February-July 1980 Semiannual Report
(This report was released to the Congress and to the press on September 3, 1980.)

Treasury and Federal Reserve Foreign Exchange Operations

Dollar exchange rates fluctuated widely over the six-month period under review Numerous political and economic crosscurrents tended to impart volatility to the exchange markets. These included the profusion of uncertainties surrounding political developments in Iran and Afghanistan and the shifting prospects for major industrial economies in dealing with the ill effects on their inflation rates and current account positions caused by the further rise in prices for oil. Market participants were also concerned about the possibilities of unsettling capital flows as the Organization of Petroleum Exporting Countries (OPEC) sought to invest the excess funds generated by their massive current account surpluses. Nevertheless, the broad movements in exchange rates during the period resulted largely from the relative pressures of the demand for money and credit in the United States, compared with other industrial countries and as reflected in sharp swings in interest differentials between investments in dollars and other major currencies. On balance, the dollar advanced sharply through early April during the time in which there was an intense scramble for funds and soaring interest rates in the United States. Once that scramble subsided and United States interest rates fell back through mid-June, the dollar also declined. Thereafter, the dollar remained vulnerable to bouts of selling pressure each time domestic interest rates tended to soften. But the selling pressures did not cumulate. By late July, with money demand in the United States picking up once again, interest rates here turned firmer and dollar rates in the exchange market also firmed. By this time also, the dollar was bolstered by the underlying improvement in the United States trade and current account positions and by indications of some reduction of our inflation rate.

For its part, throughout the period the Federal Reserve continued to adhere to the approach adopted last October 6, emphasizing bank reserves rather than the Federal funds rate as the primary operating variable in seeking to limit the growth of the monetary aggregates. When the demand for money and credit became extremely heavy in February and March, largely on the buildup of inflationary expectations at the time, the Federal Reserve's approach meant that not all the demand was met by increases in bank reserves. This effort was reinforced by the broader anti-inflation program announced by President Carter on March 14, which featured a tightening of fiscal policy but also included a program of special credit restraint by the Federal Reserve. Subsequently, when the demand for money and credit fell slack, and indeed the economy began to contract sharply, interest rates declined Consistent with its approach, the Federal Reserve provided bank reserves at about the same pace as before. In late May and early July the special

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credit restraints were eliminated in two steps. Many market participants expressed concern that, by allowing interest rates to decrease so sharply and by eliminating the special credit restraints, the Federal Reserve was giving up on its anti-inflation efforts. This was hardly the case as reiterated by Chairman Volcker in testimony to the Senate Banking Committee in late July. Moreover, as the demand for money and credit regained strength in the United States toward the end of the period, the Federal Reserve's approach again meant that these demands were not fully accommodated.

In the context of unsettled exchange market conditions and volatility of exchange rates, the United States authorities intervened frequently during the six-month period, operating on both sides of the market In the early phase through early April when the dollar was in demand, the United States authorities were able to acquire sufficient currencies in the market and from correspondents to repay earlier debt and to build up balances, buying German marks, Swiss francs, and Japanese yen. By late March-early April, the Trading Desk intervened on several occasions openly as a buyer of currencies to counter disorderly conditions in the market. Subsequently, when the dollar came under bursts of heavy selling pressure, the United States authorities intervened in size, selling German marks, Swiss francs, and French francs By the end of July, the United States authorities were again accumulating currencies to repay swap debt and rebuild balances.

For the period as a whole, total intervention sales of currencies amounted to $3,982.7 million equivalent, of which $3,530 6 million was in German marks, $291.4 million was in Swiss francs, and $160.7 million in French francs. Total acquisition of currencies amounted to $6,266.9 million, of which $1,476.2 million was in the market and $4,790.7 million was from correspondents, by currency, the acquisitions were $5,691.1 million of German marks, $357.8 million of Swiss francs, $216 8 million of Japanese yen, and $1.2 million of French francs. As indicated in Table 2, as of July 31, the Federal Reserve's swap debt to the German Bundesbank was $879.7 million equivalent and to the Bank of France was $166 3 million equivalent. Also during the period, as shown in Table 1, the Federal Reserve's reciprocal swap arrangement with the Bank of Sweden was increased by $200 million to $500 million

Through the first seven months of the year, the Federal Reserve and the Treasury both realized profits on foreign exchange operations. Table 5 shows that the System realized $14.5 million, the Exchange Stabilization Fund realized $45.8 million, and the Treasury's General Account realized $71.2 million in profits. On a valuation basis, as of July 31 the System showed $19 2 million in gains on outstanding foreign exchange assets and liabilities. However, the Exchange Stabilization Fund and the Treasury's General Account showed $325.8 million and $163.0 million in losses, respectively, on outstanding foreign exchange holdings and commitments

German mark

During the winter of 1979-80, as the exchange markets focused on the uncertainties surrounding the United States strategic and financial position in the Middle East and on the dollar's role as a reserve asset, the German mark had been bid up in the exchanges to a record high against the dollar But before long the prospects for the continued appreciation of the mark became clouded The massive increase in world oil prices and the expansion of the German economy had generated a far more rapid increase in import expenditures than in export revenues, leading to a dramatic turnaround in Germany's current account position. The current account had already swung from surplus into a DM 10 billion deficit in 1979, and an even larger deficit of as much as DM 20 billion was expected this year. Inflation also accelerated rapidly under the pressures of an economy running close to productive capacity and the persistent buildup of energy costs. Moreover, events in the international arena added to the market's sense of caution Although political tensions in the Middle East still raised the possibility that holders of dollars from that region might switch into marks, the deterioration in great power relations following the Soviet invasion of Afghanistan also raised concern about Germany's exposure in Western Europe. As a result, capital began to flow out of the mark in search of other havens

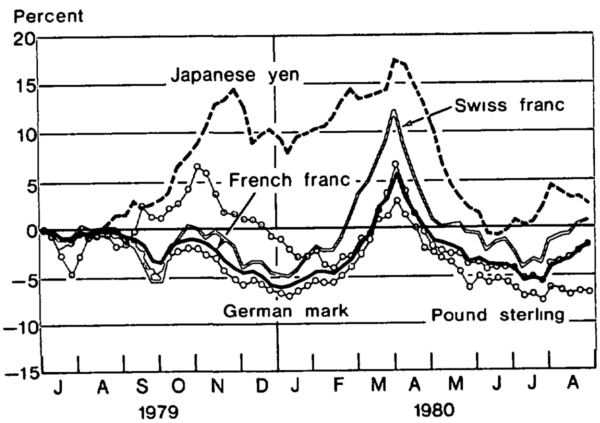
In these circumstances the mark had already slipped back from its highs early in the year to DM 1 7414 by end-January, and subsequent bouts of buying pressure did not readily cumulate Thus, on two occasions in early February when concern about the dollar brought the mark into bursts of demand, the United States authorities quickly restored balance to the market with sales of $240 8 million equivalent of marks. These sales were financed out of balances of the Treasury and the Federal Reserve and by drawings of the Federal Reserve in the amount of $115 4 million under the swap line with the German Bundesbank These operations raised the System's total mark swap debt with the Bundesbank to a peak of $2,746 3 million equivalent for the six-month review period and steadied the mark around DM 1.7375

In view of the deterioration in Germany's inflation and balance-of-payments performance, German economic policy moved toward greater restraint The

Table 1
Federal Reserve Reciprocal Currency Arrangements
In millions of dollars

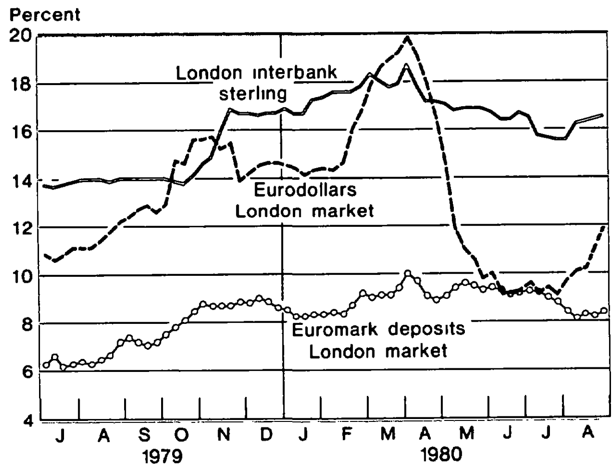
Institution	Amount of facility, January 1, 1980	Increase effective May 23, 1980	Amount of facility July 31, 1980
Austrian National Bank	250		250
National Bank of Belgium	1,000		1,000
Bank of Canada	2,000		2,000
National Bank of Denmark	250		250
Bank of England	3,000		3,000
Bank of France	2,000		2,000
German Federal Bank	6,000		6,000
Bank of Italy	3,000		3,000
Bank of Japan	5,000		5,000
Bank of Mexico	700		700
Netherlands Bank	500		500
Bank of Norway	250		250
Bank of Sweden	300	200	500
Swiss National Bank	4,000		4,000
Bank for International Settlements			
Swiss francs-dollars	600		600
Other authorized European currencies-dollars	1,250		1,250
Total	30,100	200	30,300

Chart 1
The Dollar Against Selected Foreign Currencies



Percentage change of weekly average of bid rates for dollars from the average rate for the week of July 2-6, 1979 Figures calculated from New York noon quotations.

