Treasury and Federal Reserve Foreign Exchange Operations

By early 1979, progress was clearly under way in resolving the disparities in economic performance among industrial countries that had been of concern to policymakers and exchange market participants alike for several years. The United States economy was beginning to cool down under policies of restraint, while the economies of several other industrial countries were picking up steam under policies of stimulus. These shifts in relative demand conditions, coming on top of the long-awaited adjustments in trade volumes as a result of previous exchange rate changes, were reducing the serious trade and current account imbalances of recent years. The sharp drop in Japan's trade surplus and the further narrowing of the United States trade deficit were especially encouraging. Nevertheless, those processes were far from complete, and inflation in the United States remained uncomfortably high.

In the early months of 1979, the exchange markets were responding favorably to the November 1 measures by the United States and foreign authorities to correct what had become an excessive decline of dollar rates. The follow-through on those measures included heavy intervention in the exchange market by the United States authorities in coordination with the central banks of Germany, Switzerland, and Japan, the maintenance of a firm monetary policy by the Federal Reserve, and the sale of foreign currency notes by the United States Treasury in the German and Swiss capital markets. These actions helped restore a sense of two-way risk in the market and, with interest rate differentials strongly favoring the United States, funds began to flow back into dollars. This reflux took the form of unwinding previously adverse leads and lags, covering of speculative positions, and the reversal of portfolio shifts out of the dollar which had built up last year.

While progress was being made on past problems, market participants and policymakers had to contend with new shocks to the international economy. A shortfall in world oil supplies emerged abruptly in early 1979, following the political upheavals in Iran which temporarily cut off crude oil exports from that country. The ensuing scramble for spot crude pushed spot market prices to astronomical highs and prompted individual OPEC (Organization of Petroleum Exporting Countries) members to jack up their posted prices. These events favored the dollar in two ways. The bidding-up of the spot oil price had the direct effect of generating additional demand for dollars in the exchange market to pay for the oil. In addition, markets for individual currencies were influenced by traders' assessments of the relative impact of the oil-supply and price strains on different countries. Currencies of countries which were most heavily dependent on oil imports for their energy needs, such as Japan and several continental European countries, came under...
Table 1
Federal Reserve Reciprocal Currency Arrangements
In millions of dollars

<table>
<thead>
<tr>
<th>Institution</th>
<th>Amount of facility July 31, 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austrian National Bank</td>
<td>$250</td>
</tr>
<tr>
<td>National Bank of Belgium</td>
<td>1,000</td>
</tr>
<tr>
<td>Bank of Canada</td>
<td>2,000</td>
</tr>
<tr>
<td>National Bank of Denmark</td>
<td>250</td>
</tr>
<tr>
<td>Bank of England</td>
<td>3,000</td>
</tr>
<tr>
<td>Bank of France</td>
<td>2,000</td>
</tr>
<tr>
<td>German Federal Bank</td>
<td>6,000</td>
</tr>
<tr>
<td>Bank of Italy</td>
<td>3,000</td>
</tr>
<tr>
<td>Bank of Japan</td>
<td>5,000</td>
</tr>
<tr>
<td>Bank of Mexico</td>
<td>360*</td>
</tr>
<tr>
<td>Netherlands Bank</td>
<td>500</td>
</tr>
<tr>
<td>Bank of Norway</td>
<td>250</td>
</tr>
<tr>
<td>Bank of Sweden</td>
<td>300</td>
</tr>
<tr>
<td>Swiss National Bank</td>
<td>4,000</td>
</tr>
<tr>
<td>Bank for International Settlements:</td>
<td></td>
</tr>
<tr>
<td>Swiss francs-dollars</td>
<td>600</td>
</tr>
<tr>
<td>Other authorized European currencies-dollars</td>
<td>1,250</td>
</tr>
<tr>
<td>Total</td>
<td>$29,760</td>
</tr>
</tbody>
</table>

*Increased to $700 million effective August 17, 1979.

The surge in world oil prices aggravated inflation pressures generally, coming at a time when a number of important international commodity prices were also advancing. The economies of Japan and continental Western Europe were no longer shielded from these price increases as they had been earlier when their currencies were appreciating against the dollar. Consequently, wholesale and consumer prices jumped sharply abroad. Since inflation also accelerated in the United States, this raised concern over the possibility of a renewed worldwide price spiral such as occurred in the early 1970's. For their part, foreign central banks moved to tighten monetary conditions to avoid further exacerbation of inflationary pressures as a result of domestic credit demands or international influences, and short- and long-term interest rates advanced fairly sharply in most countries. In addition, to avoid the inflationary effects of a depreciation, the authorities intervened forcefully in the exchange markets whenever their currencies came on offer.

In an effort to attain greater stability of exchange rates within the European Community (EC), the member countries launched the European Monetary System (EMS), which included new intervention arrangements and a partial pooling of reserves. As some strains developed among the EMS currencies, the arrangements provided the context in which several countries stepped up their intervention or tightened monetary policy when their currencies came under selling pressure. The United Kingdom authorities had decided not to join the intervention arrangements of the EMS for the time being and, when sterling came into heavy demand in the spring, they allowed the rate to rise rather than create substantial new domestic liquidities through intervention.

With the dollar in generalized demand through much of the spring, the United States authorities had acquired sufficient currencies to repay by end-April all their previous foreign currency indebtedness to other central banks. Subsequently, considerable progress was made in rebuilding balances drawn out of the resources acquired under the various parts of the November 1 program. Most of the currencies purchased during the period came out of direct transactions with correspondents, but the Trading Desk also bought currencies in the market on occasion when the bidding for dollars was particularly strong.
In sum, by mid-June the United States authorities purchased a total of $8,123.5 million of currencies and repaid $6,126.1 million of outstanding debt while holding the rest in balances. In addition, $1,351.5 million equivalent of marks was acquired by a further medium-term issue in the German capital market. Aside from some $656 million of foreign currency sales during brief periods of market nervousness through February, the Desk did not intervene as a seller of foreign exchange until mid-June.

By late spring, however, the balance of market sentiment began to swing against the dollar. Traders saw that the reflux of last year's outflows was coming to an end, leaving the dollar vulnerable on the downside. Moreover, the United States trade deficit was widening again somewhat and, in view of the prospective sharp increase in our oil import bill, private forecasts were being revised to show larger deficits than earlier predicted. Indeed, just when the bidding for dollars by other major countries to pay for spot oil began to slacken, the United States was encountering serious gasoline shortages and an uncertain outlook for heating oil supplies. These developments, plus the continuing debate over energy policy generally in this country, led many market participants to question whether the United States was better able to cope with oil price and supply problems after all. In addition, interest rate trends internationally had become a matter of concern. Even though inflation had accelerated in the United States and the Federal Reserve had firmed interest rates somewhat further in April, widespread talk of recession led market participants to expect that interest rates might not be raised in line with those abroad and might even decline somewhat.

