February-July 1978 Semiannual Report
(This report was released to the Congress and to the press on September 6, 1978)

Treasury and Federal Reserve Foreign Exchange Operations

During the six-month period under review, the exchange markets remained in the grip of uncertainties over the outlook for major currencies as serious economic imbalances persisted among the industrial countries. These imbalances were reflected in the sluggishness of economic growth abroad relative to the strong expansion under way in the United States, the continuing current account surpluses in countries such as Japan, Germany, and Switzerland in contrast to our current account deficit, and the indications that inflation was still abating elsewhere while accelerating here. Determined efforts to correct the imbalances were under way in most countries with further actions taken over the course of early 1978. But by midsummer the process was far from complete. At the Bonn summit on July 16-17, Germany and Japan again committed themselves to take additional stimulative measures. For its part, the United States promised to curb inflation and to press ahead on legislation to reduce its dependence on imported oil.

Against this background, market sentiment toward the dollar remained very bearish in early 1978, leaving the dollar exposed to bouts of heavy selling pressure. This was particularly true in February and March, when the dollar declined across the board in frequently disorderly trading. Between late March and mid-May, the immediate pressures on the dollar eased, as market sentiment became more positive following a series of anti-inflation steps by the Administration and the Federal Reserve. The dollar thus rose on an unwinding of speculative short positions and the reversal of previously adverse commercial leads and lags. Nevertheless, in the late spring and early summer, bearish sentiment resurfaced in the absence of further progress on economic fundamentals, and by late July the dollar was again under widespread selling pressure.

In line with the more active intervention tactics adopted in early 1978, the United States authorities continued to respond forcefully at times when exchange markets became disorderly. As before, most United States intervention was in German marks. For the six-month period as a whole, the foreign exchange trading desk of the Federal Reserve Bank of New York sold a total of $1,511.0 million net of German marks, of which $843.5 million was for the account of the Federal Reserve and $667.5 million for the United States Treasury. Most of this intervention was carried out in February and March. On March 13, as part of a broader agreement between United States and German authorities, the Federal Reserve swap line with the German Bundesbank was doubled to $4 billion. By late March, the combined swap indebtedness of the United States authorities in German marks had reached a peak of $2,844 million equivalent, of which $1,844 million equivalent was drawn by the Federal Reserve and $1 billion equivalent was drawn by the Treasury on its facility with the Bundesbank. From the end of March through mid-July, the United States authorities were able to acquire substantial amounts of marks from

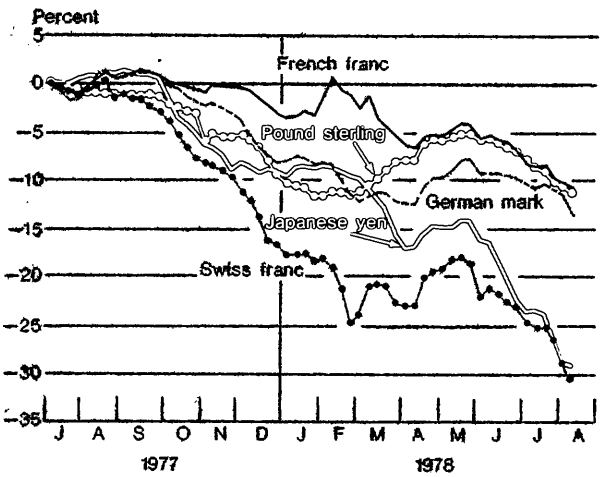
A report by Alan R. Holmes and Scott E. Pardee.
Mr. Holmes is the Executive Vice President in charge of the Foreign Function of the Federal Reserve Bank of New York and Manager, System Open Market Account. Mr. Pardee is Vice President in the Foreign Function and Deputy Manager for Foreign Operations of the System Open Market Account. The Bank acts as agent for both the Treasury and the Federal Reserve System in the conduct of foreign exchange operations.

Table 1
Federal Reserve Reciprocal Currency Arrangements
In millions of dollars

Institution	Amount of facility July 31, 1978
Austrian National Bank	$ 250
National Bank of Belgium	1,000
Bank of Canada	2,000
National Bank of Denmark	250
Bank of England	3,000
Bank of France	2,000
German Federal Bank	4,000*
Bank of Italy	3,000
Bank of Japan	2,000
Bank of Mexico	360
Netherlands Bank	500
Bank of Norway	250
Bank of Sweden	300
Swiss National Bank	1,400
Bank for International Settlements:	
Swiss francs-dollars	600
Other authorized European currencies-dollars	1,250
Total	$22,160

* Increased by $2,000 million, effective March 13, 1978

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 5-8, 1977 Figures calculated from New York noon quotations.

correspondents and in the market to liquidate swap debt. By end-July the System's debt in marks had been reduced by $1,193.4 million to $650.5 million and the Treasury's debt had been cut by $803 0 million of marks to $197.0 million.

During the period, the Federal Reserve also intervened on a few occasions in Swiss francs, selling a total of $82 1 million equivalent. Of this amount, $50.1 million equivalent was sold in February, which was financed by drawings on the swap line with the Swiss National Bank, and was fully repaid by late May using francs acquired directly from the Swiss National Bank. The remaining $32.0 million equivalent of francs was sold in late June and July. Of this amount, a part came from balances acquired from correspondents and $22.9 million equivalent was financed by new drawings on the Swiss central bank.

On the repayment of swap debt incurred in 1977-78, the policy was to repay these drawings as soon as feasible in conformity with the short-term nature of the swap facilities Since dollar rates did not recover fully to the earlier levels at which much of the debt was incurred, the repayment resulted in net realized losses on current operations during the first seven months of 1978. These amounted to $22 8 million for the System and $2 2 million for the Treasury.

Finally, during the period the Federal Reserve and the Treasury made further repayments to the Swiss National Bank of Swiss franc debt incurred prior to the suspension of gold convertibility for the dollar in August 1971. The System liquidated $191.2 million of its special swap debt, reducing the remaining total to $278.8 million. The Treasury repaid $267 6 million of foreign-currency-denominated securities, leaving $850.4 million remaining Repayment netted losses to the Federal Reserve of $140.9 million and to the Treasury of $196.1 million in the first seven months of 1978.