Chart 2
Selected Interest Rates
Three-month maturities*



*Weekly averages of daily rates

authorities feared that rising energy prices would unleash a cycle of wage-price increases. Already there was some evidence of accelerating purchases by consumers and a buildup of business inventories, partly on the expectation of more inflation to come. Also, the uncertain outlook for capital inflows raised concerns about the prospects for financing the large current account deficit. Accordingly, the pace of government expenditures had already been reduced. On February 28 the Bundesbank raised the discount rate by 1 percentage point to 7 percent and the Lombard rate by 1½ percentage points to 8½ percent. But, to prevent liquidity from tightening too far in the face of a seasonal increase in money demand, the Bundesbank also increased commercial banks' rediscount quotas by DM 4 billion and removed borrowing limits under the Lombard facility. These actions brought official rates in line with German money market rates which were rising as the authorities kept the growth of central bank money within the 5 to 8 percent annual growth range in the face of mounting credit demands

Meanwhile, however, short-term dollar interest rates were rising even more sharply as the Federal Reserve, adhering to the monetary policy adopted last October 6, restrained the growth of bank reserves in the face of a sudden resurgence in the demand for money and credit in the United States. As reports began to circulate that the United States authorities might impose credit controls to help stem the rise in inflationary expectations, a surge of precautionary borrowing ensued, which pushed United States domestic and Eurodollar rates to new highs. With interest differentials adverse to the mark widening progressively to reach 8½ percentage points in the early weeks of March, capital flowed heavily out of Germany and the mark declined rapidly in the exchanges. These outflows took the form of adverse commercial leads and lags, portfolio shifts by foreign investors, and a buildup of dollar balances by German residents. In addition, some professional and corporate borrowers around the world began meeting their financing needs in other currencies by borrowing marks and converting the proceeds in the exchanges

The German authorities were concerned that the sharp depreciation of the mark would further aggravate domestic inflationary pressures through higher prices for oil and other imports. The Bundesbank intervened heavily to blunt the mark's decline, entering the Frankfurt market, where the pressures tended to concentrate, almost daily as a heavy seller of dollars both spot and forward. The authorities also took measures to induce sufficient capital inflows to help finance the current account deficit and to help offset the outflows of capital. In part, these entailed the relaxation of restrictions on capital inflows by permitting foreigners to purchase government securities, domestic bonds, and other mark-denominated promissory notes with maturities of more than two years (as opposed to four years previously). In addition, the government negotiated directly with foreign official institutions, notably those from OPEC, to obtain investments in mark assets. Meanwhile, through mid-March the United States authorities acquired $2,751.7 million equivalent of marks from correspondents, mainly from the Bundesbank Also, the Trading Desk intervened in New York, purchasing $115 million equivalent of marks in the market. These marks were used to liquidate in full the Federal Reserve's outstanding swap debt with the Bundesbank and to make interest payments on the Treasury's securities issued in the German capital market. On balance, by mid-March the mark had declined 5 percent from early-February levels to DM 1.8265

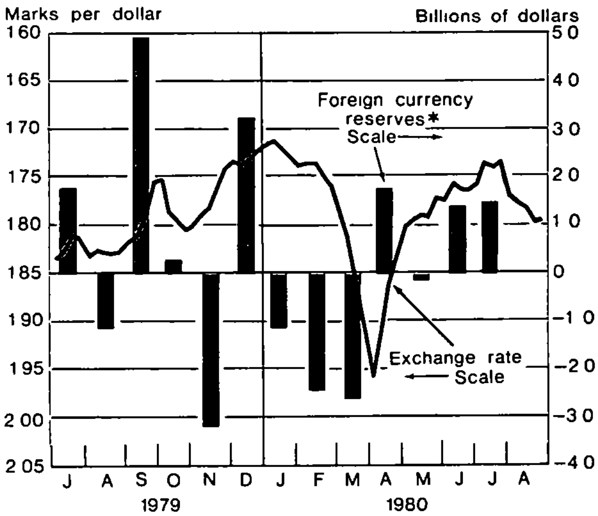
On March 14, President Carter announced a broad anti-inflation program that included actions aimed at balancing the fiscal 1981 budget, a surcharge on imported oil, and authorization for the Federal Reserve under the terms of the Credit Control Act of 1969 to impose special restraints on credit expansion Accordingly, the Federal Reserve asked the commercial banks to hold their growth of lending to United States residents to 6-9 percent during 1980, required special deposits from nonmember banks and other lending institutions, and raised the marginal reserve requirement on managed liabilities from 8 to 10 percent for large member banks and United States agencies and branches of foreign banks. In addition, the Federal Reserve imposed a 3 percentage point surcharge on large member banks' discount window borrowings. The exchange market reacted positively to the package of special credit restraints as a sign of the United States authorities' determination to curb persistent and accelerating inflationary pressures.

Following these measures the interest disincentive against the mark widened to some 10 percentage points as short-term dollar interest rates climbed further in late March and into early April, reaching peaks of 20 percent As a result, interest-sensitive capital flowed even more heavily from Germany at a time when the continued deterioration of the current account deficit left the mark spot rate particularly vulnerable to downward pressure Vigorous intervention to support the mark in these circumstances threatened a drain on Germany's foreign exchange reserves which the authorities feared would undermine confidence in the mark all the more. Therefore, the Bundesbank intervened somewhat less forcefully than in previous weeks and also supported the mark through sales of mark-denominated bonds to foreign official holders. By

Chart 3

Germany

Movements in exchange rate and official foreign currency reserves



Exchange rates shown in this and the following charts are weekly averages of noon bid rates for dollars in New York Foreign currency reserves shown in this and the following charts are drawn from IMF data published in International Financial Statistics

*Foreign exchange reserves for Germany and other members of the European Monetary System, including the United Kingdom, incorporate adjustments for gold and foreign exchange swaps against European currency units (ECUs) done with the European Monetary Fund

April 8 the mark declined another 8½ percent, reaching a low of DM 1 9810 in Far Eastern trading while also dropping to the bottom of the European Monetary System (EMS) As the sale of marks against dollars gathered momentum between mid-March and early April, the United States authorities intervened forcefully to counter disorderly trading conditions, operating frequently in the New York market and, on one occasion, overnight in the Far East The authorities purchased an additional $741 5 million equivalent of marks in the market and another $654 7 million equivalent from correspondents, which were added to System and Treasury balances Meanwhile, the Bundesbank's heavy dollar sales were reflected in a $5 1 billion decline in Germany's foreign exchange reserves from end-January to $41 2 billion by end-March.

By this time, however, the German money market had tightened considerably and, even though the Bundesbank had begun to offset the drain on liquidity of its dollar sales by entering into foreign exchange swaps, market participants expected a further rise in German official interest rates By contrast, with the scramble for funds in the United States tapering off and with economic indicators suggesting a sharp slowing in the United States economy, market participants sensed that dollar interest rates would soon turn down. Under these circumstances, the mark came into immediate and heavy demand once interest rates in the United States showed unmistakable signs of declining in early April Moreover, diminished prospects for a resolution of the hostage situation in Iran renewed concerns that official dollar holders in the Middle East would switch more of their surplus funds into European currencies—the mark in particular—as an alternative to dollar assets On April 8-10 as dollar exchange rates declined across the board, the mark soared 5½ percent to DM 1 8730 in extremely disorderly conditions In response, the Trading Desk intervened as a seller of marks and Swiss francs and, to avoid aggravating the weakness of the mark relative to the French franc within the EMS, also intervened as a seller of French francs The Bundesbank also sold French francs to support the mark within the EMS

In the weeks that followed, United States interest rates continued to drop precipitously, at times falling by as much as 1-2 percentage points a day Traders generally recognized that the Federal Reserve's policy of restraint on money supply growth was consistent with some easing in financial market conditions, as demands for money and credit weakened and as evidence of recession mounted But the abruptness of the change in market conditions generated uncertainty about the policies of the United States authorities At the same time, German interest rates remained firm, so that interest differentials adverse to the mark were rapidly narrowing As commercial and professional participants continued to unwind their short mark positions, the mark advanced another 4¼ percent to as high as DM 1 7940 by late April However, the United States and German authorities were quick to enter the market to moderate the mark's rise, and their coordinated intervention helped bring the market into better balance around the month end

Meanwhile, in Germany, inflationary pressures remained strong by recent standards, and the continued growth of credit demands was boosting borrowings from the central bank On April 30, the Bundesbank hiked its discount rate by ½ percentage point to 7½ percent and the Lombard rate by 1 percentage point to 9½ percent At the same time, the Bundesbank moved to curtail excessive reliance on the Lombard facility by reducing reserve requirements by 8 percent and raising commercial banks' quotas under the rediscount facility, thereby providing about DM 8 billion in domestic liquidity The effect of these actions was to leave the restrictive stance of monetary policy unchanged while keeping short-term liquidity tight. But market participants initially found it hard to assess the impact of these measures and focused instead on broader economic developments in the United States. Monthly data showed that the United States trade position was improving, while some evidence suggested that price increases were slowing from the rapid pace early in the year. As a result, the mark fluctuated only narrowly higher as the dollar gained some resiliency in the exchanges, to trade around DM 1.78-1.79 through mid-May

On those occasions when upward pressures on the mark threatened to cumulate, the United States and German authorities intervened to restore balance to the market. Total intervention sales by the United States authorities between early April and mid-May amounted to $1,370.2 million equivalent of marks, including $732.4 million equivalent for the System, financed out of balances and by drawings on the swap line with the Bundesbank, and $637.8 million equivalent for the Treasury financed from balances At times when the mark eased back, the Federal Reserve took the opportunity to acquire $60 4 million equivalent of marks in the market and $169.6 million equivalent from correspondents in order to finance intervention and to repay part of the newly acquired swap debt with the Bundesbank. On balance, by mid-May the System's swap indebtedness with the Bundesbank stood at $331 4 million equivalent of marks For its part the Treasury bought $29.8 million equivalent of marks on a spot basis and received delivery of $400 million equivalent of marks on a forward basis from correspondents.