By mid-June, following further interest rate hikes in several major foreign countries, these various concerns came to a head. The dollar suddenly came on offer in the exchanges, and many market participants hastened to shift out of dollars on the expectation of an even greater decline. In these highly unstable market conditions, the United States authorities intervened forcefully to check the decline, particularly on days surrounding the OPEC meeting and the Tokyo summit in late June. The United States intervention operations were mainly in marks, but also in Swiss francs. The German and Swiss central banks intervened in their own markets.

The outcome of the OPEC meeting, which resulted in an agreement that set the average OPEC price some 60 percent over last year's levels, gave rise to expectations of a strong policy response by the United States and other countries, and the communiqué from the Tokyo summit reinforced those expectations. But the tide of market sentiment was running so strongly against the dollar that political and economic events in the United States over the next few weeks were interpreted bearishly. The dollar came under repeated bouts of selling pressure, especially following the President's energy speech on July 15 and over subsequent days during which the President made several changes in the cabinet. The United States authorities intervened vigorously in German marks to head off a possible generalized decline of the dollar which might exacerbate inflationary pressures in the United States. These operations, conducted both in New York and in the overnight markets in the Far East, were coordinated with those of the Bundesbank in Frankfurt and helped blunt the immediate pressures on the dollar. In addition, on July 20, the Federal Reserve raised the discount rate by ½ percent to a record 10 percent and moved to firm money market rates as well. Once the new appointments were made, with G. William Miller moving to the Treasury as Secretary and Paul A. Volcker becoming Chairman of the Federal Reserve Board, the market quieted down and dollar rates firmed somewhat at the end of July.

From end-January to end-July, the United States dollar declined a net 2½ percent against the continental Western European currencies, 2½ percent against the Canadian dollar, and 13 percent against the pound sterling. It rose by a net 7½ percent against the Japanese yen.

Intervention sales of foreign currencies by the United

FRBNY Quarterly Review/Autumn 1979
Table 2

Federal Reserve System Drawings and Repayments under Reciprocal Currency Arrangements
In millions of dollars equivalent; drawings (+) or repayments (—)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>German Federal Bank</td>
<td>4,434.2</td>
<td>+334.2</td>
<td>+790.8</td>
<td>+1,377.1</td>
</tr>
<tr>
<td>Bank of Japan</td>
<td>106.5</td>
<td>-106.5</td>
<td>-3,020.8*</td>
<td>-114.6</td>
</tr>
<tr>
<td>Swiss National Bank</td>
<td>786.3</td>
<td>+74.1</td>
<td>+36.2</td>
<td>+31.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,327.0</strong></td>
<td><strong>+408.4</strong></td>
<td><strong>+828.9</strong></td>
<td><strong>+1,408.8</strong></td>
</tr>
</tbody>
</table>

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

* Repayments include revaluation adjustments from swap renewals, which totaled $15.2 million for drawings on the German Federal Bank renewed during the first and second quarters.

Table 3

Federal Reserve System Repayments under Special Swap Arrangement with the Swiss National Bank
In millions of dollars equivalent

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>157.3</td>
<td>-156.5</td>
<td>-0.9</td>
<td>-0-</td>
<td>-0-</td>
</tr>
</tbody>
</table>

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

Table 4

Drawings and Repayments by Foreign Central Banks and the Bank for International Settlements under Reciprocal Currency Arrangements
In millions of dollars; drawings (+) or repayments (—)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank for International Settlements* (against German marks)</td>
<td>-0-</td>
<td>-0-</td>
<td>+31.0</td>
<td>-31.0</td>
<td>-0-</td>
</tr>
</tbody>
</table>

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.
States authorities in June and July totaled $5,414.4 million equivalent. The bulk of this was in marks, of which $2,758.9 million was sold by the Treasury out of balances and $2,537.6 million was by the Federal Reserve out of balances and through drawings on the swap line with the Bundesbank. Drawings of marks by the Federal Reserve during June and July amounted to $2,167.9 million, of which $2,053.3 million was outstanding on July 31. In addition, the System sold $117.9 million of Swiss francs in June and July, and at the end of July $31.7 million of swap drawings on the Swiss National Bank was still outstanding from that series of operations. From mid-June through end-July, the United States authorities purchased $670.6 million equivalent of marks and Swiss francs, mainly from correspondents.

During the first half of 1979 both the Federal Reserve and the Treasury realized net profits on liquidations of current swap debt and sales of currencies out of balances held by the System, the Exchange Stabilization Fund (ESF), and the Treasury General Account. The figures appear in Table 7. During July the System realized a small net loss on its operations, but the ESF and General Account earned profits. The valuation profits and losses for all three accounts reflect revaluation of System and Treasury assets and liabilities as of July 31. Losses on final liquidation of pre-August 1971 Swiss franc debts are shown in Table 8.

German mark
For some time the German authorities had sought to generate a more rapid rate of domestic growth without undercutting the clear progress they had made in slowing inflation in recent years. Much of the stimulus had come from fiscal policy, with a substantial increase in the budget deficit by the public sector. Although Germany's growth rate had advanced in 1978 to 3.4 percent, the solidity of the expansion was still in question late in the year when huge amounts of hot money flowed into the mark from the dollar and from other EC currencies. The rise in the mark rate in the exchange market, particularly against the dollar, had threatened to impede real growth as German businessmen became apprehensive of their ability to compete in their own or in foreign markets. At the same time, intervention by the Bundesbank and foreign authorities to counter the mark's rise was swelling liquidity in Germany, thereby threatening to unleash serious inflationary pressures from the monetary side. The German authorities joined with those of the United States, Switzerland, and Japan in the coordinated effort starting last November 1 to correct what had been an excessive decline of the dollar and to avoid the recurrence of such a decline. The resolve of the authorities had been put to a severe test in November and December, and intervention—particularly by the United States authorities—had been very heavy. But pressures eased off on the dollar in early 1979. Already in January a reflux of funds had begun and the United States authorities were able to begin acquiring marks from correspondents and in the market to reduce their swap debt to the Bundesbank. At end-January the Federal Reserve's swap debt in marks amounted to $4,168.2 million equivalent, and the United States Treasury's swap debt in marks was $613.0 million equivalent. Moreover, with the exchange markets in better balance, the Bundesbank moved cautiously to absorb the excess liquidity generated by the late-1978 intervention.

The fragility of this balance was underscored when the dollar came under a brief bout of selling pressure in early February, as the market responded nervously to political developments in Iran. The spot mark was quickly bid up from around DM 1.86 to DM 1.83 to the dollar, but heavy intervention again helped contain the immediate pressures. In New York, the Desk sold $507.1 million equivalent of marks over three trading days through February 8. Of this total, $317.3 million equivalent was from United States Treasury balances and $189.8 million equivalent was for the Federal Reserve, of which $145.5 million was drawn under the swap line with the Bundesbank and the rest was from balances. Later in February, the mark came into brief demand on two trading days, and the Desk sold another $21.7 million equivalent of marks from System balances and $6.2 million equivalent from Treasury balances. Meanwhile, as a further follow-up to the November 1 program, the United States Treasury announced that it would issue a second mark-denominated note, equivalent to $1,351.5 million in the German capital market, with the payment date on March 1. Following these actions, the exchange market came into better balance again, and the process of unwinding resumed.

