivalent.

#### GERMAN MARK

In June and July 1972, the German mark had borne the brunt of the massive speculative rushes, first out of sterling and then, after sterling was allowed to float, out of the dollar. In meeting this demand for marks while keeping the rate within official intervention limits—of both the Smithsonian agreement and the EC narrow band ar-

rangement—the Bundesbank had been obliged to take in \$4.5 billion of foreign exchange. Pressures remained strong until, in a meeting in London on July 17-18, the EC Finance Ministers made clear their determination to maintain the Smithsonian rate structure. Then, on July 19 the Federal Reserve resumed operations in defense of the dollar by offering marks in the New York market.

The System's total offerings of marks in July and August were fairly substantial but, as the market backed away from these offerings, the actual sales amounted to a modest \$21.4 million equivalent. The sales were made out of previously accumulated balances. As the mark continued to decline, the Federal Reserve subsequently began to purchase marks in the market to build up its balances.

By early September, there was a decided improvement in the atmosphere for the dollar. At the same time that the markets tended to calm down, the exchange control measures taken by the German authorities earlier in 1972 began to bite. Consequently, during the course of September, the German mark continued to ease, along with most other continental European currencies. This decline accelerated late in the month, as the markets responded favorably to developments at the annual IMF meeting in Washington. The decline of the spot mark continued into early October and the rate reached \$0.3109¼, only ¼ percent above its Smithsonian central rate.

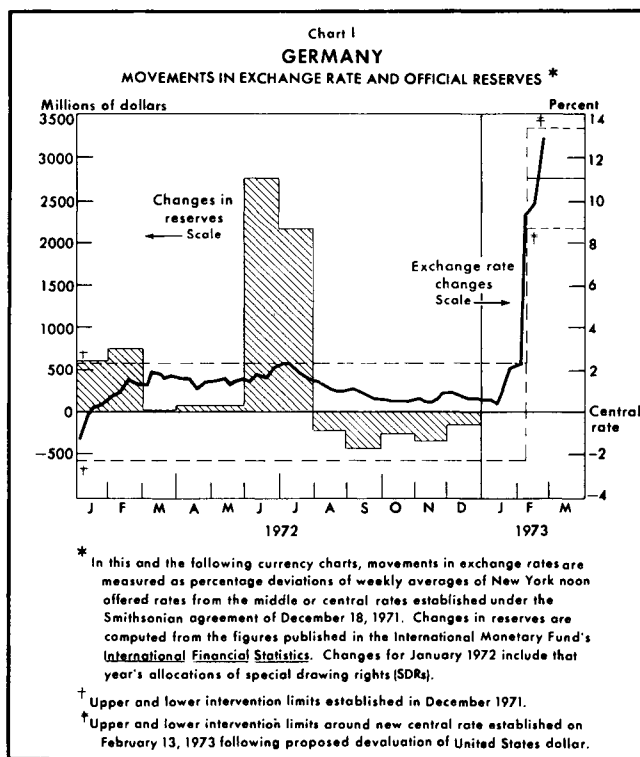
Throughout the period of decline of the mark, traders had been watching for any sign that the Bundesbank might openly enter the market as a seller of dollars, and on October 2, when the Swiss National Bank sold a substantial amount of dollars, the market came to expect that the Bundesbank would soon follow suit. The selling of marks quickly dried up, some traders actually began buying marks in anticipation of somewhat higher rates, and the spot mark advanced to about ½ percent above the central rate before leveling off. By this time, Germany's current account had slipped into deficit—even though the trade account remained in substantial surplus—and German investors were purchasing an increasing volume of United States securities. With the mark still away from its ceiling, the Bundesbank took the opportunity to sell modest amounts of dollars on a day-to-day basis.

Meanwhile, the domestic economy had entered a new phase of expansion, accompanied by unrelieved upward pressure on wages and prices. In addition, as the domestic liquidity generated by previous hot money inflows had been only partly sterilized by higher reserve requirements, the money market remained relatively easy. Thus, the liquidity situation and economic tendencies in Germany suggested the need for policies of domestic restraint. To some extent, the movement of the mark away from its

ceiling, together with tightened exchange controls, provided the authorities with room to maneuver, but the German authorities remained sensitive to the implications that a move to credit restraint might have for the exchange markets. The massive speculative inflows of 1971-72 were only slowly being unwound, and an increase in interest rates in Frankfurt could dampen any further reversal of the outflows and perhaps even trigger a new wave of money inflows.

Against this background, the German authorities moved cautiously to tighten domestic liquidity. On three separate occasions, on October 9, November 3, and December 1, the Bundesbank raised its lending rates, hiking the discount rate from 3 percent to 4.5 percent and the Lombard rate from 4 percent to 6.5 percent. Moreover, significant reductions in the discount quotas of the banks were announced. The progressive tightening of monetary policy in Germany came at a time when other EC central banks were moving in the same direction, as had been agreed by the EC Finance Ministers in late October.

The market took this tightening of monetary policy in stride as the dollar continued generally firm in Europe. Despite occasional fluctuations in the rate provoked by



**Table IV**  
**UNITED STATES TREASURY SECURITIES**  
**FOREIGN CURRENCY SERIES**

In millions of dollars equivalent

Issued to	Amount outstanding on January 1, 1972	Issues (+) or redemptions (-)					Amount outstanding on March 9, 1973
		1972				1973	
		I	II	III	IV	January 1-March 9	
German Federal Bank .....	612.0	-76.5		-76.5	-153.0	-153.0	153.0
German banks .....	153.0				-153.0		-0-
Swiss National Bank .....	1,215.4						1,253.8
Bank for International Settlements* .....	164.8						171.6
<b>Total</b> .....	<b>2,145.2</b>	<b>-76.5</b>	<b>-0-</b>	<b>-76.5</b>	<b>-306.0</b>	<b>-153.0</b>	<b>1,578.4</b>

Note: Discrepancies in totals result from valuation adjustments and from rounding.

\*Denominated in Swiss francs.

developments outside Germany, the mark traded in a range of  $\frac{1}{2}$  to  $\frac{3}{4}$  percent above the Smithsonian central rate. It also remained comfortably within the EC band, trading during most of the fall below the Danish krone, the Belgian franc, and until December the French franc. Taking advantage of relatively attractive rates, the Federal Reserve continued to make small daily purchases of marks in the market to provide balances for intervention in the exchange markets should the need arise.

At the start of the new year, the mark eased further and by Friday, January 19, was trading only  $\frac{1}{4}$  percent above its central rate, the lowest level since October. Over that weekend, however, the Italian authorities introduced a two-tier market for the lira, and on January 23 the Swiss authorities decided to allow the Swiss franc to float. In response to the sharp jump in the Swiss franc, the German mark was quickly bid up by  $1\frac{1}{4}$  percent and other European currencies rose as well.

Over the next few days, in cooperation with the Bundesbank and with the full concurrence of the United States Treasury, the Federal Reserve intervened in the New York market, selling marks in order to prevent the rate from reaching its ceiling and generating more speculative flows. Although the rate backed off temporarily in response to this intervention, the continuing rise in the Swiss franc relative to other European rates tended to pull the mark and other currencies along. Moreover, the mar-

ket was aware that the mark was now the major European currency which was neither floating nor on a split market basis, and there was widespread discussion of a test of the resolve of the German authorities to hold to the Smithsonian intervention point. Demand for marks continued to swell in a deteriorating market atmosphere. On February 1-2, the rate reached the ceiling and the Bundesbank was obliged to take in more than \$1 billion over the two days. By that time, the Federal Reserve also was intervening in New York more forcefully than before in order to keep the mark from going through its ceiling.

That weekend, the German authorities imposed tough, new restrictions against capital inflows. Nevertheless, by the following Monday, the crisis had escalated with news reports that the United States had suggested a floating of the mark. Subsequent reports that Germany was considering a two-tier market and the assertion by a prominent United States Congressman that the dollar was overvalued stirred up even greater speculation in the market. Over the week of February 5-9, the Bundesbank purchased a further \$4.9 billion in holding to the Smithsonian ceiling for the mark, while the Federal Reserve continued to intervene in New York on each day after the European close. For the period January 24-February 9, sales of German marks by this Bank amounted to \$318.6 million equivalent, of which \$167.4 million represented sales from System balances, \$46.6 million from United States Treasury balances,

and \$104.6 million from Federal Reserve drawings under the swap line with the Bundesbank. Over that weekend, there were intensive international negotiations in an effort to resolve the crisis. Official exchange market dealings were suspended in Germany on Monday, February 12, although commercial banks traded marks at considerable premiums over the Smithsonian ceiling. That evening, Treasury Secretary Shultz announced the proposed devaluation of the United States dollar, and on the following day the German authorities announced that there would be no change in the gold value of the German mark. As a result, the central rate for the mark appreciated by the full 11.1 percent commensurate with the dollar's devaluation. At the same time, new intervention limits were set for the mark at 2¼ percent on either side of the central rate.

When regular trading in marks resumed on February 14, there was an enormous overhang of speculative holdings of marks, largely in the form of deposits with German banks. Thus, although the exchange markets remained nervous and unsettled, and other currencies traded well away from the new floors against the dollar, the mark came on offer. It reached its new floor on February 19-21, and the Bundesbank sold nearly \$1 billion. At the same time, the Federal Reserve purchased sufficient marks from the Bundesbank to repay the swap drawings entered into prior to the devaluation of the dollar. Subsequently, in the continuing atmosphere of uncertainty in the exchange markets, the mark was bid up sharply, reaching its new ceiling on February 23. Although the rate was off the ceiling in the first part of the following week, the atmosphere continued to deteriorate, and on Thursday, March 1, the Bundesbank took in a record amount of more than \$2.6 billion. The German authorities then closed the market, and a new round of discussions began.

During the period under review, the United States Treasury purchased from the Bundesbank sufficient marks to redeem at maturity in October and in February two \$153 million equivalent mark-denominated securities held by that bank. In addition, the Treasury utilized balances acquired prior to the mark revaluation of 1969 to pay off at their December maturity \$153 million equivalent of mark-denominated securities issued in 1968 to German banks.

#### SWISS FRANC

By early July, in the wake of sterling's float, the Swiss authorities had resumed official dealings on the basis of the Smithsonian central rate and limits but had also imposed a battery of new controls to discourage capital inflows. Nevertheless, in the generalized speculative turmoil that

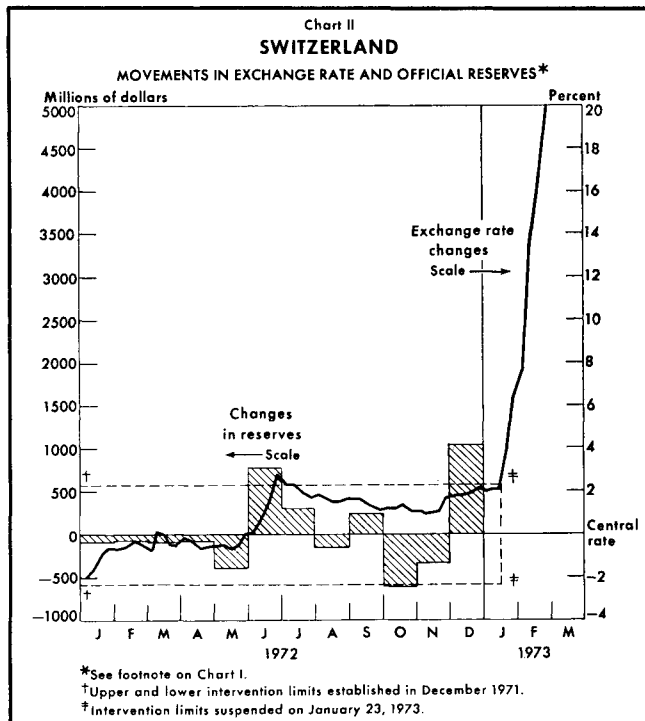
had continued through midmonth, the Swiss National Bank had been obliged to take in \$1.3 billion at the Smithsonian ceiling. In the subsequent turnaround, the franc had edged away from its ceiling. The decline had been gradual at first but became more pronounced after mid-August, when the general atmosphere in the exchanges improved and traders reportedly were beginning to reduce some of the long positions in francs taken the month before. The Swiss franc liquidity generated by the July inflows also had helped soften the spot rate as there was some switching out of francs, on which interest rates were minimal. The reversal had been far from complete, however, and the franc had held well above its central rate.