Nevertheless, market participants remained extremely sensitive to monetary policy developments in Germany and in other industrial countries. Coming into the summer, Bundesbank officials were stressing the need to rein in further central bank money growth to the lower end of the 5-8 percent target range In the United States, meanwhile, interest rates continued to decline. Participants questioned whether the sharp drop in rates was more a response to the falloff in credit demand or to the provision of bank reserves by the United States authorities. Traders closely scrutinized the actions of the domestic Trading Desk, and the mark frequently came into demand when declines in the Federal funds rate were interpreted as a sign of monetary ease. Moreover, in view of the exceptional weakness of the United States economy and increasing public discussion about the need for stimulus, the exchange market was alert to any evidence of a weakening in the priority of the United States fight against inflation. Consequently, bidding for the mark gathered force in late May and again in early July, when the United States authorities first relaxed and then phased out completely the special credit restraint program adopted early in the spring.

Demand for the mark propelled the spot rate to as high as DM 1.7335 by early July. But against the major European currencies the mark remained weak. Germany's current account deficit, already larger than that of any of its trading partners, continued to widen, and a number of private and official organizations were predicting a deterioration of up to as much as DM 25-30 billion for the year as a whole. Although capital continued to flow back into Germany, a number of other EMS countries with higher interest rates than those prevailing in the German money and capital markets were also attracting substantial inflows of funds. In these circumstances, the Trading Desk again countered the outbreak of disorder in the market by supplementing its mark intervention with sales of French francs so as to avoid aggravating the strains on the mark within the EMS.

By mid-July the mark began to lose some of its buoyancy as traders grew more cautious in the face of changing economic conditions in Germany. Evidence mounted that domestic economic growth was tapering off, as industrial production and construction activity posted declines Inflation on the wholesale and consumer levels also abated somewhat, reflecting some relief in the food and energy sectors, the slowing in demand pressures, and moderate wage settlements negotiated over the spring Moreover, several EMS countries had begun to allow monetary conditions to ease Accordingly, domestic pressures built up for a relaxation of policy in Germany The authorities were nevertheless concerned that a reduction of official interest rates would undercut the progress under way in bringing inflation under control and in financing the current account deficit Instead, the Bundesbank announced that it would provide a new repurchase facility in the amount of DM 5 4 billion. Bundesbank President Poehl described this action as a cautious easing in monetary policy.

At the same time, the outlook for the dollar was improving The dollar was benefiting from new data on production and employment which suggested that the United States economy was no longer contracting as rapidly as before. As the demand for credit picked up and the monetary aggregates recorded large increases, short-term United States interest rates rebounded. In this light, Chairman Volcker's Congressional testimony, reaffirming the Federal Reserve's commitment to a policy of monetary restraint, was particularly well re-

Table 2

Federal Reserve System Drawings and Repayments under Reciprocal Currency Arrangements

In millions of dollars equivalent; drawings (+) or repayments (−)

Transactions with	System swap commitments January 1, 1980	1980 I	1980 II	1980 July	System swap commitments July 31, 1980
Bank of France	-0-	-0-	+ 100 2	+ 60 6	166 3*
German Federal Bank	3,150 4	+ 316 0 −3,489 2	+ 996.1 − 132 4	+265 7 −263 4	879 7†
Swiss National Bank . . .	-0-	+ 22 7 − 22 7	-0-	+ 11 2 − 11 2	-0-
Total	3,150 4	+ 338 7 −3,511 9	+1,096 2 − 132 4	+337 5 −274 7	1,046 0

Because of rounding, figures do not add to totals Data are on a value-date basis with the exception of the last two columns which include transactions executed in late July for value after the reporting period

* Includes revaluation adjustments from swap renewals, which totaled $5 5 million for drawings on the Bank of France renewed during July

† Includes revaluation adjustments from swap renewals, which totaled $36 6 million for drawings on the German Federal Bank renewed during the first quarter and July

Table 3

Drawings and Repayments by Foreign Central Banks and the Bank for International Settlements under Reciprocal Currency Arrangements

In millions of dollars; drawings (+) or repayments (−)

Bank drawing on Federal Reserve System	Outstanding January 1, 1980	1980 I	1980 II	1980 July	Outstanding July 31, 1980
* Bank for International Settlements (against German marks)	-0-	+192 0 − 97 0	+ 50 0 −145 0	-0-	-0-

Data are on a value-date basis

* BIS drawings and repayments of dollars against European currencies other than Swiss francs to meet temporary cash requirements

Table 4

United States Treasury Securities, Foreign Currency Denominated

In millions of dollars equivalent, issues (+) or redemptions (−)

Issues	Amount of commitments January 1, 1980	1980 I	1980 II	1980 July	Amount of commitments July 31, 1980
Public series:					
Germany	4,065 7	+1,168 0	-0-	-0-	5,233 6
Switzerland	1,203 0	-0-	-0-	-0-	1,203 0
Total	5,268 6	+1,168 0	-0-	-0-	6,436 6

Data are on a value-date basis Because of rounding, figures do not add to totals.

ceived. As a result, the mark dropped lower to close the period at DM 1.7860, for a net decline of 2½ percent over the period under review.

After mid-May, the United States authorities intervened to sell $1,919.4 million equivalent of marks including $1,096.0 million equivalent for the System and $823.4 million equivalent for the Treasury. The System's sales were financed from balances and by drawings on the swap line with the Bundesbank. However, the authorities were also able to purchase $160 0 million equivalent of marks in the market and $608.2 million equivalent from correspondents. As a result, the System was able to reduce its outstanding indebtedness to the Bundesbank from as high as $1,080.9 million equivalent to $879.7 million equivalent by end-July (including revaluation adjustments for swap renewals), while the Treasury was able to begin replenishing its mark balances Meanwhile, Germany's foreign exchange reserves rose $4.5 billion in the four months through end-July, largely reflecting revaluation gains of its gold and foreign currency holdings with the European Monetary Fund The Bundesbank's purchases of dollars also contributed to the rise in foreign exchange reserves which stood at $45 7 billion at end-July, little changed on balance.*

Swiss franc

By early 1980, the upsurge of oil and other international raw materials prices was being quickly transmitted to the Swiss economy. Indeed, inflation in Switzerland, at 5 percent per annum, remained low by comparison with that in other countries but was accelerating at a worrisome pace At the same time, the sharp rise in imports of oil and other goods cut deeply into Switzerland's traditional current account surplus. The Swiss authorities, like those in most other industrial countries, were pursuing a policy of monetary restraint in an effort to combat inflationary pressures, and Swiss interest rates moved higher But economic activity in Switzerland was expanding more slowly than in other countries. Consequently, the demand for funds was not so intense, and Swiss interest rates—while rising sharply by historical standards—did not begin to keep pace with those abroad.

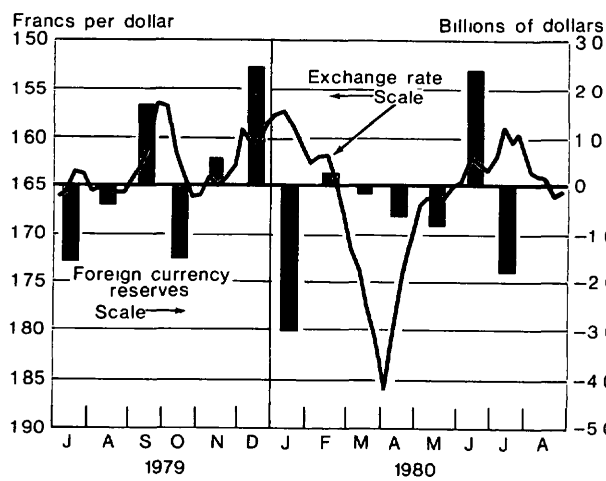
The shrinking current account surplus, accelerating inflation, and adverse interest differentials exerted a drag on the Swiss franc during February and March At times when the dollar came on offer in early February the Swiss franc was bid up. On such occasions, the Swiss National Bank intervened to counter a disorderly rise in the franc At one point, the Federal Reserve joined in the intervention by selling $22.5 million equivalent of Swiss francs out of balances. But otherwise the Swiss franc tended to ease. By late February, investors began liquidating Swiss franc-denominated assets, switching into higher yielding mark and sterling assets and, when United States interest rates began their upward climb, moving into dollar-denominated investments as well. In fact, the franc fell more sharply than the mark against the dollar, declining to SF 1.7111 in late February, some 4¾ percent below the opening level of SF 1.6325.