As the exchanges became more settled, market participants attempted to assess the implications for monetary policy and interest rates of the changing conditions in Germany's domestic economy. A harsh winter and a metal workers' strike had temporarily depressed production, but most analysts expected fairly strong growth to continue through 1979. At the same time, however, with the exchange rate no longer appreciating and thereby not shielding the domestic economy from rising international oil and raw material prices, Germany was hit by the same burst of inflation as other industrial countries. With the mark on offer in the exchanges, the Bundesbank took advantage of the opportunity to intensify its efforts to
absorb liquidity, signal its intention that funds would no longer be as readily available, and otherwise bring down the growth of central bank money to its target range of 6-9 percent. In the market, concerns that interest rates would rise sharply in Germany prompted investors to shift funds from marks into higher yielding assets in dollars, sterling, and currencies linked to the mark in the EMS.

These outflows occurred at a time when the dollar was in demand in the exchanges for other reasons. It was benefiting from evidence of a slowdown in the United States economy, news of a sharp improvement in the United States trade deficit in February, and some expectation of a moderation of inflationary pressures. Moreover, because of its role as a transaction currency, the dollar was being increasingly well bid as the scramble for oil and other dollar-based commodities intensified. As a result, the selling of marks at times put considerable pressure on the mark rate. By early April the mark dropped to trade as low as DM 1.9050. In addition, the mark was on offer against other European currencies.

As the mark came on offer, the Bundesbank sold increasingly large amounts of dollars to maintain orderly trading conditions and to absorb some of the excess liquidity in the domestic money market. For their part, the United States authorities continued to take advantage of the opportunity to cover outstanding swap commitments and to replenish foreign currency resources, largely on the basis of direct transactions with official correspondents. But, as pressure against the mark intensified in early April, the Trading Desk also intervened by buying marks in the market to maintain orderly trading conditions. Before long these combined operations had drained so much liquidity in Germany as to exert strains on the banks' reserve positions. Accordingly, the German monetary authorities acted to provide liquidity in a short-term and easily reversible manner so as not to signal any change in their efforts to resist inflationary pressures. In particular, they raised banks' rediscount quotas with the central bank by DM 5 billion on April 1, and subsequently engaged in foreign exchange swaps with commercial banks, mostly for three-month maturities. But, in response to continuing expansion in bank lending, the Bundesbank also acted to raise the cost of credit, increasing both its discount and Lombard rates by 1 percentage point to 4 percent and 5 percent, respectively.

By the spring months, it was becoming clear that the adjustment of Germany's external position was under way, as the trade and current account surpluses were sharply reduced from last year's levels. Imports were being boosted both by a sharp rebound in domestic demand and by the higher prices of oil and other international commodities. Uncertainties over energy continued to weigh on the mark. Since Germany is almost wholly dependent on imported oil for its petroleum needs, the further escalation of oil prices threatened to inflate even more the oil import bill. Moreover, the nuclear accident in the United States raised concern that Germany's efforts to shift toward greater reliance on nuclear power might be undercut and that large contracts to export nuclear plants might be delayed or canceled.

By contrast, the United States was seen as being better able to cope with oil price and supply problems than most other countries. Thus, the offering of marks was increasingly being reinforced by commercial selling and adverse reactions to each news report that suggested yet another price hike for oil. In addition, through April and early May, the exchange markets were reacting favorably to the further firming of interest rates by the Federal Reserve in response to the rapid rise in the monetary aggregates and to evidence of a further narrowing of the United States trade deficit.

Selling pressure on the mark continued and pushed the mark to a low of DM 1.9220 at one point late in May, some 3½ percent below early-February levels. In the four and one-half months to mid-June, the Bundesbank was a substantial seller of dollars. The United States authorities also purchased a total of $5,963.2 million equivalent of marks. These purchases permitted the System and the Treasury to liquidate, respectively, their remaining $4,355.2 million equivalent and $613.3 million equivalent of swap debt to the Bundesbank by end-April. In addition, they provided the United States Treasury the opportunity to make substantial progress in restoring its resources under the November 1 package in order that they might be available to finance future operations.

By early June, however, the balance of market forces was beginning to shift. After nearly six months, the process of unwinding commercial leads and lags and other types of foreign exchange positions was virtually completed. The scramble for oil was tapering down, as many of the important importers abroad had by now made alternative arrangements to secure their supplies. Meanwhile, the political scrap over energy policy in the United States cast doubts in the market over this country's ability to deal effectively with the oil supply and price situation. Moreover, interest rate differentials were narrowing. United States rates had leveled off since April or eased somewhat, and talk of a possible recession gave rise to expectations that United States interest rates might begin to decline significantly.

In Germany by that time most of the earlier strains
that had generated such large capital outflows had disappeared, but interest rates were some 1-2 percentage points higher than before. And the market was concerned that, to prevent rising oil and other commodity prices from further exacerbating inflation in Germany, the authorities in that country would tighten monetary policy sharply. Indeed, German banks were facing seasonal liquidity pressures during June in any case. The Bundesbank raised the Lombard rate a further ½ percentage point and tempered these immediate pressures by offering a new repurchase agreement type of facility for the banks, based on interest rates close to those prevailing in the market. As money market rates in Germany rose, the German mark advanced to the upper intervention point against other currencies in the EMS. Already the participating central banks had sold a sizable amount of marks, and some had increased their own official lending rates. The market was therefore uncertain about the implications for the relatively new intervention arrangements in the EC should monetary policy be tightened further in Germany. At the same time, many market partici-

pents felt there was little downside risk for the mark in view of continuing sales of dollars by the Bundesbank and purchases of marks by the United States authorities.

Under these circumstances, the mark immediately became the focus of heavy demand when the dollar suddenly came on offer on June 15. In one day it jumped 1 percent through DM 1.90, even as the Trading Desk stepped in to contain the rise. By comparison with the relatively limited rate fluctuations of previous months, market participants were impressed by the magnitude of the mark's rise, and the bidding for marks quickly cumulated even in the face of stiff resistance by the authorities who continued to intervene in sizable volume. Moreover, as the late-June OPEC meeting approached, the feeling in the market strengthened that the German authorities might welcome an appreciation of the mark to cushion the inflationary impact of rising oil prices. Also, news of a worsening in both the United States trade deficit for April and our consumer price index for May had heightened concerns in the market about the performance of the United States economy.

In these market conditions, the Trading Desk at the Federal Reserve Bank of New York intervened almost daily for the rest of the month, operating not only in New York but in the overnight markets in the Far East during the week of the OPEC meeting and Tokyo summit, June 25-29. In all, the Desk sold $2,429.9 million equivalent of marks by the month end, of which $842.1 million equivalent was financed by new drawings by the System on its swap line with the Bundesbank and the rest was drawn out of System and Treasury balances. On several days, the Bundesbank also intervened forcefully. By the month end the spot rate had advanced above DM 1.84.