German mark

In contrast to the strong expansion under way in the United States during 1977, economic recovery in Germany had been only moderate To provide support to the domestic economy, the government had adopted a more stimulatory fiscal policy, undertaking to provide additional tax relief and government investment into early 1978 Monetary policy had also been accommodative. The German Bundesbank, which had intervened in the exchange markets to cushion the mark's rise, had temporarily accepted a sharp acceleration of monetary growth well beyond its target of 8 percent for the year. Interest rates, too, had fallen to the point that the central bank's Lombard rate—which forms the upper limit of the day-to-day money rate in the interbank market—was at a historical low of 3½

percent and yields on outstanding bonds had plummeted to their lowest levels since World War II. Meanwhile, in the exchanges a sharp rise in the German mark late in the year had threatened to present a severe obstacle to further growth of economic activity. The mark's appreciation had also set off a wave of anticipatory orders for German goods from abroad, in the event that the mark would strengthen even more. On balance, Germany ended the year with a trade surplus even larger than in 1976 and little change in its current account surplus.

More orderly trading conditions were established in the exchanges following the January 4 announcement of a United States Treasury-Bundesbank swap arrangement and the shift to a more open and forceful intervention approach by the United States. Once these operations, together with those of foreign central banks, restored a sense of two-way risk in the market, large interest rate differentials favoring the dollar began to show through. As a result, the mark eased back some 3 percent from its early-January peak to trade at $0.4740 by end-January. Official intervention in the exchanges was reflected in the $979 million increase in Germany's reserves during January to $40.7 billion. Meanwhile, swap drawings by the Federal Reserve and the Treasury were, by the month end, up to $1,251.2 million and $407.4 million equivalent of marks, respectively.

This respite was short-lived, however. Dealers were disappointed that no new measures to bolster the dollar were announced in the Administration's major policy addresses of late January. Talk in mid-February of a series of international meetings of high-level government officials served to remind the market of the continuing imbalances among the major industrial nations. Reports circulated of a renewed disagreement between the United States and Germany on the need for further stimulus in Germany. Coming at a time when the market was already caught off guard by an 8 percent devaluation of the Norwegian krone within the European Community (EC) snake, these reports spurred heavy bidding for marks around mid-February. As the mark's rise accelerated, rumors appeared that members of the Organization of Petroleum Exporting Countries (OPEC) had shifted substantial amounts of funds out of dollars and that the Federal Reserve and the Treasury were approaching their respective swap limits with the Bundesbank. With this talk spreading through the exchanges, both professional and commercial bidding for marks gathered force and drove the rate higher in late February. In response to these rapidly intensifying pressures, the Bundesbank stepped up its purchases of dollars. Also, the Federal Reserve Bank of New York operated on ten trading days between February 10 and February 28, selling a total of $714.5 million equivalent of marks net. These sales were split evenly between the Federal Reserve and the Treasury and were financed by drawings on their respective swap lines with the Bundesbank.

By late February, the mark had risen 5 percent. With the spot rate now approaching $0.50 (DM 2.00 to the dollar), some traders feared that a clear breach of that level would trigger adoption either in the United States or Germany of exchange controls, as Switzerland had

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, 1978	1978 I	1978 II	1978 July	System swap commitments July 31, 1978
German Federal Bank	800.1	+1,008.5	+ 35.2 −800.1	−393.3	650.5
Swiss National Bank	-0-	+ 69.0	+ 4.8 − 69.0	+ 18.0	22.9
Total	800.1	+1,077.6	+ 40.1 −869.1	+ 18.0 −393.3	673.3

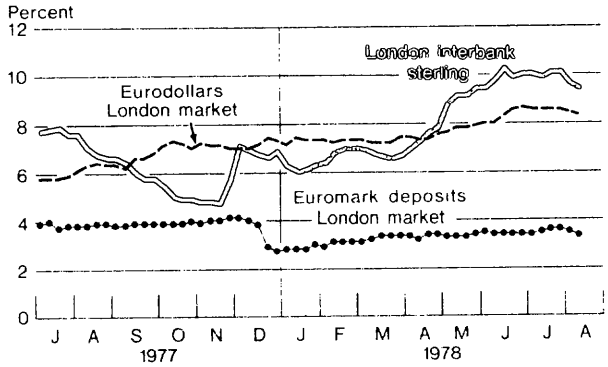
Because of rounding, figures may not add to totals.

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.

Chart 2

Selected Interest Rates

Three-month maturities*

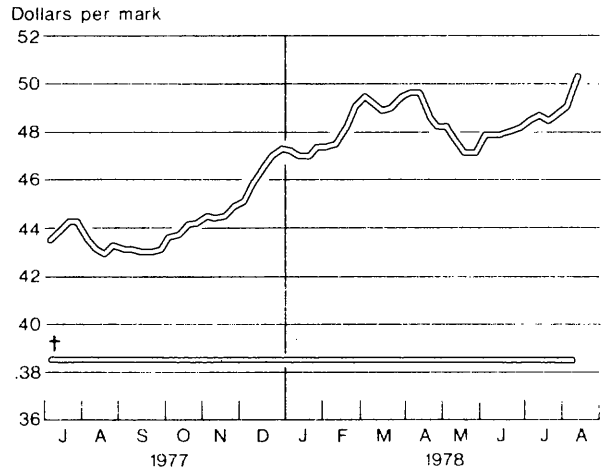


*Weekly averages of daily rates

Chart 3

Germany

Movements in exchange rate*



*Exchange rates shown in this and the following charts are weekly averages of New York noon offered rates

† Central rate established on October 18, 1976

just announced. To the extent that such measures might force a reversal of existing positions and thus a snapback in dollar rates, some dealers were hesitant to take on new positions at prevailing exchange rates while some others moved to cover their outstanding positions. Consequently, although the mark rate briefly rose above $0.50 in early March, it soon settled back without intervention by the United States authorities. Meanwhile, both President Carter and Chancellor Schmidt indicated that new consultations on economic and financial policy were under way between their two governments. With this sense of movement on the policy front, some selling of marks emerged.