In response to these pressures on the franc, the Swiss authorities acted in late February and early March to liberalize restrictions on capital inflows by lifting the ban on interest payments on nonresident savings deposits and on foreign central bank deposits with maturities of six months or more. The authorities also eased restrictions on foreigners' purchases of forward Swiss francs. On February 28, the Swiss National Bank raised the discount and Lombard rates by 1 percentage point each to 3 and 4 percent, respectively. But these measures were not sufficient either to satisfy market expectations of more comprehensive action to dismantle barriers to inflows or to bring official rates in line with interest rates prevailing in the domestic or Eurofranc money markets.

Chart 4

Switzerland

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3.

* Foreign exchange reserves for Germany and other members of the EMS, including the United Kingdom, incorporate adjustments for gold and foreign exchange swaps against European currency units (ECUs) done with the European Monetary Fund Foreign exchange reserve numbers used in the report are drawn from International Monetary Fund data published in *International Financial Statistics*

Meanwhile, domestic economic activity was picking up following two years of sluggish growth. With the economy now operating close to full employment, consumers and businesses accelerated their purchases of imported goods at a time when import prices were still rising rapidly. As a result, the trade deficit deteriorated further. During March selling pressures intensified. Commercial leads and lags swung against the franc, and investors kept shifting funds out of Switzerland. Moreover, higher interest rates abroad prompted professional and commercial borrowers to turn to Switzerland's money and capital markets where interest rates remained comparatively low.

In response, the Swiss National Bank began intervening more openly and heavily as a seller of dollars, thereby absorbing Swiss francs. The authorities also lifted completely restrictions on forward franc sales to foreigners and removed the interest payment ban on nonresident bank deposits of three months or longer. As a further stimulus to capital inflows, foreign central banks were allowed to subscribe to a second Swiss franc-denominated bond issued by the World Bank and to short-term certificates of the Swiss government. Even so, with interest differentials remaining highly adverse to franc-denominated assets, the franc spot rate continued to weaken, dropping through the psychologically important SF 0.95 level against the mark.

On March 27, Swiss National Bank General Manager Languetin stated that the Swiss central bank would intervene as forcefully as required to prevent a further weakening of the franc. At the same time, the authorities were alert to the domestic liquidity situation. The heavy volume of capital outflows and official dollar sales had led to a decline in the monetary base below desired levels, and a further contraction threatened to dampen economic activity. To support the franc without generating further liquidity strains, the Swiss National Bank supplemented its spot intervention with forward dollar sales and provided commercial banks with a substantial amount of franc liquidity through short-dated foreign exchange swaps. The Federal Reserve also took advantage of the opportunity to buy Swiss francs in New York to add to balances, buying $185.1 million equivalent of Swiss francs, including $140.4 million equivalent in the market between February and early April. Whereas the franc soon steadied against the mark, the spot rate continued to decline against the dollar, bottoming out at nearly SF 1.88 on April 8 in the Far East.

The abrupt decline of dollar exchange rates beginning early in April had its counterpart in a surge of heavy bidding for the Swiss franc. Professional and commercial interests rushed to cover short franc positions in response to the decline in United States interest rates that happened to coincide with reports that the Swiss National Bank might raise its interest rates in line with an expected hike of official interest rates in Germany. On April 8-10 the franc soared 7¾ percent to SF 1.7330, outpacing the rise in the mark. To counter the disorderly market conditions, the Federal Reserve sold $35 million equivalent of francs, while operating in other currencies as well. Although the Swiss authorities left official rates unchanged, the franc frequently led the rise in the European currencies against the dollar in the weeks that followed. Many participants bid for the franc on the view that the Swiss authorities welcomed a rise in the franc. Investors, having ready access to franc investments as a result of the virtual elimination of exchange controls, reacted to the reduction of adverse interest differentials by purchasing a broad range of franc-denominated assets. Moreover, commercial and professional interests increasingly covered Swiss franc liabilities incurred over the winter months.

Table 5

Net Profits (+) and Losses (−) on United States Treasury and Federal Reserve Current Foreign Exchange Operations

In millions of dollars

Period	Federal Reserve	United States Treasury: Exchange Stabilization Fund	United States Treasury: General Account
First quarter 1980	+14.1	-0-	+ 64.9
Second quarter 1980	+ 7.7	+ 42.0	-0-
July 1980	− 7.3	+ 3.8	+ 6.3
Valuation profits and losses on outstanding assets and liabilities as of July 31, 1980	+19.2	−325.8	−163.0

Data are on a value-date basis.

As the demand for Swiss securities increased, long-term yields in Switzerland declined. But the Swiss National Bank signaled its resistance to the rapid fall in interest rates by selling securities. Also, Swiss National Bank President Leutwiler reaffirmed the authorities' commitment to a restrictive monetary policy course. Traders were also heartened by new statistics, suggesting that Switzerland's inflation rate was leveling off. By contrast, the market remained concerned over the sharp decline in United States interest rates

Many traders questioned the priority of the anti-inflation fight in the United States, particularly when in late May and again in early July the Federal Reserve successively dismantled the special credit restraint program. On both those occasions, the Swiss franc came into demand, rising to a high of SF 1 5840 by early July To avoid an exaggerated movement in the spot rate, the Swiss National Bank intervened as a buyer of dollars in Zurich and through the agency of the Federal Reserve in the New York market For their part, the United States authorities sold $233 9 million equivalent of Swiss francs in the eleven weeks from mid-April, with the bulk financed from balances and $11 2 million equivalent drawn on the System's swap line with the Swiss National Bank.

In the final weeks of July when market sentiment toward the dollar improved, the franc lost its upward momentum Signs that the United States economy was no longer contracting as rapidly as before, and that interest rates were backing up, contrasted with evidence of some slowing of economic growth and easing in financial conditions in Western Europe. With market participants sensitive to the possibility that Swiss interest rates might also ease, the Swiss franc fell back in the exchanges to SF 1.6570 by end-July. In fact, however, Swiss interest rates held firm. When the franc came on offer after mid-July, the United States authorities took the opportunity to purchase $42.0 million equivalent of francs in the market and $130 5 million equivalent from correspondents. These francs were used to liquidate the System's outstanding swap debt with the Swiss National Bank and to rebuild System and Treasury balances.

For the period as a whole, the Swiss franc declined 1½ percent from end-January levels, while rising 1¼ percent against the German mark. Meanwhile, Switzerland's foreign currency reserves fluctuated from month to month in response, not only to the central bank's intervention, but also to foreign exchange swap operations undertaken for domestic monetary purposes. On balance, Switzerland's foreign exchange reserves declined $850 million over the six months under review to stand at $12 3 billion as of July 31.

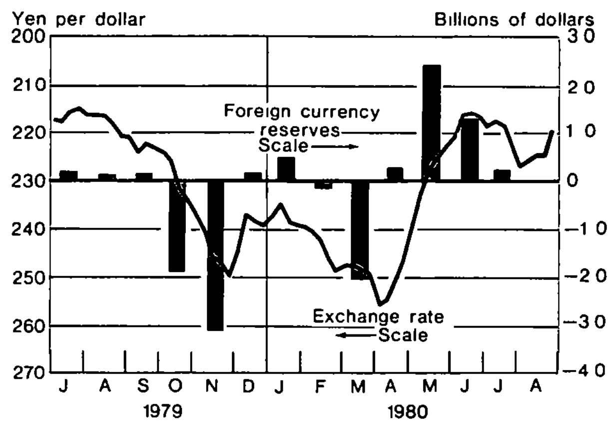
Japanese yen

Last year, the Japanese economy had made good progress in adjusting to earlier imbalances Efforts to boost domestic demand had generated solid growth while also helping reduce Japan's previously excessive current account surplus. Export and import volumes had responded to the previous appreciation of the yen, with the effect of reducing the current account surplus. The yen rate had moved back up to around ¥220 to the dollar. But the sharp new rise in international oil prices in 1979 and early 1980, coupled with the risk of major disruptions to oil supplies, was a serious blow to Japan which depends on imported oil for three fourths of its energy needs. Consequently, the authorities found that they had to reverse gears and adjust to a new set of problems, as inflationary pressures at the wholesale level built up drastically, as the current account was pushed into deep deficit under the weight of a sharply higher import bill, and as the yen came heavily on offer and depreciated sharply in the exchange market In response, the Japanese authorities progressively tightened monetary and fiscal policies, primarily to contain inflationary pressures The authorities also sought to correct the current account deficit gradually by adjustment of the real economy and, in the meantime, to finance the deficit by capital inflows. The government's budget for the 1980-81 fiscal year called for a cutback in public works spending that would permit a reduction of deficit financing. The Bank of Japan raised interest rates including a 1 percentage point increase to 7¼ percent in its discount rate on February 19. It also raised reserve requirements and kept tight reins on bank credit expansion