Early in July, the results of the OPEC pricing meeting and the Tokyo summit set up expectations in the market that there would be strong official reactions to the higher than expected new oil price increases. In fact, participants at the Tokyo summit committed themselves to limit oil imports. The market responded nervously to the postponement of President Carter's energy speech. Meanwhile the Bundesbank, following up on the rise in domestic interest rates in Germany, raised its discount and Lombard rates on July 12 to 5 percent and 6 percent, respectively. This action had been anticipated, but it nonetheless reinforced concerns in the market over the further narrowing interest differentials between Germany and the United States.

Even before the President had completed his energy address on Sunday evening, July 15, the mark advanced sharply in the overnight markets in Singapore and Hong Kong, and the Desk intervened vigorously in
those markets through banks in the United States with offices in those countries. Subsequently, the announcement that the entire United States cabinet and senior White House staff had offered their resignations to President Carter distressed the market. The dollar came under a renewed burst of selling pressure and the Desk stiffened its resistance. On July 20, the Federal Reserve raised its discount rate ½ percentage point to 10 percent and short-term money market rates were moved up as well.

The mark nevertheless remained in heavy demand, as commercial and professional market participants undertook a hard reassessment of the dollar's prospects. Over subsequent days, United States corporate interests that had previously been hesitant to turn their positions began to unwind their forward mark sales and to cover future mark needs in the spot market. In this unsettled environment, reports that central banks were diversifying out of dollar-denominated assets spread throughout the market. In response to these pressures, the United States authorities provided heavy and sustained support in both the United States and Far Eastern markets, and the Bundesbank also bought dollars in Frankfurt. This intervention blunted the immediate selling pressures, and the mark rate, which briefly reached DM 1.80, dropped back on some covering of short dollar positions. Moreover, the appointment of G. William Miller as Secretary of the Treasury and Paul A. Volcker to replace him as Chairman of the Federal Reserve helped reassure the market that lower inflation and a stable dollar would continue to be of the highest priority for economic policy in the United States. In addition, in late July statistics were released showing a widening in the German current account deficit and a narrowing in the United States trade deficit during June. The mark eased back to DM 1.8335 on July 31. At this level the mark was up a net 2 percent over the six-month period.

In July the Desk's intervention sales of marks amounted to $2,866.6 million equivalent, of which $1,225.6 million was out of Treasury balances and $1,641.0 million was for the Federal Reserve. The System's operations were mainly financed by additional $1,325.8 million equivalent of drawings on the swap line with the Bundesbank, with the remainder coming out of balances. Toward the end of the month the Desk was able to acquire some marks from correspondents and liquidated some $114.6 million equivalent of swap drawings. At the month end, System swap debt with the Bundesbank totaled $2,053.3 million equivalent.

During the period, German reserves were influenced by a revaluation of some of Germany's gold holdings when, during March, 20 percent of all gold and foreign exchange was transferred into the European Monetary Fund against the receipt of claims denominated in the European Currency Unit (ECU). Germany's reserves were also affected when the Bundesbank executed foreign exchange swaps during April and May to provide temporary liquidity to the domestic market. Excluding the impact of these transactions, Germany's foreign exchange reserves declined $6.6 billion from end-January through May, reflecting almost equally the Bundesbank's intervention in dollars and in EMS currencies. By contrast, foreign exchange reserves rose by $5.0 billion during June-July.

### Table 6

**United States Treasury Securities, Foreign Currency Denominated**

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<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government series:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swiss National Bank</td>
<td>600.4</td>
<td>-597.2</td>
<td>-3.2</td>
<td>-0</td>
<td>-0</td>
</tr>
<tr>
<td><strong>Public series:</strong></td>
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<tr>
<td>Switzerland</td>
<td>-0</td>
<td>+1,203.0</td>
<td>-0</td>
<td>-0</td>
<td>1,203.0</td>
</tr>
<tr>
<td>Germany</td>
<td>1,595.2</td>
<td>+1,351.5</td>
<td>-0</td>
<td>-0</td>
<td>2,946.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,195.6</td>
<td>(-597.2)</td>
<td>-3.2</td>
<td>-0</td>
<td>4,149.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(+2,554.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data are on a value-date basis.
Swiss franc

Coming into 1979, the persistent rise in the Swiss franc was finally blunted. Concerned that excessive appreciation might drive the economy into recession, the Swiss National Bank had intervened massively in the exchanges and had accepted the huge injection of liquidity that resulted from the heavy intervention. As part of the November 1 dollar-support package, the Federal Reserve also sold large amounts of Swiss francs in its efforts to correct an excessive decline in the dollar, and the United States Treasury had arranged a $1,203.0 million equivalent placement of Treasury notes in the Swiss capital market. The market had been impressed by these initiatives and by the priority the Swiss government was giving to stabilizing the franc. As a result, the franc had started coming on offer in January, enabling the Federal Reserve to reduce its outstanding swap debt incurred last year with the Swiss National Bank to $446.7 million equivalent by the time the period began.

In early February the franc was again bid up when the dollar came briefly on offer following the cancellation of large military contracts with Iran. The rate jumped 3 3/4 percent above its SF 1.70 opening, prompting the Swiss National Bank and the United States authorities to intervene. The System sold $45.8 million equivalent of francs financed by drawings of $40.4 million on the swap line with the Swiss National Bank and from balances, while the Treasury sold $24.8 million equivalent of francs out of the proceeds of its recent borrowing. These operations quickly brought the market into better balance and reaffirmed to the market the authorities' determination to contain any further rise in the Swiss franc. Thus, the franc settled back to SF 1.67 by midmonth while trading around SF .9000 against the German mark.

Meanwhile, the turnaround in the Swiss franc was generating fears that the sharp rise in oil and other international commodity prices would be transmitted more rapidly to the Swiss economy. Also, an improved business outlook had set in as new orders recovered somewhat from the depressed condition of earlier months. Against this background, market participants, looking for parallels between developments in Germany and Switzerland, were sensitive to the possibility that the Swiss authorities would tighten liquidity, just as the Bundesbank had done, should the recovery in activity threaten domestic price stability. But, in fact, the Swiss expansion was not nearly so well established as that in Germany, and the Swiss authorities repeatedly reaffirmed that economic policy was still focused on the need to stabilize exchange relationships. By early March the relatively comfortable conditions in Switzerland's money and capital markets were in clear contrast to the tightening taking place in Germany. As a result, Switzerland emerged as one of the most favorable markets for placing new loans. Indeed, borrowers from Asia, Europe, and North America flocked to Zurich to take advantage of the attractively low interest rates for as long as they might last. Thus, the buildup of a heavy calendar of new foreign issues weighed on the Swiss franc for some time. As the near-term outlook for the franc faded, nonresidents also shifted some of their funds out of francs into higher yielding assets in other currencies, and the leads and lags built up last year continued to be unwound.