Following their discussions, the United States and German authorities issued on March 13 a joint statement reaffirming that continuing forceful action would be taken to counter disorderly conditions in the exchange market and that close cooperation to that purpose would be maintained. To reassure the markets that ample resources would be available to finance United States intervention, the swap line between the Federal Reserve and the Bundesbank was doubled to $4 billion. Moreover, the United States Treasury announced that it was prepared to sell SDR 600 million to Germany and, if necessary, to draw on its reserve position at the International Monetary Fund (IMF) to acquire currencies that might be needed for intervention. The United States also indicated its commitment to conserve energy, to develop new sources of supply, and to press for Congressional approval of its energy bill. For its part the German government reaffirmed its commitment to support economic recovery at home. But, because output in the first quarter had been adversely affected by transitory factors including industrial disputes, the authorities were to wait to consider the need for new measures until a clearer picture of the state of the German economy would be available.

The market's initial reaction to this statement was one of disappointment. Most participants had been looking for a more far-reaching agreement that would have had an immediate impact on current payments flows. As a result the mark, which had declined to as low as $0.4788 just prior to the release of the communiqué, was bid up sharply, rising over 2 percent to as high as $0.4898 on March 13 in New York. In coordination with the Bundesbank, this Bank again intervened forcefully that day and the next, selling a further $372 million equivalent of marks financed through equal swap drawings by the System and the Treasury. After this intervention, the market came into better balance for a while. But then toward the month end, news of the United States record monthly trade deficit of $4.5 billion for February and a rush into Japanese yen brought the German mark again into strong demand, driving the rate up as high as $0.5031 by March 31. The German and United States authorities stepped up their intervention once more. The desk in New York intervened on two more trading days in late March, selling $120.2 million equivalent of marks. Of

that total, $98.7 million equivalent was financed by equal drawings by the System and the Treasury on their respective swap lines with the Bundesbank, and the rest came from System balances. These swap drawings raised the combined mark indebtedness of the United States authorities to a peak of $2,844 million equivalent, of which $1,844 million equivalent was drawn by the Federal Reserve and $1 billion equivalent by the Treasury. In Germany, official purchases of dollars in the exchanges contributed to a further $1.5 billion increase in Germany's reserves to $42.2 billion.

During April, the Federal Reserve shifted to a less accommodative stance in the domestic money market. Also, the Administration strengthened its efforts to moderate price and wage increases and to reach a compromise on the energy bill. These actions prompted an improvement in market sentiment toward the dollar. As a result, a heavy reflow of funds out of marks into dollar-denominated assets developed, a tendency that was encouraged by the exceptionally wide interest differentials favoring the dollar and a dramatic rebound of the United States stock market. These flows, together with the reemergence for the first time this year of long-term capital exports from Germany, triggered a fall in the mark which brought the rate down some 7 percent from its end-March levels to $0.4681 by mid-May.

During this time, the Federal Reserve and the Treasury took the opportunity of a declining mark to purchase marks to liquidate outstanding swap debt with the Bundesbank. These marks were bought mostly from correspondents, but a small amount was purchased in the market. Otherwise, the trading desk intervened on only four occasions, selling $95.9 million equivalent of marks from System balances and $1.6 million equivalent from Treasury balances. Overall, the Federal Reserve repaid by May 18 $493.4 million of drawings, reducing the amount the System had outstanding to $1,350.4 million equivalent. The Treasury also repaid $309.4 million equivalent, cutting its debt to $690.6 million equivalent. In addition, the Bundesbank sold dollars, particularly in connection with the conversion of foreign DM bonds but also at times when the spot mark was dropping rapidly.

In late May, however, the balance of market forces suddenly tipped in favor of the mark once more. Concern over the United States economic performance resurfaced as new data and forecasts were released, pointing to both a further widening of the United States current account deficit and an acceleration of our inflation rate. Moreover, the excessive liquidity in the German money market had been largely absorbed by the outflows of capital and by heavy borrowings, in excess of current needs, by the government and others taking advantage of low interest rates. As part of its efforts to provide liquidity, the Bundesbank announced it would terminate the 100 percent reserve requirement on the growth of commercial bank nonresident liabilities, effective June 1. But the withdrawal of this reserve requirement, which had been imposed to contain exchange market pressures in December 1977, as well as disclosure of dollar sales by several central banks, triggered a new wave of commercial and professional bidding for the mark. The rate jumped 3 percent, up to $0.4820, and to maintain orderly trading conditions the Bundesbank returned to the market as a buyer of dollars. The desk also intervened on two occasions, May 18 and May 31, selling $74.4 million equivalent of marks in the market, including $54.1 million equivalent out of System balances and $20.3 million equivalent out of Treasury balances.

These operations, together with the continued rise in United States interest rates and quarter-end considerations, helped steady the market in early June. Thereafter, dealers became cautious about moving into marks ahead of the EC summit in Bremen on July 6-7 and the summit of industrialized countries in Bonn on July 16-17. Indeed, since Germany's production figures showed growth to be still disappointingly slow, expectations developed that the Schmidt government might cut taxes to stimulate the economy before these meetings took place. With Germany's bond market already facing a heavy schedule of new issues by state and local governments, the need for financing an increased federal government deficit generated expectations of rises in German interest rates and triggered flows of funds out of German government securities to avoid capital losses. Moreover, talk of an expansion of the EC snake to include the currencies of all Common Market countries also tended to divert funds flowing out of dollars away from the mark and, in this case, into the French franc, the pound, and the Italian lira—the three major candidates for membership.

As a result, the mark lost some of its earlier buoyancy. Although the mark was well bid in early July following the passing of quarter-end constraints and news of the narrow decision by the Federal Reserve to raise the discount rate by ¼ percentage point to 7¼ percent, the rate generally lagged behind the rapid advances of other European currencies and the yen against the dollar through midsummer. After the Bremen and Bonn summit meetings, news that a new stimulatory package would be forthcoming intensified the strains in Germany's financial markets, and funds continued to be shifted out of German bonds into higher yielding sterling and French franc assets. But at times when the mark was caught up in the pressures surrounding the dollar's decline, the Bundesbank

bought dollars in the Frankfurt market. The Federal Reserve trading desk also intervened on five days in late June and during July, selling $132.4 million equivalent of marks. But, in addition, the desk continued to buy marks from correspondents, thereby reducing outstanding swap debt to the Bundesbank to $650.5 million equivalent for the System and to $197.0 million equivalent for the Treasury by July 31.