Nevertheless, by February, short-term interest rates abroad, especially on dollar instruments, were rising even more sharply than the advance of Japanese money market rates Consequently, the yen continued on offer. With the exchange rate declining, market sentiment toward the yen turned increasingly bearish so that commercial leads and lags as well as speculative outflows of funds added to the downward pressure on the yen *vis-à-vis* the dollar and other major currencies. By the month end the yen had plummeted to ¥251.75, a decline of 5½ percent from late-January levels and fully 43 percent from the high recorded in October 1978. As before, the Bank of Japan intervened to moderate the decline of the yen, supplementing its intervention in Tokyo with operations in New York through the Federal Reserve Bank of New York

The sharp decline of the yen complicated the authorities' efforts to contain inflation The rising cost of imports had already helped push wholesale prices up over 20 percent on a year-over-year basis This sharp increase was feeding into the consumer price index which by then was rising at a rate of about 8 percent. The key spring wage negotiations were about to start In these circumstances, a further weakening of the yen threatened to reinforce inflationary expectations

The Japanese authorities therefore undertook several initiatives to support the yen in the exchanges. Following intensive discussions, on March 2 the Bank of Japan announced that the Federal Reserve, the German Bundesbank, and the Swiss National Bank would



cooperate to avoid an excessive decline of the yen The Federal Reserve, for its part, indicated its willingness to purchase yen in the New York market for its own account and to provide resources to the Bank of Japan if needed under the existing $5 billion swap arrangement. The German and Swiss central banks also pledged their support and subsequently concluded swap agreements with the Bank of Japan Also, on March 2 the Japanese authorities adopted a number of measures to encourage inflows so as to help finance the current account deficit Banks were allowed to bring in Euroyen deposits from their foreign offices, and Japanese banks were permitted to make medium- and long-term foreign currency loans (so-called "impact" loans) to domestic customers Controls on private placements abroad of yen-denominated bonds by Japanese residents were relaxed And free-yen deposits held by foreign official institutions were exempted from interest rate ceilings Later during the month, the Bank of Japan abolished its 1970 arrangement with commercial banks providing for yen-dollar swap facilities to finance imports, thereby rescinding the last of the major import promotion schemes The authorization of increased ceilings for the issuance of yen-denominated certificates of deposit (CDs) by banks operating in Japan also provided more scope for short-term capital inflows from abroad

These measures were reinforced by a broad anti-inflation program, introduced on March 19, that was keyed to the domestic economy The Bank of Japan raised its discount rate another 1¾ percentage points to 9 percent and subsequently increased both reserve requirements and "window guidance" limits on bank lending Public works expenditures, already trimmed back, were postponed In addition, the government announced that henceforth it would monitor price developments more closely, would sell commodities out of stockpiles if needed to prevent shortages from developing, and would accelerate energy conservation efforts The authorities reaffirmed their commitment to a disciplined monetary policy and to the priority of the fight on inflation

These measures helped relieve some of the immediate selling pressures, and the yen strengthened against most of the major European currencies over the course of March But reflows back into yen were slow to materialize, particularly since the pull of United States interest rates was so strong in late March and early April Along with other major foreign currencies, the yen continued to decline against the dollar through early April By April 8, the yen had fallen a further 5 percent to as low as ¥ 264 against the dollar in Far Eastern trading The Bank of Japan continued to intervene forcefully to moderate the decline of the yen rate, and its dollar sales were reflected in the $2 2 billion decline of foreign exchange reserves during February-March Meanwhile, as part of the March 2 agreement, the Federal Reserve bought $216 8 million equivalent of yen in the New York market in coordinated operations with the Bank of Japan These purchases were added to System balances

By mid-April, with United States interest rates turning down, the yen began to recover along with other major currencies At first the yen's recovery was tentative Wholesale prices were still rising sharply in Japan, and concerns about oil supplies resurfaced amid discussions of economic sanctions against Iran Nevertheless, the spring wage negotiations resulted in moderate wage increases, while evidence continued to point to substantial gains in labor productivity The market increasingly came to the view that declining unit labor costs would mitigate domestic inflationary pressures and would provide the basis for Japanese exporters to take advantage of the now substantial depreciation of the yen to increase sales abroad A sharp improvement in exports was already showing through in Japan's trade figures, and the overall trade and current account deficits were beginning to level off

In response, market sentiment toward the yen improved and the spot rate began to rise more rapidly at the end of April Speculative short positions were covered, while commercial leads and lags shifted back in favor of the yen. With United States interest rates continuing to decline and interest rates in Japan holding steady, the differential in rates swung back to favor the yen in early May and the pace of capital inflows quickened. By that time, funds were moving into yen-denominated assets of all maturities amid reports of large placements by OPEC central banks and other foreign authorities in the Japanese market. As the flow of funds gathered force, the yen began to outpace the rise in the European currencies against the dollar, soaring by mid-June to as high as ¥ 214.95, some 18½ percent above its early-April lows. As the rate rose, the Bank of Japan intervened in size to counter disorderly conditions, on balance buying back about half of the dollars it had sold earlier during the period.

By that time, the reflux of funds had about run its course. Moreover, traders had become cautious in light of the upcoming parliamentary election on June 22, especially since the sudden death of Prime Minister Ohira had inserted an added element of uncertainty into the campaign. The outcome—a victory by the ruling Liberal-Democratic Party with sufficient margin to provide for continuity in Japan's leadership—reassured the market. The yen rate settled in a trading range of ¥ 215-219 through early July.

Coming into summer, however, the debate over economic policy heated up, as the pace of economic expansion began to slow and industrial production registered a decline. With slower economic growth abroad, the authorities in several other industrial countries were beginning to allow monetary conditions to ease somewhat. Meanwhile, large inflows of interest-sensitive funds had generated an easing in the Tokyo money market. As a result, the authorities were urged to ease up on monetary policy, particularly by allowing interest rates to decline. In response to this pressure, some commercial and professional selling of yen emerged and the yen declined in mid-July.

The Japanese authorities nevertheless remained concerned about the need for further adjustment of the economy. Governor Mayekawa of the Bank of Japan stressed that an easing of monetary policy was premature in light of the continuing inflationary pressures. Moreover, the new government under Prime Minister Suzuki quickly affirmed its support for a firm anti-inflationary effort. Consequently, the yen rate soon steadied and closed the period at ¥ 227.80 for a net advance of 4¾ percent over the six-month period under review. Meanwhile, the Bank of Japan's dollar gains after March were partially reflected in an increase in Japan's foreign exchange reserves of $4.2 billion. At the end of July, reserves stood at $18.8 billion, up $2.0 billion on balance.

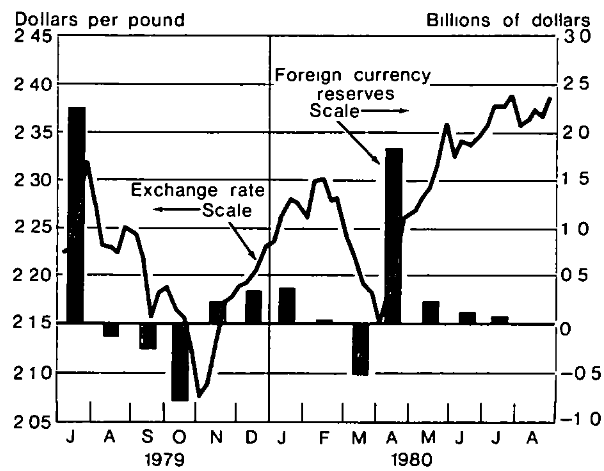
Sterling

Last year the government under Prime Minister Margaret Thatcher came into office, pledging to reduce the role of the public sector in the British economy and to restore private incentives. To achieve this objective, the government committed itself to alleviate the burden of taxation by reducing government spending over the long term while in the meantime shifting the tax structure away from direct toward indirect taxation. Meanwhile, the United Kingdom's inflationary spiral was being given another twist by an upsurge in wage demands, following the abandonment of formal wage restraints a year earlier, rising energy prices, and a 4 percent increase in the value-added tax to finance reductions of income tax. To contain these pressures the British authorities had imposed an increasingly restrictive monetary policy, raising domestic interest rates to record highs to bring the expansion of sterling M-3, the targeted monetary aggregate, back within the 7-11 percent annual growth range. By late 1979 the economy was slipping into recession. The combined impact of rising labor costs and high interest rates was imposing increasingly severe financial strains on British industry. Companies were cutting back on their inventories and scaling down their investment plans. Even so, monetary expansion was proving difficult to control, since companies were borrowing heavily from banks to meet their financing needs while waiting for interest

Chart 6

United Kingdom

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

rates to come down. Moreover, despite the government's best efforts, public spending was proving difficult to contain, and the public-sector borrowing requirement for fiscal 1979-80 was running nearly £1½ billion above target at just under £10 billion per annum