These various developments kept the franc on offer against both the dollar and the mark during most of the spring months. Between mid-February and early May, the franc declined 3 percent to SF 1.7228 against the dollar and had slipped to trade around SF .9060 against the German mark. As the franc eased, the Swiss authorities became more concerned that a sharp decline in the franc would magnify the effect of rising oil prices and otherwise exacerbate inflationary pressures. The Swiss National Bank, therefore, came into the market to support the franc and to absorb domestic liquidity by selling large amounts of dollars in the market while also continuing with its dollar sales under its capital export conversion program. For its part the Federal Reserve bought francs in the market and directly from the Swiss National Bank to repay the remaining $487.1 million equivalent of market-related...
swap debt incurred with that bank last year and during February. The Treasury also purchased francs to restore its Swiss franc balances. In addition, the United States authorities accelerated the program for orderly payment of the pre-August 1971 Swiss franc debt, so that the System and the Treasury were able to repay $139.3 million equivalent of special swap debt and $531.2 million equivalent of Treasury securities, respectively. Consequently, by early April the United States had no outstanding obligations to the Swiss National Bank for the first time since August 1970. Once the debt was repaid the Federal Reserve acquired modest balances in Swiss francs.

During May the unwinding of commercial leads and legs and the heavy volume of capital outflows gradually tapered off. But the heavy intervention to moderate the franc’s decline had generated severe strains in the Swiss money market. To some extent, the authorities had offset these strains by lending francs against dollars through foreign exchange swaps with maturities of up to six months. By this time, they had also allowed Swiss interest rates to rise to contain monetary growth and to reduce inflationary pressures. In addition, during May the Swiss National Bank liberalized its exchange controls by removing requirements that nonresidents convert franc borrowings with the Swiss central bank, that commercial banks balance foreign currency claims and liabilities at the end of each day, and that nonbank residents receive official approval for placing loans abroad. These regulatory changes were well received in the market and contributed to a bottoming-out of the franc around end-May.

As a result of the relaxation of the exchange controls and some narrowing in interest differentials between the United States and Switzerland, the Swiss franc was poised for a recovery at the time the dollar started its decline in mid-June. Bidding for francs put the rate under strong upward pressure. Leading the rise in foreign currencies against the dollar, the franc soared almost 4½ percent to as high as SF 1.6475 on June 22. To avoid an excessive appreciation of the franc, the Swiss National Bank reacted by intervening massively both in Zurich and through the agency of the Trading Desk in New York. In addition, during June the Federal Reserve sold $86.2 million equivalent of francs, with $36.2 million equivalent drawn on the swap line with the Swiss National Bank and the remainder financed from balances.

This forceful and concerted operation by the Swiss and United States authorities impressed the market, and the franc eased back to SF 1.6565 around the month end. Thereafter, the franc moved up again with the other European currencies in response first to the postponement and then to the disappointment in the market over President Carter’s energy speech and the subsequent resignation of the United States cabinet. But the franc did not lead this rise, and its advance was contained with only modest intervention by the Swiss authorities and by the System, which sold $37.1 million equivalent of francs in the market financed by swap line drawings. Once the President had completed the reorganization of his economic team, the franc fell back more rapidly than the mark. The Swiss National Bank sold dollars in the market, and the Federal Reserve was able to buy directly from the Swiss National Bank a sufficient amount of the

### Table 7
**Net Profits (+) and Losses (—) on United States Treasury and Federal Reserve Current Foreign Exchange Operations**

<table>
<thead>
<tr>
<th>Period</th>
<th>Federal Reserve</th>
<th>Exchange Stabilization Fund</th>
<th>General Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>First quarter 1979</td>
<td>+ 0.7</td>
<td>5.7</td>
<td>+17.3</td>
</tr>
<tr>
<td>Second quarter 1979</td>
<td>+30.8</td>
<td>4.6</td>
<td>+21.7</td>
</tr>
<tr>
<td>July 1979</td>
<td>— 0.2</td>
<td>22.5</td>
<td>+20.7</td>
</tr>
</tbody>
</table>

Valuation profits and losses on outstanding assets and liabilities as of July 31, 1979: + 5.6, —209.1, —62.0

Data are on a value-date basis.

### Table 8
**Net Profits (+) and Losses (—) on United States Treasury and Federal Reserve Liquidations of Foreign Currency Debts Outstanding as of August 15, 1971**

<table>
<thead>
<tr>
<th>Period</th>
<th>Federal Reserve</th>
<th>Exchange Stabilization Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>First quarter 1979</td>
<td>—139.1</td>
<td>—531.0</td>
</tr>
<tr>
<td>Second quarter 1979</td>
<td>— 0.7</td>
<td>2.8</td>
</tr>
<tr>
<td>July 1979</td>
<td>—0-</td>
<td>—0-</td>
</tr>
</tbody>
</table>

Data are on a value-date basis.
proceeds of this intervention to repay $36.2 million equivalent of swap debt with the Swiss National Bank. At the month end, System swap debt with the Swiss National Bank was $31.7 million equivalent. By the close of the six-month period under review, the franc had eased back to SF 1.6610 for a net gain of 2% on balance. Meanwhile, during the first four months of this period, Switzerland's foreign exchange reserves declined $3.6 billion. In June and July, foreign exchange reserves declined a further $500 million, as the effect of money market operations more than offset spot foreign exchange market intervention, for a net $4.1 billion decline over the six-month period.

Japanese yen
By early 1979 the Japanese economy had entered a period of strong recovery, spurred first by public investment, then by private investment and personal consumption. Progress was being made in reducing Japan's massive trade and current account surpluses, as export growth had slackened for several months while imports expanded briskly in response to rising domestic demand, to last year's sharp appreciation of the yen, and to government programs to encourage imports. The yen had fallen back more sharply than most other major currencies after the announcement of the November 1 measures and concerted intervention by United States and Japanese authorities and was trading at ¥202 on February 1. Even so, economic policy under the new Ohira government continued to focus on the need to cut the current account surplus further. The government's budget for the fiscal year beginning April 1979 contained another substantial increase in spending to maintain real growth at 6.3 percent even if production for foreign markets slowed further. On this basis, the government forecast an impressive 50 percent fallback in the current account surplus to $7.5 billion for the fiscal year. Meanwhile, monetary policy remained accommodative, so as to provide support to the economic recovery and to an outflow of capital that would offset the continuing current account surplus. But expansion of bank credit had become a matter of concern.

As a follow-up to the November 1 actions, the United States authorities remained prepared to intervene in yen. And so, when the dollar came under selling pressure on two occasions through early February, the Desk sold $50.4 million equivalent of yen in the New York market, of which $33.8 million equivalent was from Federal Reserve balances and $16.6 million equivalent from Treasury balances. But for the most part the yen was under selling pressure over the late winter and early spring. The United States authorities thus took advantage of the opportunity to acquire yen to add to balances of the System and the Treasury.