By the end of July the mark was trading against the dollar at $0.4919, up nearly 4 percent over the six-month period. Against the yen and the Swiss franc, however, the mark had fallen almost 19 percent and 10 percent, respectively. As of July 31, Germany's external reserves stood at $41.1 billion, down $1.1 billion from end-March levels but up $371 million for the period under review.

Japanese yen

Faced with a rapidly appreciating currency, a comparatively slow growth rate, and a further widening in an already large trade surplus, the Japanese authorities took further steps in 1977 to boost domestic demand and to turn around the balance-of-payments position. Following the introduction of two supplementary budgets late last year, the government was to provide for a further expansion of public works expenditures in the first half of the new fiscal year starting in April 1978. Interest rates in Japan were lowered, both to reduce the cost of capital to Japanese firms and to promote capital outflows that would offset at least to a degree Japan's continuing current account surplus. In addition, the Japanese government responded to threats of rising protectionism abroad by finding ways to open the Japanese economy more to foreign goods. In bilateral trade negotiations with the United States before the Tokyo round of multilateral negotiations, Japan agreed to reduce tariff and nontariff barriers, to raise import quotas on several products, to stockpile commodities, and to accelerate the purchase of some imports. Following these policy initiatives in Japan and the United States authorities' announcement of a more active intervention approach, the previously heavy, speculative bidding for Japanese yen tapered off during January and the spot rate eased from its early-January peak of $0.004228 to trade at $0.004140 (¥241.5) by the month end.

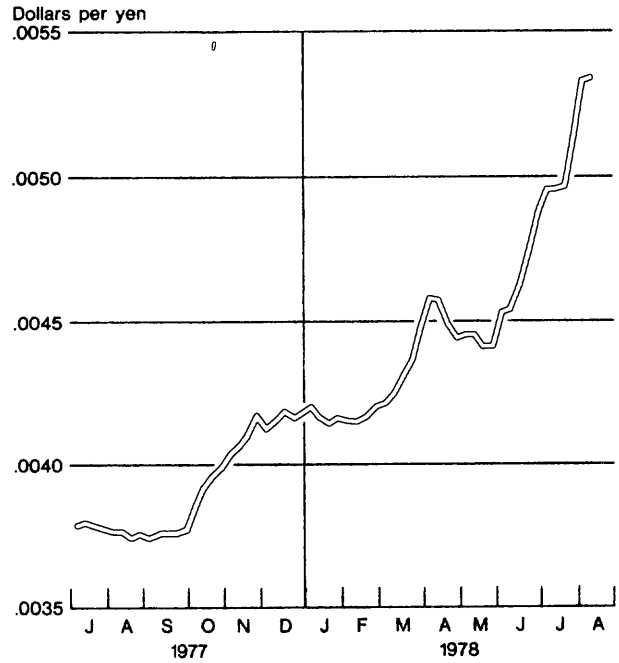
But concern over Japan's trade imbalance persisted. In fact, the 22 percent rise in the yen during 1977 so inflated Japan's export values through the improvement in the terms of trade that, even as the export volumes were beginning to level off, the surplus for 1977 as a whole reached $17.3 billion, up $7.4 billion from the previous year. Meanwhile, with private forecasters still skeptical that the government's fiscal 1978 target for real growth of 7 percent could be achieved, the market had little confidence that a "considerably reduced" trade surplus would materialize. Also, inasmuch as the rate of inflation in Japan's chief export market, the United States, showed signs of accelerating early in the year, Japanese exports were no longer so seriously threatened by the rising yen as once feared. In this atmosphere, the market remained highly sensitive to any new development that might touch off another increase in the yen. Although a better balance was restored in the market by early February, there was little unwinding of long yen positions or of nonresident holdings of "free" yen deposits and government securities.

Then, in mid-February, a general decline in the dollar on the exchanges triggered a renewed rise in the Japanese yen. At first, the yen moved in line with the rise in European currencies. But, in view of Japan's awesome trade surplus, talk spread in the market that the government would move to limit any further increase in Japanese exports. In response, exporters rushed to speed up their shipments abroad before the fiscal year-end in March and, as the yen

Chart 4

Japan

Movements in exchange rate*



*See footnote on Chart 3.

advanced, they scrambled to cover anticipated receipts partly in the forward market. As a result, the premium on forward yen increased, providing an arbitrage incentive to move funds into yen-denominated assets. Indeed, by early March the inflows into bonds and free-yen deposits had swollen to enormous proportions.

Concerned that a further rise in the yen would hamper economic recovery and delay even longer the needed reduction in the trade surplus, the authorities tried to counter the upward pressure on the currency by intervening heavily both in Tokyo and in New York through the agency of the Federal Reserve Bank of New York. In addition, the authorities announced new measures to reduce capital inflows, to stabilize the yen, and to give a further boost to the domestic economy. The Bank of Japan announced a ¾ percentage point cut in its official discount rate to a post-World War II low of 3.5 percent and a rise from 50 percent to 100 percent in reserve requirements on increases in nonresident free-yen accounts above the averages of daily levels for mid-February. In addition, the government announced a prohibition on sales to nonresidents of yen bonds issued by domestic entities with maturities of less than five years and one month.

Except for a brief respite following these announcements, the yen remained in heavy demand during the rest of March. To some extent, foreign funds sought outlets in longer term Japanese bonds and the Tokyo stock market, which were not subject to the new controls. Also, despite the cost of new reserve requirements on nonresident yen balances, banks were willing to attract these funds in order to build up deposits for the fiscal year-end. Moreover, by the end of March, the current account surplus ballooned to a seasonally adjusted annual rate of $22 billion for the first quarter. All in all, the pressure on the yen gained momentum toward the month end, pushing the rate up 7⅜ percent to $0.004445 (¥225.0) by March 28. The Bank of Japan continued to intervene heavily in the exchanges in Tokyo and New York. Largely as a result, Japan's official reserves rose $5.8 billion from end-January to $29.6 billion by end-March.