In the exchange market, sterling had strengthened. British interest rates were high relative to those in most other countries. Moreover, the United Kingdom's approaching self-sufficiency in oil was seen as leaving the current account well protected against possible cutoffs in oil supplies and further increases in energy prices. The breadth and depth of British capital markets also provided attractive investment opportunities for international investors, especially OPEC members who were seeking outlets for their burgeoning surpluses. As a result, foreign capital flowed heavily into sterling-denominated assets, enabling the United Kingdom to finance in 1979 a $5 billion current account deficit, official debt repayments of over $2 billion, and outflows of more than $4 billion stemming from the abolition of exchange controls. Even after these outflows, sterling traded around $2.27 by end-January 1980 and around 71.7 on a trade-weighted basis as a percentage of the Smithsonian parities. Meanwhile, Britain's foreign exchange reserves, after increasing by over $2 billion in 1979, stood at $18.8 billion on January 31 of this year

In the late winter-early spring, evidence cumulated of declining industrial output and employment. Monetary growth was also showing signs of declining. Public-sector borrowing needs were temporarily reduced by the tax-gathering season. The authorities were able to sell a large amount of government debt in the wake of the earlier measures, and external factors continued to have a contractionary influence on the money supply At the same time, however, private-sector loan demand continued to grow strongly, with the result that the banking system was faced with a reduced supply of public-sector debt and hence of reserve assets The authorities were thus obliged to provide temporary assistance to the money market so as to counter the upward pressures on short-term interest rates created by this drain on banking liquidity. These initiatives helped stabilize British short-term interest rates around 17 percent per annum.

Meanwhile, however, dollar interest rates were rising sharply in response to rising credit demand in the United States, with the result that in late March interest differentials moved against sterling and in favor of the dollar. As multinational corporations and international portfolio managers switched funds out of sterling into dollar-denominated assets, the pound came on offer against the dollar and the spot rate fell to as low as $2 1285 on April 7 But, since British interest rates remained substantially above those on the European continent, sterling fell less against the dollar than the other European currencies. The turnaround in the dollar on April 8 brought sterling into renewed demand As United States interest rates fell sharply, interest differentials moved back into sterling's favor. Therefore, the pound bounced back to $2.2275 by mid-April.

Meanwhile, with the domestic economy clearly headed into a recession, pressures were building up within British industry for relaxation of fiscal and monetary policy. But, in a consultative paper on monetary control issued jointly by the British Treasury and the Bank of England, the authorities reaffirmed sterling M-3 as the appropriate target variable for monetary policy, emphasized that lowering the government deficit played a major role in reducing that aggregate's growth rate, and asserted that quantitative controls were not an alternative to high interest rates as a means of reducing monetary expansion. In the annual budget message, Chancellor Howe followed up by announcing that the government still intended to reduce the public-sector borrowing requirement to £8 5 billion and the growth of sterling M-3 to a 7-11 percent annual target range. Thereafter, both the Prime Minister and the Chancellor repeatedly affirmed the government's commitment to reduce inflation by containing monetary growth. In this context, British interest rates remained high even after the end of the tax-payment season, while United States interest rates continued to fall. Moreover, the recession was leading to a rapid elimination of the current account deficit. As a result, sterling led the advance of other European currencies against the dollar, soaring to as high as $2.3770 in late May.

By early June, after prolonged negotiations, agreement had been reached to reduce by £750 million Britain's contribution to the European Community (EC). These developments generated expectations in the exchange markets of near-term reductions of British interest rates. Fearing heavy outflows of interest-sensitive funds, traders reacted initially by selling sterling As a result, the pound came on offer during June, falling as much as 3½ percent below its late-May highs.

For their part, however, the authorities remained reluctant to cut interest rates until firmer evidence appeared of a sustained reduction of monetary growth. Unfortunately, interpreting the data was being made increasingly difficult at this time by the imminent removal of the supplementary special deposit scheme—the "corset". Inevitably, the mid-June termination of this scheme was followed by a statistical explosion in sterling M-3, as banks restored direct lending to all their customers, which had been temporarily replaced by bankers' acceptances arranged to avoid hitting the limits on the expansion of interest-bearing eligible liabilities imposed earlier by the corset. Nevertheless, credit demand was still thought to be relatively strong. Moreover, despite rising unemployment, wages were still increasing at just under 20 percent per annum as the trade unions sought full compensation for price increases due to rising energy costs and higher indirect taxation. Therefore, the authorities felt unable to cut interest rates during June and, in fact, allowed a repurchase facility—introduced earlier in the year to provide liquidity—to run off. As a result, sterling moved back up to fluctuate around $2.34 in late June.

In early July the authorities provided some interest rate relief by cutting the minimum lending rate 1 percentage point below its all-time high to 16 percent The pound came on immediate offer but then steadied During the rest of the month, some professionals in the market continued to look for further reductions of British interest rates. But the authorities remained cautious in light of continued strong inflationary pressures, and no further action was taken As a result, sterling continued to be buoyed by capital inflows coming from OPEC and other international investors seeking to diversify their portfolios and to lock in high yields on British government securities Expectations of a near-term cut in British interest rates receded, and the pound was propelled to a five-year high of $2.3992 against the dollar on July 24. Subsequently, the rebound in United States interest rates produced a steep decline to $2.3305 at the month end, for a net increase of 2½ percent over the six-month period. However, the pound continued to trade firmly against the other major currencies, so that it closed at 74.4 on a trade-weighted effective basis on July 31.

During the six-month period, the Bank of England intervened to smooth fluctuations in the sterling rate These operations had a negligible impact on Britain's foreign exchange reserves Instead, the $1.6 billion increase over the period to $20 4 billion mostly reflected further revaluation gains from periodic renewals of gold and dollar swaps against ECUs done with the European Monetary Fund.

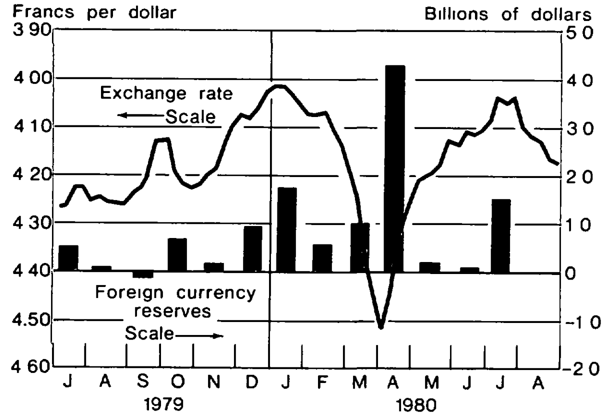
French franc

The French economy was embarked on a sustained recovery late in 1979 when the sharp hike in imported oil costs threatened to aggravate domestic inflationary pressures, lower real incomes, and impose a sharp reversal in France's current account position The authorities faced the prospect that the significant improvements achieved in curbing inflation, restoring the balance of payments to a surplus position, and improving the competitiveness of French industry, after years of stabilization policies, would now be seriously undercut By early 1980, consumer prices were rising

Chart 7

France

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

at an annual rate of more than 13 percent. Last year's $1.2 billion current account surplus had just about disappeared And the huge increase in France's oil import bill was expected to lead to a $4-5 billion deficit in the current account this year. Meanwhile, a shakeout of noncompetitive French industries, together with a bulge in young entrants to the work force, had generated a rise in unemployment even as the economic recovery continued.

In response, the government had provided some fiscal stimulus on a selective basis (expanding programs to create jobs, providing additional low-cost financing to industry, and increasing low-income subsidies to offset increases in public-sector energy prices) while keeping the government's borrowing requirement at a relatively low 1.3 percent of GDP (gross domestic product). Meanwhile, France's already restrictive monetary policy was reinforced in order not to accommodate the accelerating rate of domestic inflation The 11 percent target for monetary expansion set for 1979 was carried forward into 1980 and the system of credit ceilings was tightened. Inasmuch as a strong demand for credit was fueling a growth of the money supply well above the target rate, the Bank of France's efforts to curb this expansion generated a progressive rise in both short- and long-term interest rates

In the exchange markets, the French franc benefited from this rise in interest rates Moreover, France's current account deficit, though a source of concern, was expected to be substantially smaller than the current payments imbalance of Germany, its principal trading partner. Also, in the context of the Iranian crisis, the traditionally good relations between France and the Middle East were expected to favor the franc in two respects. Part of the anticipated increase in OPEC's surplus would gravitate into the franc Also, the impact of any further oil supply disruptions would be less severe for France than for most other major countries. In this atmosphere, commercial leads and lags remained favorable to the franc, and international investors steadily moved some of their funds into domestic and Eurofranc assets.

These inflows enabled the French franc to stay at the top of the EMS band throughout the early spring. Indeed, the Bank of France regularly had to intervene in European currencies to keep the franc within the obligatory EMS margins, and often it purchased dollars as well. These operations were, for the most part, reflected in the $1.5 billion increase in France's foreign exchange reserves over the months January through March.