The Swiss authorities had mainly relied upon adjustment in reserve requirements to mop up a portion of liquidity created by the July inflows of foreign exchange. These measures were not sufficient, however, to restrict credit expansion that, by September, had already exceeded the limits set forth in a previous gentleman's agreement. Consequently, the authorities feared that, in the absence of strong restraints on lending, the excess liquidity still in the hands of the banks would compound the severe inflationary pressures long troubling the economy. Several additional measures were discussed with the banks in late August and early September. But, as the exchange market was still in tenuous balance, the authorities chose simply to grant greater access to the Swiss capital market to foreigners and to increase the proportion of such borrowings that had to be converted into dollars at the central bank.

By late September the markets were responding favorably to the improved atmosphere of the IMF annual meeting. In the general strengthening of the dollar that developed at that time, the cutting out of long positions in francs accelerated and the franc rate dropped to within 1 percent of its central rate. As the rate continued to fall, the Swiss National Bank on October 2 sold more than \$200 million in the exchange market, with the dual objective of mopping up excess bank liquidity and reducing its dollar reserves. This substantial intervention not only had its expected impact on domestic liquidity, but also tended to reinforce market expectations that a further strengthening of the dollar might be resisted by official dollar sales by the Swiss or by other European central banks. Consequently, the spot franc turned upward and remained away from the lowest point at which the National Bank had intervened, a level which traders began to view as an effective floor for the franc for the time being.

The markets were generally quieter in October, and the National Bank suspended the requirement that banks maintain either long or balanced overall foreign exchange





positions. Nevertheless, by then the various measures taken by the Swiss authorities to absorb liquidity were beginning to bite. To prevent a squeeze from developing at the end of October, the National Bank provided some \$145 million in short-dated swaps and released a further \$100 million equivalent of francs through temporary adjustments in reserve requirements. With the demand for franc liquidity thus defused, the spot exchange rate moved on an easier trend into early November.

As Switzerland's rate of inflation was running in excess of 7 percent, political pressures were building for effective measures to bring it under control. In the absence of strong fiscal powers in the hands of the Confederation, the focus of the anti-inflationary effort turned increasingly to monetary policy. On November 22, the central bank informed the banks—which were already heavily loaned up and were beginning to position themselves for month-end needs—that it would not provide swaps as it had in October. The prospect of renewed pressure at the month end led to a brief run-up of the spot franc until a recalculation of required reserves led to a sufficient injection of francs by the National Bank to turn the situation around.

In late November, however, the Swiss National Bank indicated firmly that it would provide only part of the

banks' year-end needs, with one-month swaps beginning on December 4 and with seven-day swaps later in the month. This move was intended to reinforce the central bank's earlier attempts to reduce bank liquidity at the same time that the government was developing a comprehensive anti-inflationary package to be presented to Parliament the following week. As the market assessed the need for francs for the year-end and awaited the government's package, rumors that the Italian lira would be allowed to float touched off rumors of a possible float or revaluation of the Swiss franc as part of the government's program. The Swiss franc rose to within ½ percent of its ceiling by the time the government formally announced its plans for curbing inflation on December 4. The package was heavily weighted with monetary measures, including proposed statutory authority for the National Bank to impose lending ceilings and new reserve requirements. In addition, it included controls of bond issues, a three-year extension of the export deposit scheme, limits on depreciation allowances, and the establishment of an office of price "surveillance". Since a float or revaluation of the franc had been excluded, the franc rate dropped back briefly. The rate firmed again after midmonth, however, as Swiss banks began bidding actively for francs for year-end purposes. The National Bank ultimately provided them with \$1.2 billion in swaps and, although the franc reached its Smithsonian ceiling on December 27, the central bank did not have to take in dollars on an outright basis.

Meanwhile, from the late summer, the Federal Reserve had been making modest day-to-day purchases of francs in the market. These francs were used in partial repayments of outstanding swap drawings with the Swiss National Bank. By the year-end, outstanding drawings in Swiss francs had been reduced by \$130 million, and a further \$5 million repayment was made in early January. As a result, on March 9, 1973 total indebtedness in Swiss francs stood at \$1,165 million, including \$600 million with the Bank for International Settlements (BIS), all incurred before August 15, 1971.

Even after the passing of the year-end, the Swiss franc remained firm as the liquidity squeeze at the banks continued unabated. Early in January, before the year-end swaps had been liquidated, the banks began to position themselves once more against the possibility of a squeeze for balances at the month end. Under its new powers the National Bank established a stiff 6 percent limit on credit expansion by the banks for the year ending July 31, 1973. Nevertheless, with heavy loan commitments already on their books, the banks were hoping for a permanent infusion of franc liquidity through outright dollar purchases by the National Bank. Instead, the National Bank an-

nounced that it would provide temporary assistance at the end of January and would lift the requirement that a proportion of all loans to foreigners be converted into foreign exchange at the central bank. Despite these measures, the banks' appetite for liquidity was not satisfied, and by midmonth the franc was just  $\frac{1}{4}$  percentage point away from its upper limit.

On Friday, January 19, the National Bank announced increases in its discount rate by  $\frac{3}{4}$  percentage point to  $4\frac{1}{2}$  percent and in its Lombard rate by  $\frac{1}{2}$  percentage point to  $5\frac{1}{4}$  percent. These increases, the first since 1969, reinforced the Swiss banks' concern over their liquidity positions, especially as the hikes were to come into effect just as the bulk of the remaining year-end swaps was to be unwound on the following Monday, January 22.

Over that weekend, the Italian authorities announced that they were instituting a two-tier market for the lira. This immediately added to tensions in the market for Swiss francs, mainly because it introduced a new element of uncertainty, but also because Italian banks began buying Swiss francs to repay indebtedness. The franc thus quickly moved toward its upper limit. The Swiss National Bank tried to stop the rise by purchasing \$200 million, thereby supplying enough francs for the banks to unwind their remaining swap commitments. The pressure continued, however, and with growing evidence of speculative demand developing the central bank announced that the franc counterpart to further intervention would be placed in blocked accounts on its books. The National Bank then purchased another \$70 million, while dealers quickly began to trade unblocked balances at rates as high as 1 percent above the Smithsonian ceiling amidst rumors that the franc would be floated. At the opening the next morning, the Swiss National Bank announced:

Monetary measures abroad caused on Monday, January 22, a heavy demand for Swiss francs which is partly of a speculative nature. In view of the risk of fresh massive inflows of foreign exchange which would entail a corresponding money creation, the Swiss National Bank in agreement with the Federal Council has today decided not to take up intervention purchases in the dollar market. It will stay away from the market until things have quieted down again.

This action effectively allowed the Swiss franc to float in the exchanges. Later in the day, the Swiss authorities followed up by reimposing the requirement that banks maintain balanced or long foreign currency positions.

With a substantial amount of unsatisfied demand for

francs already overhanging the market, and with the possibility of a further rise in the rate now attracting other bidders, the spot franc shot upward and continued to climb throughout that week. The rise in the Swiss franc in turn put upward pressure on the currencies of Switzerland's major trading partners, which were still committed to the Smithsonian central rates and intervention points. As time passed and the Swiss authorities took no further action either to bring the franc rate down or to fix a new central rate and limits, the Swiss franc rose to nearly 8 percent above the Smithsonian central rate by February 9, even as the focus of speculative attention shifted to the German mark. With the United States announcement on February 12 of a proposed new special drawing right (SDR) parity for the dollar which would correspond to an 11.1 percent appreciation of foreign currencies against the dollar, the Swiss franc moved up quickly to trade 0.6 percent above such a level. Although the authorities of several of Switzerland's major trading partners quickly set new central rates and limits based on the United States devaluation, the Swiss government decided to wait until the market had settled down before establishing new benchmarks for the franc. The markets did not settle down, however, and with the heavy new flow out of dollars the spot franc was pushed up to about  $24\frac{3}{4}$  percent above the Smithsonian central rate.

#### STERLING

Following the British government's decision in June to allow sterling to float, the rate had dropped sharply, reaching as low as  $\$2.41\frac{1}{4}$  before firming up to trade in a wide range around  $\$2.45$ . Although the British current account had slipped into deficit, the gradual covering of short positions taken in June tended to buoy the rate. A rough balance lasted well into September, but late that month the technical support that had been provided by the unwinding of speculative positions dried up, and sterling became more vulnerable to downward pressures.

By then, the government was engaged in extensive negotiations with the leaders of industrial and labor organizations in a final effort to slow an escalating domestic wage-price spiral through voluntary restraints. At times, negotiations seemed to be showing signs of progress and sterling would be bid up sharply in the market, but at other times there were indications of a possible stalemate and sterling would come on offer. On balance, market pessimism dominated, and by the first week of October sterling had fallen to around the  $\$2.42$  level.

In the meantime, the British authorities were also striving to check excessive monetary growth. In the summer

and early fall the Treasury bill rate had risen sharply to a level well above the bank rate, which remained at 6 percent. On October 9 the Bank of England announced that in lieu of the bank rate it would adopt a floating minimum lending rate, to be fixed at  $\frac{1}{2}$  percentage point above the average discount rate set on the weekly tender for Treasury bills rounded up to the nearest  $\frac{1}{4}$  percentage point. The traditional method of setting the central bank's lending rate remained available to the authorities, but they indicated that reliance would be placed on the minimum lending rate which would follow market rates. That week, the rate was set at  $7\frac{1}{4}$  percent,  $1\frac{1}{4}$  percentage points above the previous bank rate.

Rising interest rates in London, however, were unable to offset the growing pessimism over the inflationary outlook and the escalation of wage demands, as the government's wage-price negotiations with labor and industrial leadership dragged on through mid-October without signs of any success. The market was becoming increasingly skeptical that anything positive would come out of these talks and feared that, if the negotiations should fail and the government should impose statutory controls, disruptive action by militant labor groups could weaken or undercut the controls.

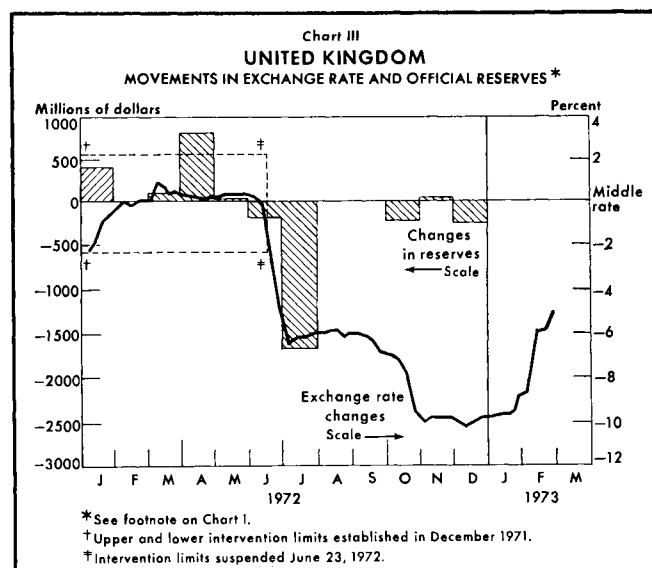
In this atmosphere, new selling pressure developed on October 19, triggered by reports of a possible slowdown by electrical workers and the release of figures showing a marked increase in the rate of wage inflation to  $16\frac{1}{2}$  percent for the preceding twelve months. Over the next several days, spot sterling spiraled downward, passing through several expected resistance points—including the \$2.40 and \$2.38 pre-Smithsonian parity and floor, respectively—while press and market commentary now suggested that a new parity might eventually have to be set as low as \$2.25 or even \$2.20. The actual low point was hit on Friday, October 27, when the spot rate reached \$2.32 in London before recovering to trade a cent or two higher. During the downswing, the Bank of England sold moderate amounts of dollars but did not attempt to hold the rate at any particular level.

Shortly thereafter, the British government's efforts to negotiate voluntary restraint on prices and wages broke down completely when the labor leadership formally rejected the government's proposed price-wage guidelines. This rejection initially led to a new sell-off of sterling. Later on, when it had become apparent that the government would turn to statutory controls and that such controls would not generate widespread labor unrest, sterling recovered to around \$2.35. On November 6, Prime Minister Heath introduced legislation calling for a comprehensive standstill of prices, wages, rents, and divi-

dends. The standstill was effective immediately and was to have an initial term of ninety days following the passage into law of legislation, with provision for a sixty-day extension. During the period of the standstill, the government would continue negotiations with unions and the employers to work out a longer term incomes policy.