However, as the upward pressures on the yen began to subside, the Bank of Japan scaled down its intervention toward the end of March. Thereafter, the rate rose 3½ percent to as high as $0.004598 (¥217.5) in London on April 3, before easing back as the passing of the Japanese fiscal year-end led to a reduction in the covering activity by Japanese exporters and an outflow of foreign funds from free-yen deposits. Then, from early April to late May, the yen fell back from the record highs reached around the quarter end. Japanese exports declined sharply. The tightening of controls on capital inflows began to take hold. This development, along with the decline in Japanese interest rates and the rise in comparable rates in the United States money market, produced some easing of capital inflows to Japan. Moreover, yen borrowings by foreign governments and international financial institutions rose sharply during April. As a result, the yen declined with the other European currencies against the dollar, dropping as much as 5¼ percent to as low as $0.004354 (¥229.7) on May 23.

Meanwhile, the government continued to seek ways of achieving temporary reductions in exports and increases in imports until its expansionary fiscal and monetary policies had time to work through the economy and to generate an increase in consumer demand, investment, and imports. During April the authorities acted to restrain some exports through administrative guidance, to increase imports through commodity stockpiling, and to encourage a shift from dollar to yen financing by offering to refinance import settlement bills for the banks outside their regular rediscount ceilings. Also, industrial production and consumer demand picked up during the first quarter.

But Japanese trade and current account surpluses continued to mount, reflecting the relative price effects of the yen's appreciation since February and the continued adjustments of Japanese exporters to the higher yen values. As a result, exchange market participants concluded that the yen would appreciate further against the mark and other European currencies. The yen therefore was bid up strongly, beginning in late May, on a combination of renewed professional demand and the covering of forward receipts by Japanese exporters. Within six weeks it had appreciated over 14 percent, far outstripping the rise in other strong currencies. As the yen approached the ¥200 level and as exchange market participants focused in late June-early July on the Bremen and Bonn summit meetings, the yen's rise slowed temporarily. But, in the aftermath of those meetings, the talk of linking together all the major European currencies in an expanded joint float arrangement left the impression in the market that the yen was more vulnerable to upward pressure than those other currencies. Moreover, seasonal factors pointing to a large volume of exports in July led traders to anticipate that heavy commercial bidding for yen would persist for the next several weeks. Therefore, market professionals and Japanese exporters saw little risk on the downside for yen over the near term.

Against this background, the yen became the immediate focus of speculative pressure and the inflows into free-yen deposits swelled to large proportions, though not to the extent of March. Thus, the yen came into demand again in July and burst through ¥200 on July 21 in the midst of a swift exchange market reaction to

news that an OPEC special advisory panel had recommended pricing oil in terms of a basket of currencies. Thereafter, the yen was bid up to successive new highs each day, as the speculative surge in the rate continued to be reinforced by another rush of Japanese exporters to cover their forward receipts. Trading volume mounted, and the yen was bid up to a high of $0.005301 (¥188.6) on July 31. At this level the yen had advanced 28 percent against the dollar over the six-month period. Moreover, the yen had gained 23 percent against the German mark. To moderate this rise in the yen, the Bank of Japan continued to intervene both in Tokyo and in New York through the Federal Reserve Bank of New York, albeit to a lesser extent than in March.

Swiss franc

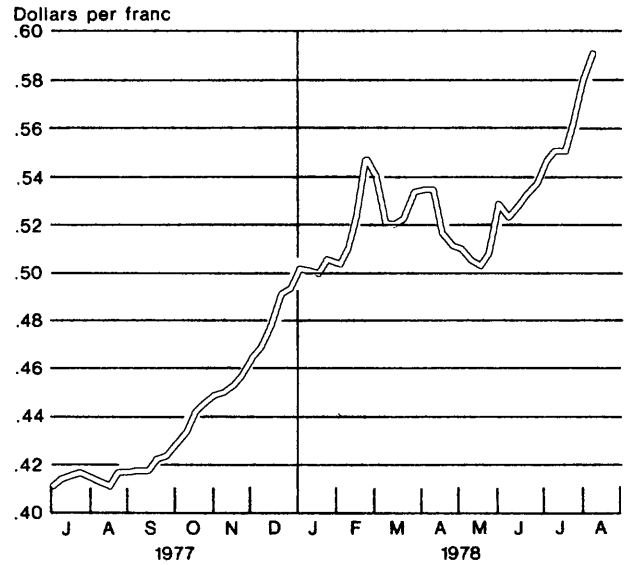
In the face of generalized tensions in the exchange markets, the Swiss franc came into increasingly strong upward pressure during 1977, rising by the year-end some 27¾ percent against the dollar and significantly against the German mark as well as other currencies. At least initially, Swiss firms were able to take advantage of Switzerland's low inflation rate—running slightly above 1 percent per annum—to maintain their competitive position in world markets. Thus the current account, bolstered by Switzerland's traditionally large earnings on overseas investments, remained in sizable surplus and provided the major contribution to growth in a domestic economy just pulling out of recession. But, by late winter, economic output flagged and the prospects for further economic recovery came into question when Swiss businessmen, responding to the uncertainties generated by the accelerating appreciation of the franc, began to curtail investment spending plans.