When the scramble for dollars developed between late February and early April, the franc fell along with the other European currencies But the franc declined less than the mark against the dollar Even so, it dropped some 12 percent from its opening level of FF 4.0725 to as low as FF 4.5550 on April 7. When the dollar turned around after the Easter holiday, the franc came back into heavy demand. Amid reports of large Middle Eastern demand for French francs, the rate was bid up sharply, prompting the Bank of France to intervene vigorously both in EMS currencies and in dollars. With the franc remaining at the top of a nearly fully stretched EMS and the mark at the bottom, the Federal Reserve supplemented its intervention operations in New York by selling on three occasions between April 9 and April 16 $73 9 million equivalent of French francs. These sales were financed by drawings on the swap line with the Bank of France.

During the late spring the French economy showed signs of turning down. Domestic demand weakened, industrial output declined, and the continuing rise in unemployment was generating some pressures for more stimulative measures Nevertheless, the money supply was still expanding slightly above the targeted rate, the current account deficit was widening, and inflation continued at a troubling double-digit pace. In late June, the French government announced it would provide some additional funds for investment by the nationalized industries into the housing sector. But the authorities were unwilling to ease their restrictive monetary stance. Instead, restrictions on the expansion of bank lending were maintained and the limits were tightened for the second half of the year. As a result, French interest rates stayed relatively high during May and June.

Thus the franc continued to benefit from various types of capital inflows. It also was bolstered by unusually large repatriations of investment income and favorable tourism receipts. The franc therefore joined in the continued, albeit more gradual, rise of the European currencies against the dollar, moving up some 11½ percent from the early-April low to FF 4.0235 by July 8. The Bank of France continued buying modest amounts of dollars and EMS currencies. The Federal Reserve again included the French franc in its intervention operations, selling $86.8 million equivalent on four occasions between mid-June and end-July. This intervention was financed by further drawings on the swap line with the Bank of France, raising the System's swap indebtedness with the French central bank to $166.3 million equivalent including revaluation adjustments from renewals of earlier drawings.

During July, French interest rates eased somewhat. Nonetheless, the franc fell less than the mark when the dollar rose in late July. At this time the Federal Reserve was able to buy $1.2 million equivalent of French francs from a correspondent to begin covering its outstanding swap debt. On July 31 the franc was trading at FF 4.1350, for a net decline of 1½ percent over the six-month period.

Meanwhile, France's foreign currency reserves continued to increase during April through July. The large rise in April and July resulted in part from the revaluation gains stemming from quarterly renewals of its swaps with the European Monetary Fund. But, in addition, the continuing purchases of dollars and EMS currencies also contributed to a rise in foreign currency reserves, which stood at $25.3 billion at the end of July.

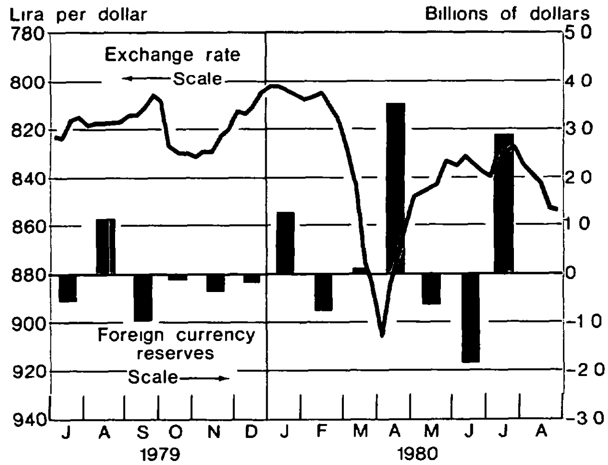
Italian lira

Throughout 1979 the Italian lira had been bolstered in the exchange markets by a substantial current account surplus, together with relatively high interest rates and restrictions on domestic credit expansion that had drawn in large movements of capital from abroad As a result, the lira had risen during the second half of the year to trade at LIT 807.50 against the dollar by end-January 1980, while also remaining in the upper half of its 6 percent band within the EMS Meanwhile, the favorable balance-of-payments position and valuation adjustments stemming from quarterly renewals of Italy's swaps with the European Monetary Fund had generated an increase in Italy's foreign exchange reserves to $18.5 billion even after repayment of some

Chart 8

Italy

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

official debt. By February, however, Italy's substantial current account surplus was rapidly disappearing. The impact of sharply higher oil prices, estimated to add $8 billion to the overall import bill, was already beginning to weaken Italy's trade position. And the prospect that Italy could avoid a return to current account deficit with a further upsurge in its exports looked dubious, in view of the deteriorating economic outlook for Italy's principal trading partners. Moreover, the domestic economy was expanding at a brisk pace, several sectors were encountering capacity constraints, and inflationary pressures were again building up.

In response, over the course of the winter months, the Italian authorities had begun to turn to a more restrictive posture. The government raised fuel prices in line with worldwide increases in the price of oil, thereby absorbing purchasing power. But, with the 1980 fiscal budget still moderately expansive and expected to generate a LIT 40 trillion public-sector deficit, much of the burden of containing inflationary pressures continued to fall on monetary policy. Accordingly, the Bank of Italy had raised interest rates, drained domestic liquidity, and tightened the enforcement of domestic credit ceilings by requiring that banks lending above those limits maintain noninterest-bearing deposits at the central bank. With these actions producing steadily rising money market rates, Italian companies continued to satisfy their financing needs by borrowing abroad. Thus, the Italian lira held within the top half of the EMS joint float throughout the early spring.

Against the dollar, however, the lira weakened along with other currencies after mid-February The sharp rise in United States interest rates soon eliminated the interest differentials that had previously favored the lira. To the extent that Italian companies repaid their Eurodollar borrowings with domestic funds, they came into the market to sell lire, thereby contributing to the drop in the rate which fell as much as 13 percent to LIT 912.10 by early April. But, with Italian interest rates significantly higher than those prevailing in other EMS countries, the lira maintained its generally favorable position within the EMS. Consequently, the Bank of Italy provided little support for the lira through intervention. Indeed, Italy's foreign exchange reserves rose through end-April to $21 5 billion, reflecting valuation adjustments in its EMS holdings.

Around mid-April the lira began to recover against the dollar as United States interest rates retreated. The lira's rise, however, lagged behind that of other EMS currencies so that, while just below the center of its 6 percent EMS band, the lira emerged as the weakest currency within that arrangement by May. Italy's current account had now fallen into clear deficit, exerting a drag on the currency's performance in the exchange market. Italy's prices and wages had continued to rise at more than 20 percent per annum without a corresponding adjustment in the exchange rate, so that the competitiveness of Italian goods was being eroded. Also, poor weather had cut into tourist revenues. Moreover, a government crisis late in March had generated some questions as to whether the authorities' anti-inflation efforts would be sustained. A new center-left coalition cabinet was soon put in place, committed to defend the lira's position in the EMS and to check inflation But during the spring, as the cabinet sought to reach an understanding with the trade unions on ways to limit the rise in labor costs and to get the agreement of other political groups on an industrial policy that might help maintain employment, the exchange market for the lira remained nervous

Against this background, pressures began to mount for a devaluation of the lira within the EMS to restore the competitiveness of Italian industry in world markets so as to bolster exporters' profit margins and to sustain economic growth in the face of a spreading slowdown abroad. Although government officials in their public statements stressed the argument that devaluation was not a viable alternative in a highly indexed economy, the lira came on offer as market participants continued to anticipate that a new economic package from the government might include a devaluation. In this environment, short-term capital outflows quickly materialized. As the outflows persisted during June, the Bank of Italy entered the market in force, selling large amounts of dollars to prevent the lira from weakening further within the EMS.

In early July, the government announced new measures to bring both the economy and the exchange market into better balance. The measures included higher indirect taxes to finance a reduction of employer social security contributions, more export credits, and a reduction of the public-sector deficit. Also, the government proposed a ½ percent withholding scheme for wages and salaries, in which the proceeds would be invested in bonds redeemable in five years to finance economic development In addition, the Bank of Italy announced a further restriction of domestic credit expansion to 13 percent per annum.

The exchange market reacted favorably to the package. With devaluation fears dissipating, funds flowed back into the lira during the balance of July, as commercial and professional participants covered short positions. The lira, therefore, traded more comfortably at the bottom of the joint float through the month end. On July 31, the lira traded at LIT 838.80, for a net decline of 3¾ percent over the six-month period. In addition, the flows of funds back into the lira, together with further valuation adjustments of EMS gold holdings produced a $500 million increase in foreign exchange holdings, to $22.0 billion, for a net rise of $3.5 billion over the six-month period.

European Monetary System

By the period under review, the countries whose currencies were members of the EMS's joint float were faced with the problem of having to adjust their economies to large increases in the price of oil. Most of the economies were already expanding fairly briskly, generating upward pressure on prices and wages. Consequently, for the authorities in each country the greatest concern was to prevent higher energy prices from setting off an inflationary spiral. Each country thus adopted restrictive policies both to restore external and internal balance to their economies and to fund their current account deficits. Monetary policy was the major instrument for achieving restrictiveness and interest rates remained high in the EMS countries.