As the market took stock of the prospects for success of this policy, spot sterling traded over a fairly wide range. At first, it dropped in response to labor's highly critical initial reaction to the government's standstill. Then, sterling was boosted by a further rise in domestic interest rates sparked by the Bank of England's November 9 call for special deposits of 1 percent of total bank liabilities. By midmonth, with labor seemingly more resigned to the inevitability of the standstill, sterling began to show a somewhat firmer undertone for a time and the spot rate rose to \$2.35 $\frac{3}{4}$ . But some dealers remained unconvinced and began to increase their short positions in sterling, taking the rate down below \$2.34 before a modest demonstration of support by the Bank of England steadied the rate.

On December 21 the Bank of England again tightened the monetary screws, issuing a call for additional special deposits amounting to a further 2 percent of eligible liabilities. Domestic credit markets responded strongly to this announcement, and the next tender rate was pushed sharply higher. Consequently, the Bank of England's floating minimum lending rate, which had earlier increased in several steps to 8 percent, rose a full percentage point to 9 percent. As these increases spread to bank lending and



deposit rates more generally, sterling was bid up again over \$2.35 and held firm around that level through the year-end and into January.

On January 17, Prime Minister Heath announced the government's plans for a longer term anti-inflation policy. The current price standstill would be extended through April, and the freeze on wages and dividends would be extended through March. In the meantime, Parliament would be asked to pass legislation for Phase II statutory controls. The legislation provided for a price commission and a pay board to enforce a series of interim limits on price and pay increases. Also in the package were limits on dividends, business profit margins, and rents. Although provisions were made for possible modifications of these limits next fall, the legislation was drafted in terms of a three-year period. The program was well received in the market, and sterling edged up to \$2.35¼ by January 19.

Following the introduction of a dual exchange market in Italy and the floating of the Swiss franc, sterling was caught up in the growing turmoil in the exchanges. Traders had to weigh several conflicting considerations. Sterling had effectively depreciated by some 10 percent against other currencies, and this was expected to improve the competitiveness of British exports. On the other hand, there was still no way of knowing how effective the Phase II measures might be in curbing the entrenched inflation. In the meantime, liquidity conditions in London were likely to be extremely tight, partly because of the special deposit calls by the Bank of England and partly because of normal seasonal factors. Moreover, the United Kingdom had become an EC member and the pound now appeared linked more than ever to the other EC currencies, although sterling remained outside the EC currency support arrangements. As one or another of these considerations dominated the market, sterling moved erratically but, when strong demand emerged for continental European currencies and particularly for the German mark, the sterling rate was ratcheted upward, reaching as high as \$2.39 by Thursday, February 1. Over the next few days, sterling fluctuated along with Continental currencies as the exchange crisis intensified but by February 9 was trading at \$2.38¾.

While the negotiations which led to the devaluation of the dollar were proceeding, the London exchange market was closed on February 12 and the British authorities announced that sterling would continue to float for the time being. When the market was reopened the following day, sterling quotations were higher, and on February 14 the pound reached \$2.47¾, some 5 percent below its Smithsonian central rate. As the exchanges remained highly nervous in the wake of the dollar devaluation, sterling

moved widely from day to day and even from hour to hour between \$2.43 and \$2.48. Then, as the turmoil built up to a peak on Thursday, March 1, the rate moved above \$2.50. Early in the following week, with the markets officially closed, sterling settled back to trade around \$2.46.

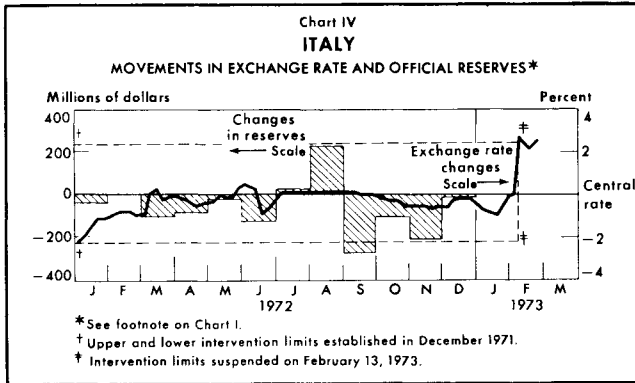
#### ITALIAN LIRA

Through most of 1972 the Italian authorities faced the policy dilemma of economic stagnation coupled with strong wage and price inflation. A severe profit squeeze cut into investment, and sporadic strikes tended to keep one sector or another of the economy operating below full capacity. The Italian current account remained in surplus, but the general nervousness over the situation led to a buildup of adverse leads and lags on commercial transactions. Moreover, private capital outflows from Italy remained substantial, in reaction to the political and economic uncertainties, to recurring rumors that the lira would be devalued or floated, and later to widening differentials between domestic and foreign interest rates.

Following the floating of sterling in June, the Italian authorities had been given an exemption from the formal EC procedures for intervention to maintain the 2¼ percent band. This exemption permitted intervention in defense of the lira to be carried out in dollars rather than in other EC currencies in order to avoid using gold in repayments of possible debts in those currencies. Heavy intervention had been necessary in July, but the markets had calmed down by early September and the Italian authorities had more than offset the July reserve losses with borrowings in Euro-dollar markets by Italian entities.

The lira continued at or near the bottom of the EC band throughout the early fall, and as the dollar strengthened against other EC currencies the lira dropped below its Smithsonian central rate. The exemption from intervention in EC currencies was extended for another three months at the end of September, and the Italian authorities were obliged to sell dollars from time to time to keep the lira rate within the 2¼ percent EC band.

Meanwhile, negotiations had begun on new wage contracts for nearly one quarter of Italy's labor force and, with price inflation running about 8 percent per annum, labor threatened to strike if its substantial claims were not met. At the same time, the persistent economic sluggishness and high unemployment rate had not responded to the expansionary monetary and fiscal policies then in force. In these circumstances, the Italian authorities did not join other EC governments in tightening domestic monetary conditions, thereby underscoring the serious problems in the Italian economy.



By late November, commentators in the market, the press, and political circles were talking increasingly of an exchange rate adjustment through devaluation, a float, or complete withdrawal from the EC arrangements. As this talk became more widespread, heavy leads and lags built up against the lira and speculative capital outflows accelerated. At the same time, the Danish krone, then at the top of the EC band, strengthened markedly on a covering of short positions in that currency and the lira required a sizable amount of support to remain within the band. The situation came to a head on November 30, when rumors that Italy was planning to withdraw from the EC band or to float generated heavy selling in New York. In short order the rate was pushed sharply lower, and the Bank of Italy had to intervene very heavily to bring it back within the EC band the next day.

This speculative squall passed quickly, however. The Italian authorities, aware that much of the selling of lire had reflected adverse leads and lags, raised the domestic Lombard rate from 3½ percent to 5½ percent in an effort to discourage Italian banks from lending lire for such purposes. In financing the outflows, Italian banks had experienced a sharp increase in foreign currency liabilities to residents, while building up correspondingly large increases in foreign currency claims on nonresidents. Since the authorities had directed the banks not to maintain net foreign asset positions *vis-à-vis* nonresidents, the exchange authorities provided swaps to the banks, taking in dollars and supplying lire at current rates. These measures helped calm the market and allowed the authorities to recover the recent reserve losses. Toward mid-December, the banks found themselves short of lira liquidity because of a bank strike, and the Bank of Italy provided additional lire against dollars swapped on a similar basis.

At the beginning of the new year, Italy's partial exemp-

tion from the EC intervention arrangements lapsed. The Italian authorities were once again obliged to support the lira in Community currencies rather than dollars, it having been agreed, however, to postpone gold settlements of possible debts with other EC countries. The lira came on offer and the rate quickly dropped to the point of requiring support against the Danish krone and the Belgian franc, the two currencies at the top of the EC band. By the end of the first week in January, this intervention had tended to pull the band down relative to the dollar and, as the band moved, the lira slid to roughly 1 percent below its Smithsonian central rate. Intervention was substantial at times, and there were growing expectations in the market that the Italian authorities would soon be obliged to take exchange rate action to resolve the situation.

On Saturday, January 20, the Bank of Italy announced a two-part package to contain speculative pressures. First, a two-tier market was established in which all current-account transactions would be channeled through the officially supported commercial market and all capital transactions would pass through a financial market in which the exchange rate would float. Second, the Italian authorities sharply reduced the period for settlement of export and import payments in an effort to stop and even reverse the buildup of leads and lags against the lira.

There was initial confusion in the market, as traders had to sort out the new accounting procedures as well as to evaluate their positions in connection with the split market for a lira payment. The commercial lira moved sharply above its central rate, while the financial lira dropped to a substantial discount. Then, when the Swiss franc was floated and the exchanges generally were dominated by speculative flows, the lira fell off, once again extending the EC snake to its limit. The other EC currencies rose and eventually reached their upper limits against the dollar, with the result that the commercial lira was correspondingly pulled to its Smithsonian central rate. Further intervention in the EC currencies was required to keep the rate from falling below that level, but not on a massive scale.

Following the announcement on February 12 of the proposed devaluation of the United States dollar, the Italian authorities responded by allowing the commercial lira to float rather than moving directly to a new central rate *vis-à-vis* the dollar. They nevertheless maintained the distinction between the commercial and financial markets, both of which were now on a floating rate basis. The commercial lira did not join in the general rise in rates against the dollar until early March, and during the first week in March it was still trading only some 4 percent above its Smithsonian central rate.

### FRENCH FRANC

By late summer, economic activity in France was advancing rapidly, spurred in part by a strong rise in exports. At the same time, however, inflation had begun to accelerate and, in view of the large inflows of funds in June and July, the monetary authorities were struggling to maintain control over domestic liquidity. The French money market was nevertheless firmer than those in several other European centers, and that firmness, together with the strong underlying payments position, helped to keep the franc at the top of the EC band and close to its Smithsonian upper limit. Indeed, as the atmosphere for the dollar generally improved in September and early October, the Bank of France moved to tighten monetary conditions further by progressively raising its money market intervention rates and by raising reserve requirements against bank loans above a base level to 15 percent. Consequently, although the franc remained comfortably away from its upper intervention point, it did not get so low as other continental European rates relative to the dollar.

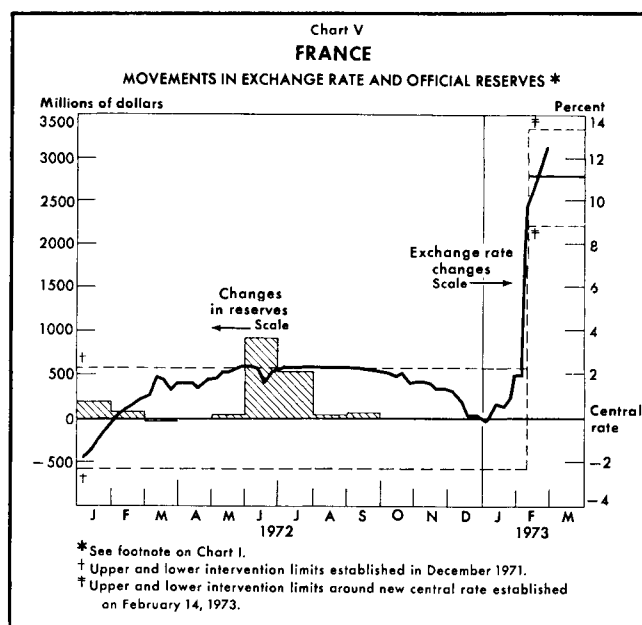
The sudden sharp downturn of sterling after mid-October forced market participants to reassess their views of the relationship between the pound and continental European currencies. The French franc, which was still at the top of the EC band, was particularly vulnerable. Consequently, on October 26, the commercial franc came on offer and dropped sharply, reaching about  $1\frac{1}{4}$  percent above its central rate before leveling off. On October 30, the EC Finance Ministers met and agreed on the need for concerted action to combat inflation in their countries. Subsequently, on November 2, the Bank of France announced a  $\frac{3}{4}$  percentage point increase in its bank rate to  $6\frac{1}{2}$  percent, a move which was explained by Finance Minister Giscard d'Estaing as illustrative of the French government's willingness to cooperate with recommendations of the EC ministers. The French authorities subsequently followed up with further measures of restraint, including another increase in reserve requirements against loans by banks, and these actions helped keep the commercial franc firm in quiet trading through mid-November.