Much of the flow out of yen continued to reflect the reversal of commercial leads and lags which had built up in 1978, when the yen had been appreciating rapidly. In addition, with interest rates in Japan well below those in the United States and Eurodollar markets, capital moved out of yen once the spot rate began to decline. Japanese residents shifted funds abroad and nonresidents ran down their free-yen deposits in Japan. Moreover, a number of foreign borrowers took advantage of both favorable rates and ample liquidity in the Tokyo market to issue bonds and to place syndicated loans denominated in yen. The continued conversion of the proceeds of sizable issues over a short period of time also weighed on the exchange market.

In addition, the decline in the rate reflected a deterioration in market sentiment toward the yen during the early spring. Now that the sharp rise in the spot rate had been broken, the adjustment in Japan's trade position was no longer masked in the monthly figures by a continuous improvement in the terms of trade. At the same time, the oil shortage triggered by the protracted shutdown of Iranian production was highlighted, even more in Japan than elsewhere, when multinational oil companies phased out shipments to their nonaffiliates, thereby sharply reducing deliveries of crude oil to Japan's refineries. Fears over the availability of supplies as well as concern over rapidly rising international prices led to an increase in imports of oil and other commodities. This was reflected in a

![Chart 5: Japan Movements in exchange rate and official foreign currency reserves](chart5.png)

See exchange rate footnote on Chart 3.
scramble for dollars in the exchange market, which added to the pressure against the yen. While other major currencies were weakening only slightly against the dollar, the spot yen dropped a full 4½ percent below early-February levels to ¥211.60 by early April.

With the yen on offer and declining almost daily, the Japanese authorities acted to moderate the selling pressures, in part, through the continued liberalization of exchange controls on capital inflows. Limitations on nonresident purchases of yen bonds were progressively eliminated, a marginal reserve requirement on increases in nonresident free-yen accounts was phased out, and the period for converting the proceeds of nonresident issues of yen-denominated bonds was extended. Moreover, the Bank of Japan intervened massively in the exchange market as a seller of dollars, thereby absorbing yen. As the pressures continued to build, the authorities became concerned that the decline in the yen would undercut the progress already achieved in reducing the large trade and current account surpluses of recent years. At the same time, the sharp depreciation of the yen magnified the effect of rapidly rising commodity prices, thereby aggravating domestic inflationary pressures. With these concerns in mind, on April 17 the Bank of Japan raised its discount rate by ¾ percentage point to 4½ percent. Selling pressure on the yen nevertheless continued into early May at which point the rate had fallen to ¥225.25, some 11½ percent below the early-February level and fully 27½ percent below its peak just before the November 1 program.

By May, expressions of concern by senior Japanese and United States officials that the yen may have reached excessively low levels sparked a sudden scramble for yen. In a surge of profit taking and short covering, the spot rate shot up over 6 percent to ¥211.50 toward midmonth. Once these immediate demands passed, however, the yen came on offer again and the rate eased to around ¥218-220 by early June. The Japanese authorities did not intervene as heavily as before in the market but, reflecting the sustained heavy intervention over the early months of the year, Japan’s foreign exchange reserves declined by $8.7 billion from January through May.

In early June, selling pressure on the yen gradually tapered off, but the yen did not participate in the generalized rise against the dollar that set in at mid-month. The market remained cautious about the outlook for Japanese trade and current account positions, with the further rise in the oil prices adding to Japan’s oil-import bill and the possible slowdown in the United States cutting into Japanese exports. Not until selling pressure on the United States dollar intensified in July, amid concern over the management of United States energy policy and of economic policy more generally, did the yen begin to advance. By that time, the pickup of inflationary pressures in Japan and rapid growth of the money supply prompted the Bank of Japan to raise its discount rate by 1 percentage point to 5¼ percent. The market responded favorably to this action, and the yen edged higher to close around ¥217. At this level, the yen showed a net 7½ percent decline over the six-month period under review. Japan’s foreign exchange reserves posted little further change in June and July, closing the period at $21.0 billion, compared with $28.8 billion at end-January.

Sterling

Coming into 1979, sterling was firm in the exchange markets. Underpinning the pound were the relatively high yields available on British gilt-edged securities and other sterling instruments. Also, the United Kingdom government had indicated that, even though it would not initially join the exchange intervention arrangement in the EMS, it would seek to keep sterling relatively stable vis-à-vis the currencies of its major trading partners. The comfortable level of foreign exchange reserves, which were at $15.6 billion at the end of January, gave credibility in the market to this pledge. Moreover, Britain’s near self-sufficiency in oil was seen as insulating the United Kingdom economy from the disruption in Iranian oil supplies and its balance of payments from the effects of skyrocketing oil prices. Thus, the pound traded comfortably around the $2.00 level in early February and, on the effective trade-weighted basis used by the United Kingdom authorities, it remained around 63 percent of its Smithsonian parity.

Meanwhile, Britain’s economic performance was falling short of market expectations. The recovery of the domestic economy had run out of steam, inflationary pressures were accelerating, and the current account was showing little improvement despite the increasing contribution of North Sea oil to the balance of payments. Looking ahead, a larger than expected public-sector borrowing requirement, labor union demands for large pay increases to make up for four years of wage restraint, and spiraling commodity prices all aggravated the outlook for inflation. Interest rates continued to move up in London’s financial markets, and on February 8 the Bank of England raised its minimum lending rate from 12½ percent to 14 percent.

During February a massive reflow of German marks, Swiss francs, and Japanese yen was getting under way. Much of this reflux was into dollars. But with so much money on the move at a time when interest rates in the United Kingdom were higher than in other major countries, including the United States, there was a tendency for some of these funds to gravitate
had been a supply, the United Kingdom authorities decided to sterling of continued heavy intervention point, imponderable effects the lack of monetary expansion. Complicating matters spark additional demand from investors the targeted levels. Cuts in interest rates aimed substantial a as a bullish factor for sterling. Consequently, the injection of election uncertainties at first gave little pause to the bidding for sterling.

The persistent inflows of funds into sterling raised a serious policy dilemma for the United Kingdom authorities. Exchange market intervention to keep spot sterling from rising sharply risked generating a substantial burst in the monetary aggregates beyond the targeted levels. Cuts in interest rates aimed at reducing the attractiveness of sterling investments could instead spark additional demand from investors on expectations of capital gains and undermine efforts to rein in monetary expansion. Complicating matters further was the lack of reliable data on current economic developments in the United Kingdom as a result of a civil servants' strike affecting data collection and of a series of strikes elsewhere in the economy which were having imponderable effects on overall employment and production levels. On April 5 the Bank of England once again cut its minimum lending rate by 1 percentage point to 12 percent. At the same time concern that continued heavy intervention to restrain the rise in sterling was generating excessive growth of the money supply, the United Kingdom authorities decided to scale back the magnitude of their intervention.