Meanwhile, in the exchange markets, the Swiss authorities had intervened forcefully and tightened up controls on capital inflows to counter the pressures on the Swiss franc. By late winter the cumulative intervention in Swiss francs had added far more liquidity to the domestic money market than was called for by the National Bank's target for monetary growth of 5 percent for the year. The central bank continued to absorb some of this liquidity by selling dollars to nonresident borrowers of Swiss francs under the official capital export conversion requirement. But the National Bank permitted a sharp expansion of liquidity in the short run to prevent money market strains from pushing up the Swiss franc even more, while recognizing that the persistence of such excess liquidity might generate troublesome inflationary pressures over time. Against this background, the market sought to test the authorities' resolve to avoid a renewed rise in the Swiss franc after

Chart 5

Switzerland

Movements in exchange rate*



*See footnote on Chart 3.

the announcement of more active intervention by the United States authorities in early January. Thus, the franc remained subject to bouts of buying that threatened to trigger broader unsettlement in the exchanges. Consequently, the Federal Reserve resumed intervention in Swiss francs during January, financing its franc sales with drawings of $18.9 million equivalent of francs that remained outstanding as of the month end.

In mid-February, when the dollar again came on offer generally, the franc came under a new wave of commercial and professional demand. Reports that multinational corporations were buying francs to repay Swiss franc loans gave further momentum to this rise, propelling the rate 12 percent above early-February levels to $0.5651 against the dollar and up 6¾ percent to SF 0.88 per mark by February 24. In response, the Swiss National Bank stepped up its intervention, not only in Zurich but also in New York through the agency of the Federal Reserve Bank of New York. The Federal Reserve also sold a further $50.1 million equivalent of francs on February 10-17 in New York, financing these sales with additional drawings on the swap line with the Swiss National Bank.

Toward the month end, the Swiss authorities took further steps to halt the rise in the franc. Effective February 27, the central bank cut by ½ percentage

point the official discount and Lombard rates to 1 percent and 2 percent, respectively, the lowest levels in the history of the National Bank. Also, the Swiss authorities further tightened controls restricting foreign inflows. In particular, they reduced the amount of nonresident Swiss franc deposits exempt from the negative interest charge, extended the negative interest charge to central bank holdings of francs (at maturity of current deposit), banned nonresident purchases in primary and secondary markets of Swiss franc securities issued by domestic entities, and restricted nonresident acquisitions of franc-denominated bonds issued by foreign entities to 35 percent of the total issue

Following these measures, inflows of foreign funds tapered off Moreover, the market became sensitive to the possibility that existing official franc holdings in time deposits might be liquidated as they matured and become subject to the negative interest charge The franc, therefore, fell back sharply against both the dollar and the mark. Although it recouped some of these losses at the end of March and in early April in response to quarter-end liquidity pressures and news of the United States massive trade deficit in February, the franc resumed its downtrend in mid-April, when trading conditions in the exchange markets generally became more settled. By mid-May, the franc dropped 11½ percent from its early-March highs to $0.5002 Taking advantage of this slide in the rate, the Federal Reserve bought sufficient amounts of francs directly from the Swiss National Bank to liquidate in full the swap debt it had incurred with the Swiss central bank earlier in the year

Meanwhile, an official forecast of a SF 9 billion current account surplus for the year, second only to Japan's, attracted market attention. Also, as the franc moved lower, selling became increasingly hesitant on the possibility that the authorities might take advantage of a more settled exchange market to relax some of the existing or newly imposed exchange controls. As it was, the Swiss National Bank sold more dollars under its capital export conversion program than it bought in the market. When the National Bank announced it had sold dollars in the market to mop up liquidity generated by the heavy intervention earlier in the year and, moreover, when figures were released showing a 16 7 percent increase in the monetary aggregate for the year ended in March, market participants began to question the authorities' willingness to intervene again should the franc strengthen.

Against this background, the Swiss franc soon came into strong demand again, beginning in late May when the dollar came on offer generally. In part, the demand was generated by traders anticipating another rush of nonresident covering of franc-denominated loans. After a rapid advance in late June, the franc leveled off as the authorities provided temporary quarter-end assistance to the domestic money market through swapping francs for dollars for short maturities. But during July the franc was bid up even more after news that an OPEC advisory panel had recommended oil pricing in terms of a basket of currencies and by further signs of a pickup in the United States inflation rate. In response to the franc's continued advance, the Swiss authorities adopted a more flexible limit for the expansion of central bank money and provided further assistance to relieve money market strains. But, over the course of the month, the flow of funds out of dollars and other currencies into francs gathered further steam, and the franc emerged as the lead currency in the advance against the dollar. By the month end, it had soared 15⅞ percent from mid-May levels to $0.5797 to close the six-month period as a whole up a net 15 percent against the dollar and 10¾ percent against the mark.

Under these circumstances, the Federal Reserve returned to the market, on six trading days in June and July, selling $32.0 million equivalent of Swiss francs to maintain orderly trading. Of this amount, $9 1 million equivalent came from System balances which had been replenished by purchases of francs from correspondents The remaining $22 9 million equivalent of francs was financed by drawings on the swap line with the Swiss National Bank that remained outstanding as of the close of the period. The Swiss central bank also bought dollars against francs in the market both in Zurich and through the Federal Reserve Bank trading desk in New York.

During the period under review, the Federal Reserve and the United States Treasury continued with the program agreed to in October 1976 for an orderly repay-

Table 3

Federal Reserve System Repayments under Special Swap Arrangement with the Swiss National Bank

In millions of dollars equivalent

System swap commitments January 1, 1978	1978 I	1978 II	1978 July	System swap commitments July 31, 1978
506 5	−95 6	−95 6	−36 4	278 8

Because of rounding, figures do not add to total

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

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 (−)

Bank drawing on Federal Reserve System	Outstanding January 1, 1978	1978 I	1978 II	1978 July	Outstanding July 31, 1978
Bank for International Settlements* (against German marks)	-0-	+295 0 −295 0	-0-	+22 0 −22 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 5

United States Treasury Drawings and Repayments under Swap Arrangement with the German Federal Bank

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

Amount of commitments January 1, 1978	1978 I	1978 II	1978 July	Amount of commitments July 31, 1978
-0-	+964 8	+ 35 2 −533 6	−269 5	197 0

Because of rounding, figures do not add to total

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

Table 6

United States Treasury Securities Foreign Currency Series Issued to the Swiss National Bank

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

Amount of commitments January 1, 1978	1978 I	1978 II	1978 July	Amount of commitments July 31, 1978
1,168 9	−133 8	−133 8	−50 9	850 4