By that time, interest rates elsewhere in Europe had risen to the extent that there was no longer much relative advantage in holding French francs, and funds were accordingly switched out of the financial franc and into other European currencies. Moreover, the United States securities markets were attracting investment money from Europe, and French investors were moving large amounts into Wall Street at a time when nonresidents of France were also selling French securities. Consequently, the financial franc, which for sometime had been trading at

a substantial premium over the commercial rate, had fallen back sharply to trade occasionally at a small discount *vis-à-vis* that rate.

By late November, there was renewed concern over inflationary pressures in France, especially after the release of the consumer price index for October showing a rise of 11 percent on an annual basis, and the authorities took further steps to reverse the trend. On November 30, the Bank of France raised its discount and Lombard rates by a full percentage point to  $7\frac{1}{2}$  percent and 9 percent, respectively. Then on December 7 the government announced a new anti-inflationary program, including the imposition of ceilings on the expansion of bank credit and a cut in the value-added tax (with a special public bond issue to offset the revenue shortfall resulting from the tax cut).

These measures bolstered the franc only temporarily, however, as the market had already become nervous over election polls in France indicating the growing potential vote for the parties of the left in the March parliamentary elections. Toward mid-December, such polls set off a sharp spasm of selling, which pushed the commercial franc down by more than a full percentage point against the dollar to below the Smithsonian central rate and temporarily to the bottom of the EC band. Simultaneously, the financial franc also moved down sharply, with a widening discount against the commercial franc. Selling pressure did not last, however, and the markets turned quieter toward the end of



December and in early January, with the commercial franc hovering close to the central rate. The next round of polls was somewhat more favorable to the government, and President Pompidou and Finance Minister Giscard d'Estaing made strong statements arguing the fundamental strength of the franc. The spot franc then recovered somewhat, and by mid-January was holding around ½ percent above its Smithsonian central rate.

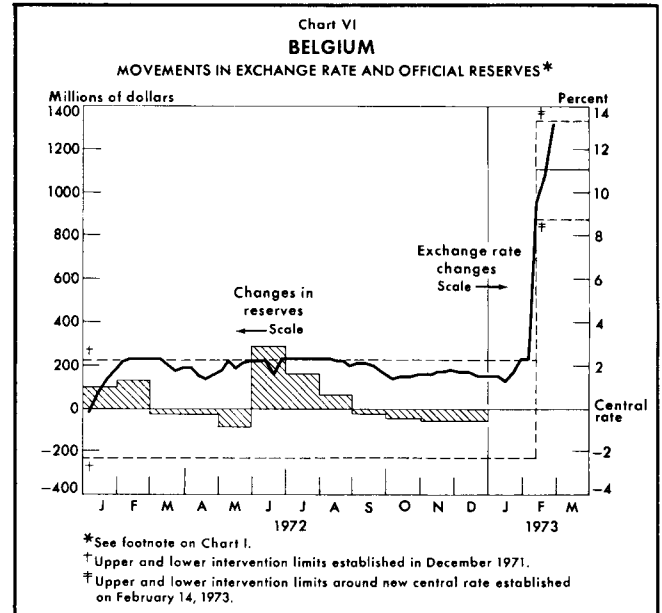
In the speculative turmoil following the introduction of a split market for the Italian lira and the subsequent floating of the Swiss franc, the French franc was bid up sharply to trade once again at or near its Smithsonian upper limit. The financial franc also rose and moved to a premium over the commercial rate once again. There was no significant flow of funds into France, however, and during the next three weeks the intervention of the Bank of France at the Smithsonian limit was very small. In part, continuing uncertainties over the election outcome tended to give pause to the market. In addition, much of the speculation was over the possibility of the introduction of a two-tier market in Germany, and the French two-tier system already in force tended to divert speculative pressures away from the franc.

Following Secretary Shultz's announcement of the devaluation of the United States dollar, the French authorities quickly reaffirmed the franc's gold parity and established a new central rate of \$0.2172 for the French franc, allowing the full 11.1 percent appreciation in terms of the dollar. The franc immediately moved up to trade well within its new band and, although the market was still somewhat nervous over the upcoming elections, the spot rate was bid up to its ceiling on February 23. The Bank of France intervened on a small scale that day, and the rate eased. Then, on March 1 and 2, before the market was closed, the Bank of France had to take in nearly \$500 million.

#### BELGIAN FRANC

The Belgian franc emerged from the turmoil of last July relatively strong and traded near its Smithsonian upper limit through early August, even though the dollar was improving against most other major European currencies. In part, the commercial franc was bolstered by a steadily increasing current-account surplus, reflecting significant export growth at a time when Belgium's imports were still cyclically low. At the same time, a special deposit of reserves at the central bank absorbed the excess liquidity created by earlier official purchases of dollars and sterling.

With the franc rate holding at the ceiling while exchange rates elsewhere in Europe were easing, on August 10 the



Federal Reserve initiated a probing action in the New York exchange market to see whether some shift of expectations could be generated that would pry the Belgian franc loose from its ceiling. Over the course of several days, the Federal Reserve placed offers of Belgian francs in the New York market at the current rate and, as the market backed away, moved these offers down. On this basis, \$10.2 million equivalent was sold and, as had been agreed at the outset of the operation, the Federal Reserve covered these sales by drawing on its swap line with the National Bank of Belgium. As the dollar improved generally over the next weeks, the franc continued to ease on its own and the Federal Reserve was able to purchase sufficient amounts of francs in the market to repay the swap drawings by early September. The financial franc, which had been trading at a premium of ½ percent above the commercial rate in mid-August, dropped almost to parity with the official rate by early September.

Over the next two months the Belgian franc, while holding at or near the top of the EC band, moved roughly in sympathy with the other continental European currencies. Thus, the commercial franc declined sharply in late September and the early days of October, before firming to about ¾ percent from its ceiling through the end of October. Meanwhile, the financial franc had fallen quite sharply, to trade at a discount *vis-à-vis* the commercial rate, in response to sizable Belgian purchases of United States securities and corporate outflows.

Throughout last fall, economic activity in Belgium expanded, led in part by the rise in exports, but—as elsewhere in Europe—the rate of inflation also was rising sharply. Consequently, the Belgian authorities were quite prepared to join with other EC central banks in anti-inflationary measures. The National Bank hiked its lending rates by  $\frac{1}{2}$  percentage point on November 23 and by another  $\frac{1}{2}$  percentage point on December 21, bringing the basic discount rate to 5 percent. The National Bank also negotiated new provisions for special deposits, this time to include financial institutions other than commercial banks. The announcement of these measures, which would ultimately absorb domestic liquidity, contributed to keeping the franc firm in the exchange markets, with the commercial rate trading in a range of  $\frac{1}{2}$  to  $\frac{3}{4}$  percent from its Smithsonian ceiling until late in December, when it eased slightly.

Meanwhile, beginning in early October, the Federal Reserve had begun a program of modest daily purchases of Belgian francs in the market to repay drawings outstanding on the swap line since prior to August 15, 1971. Using the francs thus acquired, the System repaid \$55 million of Belgian franc swap indebtedness through the end of 1972 and \$25 million more in early 1973. These repayments reduced total commitments to the National Bank to \$390 million equivalent, including \$35 million originally drawn on the BIS but consolidated in November into System swap commitments to the National Bank of Belgium.

At the start of 1973 the Italian authorities resumed full participation in the EC currency support arrangements—the “snake in the tunnel”—thereby undertaking to support the lira in EC currencies rather than exclusively in dollars. As the EC band became extended to its full  $2\frac{1}{4}$  percent width, with the Belgian franc (and the Danish krone) at the top and the lira at the bottom, the arrangements obliged the National Bank of Belgium and the Bank of Italy to intervene in each other’s currency (providing francs against lire). This infusion of francs into the market tended to drag the franc rate down against the dollar to a low of  $1\frac{1}{4}$  percent above its Smithsonian central rate at one point in mid-January.

The Belgian franc snapped upward temporarily after the introduction by the Italian authorities of a dual market system for the lira on January 22. Then, in the more generalized unsettlement following the floating of the Swiss franc, the rate for the Belgian franc continued to rise, in concert with other European currencies. Late in January the Belgian franc reached its upper limit, and the Belgian authorities took in some \$250 million through February 9.

Following Treasury Secretary Shultz’s announcement of

the proposed devaluation of the dollar, the Belgian authorities set a new central rate of \$.024793 for the franc which allowed fully for that devaluation. New intervention points were also established at  $2\frac{1}{4}$  percent on either side of the new central rate. In the subsequent period of disorderly trading the commercial franc was also bid up to its upper limit, with substantial intervention by the Belgian authorities on March 1. Thereafter, the exchange market was officially closed and the franc traded slightly over its new ceiling.

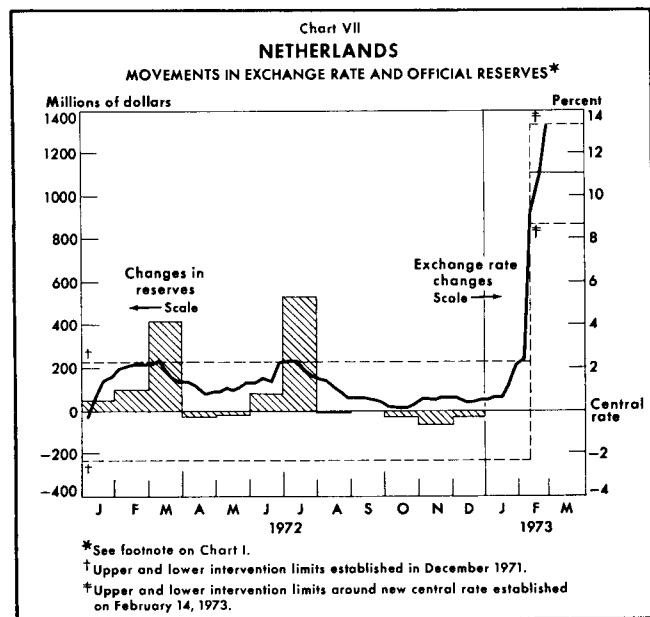
#### DUTCH GUILDER

Following the large foreign exchange inflows of the early summer, the money and credit markets in the Netherlands were awash with liquidity. Consequently, there was an outflow of funds from the Netherlands, which led to an easing of the guilder despite improvement in the underlying balance-of-payments situation. By the end of August the guilder had fallen to within  $\frac{1}{2}$  percent of its Smithsonian central rate. Since the Belgian franc had remained close to its ceiling, the spread between the two currencies reached  $1\frac{1}{2}$  percent and, under the terms of the Benelux agreement linking the two currencies, the Netherlands Bank was obliged to sell Belgian francs against guilders to prevent the spread from widening still further.

Early in September, the Netherlands Bank moved to reassert greater control over domestic credit conditions in view of the persistence of a high rate of inflation, since inflation remained a major problem even though economic activity continued sluggish. Under a gentleman’s agreement with the commercial banks and postal authorities, minimum reserve requirements against deposit liabilities were introduced for the first time since 1963. The bank made it clear, however, that it intended to allow the market to remain sufficiently liquid to avoid triggering new inflows of foreign funds. It underscored this intention by cutting its discount rate from 4 percent to 3 percent and, similarly, by lowering other lending rates 1 percentage point to bring them more into line with the very low rates prevailing in the Amsterdam market.

Domestic liquidity remained plentiful for the time being, however, and the guilder declined even further. The Belgian franc also eased somewhat during this period, but the Benelux band was still stretched to its limit and the Netherlands Bank continued to have to intervene in francs. The Dutch authorities then moved to speed up their absorption of domestic liquidity by undertaking open market sales of securities on September 12. In response, the Dutch money market tightened, the guilder steadied, and with the Belgian franc weakening the spread between the





two currencies narrowed. During subsequent weeks the Netherlands Bank was able to purchase francs to settle with the National Bank of Belgium part of the debt arising out of the earlier intervention; nevertheless, a portion of the obligation was settled in reserve assets.

Late in October, the EC Finance Ministers agreed on a combined effort to bring inflation under control in their respective countries. On November 3 the Netherlands Bank raised its discount rate by 1 percentage point, back to 4 percent. At the same time the Dutch government continued discussions with labor and employer groups to negotiate voluntary limits on wage and price increases. With these negotiations at a critical stage and the recovery of the Dutch economy still tentative, the Netherlands Bank did not follow the next rounds of increases in discount rates on the European continent in December and early January. Even so, the money market in Amsterdam held firm, and the guilder remained steady *vis-à-vis* the other EC currencies and the dollar.