The initial response in the market to these steps was a further rush into sterling. By mid-April, the spot rate had been bid up above $2.10 against the dollar and to nearly 68 percent in effective terms. The demand for sterling then ran out of steam and the rate eased back as traders sensed that interest rates would not be allowed to fall further in the United Kingdom, particularly following evidence that domestic inflation was accelerating. Moreover, the market turned cautious ahead of the general election, as the public opinion polls indicated a narrowing of the margin in favor of the Conservatives. Spot sterling fluctuated rather widely over the last weeks before the election. The immediate reaction to the May 3 election results, a clear majority for a new Conservative government, led by Prime Minister Margaret Thatcher, was some further bidding for pounds and the spot rate advanced to as high as $2.0843. Although the Bank of England remained prepared to intervene to counter excessively disorderly conditions in the market, it continued to allow sterling to move rather widely in response to market forces. Sterling soon settled back somewhat as the market assessed the prospects for the Conservative Party program, which was to be laid out in some detail in a budget message on June 12.

By this time, available evidence suggested that output had fallen during the first quarter and that both the
trade and current accounts had been in uncomfortably large deficit. Wage increases had been much higher than anticipated which, together with the upsurge of raw material and oil prices, contributed to the acceleration of inflation. The pace of monetary expansion had quickened substantially, largely because of strong demands for bank credit. Some tightening measures were therefore expected.

The market was nonetheless caught by surprise by the boldness of the initiatives announced by Chancellor Howe in the budget address, which adhered closely to the principles set forth in the campaign. The projected public-sector borrowing requirement for the current fiscal year was to be cut nearly £1 billion below its current level to £6.1 billion. Substantial reductions in income taxes were to be financed by large cuts in public spending, increases in the value-added tax, and the sale of some government holdings to the private sector. In the meantime, to keep inflation in check, the authorities imposed stricter monetary restraints. They reduced the money growth target to a 7-11 percent range. To bring the actual growth of sterling \( M_3 \) down into the middle of this range, the minimum lending rate was raised 2 percentage points to 14 percent and the supplementary special deposit scheme, which had been imposed last summer to restrict the growth of commercial bank interest-bearing eligible liabilities, was extended for a further three-month period. With the intention of allowing United Kingdom residents much freer use of sterling resources, certain capital controls were also liberalized. These changes included freer availability of official exchange for outward direct investment, abolition of the requirement that two thirds of overseas profits be repatriated, the end to controls on dividends, and the relaxation of controls on travel and emigration allowances.

The exchange market's response was exceedingly bullish, with the pound coming into heavy commercial and professional demand from financial centers around the world. The jump in interest rates had particularly marked effects, as foreign investors joined in the scramble to buy government securities and several issues of government tap stocks were sold out quickly. Rumors of a large new oil find in the North Sea reinforced favorable market sentiment toward sterling at a time when the world oil price and policies were under active debate within OPEC and among the major industrial countries. With the increased volume of funds coming into sterling, the British authorities continued to intervene to avoid excessively disorderly markets but allowed the exchange rate to take the brunt of the demand pressures. As a result, the pound shot up to $2.21 by early July, some 6 percent above early-May levels. Sterling rose against other major currencies as well, advancing to 70.8 percent in effective terms.

The relatively high level of United Kingdom interest rates, the security of British oil supplies, and the depth and diversity of the United Kingdom money market all benefited sterling when the dollar came on offer during July. In response to the uncertainties surrounding United States energy policy and the outlook for economic policy generally in the United States, funds from multinational corporations, OPEC members, and market professionals continued to flow heavily into London. The perception that the Bank of England, reluctant to compromise its control of the money supply, would restrain its intervention in the exchanges also propelled sterling higher. In these circumstances, the authorities accelerated their policy of relaxing exchange controls by lifting totally all restrictions on overseas direct investment and easing those on outward portfolio investment. But these measures had little immediate impact, and the pound rocketed up to a four-year high of $2.3324 on July 26. By that time, British manufacturers were expressing open alarm over a possible loss of competitive positions which could result with sterling at such a high level. Once the immediate concern over United States economic policy eased in late July, the flow into sterling suddenly dried up. Spot sterling dropped away as sharply as it had risen, receding to $2.2480 by the month end. Nevertheless, compared with six months before, sterling had risen on balance by 13 percent against the dollar and by 14 1/4 percentage points to 72.7 percent on the trade-weighted index.

During the period the government took advantage of sterling's strength in the exchanges to repay previously incurred external debt while also extending the maturities of remaining external public debt. These repayments included the prepayment of $1 billion to the International Monetary Fund (IMF), liquidating Britain's remaining credit tranche drawings with the Fund as well as the repayment of a large portion of public-sector debt which was coming up for early maturity. Even so, reserves rose another $2.3 billion above end-March levels to $19.2 billion at end-July, reflecting the accumulation of dollar intervention by the Bank of England.

**European Monetary System**

On March 13 the EMS was formally inaugurated. Aimed at achieving greater exchange rate stability in Europe, the new system supplanted the EC snake, which had been in existence since 1972 but had by this time lost more than half its membership. Within the EMS the new joint floating arrangement included the currencies still remaining in the EC snake, together with the
French franc, the Italian lira, and the Irish pound. As in the EC snake, the member nations agreed to maintain their currencies in a 2¼ percent band against each other, except for Italy which was allowed a wider 6 percent margin for the lira. The United Kingdom decided not to bring the pound sterling into the exchange rate arrangement at this stage, though participating in other aspects of the EMS.

The launching of the EMS was the culmination of nearly a year's intensive efforts by officials of the nine participating nations. The new system was designed to promote monetary stability by appropriate and timely policy measures and by a strengthening of existing financing arrangements, including the creation of ECUs (European Currency Units) against central bank deposits of gold and dollars. In addition, the participating governments agreed to limit fluctuations in their currencies against the ECU, a weighted basket of all currencies. A nation whose currency deviates beyond an agreed limit from the ECU is expected either to intervene, to apply domestic monetary measures, to adjust other economic policies, or to explain to the other members why none of these actions would be sufficient or adequate to bring its currency back into line.

Initially, the exchange market had been skeptical about the practicality of a joint floating arrangement, given the persistently wide disparities in the inflation and trade performances of the respective economies. Expectations of a realignment prior to or just after the EMS got under way had generated large movements of funds between member currencies. But, once the monetary authorities of the EC snake countries let it be known that the bilateral central rates then in force between the "snake" currencies would be maintained in the new system, tensions eased and most speculative positions were unwound before the EMS was finally launched.

In this context, interest differentials increasingly dominated exchange rate movements within the EMS as elsewhere. Funds flowed heavily out of the German marks, where interest rates were low, into assets of other currencies where interest rates were much higher. Among the beneficiaries of these flows was the French franc, which settled into the middle of the new band. It was also helped from an improved external position and favorable market reaction to the sustained commitment of the French government to fight inflation and to increase the competitiveness of French industry. The Italian lira also was well bid, moving quickly to its 6 percent upper limit, as higher interest rates, restrictions on domestic credit expansion, and the market's awareness of the sizable foreign exchange reserves the Bank of Italy had amassed over the previous two years encouraged Italian companies to satisfy their financing needs through external borrowings. The lira was buoyed, too, by Italy's current account position, which remained in sizable surplus even after a rebound in economic activity over the
winter and early spring. In addition, the Danish krone, as well as the Irish pound, which remained tied to sterling, moved to the top of the 2 1/4 percent band as capital inflows were attracted by the exceptionally high interest rates in Denmark and the United Kingdom. In fact, when interest-sensitive funds continued to pour into sterling, the Central Bank of Ireland was forced on March 30 to suspend its currency’s longstanding link with sterling in order to keep the Irish pound from bursting through the top of the joint float.