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

Table 7

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

In millions of dollars

	Net profits (+) and losses (−) related to current operations		Net profits (+) and losses (−) on liquidations of foreign currency debts outstanding as of August 15, 1971	
Period	Federal Reserve	Exchange Stabilization Fund	Federal Reserve	Exchange Stabilization Fund
First quarter 1978	− 0 2	− 0 2	−58 7	−81 1
Second quarter 1978	−17 2	− 2 9	−60 6	−84 8
July 1978	− 5 4	+ 0 9	−21 6	−30.2

Data are on a value-date basis

ment of pre-August 1971 franc-denominated liabilities. The Federal Reserve repaid $191.2 million equivalent of special swap indebtedness, while the Treasury redeemed $267.6 million equivalent of Swiss franc-denominated securities by the end of July. Most of the francs for these repayments were acquired directly from the Swiss National Bank against dollars. However, the Federal Reserve also bought francs from the National Bank against the sale of $70.1 million equivalent of German marks and $13.5 million equivalent of French francs, which were in turn either covered in the market or drawn from existing balances. By end-July, the Federal Reserve's special swap debt to the Swiss National Bank stood at $278.8 million equivalent, while the Treasury's Swiss franc-denominated obligations were reduced to $850.4 million equivalent.

Sterling

By 1977, fiscal, monetary, and income restraints in the United Kingdom had produced positive results. During the second half of the year, retail prices rose by well under 10 percent per annum for the first time since 1973 and Britain's current account swung into surplus. In response to these improvements in Britain's financial position, the pound was in heavy demand, and the authorities at first took advantage of the favorable shift in market sentiment to build up official reserves by purchasing dollars in the market. But, when continuing inflows of funds threatened to undercut domestic monetary policy last fall, sterling was allowed to float upward. In view of the pound's strength in the exchanges, Britain was identified as one of those countries which could contribute to an improved economic performance worldwide by providing some stimulus to the domestic economy. Indeed, the government took advantage of a sharp drop in the public sector borrowing requirement, well below the level anticipated in Britain's standby arrangement with the IMF, to propose in October a modest tax reduction. Thus, by the year-end, private and official forecasters expected a strong pickup in economic activity this year. But, unlike previous British recoveries from recession, the current account surplus was expected to widen substantially in 1978, bolstered by a continued expansion of oil production in the North Sea. As a result, the pound soared to as high as $1.9930 on January 4, before settling back to around $1.9500 in late January. Meanwhile, the British authorities announced plans to repay and restructure external debt to reduce foreign obligations and to lengthen maturities.

During February, however, market sentiment over the outlook for the pound turned more hesitant. As the rise in retail prices slowed, the ensuing increase in real incomes together with the October tax cuts led to a faster than anticipated increase in imports, and the trade account showed a substantial deficit for January. Also, the tax cuts contributed to a rise in the monetary aggregates at a time when the slowdown of the inflation rates already appeared to be bottoming out. Against this background, concern surfaced over the competitiveness of British industry at prevailing exchange rates as well as over the prospects for a continuation of the pay restraint policy. Meanwhile, further reflationary measures were widely expected to be contained in the government's April budget.

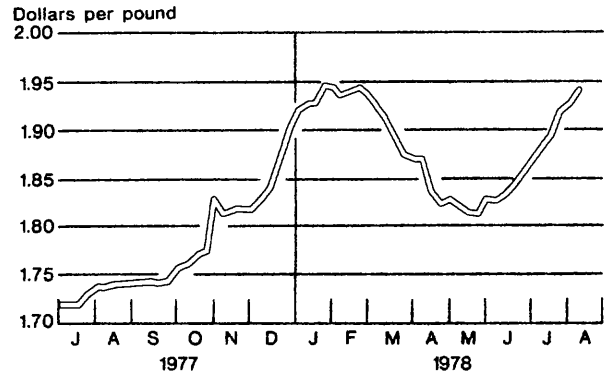
Under these circumstances, the financing of the government's borrowing needs became more difficult as bond market participants, fearing a near-term jump in British interest rates, held off acquiring new government stock and shifted portfolio investments abroad. Consequently, sterling came under occasionally heavy selling pressure in February and March, falling by 4⅜ percent against the dollar to around $1.8650 and by 4.7 percentage points on an effective basis to 61.8 percent. The authorities intervened at times heavily to moderate the decline of the rate.

In April, the British government announced a budget that was only mildly expansionary but brought the public sector borrowing requirement up quickly to the maximum suggested by the IMF. To help finance that deficit while still containing monetary growth, the Bank of England's minimum lending rate was raised a full percentage point to 7½ percent. Even so, market participants were doubtful that further fiscal stimulus would be compatible with the new guidelines for monetary expansion, unless additional restrictive measures

Chart 6

United Kingdom

Movements in exchange rate*



*See footnote on Chart 3.

were imposed. Data revisions suggesting further growth in Britain's monetary aggregates, combined with a continued advance of United States interest rates, deepened doubts that the government would be able to finance its debt at prevailing interest rates. In addition, the imposition by Parliament of tax cuts in excess of those proposed in the budget and prospects of an early general election made this task seem increasingly difficult.

In the exchanges, dealers were wary that nonresidents who had built up large-scale portfolios last year might liquidate their holdings should British interest rates rise further. Also, market participants had noted that Britain's trade figures, while fluctuating widely between deficit and surplus, were on average showing a much smaller surplus than had been implied in official forecasts, even after these forecasts had been scaled back substantially. Under these circumstances, sterling was subject to bouts of professional and commercial selling after mid-April. Against the dollar, spot sterling fell another 3⅛ percent from end-March levels to a low of $1.8057 by May 17, while also falling 0.3 percentage points on an effective basis to 61.5 percent.

To counter these selling pressures, the Bank of England sold fairly large amounts of dollars at times through early June. But at the same time the authorities proceeded to liquidate external debt while also renegotiating terms and stretching out maturities on some major loans to take advantage of more favorable borrowing conditions in the Eurodollar market. Reflecting in part the intervention support for the pound and net repayments of external debts of $600 million, Britain's external reserves fell over the four months by $4.1 billion to $17.3 billion as of May 31.