After January 22, the guilder was caught up in the generalized rush into European currencies that followed the introduction of a split market for the Italian lira and the floating of the Swiss franc. As the movement out of dollars gathered steam, it tended to focus on those currencies that were neither floating nor trading in split markets. The guilder, with only a very limited version of the two-tier market (the "O" guilder circuit for foreigners' purchases of Dutch securities), and also with close traditional ties

to the German mark, came into relatively heavy demand. By the end of January, the guilder was bid up to its Smithsonian ceiling. In the opening days of February, the Federal Reserve, utilizing \$20.4 million equivalent of balances accumulated in the market last fall, began to sell guilders in the New York market to provide some resistance to this advance and maintain an orderly market. Nevertheless, as the mark came under unusually heavy pressure, the Netherlands Bank was forced to take in sizable amounts of dollars. By Friday, February 9, its intervention had swelled to just under \$400 million.

After Secretary Shultz announced the proposed change in the United States parity on February 12, the Netherlands authorities set a new central rate which fully reflected an 11.1 percent appreciation of the guilder relative to the dollar. There were no reflows, however, and the guilder quickly moved up to trade near its new central rate. As the market situation deteriorated over the next weeks, the guilder continued to rise and, by February 28, the Netherlands Bank was obliged once again to absorb dollars. After taking in more than \$750 million by the close on March 1, the Dutch authorities joined other European governments in suspending official dealings as intensive international negotiations began.

#### JAPANESE YEN

Japan remained in massive payments surplus throughout 1972, as the trade surplus grew further. To be sure, some of this widening reflected the immediate terms-of-trade effects of the 1971 revaluation and, for the early part of the year at least, the sluggishness of the Japanese economy. Nevertheless, there was a general conviction in the exchange markets that the yen was still undervalued. Consequently, the yen continued in strong demand throughout the late summer and early fall, partly because of the underlying payments surplus, but also because of commercial leads and lags and outright speculation in favor of the yen.

While rejecting further direct action on the exchange rate, the Japanese authorities took several measures during the fall to bring Japan's external position into better balance. In September, the Bank of Japan abolished the remaining vestiges of long-standing export promotion measures, whereby the authorities made low-interest loans against export trade bills and discounted yen-denominated export usances. Then, on October 20 the Japanese government announced a five-point program, including across-the-board reduction in import duties, increases in some import quotas, a voluntary export restraint plan, and a supplemental budget designed to shift resources out of

export production and into public goods and services. On the same date, it decided to impose statutory controls on foreign portfolio investments in Japan. Nevertheless, the yen remained pinned to its upper limit, and the Bank of Japan continued to purchase sizable amounts of dollars almost daily. To slow the growth of official reserves, the Ministry of Finance continued its program of depositing dollars with the Japanese exchange banks so as to enable them to repay short-term dollar liabilities to United States banks. Taken together, in September and October a further \$600 million was so deposited, while official reserves increased by a net of \$1,424 million.

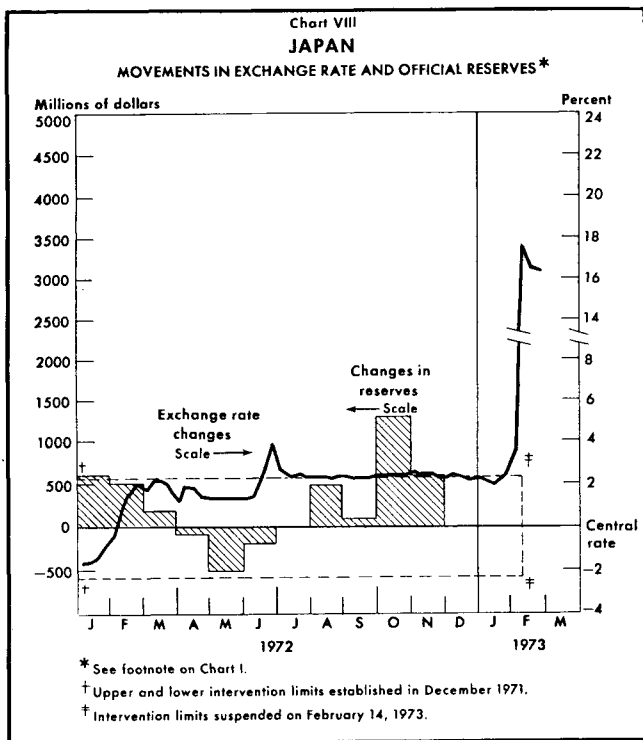
The massive inflows continued through November and into December, although the Bank of Japan's daily dollar purchases tended to slacken somewhat. In part, this slowdown reflected the Finance Ministry's efforts to prevent abnormal prepayments for Japanese ships and to promote outflows of Japanese funds for investment abroad. Moreover, speculation on an early revaluation of the yen died down when parliamentary elections were scheduled in Japan for early December and traders began to believe that action on the exchange rate was not likely until after those elections. Furthermore, the Japanese economy was expanding rapidly by then and there was an unusually

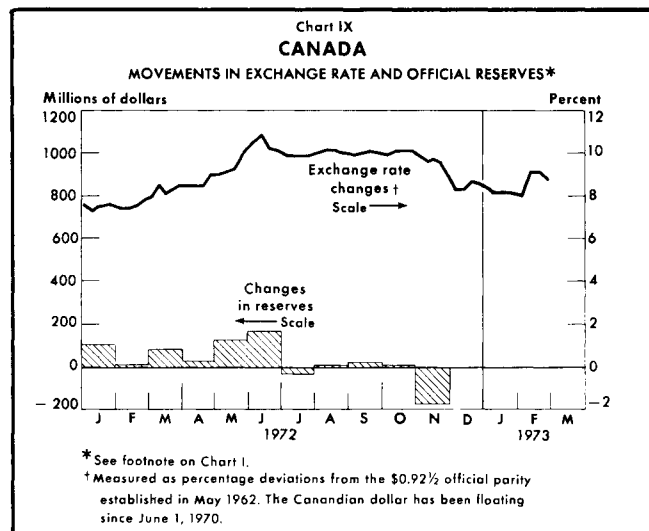
sharp jump in wholesale prices. The trade accounts, while still in substantial surplus, were beginning to show some influence both of the revaluation itself and of the pickup in the Japanese economy. The yen nevertheless remained at its ceiling until late in December, when the Japanese banks found themselves short of dollars for year-end needs. The spot rate then eased below its ceiling for the first time since June, and the Bank of Japan was able to sell modest amounts of dollars. In November-December, official reserves showed a further rise of \$569 million after the placement of an additional \$800 million of special deposits by the Ministry of Finance with the exchange banks.

Early in 1973, the yen held marginally away from its ceiling, reflecting seasonal slack in conversions of Japanese export receipts and a partial unwinding of leads and lags. The yen continued to trade quietly, even as the turmoil in the European exchange markets flared up after mid-January. It was only after continental European currencies had reached their Smithsonian limits, requiring massive official intervention, that the Japanese yen returned to its ceiling and the Bank of Japan also began to absorb dollars. In the eight trading days through February 9, total intervention by the Bank of Japan amounted to \$1.1 billion. With negotiations among governments on the question of the alignment of exchange rates then in progress, the Japanese authorities closed the exchange market on Saturday, February 10, until further notice. In the course of these discussions, the Japanese government decided that the yen would be allowed to float temporarily, although the Bank of Japan was still prepared to intervene to moderate movements in the rate. When full-scale trading resumed on February 14, the yen rose sharply and soon reached 17¾ percentage points above its Smithsonian central rate. The market then quieted and the yen tended to settle back. However, in the renewed crisis atmosphere that developed in the exchanges at the end of February, the yen again rose sharply.

**CANADIAN DOLLAR**

Through the late summer and early fall the market for the Canadian dollar remained in rough balance, with the rate moving narrowly between \$1.01½ and \$1.01¾. Canadian money market rates were generally lower than those elsewhere, and the Canadian current-account deficit had deepened, but substantial long-term capital inflows continued to support the exchange rate. The parliamentary election of October 30, in which neither major party in Canada achieved a clear majority, was a jolt to the market. The immediate response was heavy professional selling,





and the Bank of Canada acted to steady the market. The pressure soon passed, however, and the rate settled around the \$1.01½ level through much of November. The political situation nevertheless continued to be a matter of concern in the market, as traders expected that the new Canadian minority government would pursue more expansionary economic policies in response to the evident concerns of the electorate.

On November 27, the Canadian chartered banks announced a reduction in their CD rates by ⅛ to ¼ percentage point. These reductions, though modest in size, had a substantial impact on the exchange market, as they were unexpected and occurred at a time when interest rates were rising sharply in the United States and Europe. Consequently, on the next trading day, the Canadian dollar came on offer in the market. Meanwhile, traders were still concerned over the political situation in Canada, United States commercial interests were beginning to repatriate funds for year-end purposes, and conversions of Canadian borrowings abroad had tapered off. Thus, when offers appeared in the market, there were few buyers, and the selling snowballed. The Bank of Canada continued its policy of intervening to maintain an orderly market, but the rate dropped 1½ cents, reaching \$0.99¾ on December 7 before staging a partial recovery. There were, however, wide fluctuations in the rate through the balance of the year. Over November and December, Canada's official reserves declined by \$180 million.

By early January the market had settled down, with trading generally around the \$1.00 level. At that point,

expectations were for a continuing softness of the Canadian dollar, partly for seasonal reasons and partly because there were still a few large foreign borrowings by Canadian entities in the pipeline. Moreover, Canadian credit markets were liquid, and there were continuing expectations that the government's upcoming budget message would chart an expansionary course. Consequently, the Canadian dollar was largely ignored in the speculative turmoil that erupted in late January in the markets for European currencies and for the Japanese yen, and the spot rate for the Canadian dollar continued to fluctuate narrowly near \$1.00 through February 9.

The following Monday, however, with widespread reports that the United States Government was negotiating an exchange rate realignment with the governments in Europe and Japan, the Canadian dollar came into strong demand. After Secretary Shultz's announcement that night of the proposed devaluation of the United States dollar, Canadian Finance Minister Turner issued a statement that the Canadian authorities were prepared to take strong measures to keep the Canadian dollar from rising relative to the United States dollar. When a wave of demand for Canadian dollars developed on the following day, the Bank of Canada intervened heavily, buying United States dollars. The spot rate reached \$1.01¼ before turning around following the reopening of European exchange markets. The rate then fell sharply, and the Bank of Canada was just as active in the market as the Canadian dollar moved down as it had been on the way up. The rate bottomed out just below \$1.00¾, fluctuating within a relatively narrow range through the rest of February and closing the month at that level.

#### EURO-DOLLAR

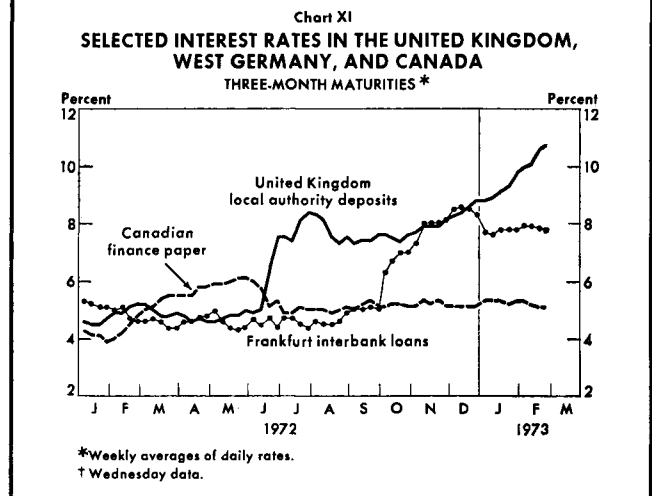
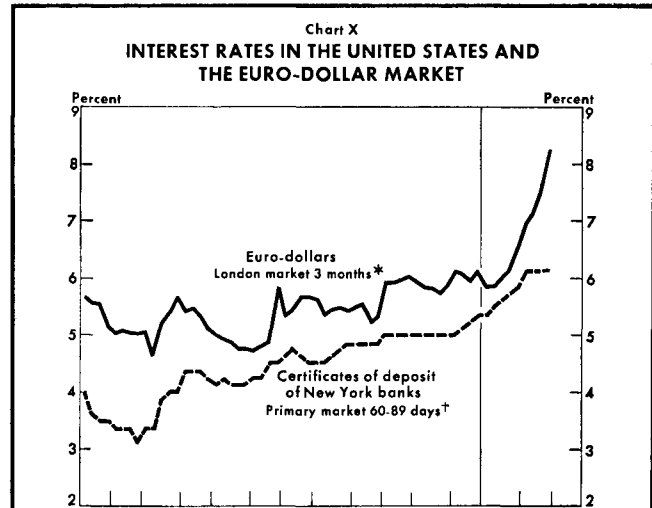
During the closing months of 1972, Euro-dollar rates tended to rise more in line with the gradual advance of money rates in the United States than with the steeper upswing of interest rates in major European financial centers. Throughout the year the supply of Euro-dollars had steadily expanded. The continuing United States payments deficit had further increased the volume of dollars in foreign hands, and some of those funds were deposited in the Euro-dollar market. Moreover, private and official sources in countries outside the Group of Ten that had significant balance-of-payments surpluses added to the Euro-dollar pool. The Japanese banks, their resources bolstered by dollar deposits with them by the Japanese authorities, were notably active in the market, stepping up both their direct loans to customers and their loan participations. Further, there was a record volume of new issues in the

Euro-bond market in 1972, and issuers placed large portions of the proceeds of these bond sales in the Euro-dollar market until needed for actual outlays. Partly offsetting these new supplies of funds were withdrawals from the market by investors wishing to take advantage of the higher interest rates in domestic European money markets or, in view of continuing currency uncertainties, to reduce their dollar exposure.