By contrast, the commercial Belgian franc, after having already reached its lower intervention limit against the Danish krone during April, weakened against the mark. In part, this reflected the deterioration in Belgium’s current account deficit from an upsurge in imports associated with the expansion in Belgian economic activity. But in addition, with German interest rates rising, the mark moved up to the top of the 2 1/4 percent band in the second half of May. Once the mark hit its upper intervention limit against the Belgian franc, rumors circulated of a possible realignment within the joint float. As a result, the Netherlands guilder moved down close to the Belgian franc amid signs of a widening in the Netherlands trade deficit. At the same time, the Danish krone dropped to the bottom of the band as earlier capital inflows dried up and were even reversed.

As German interest rates rose higher, pressures within the EMS intensified. However, in this first test of the durability of the new arrangement, the participating central banks provided strong support for their currencies through sales of dollars and marks both at the intervention limits against the mark and within the margins. Moreover, the authorities were quick to raise domestic interest rates to maintain interest differentials against the mark. In mid-June, when the mark started to rise against the dollar, other EMS currencies had difficulty keeping pace. But once the mark’s advance was checked, pressures within the joint float were alleviated. As a result, the weaker EMS currencies moved above their lower intervention points, and tensions eased within the EMS during July.

**Canadian dollar**

By early 1979, Canada’s current account remained in substantial deficit despite the sharp depreciation of the Canadian dollar over the previous two years. The growth of export earnings was insufficient to offset rising imports and the increasing burden of Canada’s interest payments on external debt. Long-term capital inflows from abroad were not large enough to close the payments gap left by the current account deficit. Moreover, the persistent decline in the Canadian dollar was complicating the task of winding down inflation, since the foreign sector had become a principal source of upward pressure on Canadian prices and costs. Therefore, the Canadian authorities had intensified their efforts to check the decline of the exchange rate. The Bank of Canada had intervened substantially at

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**Chart 9**

**Canada**

Movements in exchange rate and official foreign currency reserves

![Chart 9](chart1.png)

See exchange rate footnote on Chart 3.

**Chart 10**

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

Three-month maturities*

![Chart 10](chart2.png)

*Weekly averages of daily rates.
times. It had also increased its discount rate in several stages to 11 1/4 percent by early January and acted to firm up yields in the bond market, thereby maintaining favorable interest rate differentials vis-à-vis the United States. To replenish Canada's reserves and to supplement long-term capital inflows, the government had previously borrowed large sums in the United States and German capital markets and had drawn $2.7 billion under two revolving standby credit facilities with foreign commercial banks. In addition, early this year the government raised about $500 million and $900 million equivalent in the Japanese and Swiss capital markets, respectively.

Exchange market pessimism toward the Canadian dollar was deeply entrenched, however, following the extended slide of the exchange rate, and this mood was reinforced by uncertainties ahead of the national election to be held in 1979. The Canadian currency therefore remained on offer in the early weeks of the year and reached Can.$1.2019, a 46-year low, on February 1. Against the United States dollar, this represented a cumulative decline of 20 1/2 percent since November 1976 and an even greater fall against currencies of many of its other trading partners.

In early February, the Canadian dollar began to rally, partly in response to the worldwide scramble for oil and other commodities. Canada with its rich supplies of natural gas, oil, and other minerals was considered less vulnerable than other industrial countries to energy shortages. Moreover, in March, Canada's role as an energy producer was highlighted when the National Energy Board determined that Canada's natural gas reserves were sufficient to warrant an increase in exports. Once it was clear that the spot exchange rate had bottomed out, the adverse leads and lags and short trading positions that had been built up began to be unwound, and favorable short-term interest rates also helped draw liquid funds into Canadian dollars. The higher yields on government bonds also attracted investment funds from abroad, including substantial amounts from Europe, Japan, and OPEC countries. By late April, the Canadian dollar had been bid up to as high as Can.$1.1401, some 5 percent above early-February lows. During the advance the Bank of Canada bought substantial amounts of United States dollars on days in which the Canadian dollar was in demand, in accordance with the Canadian authorities' approach of intervening to moderate exchange rate movements in either direction.

Meanwhile, Canada's external position had failed to improve. Export growth turned sluggish, and the possibility of a slowdown in the United States worsened prospects for the near term, while imports continued to grow by more than expected. With respect to capital flows, the expansion of the domestic economy was generating sufficient liquidity in the corporate sector to provide for the financing of new investment out of internal sources rather than depending so heavily on foreign borrowing. At the same time, there were prospective outflows in connection with takeovers by Canadian companies of United States-owned operations. Moreover, in assessing the prospects for the Canadian dollar, many market participants viewed the sizable intervention purchases of United States dollars as an indication that the Canadian authorities were resisting an appreciation of the rate to maintain the competitiveness of Canadian exports and to build up reserves.

These uncertainties reinforced existing bearish sentiment in the exchange market, and the Canadian dollar came increasingly on offer. Also, with the approach of the May 22 general election, market participants became concerned over the possibility that a weak minority government might emerge, which many thought would be unable to deal effectively with Canada's economic problems. The spot rate fell back to as low as Can.$1.1626 in mid-May, with the Bank of Canada intervening to moderate the decline.

The election provided a near majority to the Progressive Conservative Party under Joseph Clark and helped clear the air somewhat. But the release of recent trade figures confirmed Canada's disappointing trade performance. Also, the $1.1 billion decline in Canada's foreign exchange reserves during May suggested that there had been more support for the Canadian dollar than the market had realized. The Canadian dollar dropped off to Can.$1.1780, almost 3 1/2 percent below the mid-April high.

As attention again shifted to world energy problems ahead of the late-June OPEC meeting and Tokyo summit, market sentiment toward the Canadian dollar improved somewhat and reports of several large natural gas discoveries in Canada prompted some bidding-up of the Canadian dollar. Therefore the exchange market came into better balance over the rest of June and through July. Following the further advance of interest rates in the United States and in European centers, the Bank of Canada raised its discount rate by 1/2 percentage point to 11 1/4 percent on July 23. At the end of July the Canadian dollar was trading at Can.$1.1700, up a net 2 1/2 percent against the United States dollar over the six-month period. After the large reserve swings earlier in the period, there was little change in June and July. At the close of the period Canada's reserves totaled $2.1 billion, down a net $60 million from the level of January 31, after official borrowings of $1.4 billion and repayments of $2.2 billion under the standby facilities with commercial banks.