Within the joint float the configuration of currencies remained relatively stable, even as the entire EMS fluctuated widely against the dollar. For the most part the French franc stayed at the top of the band, while the German mark remained near the bottom. The Netherlands guilder traded firmly near the top of the band. By contrast, the Belgian franc came under persistent selling pressure between February and early April, reflecting the market's concerns over Belgium's fiscal and current account deficits and the political difficulties facing the coalition government. The National Bank of Belgium intervened forcefully to keep the franc within its 2¼ percent band. Domestic interest rates were also raised. These actions stemmed the outflows, and during the last three months of the period the franc traded comfortably within the limits of the band.

The Danish krone also came under selling pressure early in the period and required some official support through intervention. However, the krone gradually came into better balance in the early spring. Thereafter, it traded steadily in the lower half of the EMS through the end of July.

The remaining two currencies fluctuated more widely. The Italian lira fell from the top to the bottom of the joint float and required substantial official support in June before stabilizing in July. By contrast, after trading near the bottom through mid-March, the Irish punt rose into the upper half of the EMS band during the spring and remained there through the end of July.

Canadian dollar

The sharp jump in international oil prices during 1979 had somewhat different consequences for Canada than for most other industrialized countries. Its untapped reserves of oil, natural gas, and other energy resources gave Canada considerable potential for increasing energy production in the future, both for use at home and for export. In the meantime, the oil price hike had little direct effect on Canada's trade account, since the country is self-sufficient in oil and gas. It did have implications, however, for the distribution of income between the oil-producing provinces of the west and the oil-consuming provinces of the east. Moreover, if oil prices in Canada were allowed to adjust more rapidly to international price levels, the escalation of energy prices would add to inflationary pressures. A proposal to that effect in the budget, which had brought about the government's defeat in December, was still under debate pending a general election in mid-February

Canada's current account had begun to show signs of improvement. As a net exporter of raw materials, Canada benefited in 1979 from the favorable shift in terms of trade that reflected pressures in world commodities markets generally. In addition, the sharp depreciation in the Canadian dollar of previous years and the sustained efforts to curb cost and price pressures at home had substantially enhanced the international competitiveness of domestic industry. But, with much of the manufacturing sector up against capacity constraints, Canada was all the more vulnerable to the demand and price pressures in the United States, Canada's principal trading partner. In these circumstances, economic policies continued to focus on the need to counter inflationary tendencies. Fiscal policy had been tightened in an effort to reduce the sizable budget deficit. Monetary policy was aimed at restraining the growth of the money supply while seeking an interest rate relationship between Canada and the United States that did not contribute to an acceleration of inflation through a further substantial decline in the Canadian dollar. As United States interest rates had risen, interest rates in Canada moved up and the Bank of Canada raised its discount rate in several steps to 14 percent.

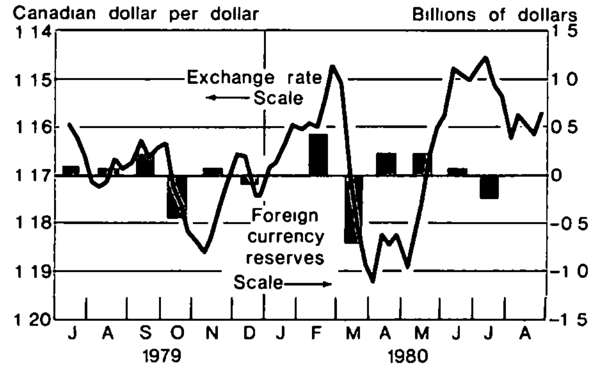
By early February, Canada's rich energy resources and its improving current account performance had contributed to a generally positive sentiment toward the Canadian dollar. Also, its relatively high interest rates and North American location made Canada an attractive investment opportunity, especially at a time of growing political uncertainty and security concerns. The Canadian dollar had strengthened considerably over the preceding two and a half months to trade at Can $1.1574 by the beginning of the month. Then, when it was clear that the general election had provided for a majority government, the Canadian dollar came into stronger demand. Capital inflows intensified as repeated reports of new oil discoveries off the Newfoundland coast attracted foreign funds into a rising Canadian stock market. The Canadian dollar was thus propelled to Can $1.1419 on March 3, its highest level in nearly a year. Meanwhile, the Bank of Canada, operating to moderate the fluctuations in its currency, had purchased dollars in the exchange market. These acquisitions were reflected in the $433 million increase in official foreign currency reserves during the month from the end-January level of $1.9 billion.

Nevertheless, the Canadian dollar remained vulnerable to actual or anticipated shifts in capital flows. When the intense demand for credit in the United States pushed up interest rates so sharply as to raise doubts in the market whether Canadian interest rates would keep pace, the spot rate began to ease early in March. Already interest rates in the United States had risen above comparable levels in Canada, and market participants were unsure how long this unusual pattern would continue without siphoning off the inflows needed to offset Canada's current account deficit. Monetary growth in Canada had slowed considerably. Indeed, the monetary aggregates were now just within the lower end of the Bank of Canada's 5 to 9 percent target range. But inflation was still running at 9.5 percent per annum, and the authorities were concerned to avoid a substantial depreciation that might set off more cost-price pressures at home. Therefore, to provide itself with more flexibility to react to rapidly changing external conditions and to avoid increases in short-term interest rates beyond those necessary to contain inflation, the Bank of Canada announced on March 10 it would set its official discount rate each week at ¼ per-

Chart 9

Canada

Movements in exchange rate and official foreign currency reserves

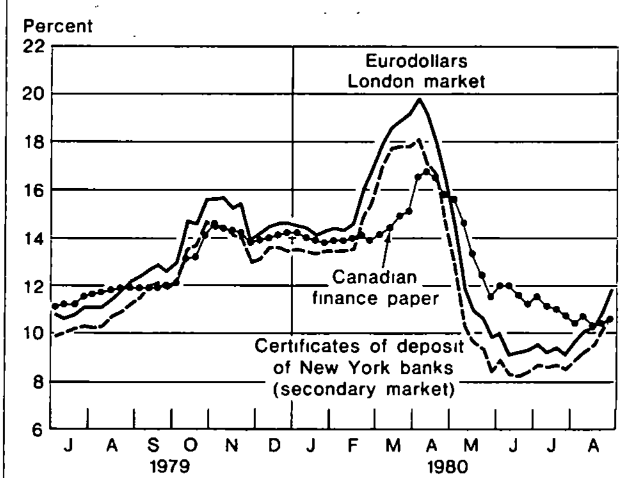


See exchange rate footnote on Chart 3

Chart 10

Interest Rates in the United States, Canada, and the Eurodollar Market

Three-month maturities*



*Weekly averages of daily rates

centage point above the average rate on the weekly tender of three-month Treasury bills.

Following this announcement, Canadian money market rates continued moving up, while longer rates remained close to their peaks during March At the same time, congestion had developed in the United States bond market, leading to the postponement of several Canadian borrowings while Canadian companies were repaying dollar-denominated loans as United States interest rates continued to rise. The Canadian dollar thus came on offer. Against the United States dollar, it declined nearly 5 percent from its earlier high to Can.$1.1983 on April 1 The Bank of Canada intervened heavily at times to cushion the decline; foreign currency reserves decreased by $728 million during March Even so, the decline in the Canadian dollar from early-February levels was modest, relative to the much larger drops of other major currencies.

After early April, interest differentials moved back into Canada's favor as Canadian interest rates eased more slowly than those in the United States. Although Canadian entities still did little borrowing in the United States, this traditional source of finance for Canada's current account deficit was being replaced by investment funds flowing into Canadian dollar and Euro-Canadian dollar assets. Moreover, the Canadian trade account remained in larger surplus than had been anticipated earlier in the year.

The Canadian dollar, therefore, traded more steadily during the early spring. For a time, uncertainty over the outcome of a May 20 referendum in Quebec, in which the governing Separatist Party sought authorization to negotiate with the federal government on the sovereignty issue, gave pause to the market and tempered the currency's previous buoyancy. But, once the market sensed that the referendum would be defeated, the Canadian dollar began to rise again. News of further increases in the price of oil, fears of more price increases to come out of the OPEC meeting in Algiers, and reports of new energy discoveries in Canada added to the upward momentum of the rate. Also, announcements by some Canadian provinces of plans to float new issues in the New York bond market generated some professional bidding. Consequently, the Canadian dollar was bid up in steps to Can.$1 1407 by July 7. The Bank of Canada again bought dollars to moderate the rise, thereby recouping much of the reserves it had lost during March.

During the rest of July, the Canadian dollar lost its upward momentum in the face of political tensions arising over the question of pricing Alberta oil and natural gas, growing uncertainties over the outlook for United States interest rates, and concern in the market that Canadian interest rates would ease further. As interest rates in the United States backed up and a heavy supply of new issues in the United States bond market led some of the planned Canadian issues to be postponed, the Canadian dollar dropped off along with most other currencies late in the month.

At the end of July, therefore, the Canadian dollar, at Can.$1.1594, was down a net ¼ percent over the six-month period During the period under review, the Bank of Canada intervened, heavily at times, on both sides of the market. In addition, the government sold small quantities of its gold holdings at market prices well above book value. Over the six-month period, total official foreign currency reserves were unchanged at $1 9 billion.