On the demand side, the sharply tightened credit conditions in European financial centers might have led to even greater borrowings of Euro-dollars during the fall and early winter, except for the various measures taken in almost every European country to prevent inflows from abroad. The impact of controls was most strongly felt in Germany, where the Bardepot—a 50 percent reserve requirement against new foreign borrowings—often inhibited German firms from borrowing Euro-dollars. Constraints on capital inflows were enforced in other Continental countries and, consequently, demand from European corporate customers expanded at only a fraction of the rate of domestic credit expansion. By contrast, the demand from the developing countries and, to a growing extent, from eastern European countries expanded greatly. These borrowers, mostly public or semipublic enterprises, raised funds principally for medium-term maturities.

United States banks continued to be active on both sides of the Euro-dollar market but did not add greatly to the net supplies coming into the market or to demands on the market. Thus, although United States banks' liabilities to their branches showed fairly wide week-to-week fluctuations, outstanding liabilities at the year-end were still around \$1.5 billion. The United States banks tended to be most active at the short end of the maturity structure, borrowing overnight Euro-dollars from foreign banks or their foreign branches to meet immediate reserve needs. In addition, for protracted periods the New York agencies of Canadian banks and branches of other foreign banks took advantage of arbitrage opportunities afforded by lower rates on overnight Euro-dollars to make placements in the Federal funds market.

The general balance of demand and supply in the Euro-dollar market that had prevailed during most of the fall months was upset during the massive rush out of dollars and into European currencies that developed in January and early February 1973. As the crisis in the foreign exchange markets gathered strength, traders liquidated



earlier placements in the Euro-dollar market or even bid for additional Euro-dollars to finance purchases of other currencies. This subjected the Euro-dollar market to a severe squeeze, and rates rose across the board. Even after the announcement of the proposed devaluation of the dollar on February 12, Euro-dollar rates continued to shoot upward, with the three-month rate reaching as high as 9¼ percent by March 1. Thereafter, the immediate pressures eased somewhat, and early in the following week the three-month rate declined somewhat.

## The Business Situation

The latest readings on economic activity indicate continued substantial expansion in the domestic economy.<sup>1</sup> Consumer spending has remained in the forefront, as retail sales posted a strong advance in January. Seasonally adjusted purchases of new domestic-type automobiles continued strong in February. Housing starts climbed further in January after a very vigorous fourth quarter, and new orders for durable manufactured goods surged ahead. While overall industrial production rose moderately, output of business equipment increased sharply, surpassing the previous peak set in the fall of 1969. There is evidence of a more vigorous buildup of inventories and greater strength in the capital goods area.

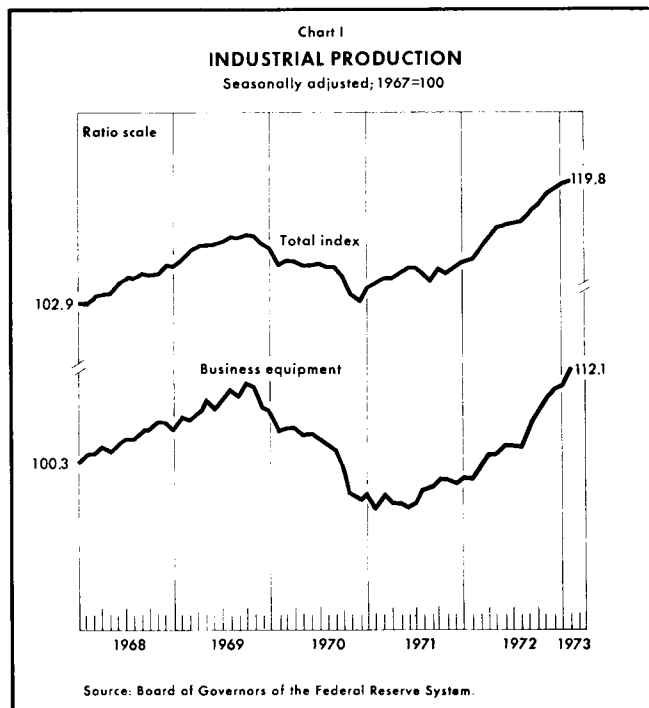
The near-term outlook for prices, on the other hand, appears discouraging. Wholesale prices of agricultural products advanced at a very rapid rate in February, following a similar increase in January and marking the fourth consecutive month of inordinately large advances. These increases have begun to be reflected in consumer food prices; in January, such prices soared at a seasonally adjusted annual rate of 25 percent. Although consumer nonfood commodity prices were steady in January, wholesale industrial commodity prices shot up in February at the fastest rate in over twenty years. This increase seems likely to be reflected in higher prices at the consumer level in the months to come.

### INDUSTRIAL PRODUCTION, ORDERS, AND INVENTORIES

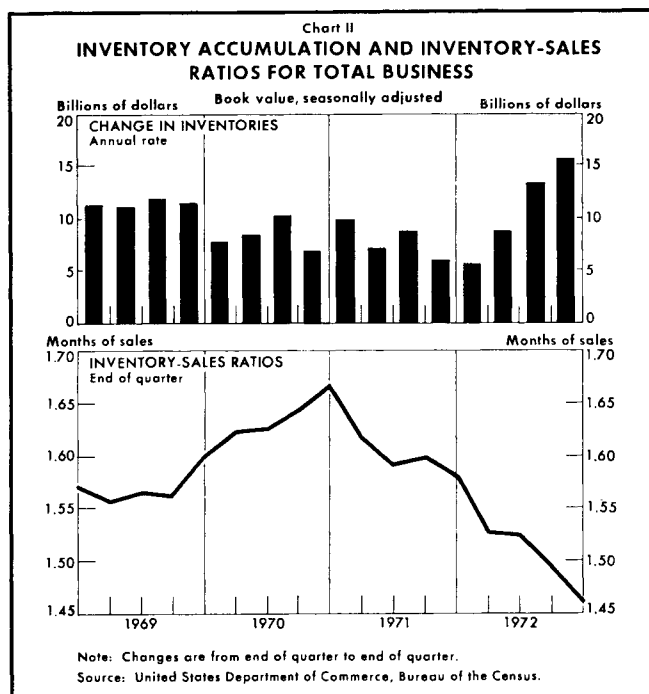
The growth of industrial output apparently moderated somewhat in January after rising very strongly during

1972. The Federal Reserve Board's index of industrial production rose at a 6 percent seasonally adjusted annual rate in January by comparison with the 10.2 percent advance experienced over the preceding year. Output of business equipment climbed sharply in January to a level surpassing the previous peak of September 1969 (see Chart I), and output of consumer nondurable goods moved up as well. On the other hand, production of materials and intermediate products was virtually unchanged, while output of consumer durables and defense and space equipment declined. Domestic car production, at seasonally adjusted annual rates of 9.7 million units in January and 10.1 million in February, while below the unusually high December rate, was well above the 8.8 million units produced in all of 1972.

Preliminary data indicate that new orders for durable



<sup>1</sup> In its revised figures for fourth-quarter 1972 gross national product (GNP), the Department of Commerce reduced its estimate of current-dollar GNP from \$1,195.8 billion to \$1,194.9 billion. This downward revision stemmed primarily from smaller increases in consumption and government spending. Growth in real GNP in the fourth quarter was not so rapid as first estimated, although it was still a strong 8 percent. On the other hand, the estimate of the implicit price deflator for GNP was raised marginally.



manufactured goods rose in January by a huge \$2.2 billion, or nearly 6 percent. Defense bookings increased considerably after declining in December. In addition, new orders for nondefense capital goods expanded by almost \$0.5 billion, substantially more than the average increase over the previous six months. Bookings for primary metals and machinery also moved up in January. Shipments increased markedly as well but remained below the level of new orders. As a result, the backlog of unfilled orders climbed significantly for the sixteenth consecutive month.

Business inventory spending has continued at an accelerated pace in recent months. In December, the book value of manufacturing and trade inventories increased \$16.1 billion at a seasonally adjusted annual rate, bringing the average monthly gain for the fourth quarter to \$15.6 billion. This gain surpassed the third-quarter average of \$13.3 billion and was well above the rate of inventory accumulation in the first two quarters of the year (see Chart II). During the fourth quarter, sales advanced more rapidly than inventories so that the ratio of inventories to sales declined to 1.46, down from 1.49 three months earlier. At the end of 1971 the inventory-sales ratio had stood at 1.58.

Over 1972 as a whole, business inventories climbed by \$10.8 billion, almost \$3 billion more than the 1971 in-

crease and the largest yearly gain since 1969. Over half of the increase in stocks occurred in manufacturing inventories. In turn, much of this buildup was in durable goods industries and stemmed in part from the vigor of motor vehicle production during the year as well as from the rebound in the aircraft industry. Preliminary data for January indicate that manufacturing stocks edged up further at a \$2.6 billion seasonally adjusted annual rate. The increase in durables manufacturers' inventories more than offset a slight decline in nondurables inventories.

#### **RESIDENTIAL CONSTRUCTION, RETAIL SALES, AND PERSONAL INCOME**

Residential construction activity is continuing at a very rapid rate. In January, private housing starts surged to a seasonally adjusted annual rate of 2.5 million units. Although the multifamily total fell somewhat from the unusually high December level, it was only slightly below the average for 1972. Single-family housing starts, on the other hand, rose to a new high in January, exceeding the previous record set in January 1972. It should be noted, however, that starts may have been artificially boosted in recent months as some builders may have accelerated activity prior to the freeze on Federal subsidy programs. Newly issued building permits fell 8.1 percent in January from the very high level of the previous month.

Sales of new one-family homes in December, the most recent month for which data are available, rose to a seasonally adjusted rate of 724,000 units. Builders' inventories of unsold new homes were at 404,000 at the end of December, leaving the ratio of unsold new homes to sales of new one-family homes only slightly below the very high November level. The vacancy rate on residential rental properties fell to 5.6 percent of available stocks in the fourth quarter, down from the third-quarter average of 5.8 percent. The average rate for the four quarters of 1972, however, was the highest annual rate since 1968. Vacancy rates on homeowner properties rose slightly in the fourth quarter of 1972, but were unchanged from the level of a year earlier.

Consumption spending was also strong in January, as seasonally adjusted retail sales rose \$1.2 billion above the upward revised December level. The increase was broadly based in sales of both durable and nondurable goods. The continuing strength of the auto market was evident in January sales of new domestic-type automobiles, which reached a seasonally adjusted annual rate of 10.3 million units on the heels of fourth-quarter sales that averaged 9.9 million units at an annual rate. Moreover, the January sales pace was the most rapid rate since September 1971,

when domestic car sales were stimulated by the price freeze, the removal of the excise tax on automobiles, and the import surcharge. Auto sales continued high in February at a seasonally adjusted annual rate of 9.9 million units, including a record 2 million of imported cars. Demand for imported cars was undoubtedly stimulated by expectations of price increases for imports in the future stemming from the devaluation of the dollar.

Further sizable advances in retail sales appear possible in the months ahead. Substantial tax refunds are expected in the first half of the year as a result of the overwithholding of personal income taxes in 1972. Undoubtedly, some of these funds will be channeled into consumption.

Furthermore, the latest surveys of consumer intentions indicate continued strength in expenditures. At the same time, however, the University of Michigan Survey Research Center reported a leveling-off of consumer optimism in the fourth quarter of 1972, albeit at a relatively high level. There is some evidence in the Michigan survey that consumers have become more concerned in recent months about rising prices of essentials.

Personal income rose only \$2.5 billion in January to a seasonally adjusted annual rate of \$985.4 billion. This was a small gain, compared with monthly increases in the fourth quarter of 1972 which averaged \$12 billion. A number of factors, however, acted to inflate the fourth-

### **Fifty-eighth Annual Report**

The Federal Reserve Bank of New York has published its fifty-eighth *Annual Report*, reviewing the major economic and financial developments of 1972.

The *Report* commented that monetary policy in 1972 sought to "encourage growth in the monetary aggregates rapid enough to sustain the expansion of real economic activity, and thus help to lower unemployment, but not so rapid as to undermine efforts to reduce the rate of inflation". It further noted that "the pursuit of this objective entailed strenuous efforts" early in the year "to stimulate the money supply's growth in the wake of a period of sluggishness in late 1971" but that "the immediate objective of System policy soon shifted to the attainment of moderate money supply growth". The appropriateness of this change in focus "was reinforced by the mounting evidence of the strengthening recovery in economic activity". Nevertheless, the *Report* said, growth in the monetary aggregates in 1972 was "somewhat more rapid than would seem desirable, if a noninflationary environment is to be achieved and maintained".

In his letter presenting the *Report* to the member banks, Alfred Hayes, President of the Bank, said that "the prospects for continued improvement in the economy seem good", but that the outlook is "clouded by a number of uncertainties". He observed also that, although "some steps have been taken to deal with these problems, . . . there is still much unfinished business. The realignment of international exchange rates must be supported by appropriate stabilization policies in the United States and by a sincere effort on the part of all nations to reduce the many remaining barriers that distort trading patterns. The Phase Three wage and price restraints will require vigorous surveillance as well as a voluntary cooperation". Moreover, he stressed, "it is imperative that monetary and fiscal policies become less stimulative than they were last year".

The *Annual Report* may be requested from the Public Information Department, Federal Reserve Bank of New York, 33 Liberty Street, New York, N.Y. 10045. A copy is being mailed to *Monthly Review* subscribers.

quarter increases in personal income, particularly a 20 percent rise in social security benefits in October. On the other hand, personal income in January was reduced \$5.2 billion by an increase in social security contributions, although this was offset to some extent by a Federal civilian and military pay raise. In the absence of these special factors, the January increase would have been \$5.8 billion, slightly lower than the revised December increase of \$6.7 billion.

#### **PRICE DEVELOPMENTS**

The persistence of inflationary pressures is evident in the latest price statistics. Wholesale prices advanced at a very rapid 21 percent seasonally adjusted annual rate in February following increases of 13.5 percent in January and more than 21 percent in December. The primary source of the December and January increases was the surge in prices of farm products and processed foods and feeds, which climbed at a seasonally adjusted annual rate of about 60 percent over those two months. Such prices continued to rise sharply at a 46 percent seasonally adjusted rate in February. Moreover, wholesale prices of industrial commodities in February soared at a 12 percent seasonally adjusted annual rate, the highest monthly increase in over

twenty years. The February increase compared with a 4 percent rate of rise in January and was much higher than the 2.6 percent rate of increase experienced over the second half of 1972. The February surge in wholesale industrial commodity prices was broadly based in the various industrial subsectors but with particularly large gains in prices of fuel and related products and in lumber prices. On March 6 the Cost of Living Council announced the imposition of mandatory price controls on oil companies with annual sales of above \$250 million.

Consumer prices rose at a rapid seasonally adjusted annual rate of 6.5 percent in January, up markedly from the December rise of 2.6 percent. Over the past three months, consumer prices have risen at about a 4 percent pace. Food prices soared at an annual rate of more than 25 percent in January and largely accounted for the increase in the overall index. In light of the continuing rapid run-up in prices of agricultural products at the wholesale level, the outlook for consumer food prices does not appear encouraging. Prices of nonfood commodities were unchanged in January, and over the past year such prices have climbed only about 2.4 percent. The advance of services prices moderated to a 2.7 percent annual rate of increase in January, compared with a 4.5 percent rise in the previous month.



## The Money and Bond Markets in February

Short-term interest rates in February were buffeted by the speculative flows of funds surrounding the devaluation of the dollar. On the one hand, demand for dollar loans to buy foreign currencies pushed Euro-dollar rates sharply higher. On the other hand, the dollars absorbed by foreign central banks in defense of the exchange rates negotiated in the Smithsonian agreement of December 1971 were used to purchase Treasury bills and special nonmarketable Treasury issues. Bill rates fell to artificially low levels, and the floating supply of bills decreased sharply. In this environment, the Federal Reserve experienced some difficulty in managing bank reserves during the month. The restrained provision of nonborrowed reserves over the month forced member banks to meet a larger part of their reserve requirements by borrowing from their Reserve Banks. Reflecting the mounting pressure on bank reserve positions, the Federal funds rate rose from 6.35 percent in the week ended January 31 to 6.75 percent in the week ended February 28. Late in the month the Federal Reserve Banks increased their discount rate from 5 percent to 5½ percent. Most major commercial banks immediately raised their prime business loan rate ¼ percentage point to 6¼ percent.

Bond prices tended lower during February as market caution about the interest rate outlook deepened. Concern over rising short-term interest rates made Government securities dealers and others willing sellers of issues acquired in the Treasury's February financing, although future Treasury financing needs were reduced by the sizable foreign central bank purchases of special issues directly from the Treasury. Relatively light new issues of corporate and municipal bonds helped to sustain the markets for these securities, but syndicate sales slowed and bond prices declined toward the month end.

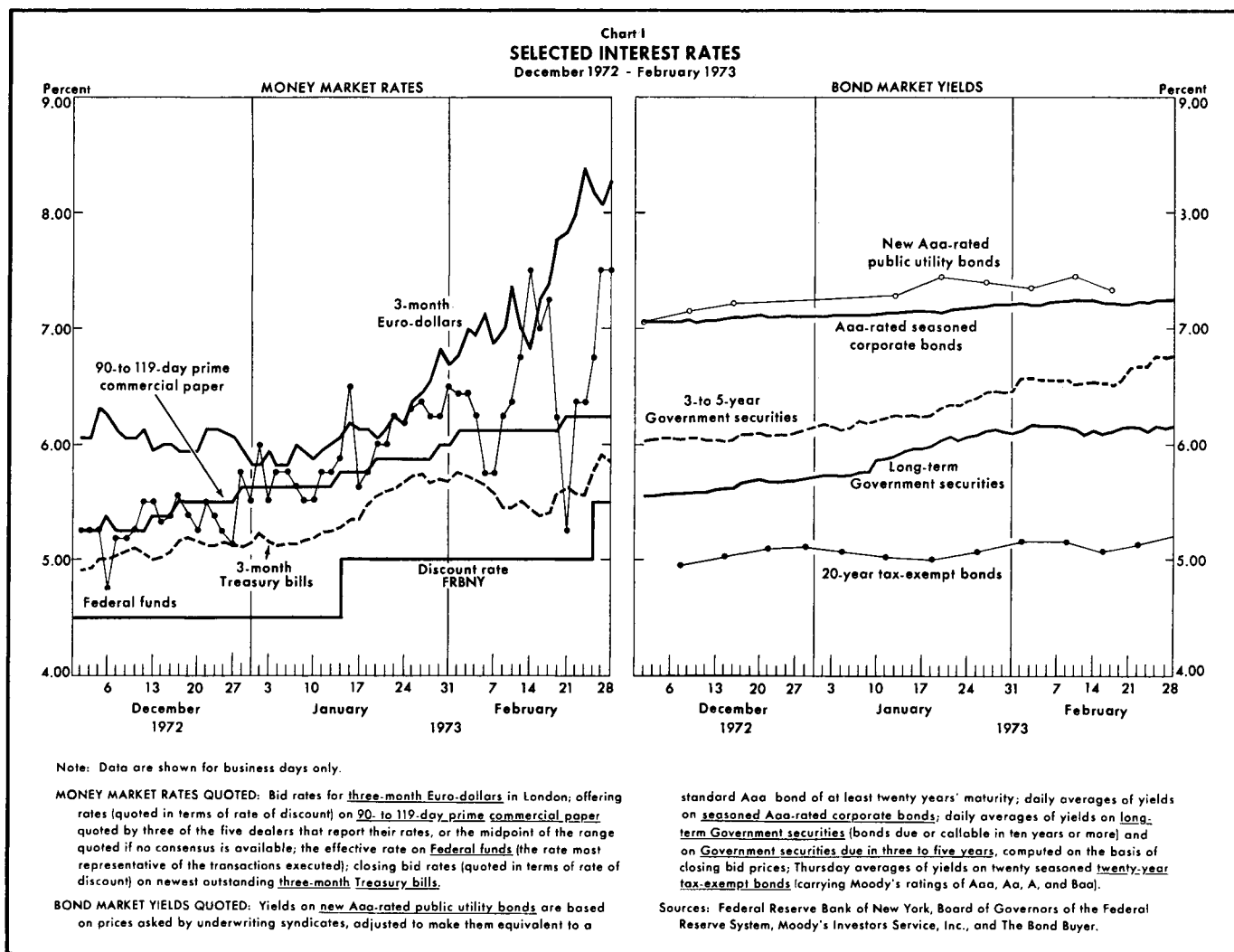
### BANK RESERVES AND THE MONEY MARKET

Money market conditions generally continued to grow firmer in February, although rates fluctuated widely. The effective rate on Federal funds averaged 6.58 percent, up

from 5.94 percent in January. In the first week of February the effective Federal funds rate averaged 6.21 percent. The rate climbed sharply during the following statement week, averaging 6.58 percent but reaching 7½ percent on Wednesday, February 14 (see Chart I), as foreign exchange flows complicated reserve management. As the week progressed the Federal Reserve was unable to provide reserves in sufficient volume through open market operations because of the small floating supply of Government securities in the market. The technical condition of the market reflected the prior investment in Treasury securities of a portion of the massive accumulation of dollars by the German and Japanese central banks in the first nine days of February as they defended the exchange rate limits established in the December 1971 Smithsonian agreement. On the evening of February 12, Secretary of the Treasury Shultz announced that President Nixon would ask the Congress to devalue the dollar 10 percent.

The massive flow of dollars from commercial banks to foreign central bank accounts in the second statement week threatened a substantial drain of reserves from the banking system. But the Treasury, which absorbed the major part of these funds through sales of special issues, made a record redeposit of \$3 billion with the Class C bank depositories on February 14. The remainder was returned to bank reserves through foreign purchases of Treasury bills in the market. This buying, however, sharply reduced market supplies so that the Trading Desk was unable after the holiday weekend to provide reserves in sufficient volume to counter the cumulative reserve deficiencies of the major banks. Accordingly, Federal funds traded at rates as high as 8½ percent on the final day of the week, and borrowings at the discount window rose to nearly \$2.8 billion.

Against this background, on February 14 the Trading Desk indicated its intention to supply funds through seven-day repurchase agreements for the following statement week. Although the Federal Reserve moved aggressively to provide reserves, the high Federal funds rate persisted as banks built up substantial reserve excesses over the sec-



and long holiday weekend. These excesses pushed the rate down sharply after the weekend, but the Federal funds rate averaged 6.79 percent for the week as a whole.

On February 23 the Board of Governors of the Federal Reserve System approved a ½ percentage point increase in the discount rate to 5½ percent at four Reserve Banks. This action was taken against the background of the strong credit demands generated by the rapid economic expansion, and the resultant rise in short-term market interest rates, and also in view of the developments in the foreign exchange markets. Similar increases in the discount rate at the eight remaining Reserve Banks were approved shortly thereafter. By the final statement week of February,

average daily borrowed reserves had declined somewhat from the high levels seen at the peak of the exchange rate speculation at midmonth. However, borrowings of \$1,479 million (see Table I) were still above the \$1,309 million in the January 31 statement week.

According to preliminary estimates, the narrowly defined money supply ( $M_1$ )—adjusted private demand deposits plus currency outside banks—grew at a seasonally adjusted annual rate of about 6 percent in February, after having declined slightly during January. This brought the three-month growth in  $M_1$  to 6½ percent at an annual rate and the twelve-month growth to 7½ percent (see Chart II). The growth of commercial bank time deposits other

than large certificates of deposit (CDs) slowed so that the broadly defined money supply ( $M_2$ ), which adds these time deposits to  $M_1$ , expanded at a 6 percent rate in Feb-

ruary. For the three months ended in February,  $M_2$  advanced at an 8 percent rate, and the increase over the year-earlier level was 9½ percent.

The adjusted bank credit proxy—which consists of daily average member bank deposits subject to reserve requirements plus liabilities to foreign branches and bank-related commercial paper—climbed sharply at a 16 percent rate in February. CDs continued to increase rapidly, as the banks sought to meet both strong domestic credit demands and those related to the foreign exchange crises. Yields offered by banks on new CDs reportedly reached the 6½ percent area by the month end for ninety-day maturities, and approached the 6¾ percent area for six-month maturities. The adjusted bank credit proxy has increased at rates of about 12½ percent over the past three- and twelve-month periods.

The demand for bank credit, particularly business loans, continued to expand rapidly in February. In addition to the increased demands for credit to finance expanding economic activity, there were some special factors contributing to the large increase in business loans. These included the demand for speculative funds with which to purchase foreign currencies, and the attraction of the relatively low bank prime rate compared with the cost of raising funds through commercial paper.

Early in February four commercial banks had raised their prime lending rate by ¼ point to 6¼ percent but shortly thereafter rescinded the increase after the Committee on Interest and Dividends requested justification. In requesting the explanation of the prime lending rate increase in terms of the banks' recent changes in costs and earnings, the Committee reiterated its view that "higher marginal costs of funds from sensitive market sources should not be permitted to unduly influence institutional lending rates". On February 23, after examining data submitted by one of the banks, the Committee removed its objection to a ¼ percentage point increase in the prime rate. On February 26, most major banks increased their prime rate to 6¼ percent.

#### THE GOVERNMENT SECURITIES MARKET

While other money market rates rose during the first half of February, Treasury bill rates declined. Foreign central banks made large purchases of Treasury bills with the dollars they had acquired from speculators. Marketable United States Government securities held in custody by the Federal Reserve Banks for foreign and international accounts increased \$2.5 billion in the first two weeks of February to a record \$32.7 billion on February 14. By February 28 this figure had declined to \$32.1 billion, still

**Table I**  
**FACTORS TENDING TO INCREASE OR DECREASE**  
**MEMBER BANK RESERVES, FEBRUARY 1973**

In millions of dollars; (+) denotes increase  
(-) decrease in excess reserves

Factors	Changes in daily averages— week ended				Net changes
	Feb. 7	Feb. 14	Feb. 21	Feb. 28	
<b>"Market" factors</b>					
Member bank required reserves .....	+ 416	+ 62	+ 95	+ 224	+ 797
Operating transactions (subtotal) .....	+ 427	- 903	+ 510	- 454	- 420
Federal Reserve float .....	+ 944	- 426	+ 546	- 15	+1,049
Treasury operations* .....	- 336	- 211	+ 730	- 555	- 372
Gold and foreign account .....	+ 1	- 13	+ 20	- 102	- 94
Currency outside banks .....	- 121	- 480	- 708	+ 310	- 999
Other Federal Reserve liabilities and capital .....	- 61	+ 227	- 78	- 93	- 5
Total "market" factors .....	+ 843	- 841	+ 605	- 230	+ 377
<b>Direct Federal Reserve credit transactions</b>					
Open market operations (subtotal) .....	-1,020	+ 110	+ 647	- 62	- 325
Outright holdings:					
Treasury securities .....	- 438	- 21	+ 199	+ 381	+ 121
Bankers' acceptances .....	+ 3	- 7	+ 6	- 5	- 3
Federal agency obligations .....	-	-	-	- 7	- 7
Repurchase agreements:					
Treasury securities .....	- 503	+ 94	+ 262	- 261	- 408
Bankers' acceptances .....	- 39	+ 32	+ 130	- 117	+ 6
Federal agency obligations .....	- 43	+ 12	+ 50	- 53	- 34
Member bank borrowings .....	- 78	+ 759	- 321	- 191	+ 169
Other Federal Reserve assets† .....	- 51	+ 14	- 675	+ 29	- 683
Total‡ .....	-1,149	+ 883	- 349	- 225	- 840
Excess reserves‡ .....	- 306	+ 41	+ 258	- 446	- 453
<b>Daily average levels</b>					
					<b>Monthly averages</b>
<b>Member bank:</b>					
Total reserves, including vault cash‡ .....	31,834	31,826	31,976	31,306	31,736§
Required reserves .....	31,687	31,652	31,530	31,306	31,539§
Excess reserves‡ .....	147	188	446	-	195§
Borrowings .....	1,232	1,993	1,670	1,479	1,594§
Free, or net borrowed (-), reserves .....	-1,085	-1,803	-1,244	-1,479	-1,403§
Nonborrowed reserves .....	30,602	29,833	30,306	29,827	30,142§
Net carry-over, excess or deficit (-)   .....	201	112	74	252	160§

Note: Because of rounding, figures do not necessarily add to totals.

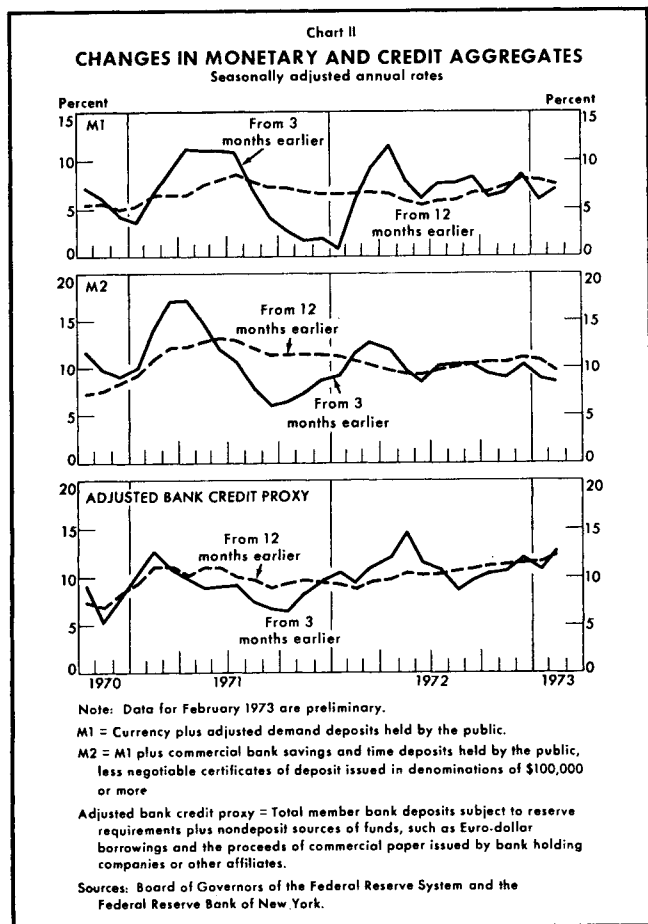
\* Includes changes in Treasury currency and cash.

† Includes assets denominated in foreign currencies.

‡ Adjusted to include \$279 million of certain reserve deficiencies on which penalties can be waived for a transition period in connection with bank adaptation to Regulation J as amended effective November 9, 1972. (The adjustment amounted to \$450 million from November 9 through December 27, 1972.)

§ Average for four weeks ended February 28.

|| Not reflected in data above.



\$1.9 billion above the level at the end of January. Furthermore, the Treasury sold an additional \$5.6 billion of non-marketable issues, mostly to foreign central banks, by mid-February. Reflows of some speculative funds caused liquidation of about \$700 million of these issues in the next two weeks. These nonmarketable securities totaled \$25.4 billion at the end of February, a net increase of \$4.9 billion for the month. The three-month Treasury bill rate declined during the first half of February. Once foreign demand was removed, however, Treasury bill rates rebounded sharply, spurred by increases in the Federal funds rates and other short-term market rates.

The pattern of weekly auctions of Treasury bills reflected the speculation prior to the devaluation announcement and the subsequent dollar reflows. The average issuing rate for three-month bills fell from 5.69 percent at January's last auction to 5.42 percent at the February 9 auction (see Table II). It subsequently rose to 5.81 per-

cent at the February 26 auction. At the February 22 auction \$1.8 billion of one-year bills was sold at an average issuing rate of 6.05 percent, 7 basis points above the January 26 offering. The \$1.8 billion sale raised \$100 million in new cash in addition to replacing \$500 million of discontinued nine-month bills and \$1.2 billion of one-year bills coming due.

Yields on United States Treasury coupon securities were relatively steady through midmonth but rose toward the month end. Renewed fears of inflation were sparked by reports of sharply higher wholesale and retail food prices and by statements from the Administration that these increases could be expected to continue for several months before leveling off. It also appeared that the devaluation of the dollar would increase the costs of imported goods, though imports are only 6 to 7 percent of gross national product. Perhaps more important for the domestic price outlook is the reduction in foreign competition with domestic products and the improved competitiveness of United States export food commodities. Bond market participants concluded that a more restrictive monetary policy was likely to be needed, and this view was reinforced by the testimony of the Federal Reserve Chairman and others before the Congressional Joint Economic Committee. Chairman Burns indicated that greater moderation in the provision of money and credit would be necessary in 1973 and that the Federal Reserve must "avoid efforts to hold open market interest rates at artificially low levels".

Two new Treasury coupon issues were sold early in the month. In the auction of \$1 billion of 6 $\frac{5}{8}$  percent 6 $\frac{3}{4}$ -year notes, public participation was weaker than anticipated, resulting in an average auction yield of 6.74 percent. There was considerable attrition, as expected, in the exchange offering of new 6 $\frac{1}{2}$  percent 3 $\frac{1}{2}$ -year notes. About \$2.5 billion of the \$4.7 billion of maturing February 15 notes held by the public was exchanged.

Federal agency financing was stepped up in February. Offerings of the Federal Home Loan Banks and the Federal Intermediate Credit Banks were well received by investors. An offering of two issues of the Federal National Mortgage Association toward the month end encountered considerable investor resistance, however.

#### OTHER SECURITIES MARKETS

The corporate bond market was steady in the early part of February, but some weakness developed in the final two weeks. The extremely light corporate new-issue calendar prompted good underwriter bidding, although investor interest was restrained somewhat by renewed fears of inflation, the devaluation, and rising short-term rates.

Only about \$12 million of an aggressively priced \$50 million issue of a Bell Telephone System subsidiary was sold while held in syndicate at 7.30 percent. A week later

the remainder of this Aaa-rated debt was released from syndicate restrictions and sold out at about 7.41 percent. Similarly, two thirty-year maturity electric utility offerings of \$100 million and \$150 million brought only limited buyer interest. The \$150 million issue, rated A by Moody's and BBB by Standard and Poor's, was originally offered at 7.70 percent but sold at 7.90 percent when syndicate restrictions were lifted. Later in the month there were no significant new corporate bond offerings. By the end of February, Moody's index of Aaa-rated seasoned corporate bonds had risen to 7.24 percent, compared with 7.20 percent on January 31.

In the tax-exempt bond market, a relatively light February calendar of new issues facilitated bond distributions, and new municipal offerings sold quickly during the first two weeks. As in the new-issue corporate market, however, buyers held back in the latter part of the month amid continuing foreign exchange rate uncertainty and rapid changes in short-term interest rate trends. The Blue List of advertised inventories of municipal bonds declined to \$807 million on February 28, compared with \$905 million on January 31. The Bond Buyer index of twenty municipal bond yields rose 6 basis points during February to 5.22 percent on March 1.

**Table II**  
**AVERAGE ISSUING RATES\***  
**AT REGULAR TREASURY BILL AUCTIONS**

In percent

Maturities	Weekly auction dates — February 1973			
	Feb. 5	Feb. 9	Feb. 16	Feb. 26
Three-months .....	5.665	5.424	5.455	5.811
Six-months .....	5.849	5.624	5.653	6.045
	Monthly auction dates—December 1972-February 1973			
	Dec. 26	Jan. 26	Feb. 22	
Fifty-two weeks .....	5.337	5.986	6.051	

\* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

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