Meanwhile, the Bank of England had abandoned its market-related formula adopted in 1972 for determining its minimum lending rate and reverted to its previous practice of setting the official discount rate administratively. The authorities kept the rate at 9 percent, but market expectations of an early hike in interest rates were reflected in a considerable widening in the discounts on forward sterling.

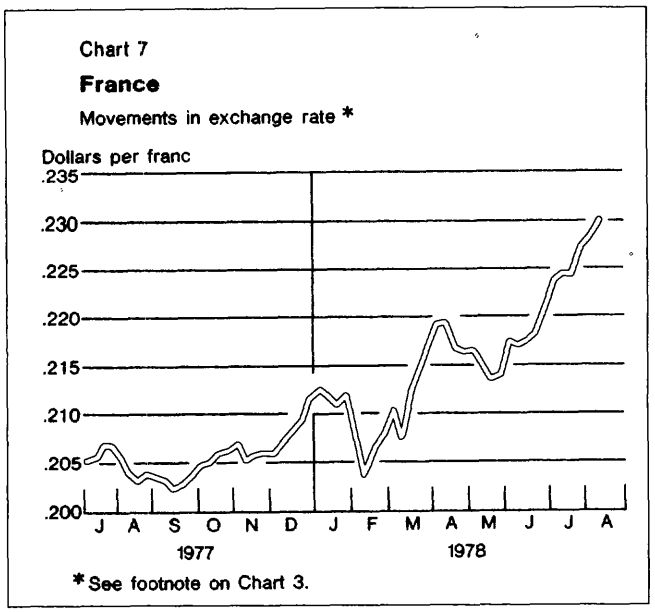
Then, in order to resume sales of gilt-edged securities and to bolster the pound, on June 8 the British government announced a package of measures to bring the economy back on the course anticipated at the time of the budget. The authorities reintroduced the supplementary special deposit scheme restraining the growth of interest-bearing eligible liabilities of the commercial banks to curb the expansion of the money supply. In addition, to offset the impact of the extra cuts in income taxes on the public sector deficit, the government increased the national insurance surcharge levied on employers and announced it would seek to limit wage increases even further in a fourth phase of voluntary pay policy to begin in July. Moreover, the authorities raised the official discount rate 1 percentage point to 10 percent. Finally, Chancellor Healey reaffirmed the government's commitment to keep the public sector borrowing requirement and the expansion of domestic credit within the limits agreed with the IMF.

Following these announcements, the pressures against sterling subsided. The ensuing tightening in the domestic and Eurosterling money markets helped attract funds from abroad. Moreover, the pound was buoyed by talk, ahead of the July 6-7 Bremen summit, of the possibilities of the pound's eventual inclusion in an expanded EC snake. The widespread press commentary over the various proposals for achieving some new form of joint floating arrangement frequently generated bidding for sterling by international investors shifting funds out of both the dollar, which was declining, and the German mark. Sterling thus advanced strongly with the other independently floating European currencies and the yen over the last two months of the period. By end-July the pound rose to $1.9310 against the dollar, almost 7 percent above its mid-May lows and just 1 percent down on balance from end-January levels. On an effective basis, the pound rose from a low of 60.9 percent in early June to 62.5 percent. Meanwhile, the Bank of England was able to add dollars to its reserves in June and July while continuing to repay and to prepay its external debts. Taking these liquidations into account, Britain's official reserves rose $292 million during the last two months of the period to $17.6 billion as of July 31, a net decline of $3.8 billion over the six-month period.

French franc

By the end of 1977, inflationary pressures in France were decelerating and France's current account had swung into surplus in response to more than a year of fiscal, monetary, and price restraints. The cost to the domestic economy had nevertheless been severe. Consequently, by September the government had taken advantage of its stronger external position to adopt selective measures to boost employment while still giving priority to the fight against inflation and to the maintenance of a sound balance of payments. Meanwhile, performance of the economy was a key issue in the upcoming elections scheduled for March 1978 and, by the time the period under review began, opinion polls were suggesting that a coalition of the Socialist and Communist parties was in a position to win a majority in the French Parliament.

Amidst uncertainty over France's economic and political outlook, the French franc at times had come under selling pressure in both the spot and forward



markets when adverse commercial leads and lags and speculative short positions built up against the franc. Such a spasm of nervousness broke out again in mid-January. As the franc came on offer, the spot rate fell to $0.2020 by February 6, while plummeting 5¾ percent to record lows against the German mark and Swiss franc. The Bank of France scaled up its official dollar sales and suspended its facility for rediscounting Treasury bills and other medium-term paper, thereby setting the stage for an abrupt upward adjustment in short-term interest rates. These actions helped steady the market, enabling the franc to rise somewhat against the dollar. But this advance was insufficient for the franc to keep pace with the German mark. In fact, just before the first round of balloting on March 12, the franc dropped to a record low of FF 2.3873 per mark, even as the Bank of France intervened in marks and dollars to moderate the decline.

Early reports indicating that the left-wing coalition had failed to make its hoped-for electoral gains in the first round prompted some quick covering of positions. At about the same time, the market learned of a further improvement in the French trade account and of a pickup in industrial output. Buoyed by this news and by an unexpectedly comfortable majority the government obtained in the final vote of the parliamentary elections, the franc moved up sharply. But market sentiment toward the franc remained cautious because of expectations that the new government would now shelve the austerity program in favor of more reflationary measures to reduce unemployment and to placate the growing unrest within French labor's rank and file. Thus, following a short-lived rally, the franc leveled off against other European currencies in late March while continuing to rise against an easing dollar.

Meanwhile, during the first quarter, the current account moved strongly into surplus. Industrial production was expanding and, with the elections over, investment demand and stock building were expected to spur output even more. At this point, President Giscard d'Estaing moved quickly to reaffirm his government's commitment to continue current policies, with Premier Barre heading the new government. Over the course of the next month, Barre announced the government's intention to reduce the growth of public financing needs and to channel more personal savings into business investment. These objectives were to be met by increasing charges for certain public services, relaxing gradually long-standing controls on industrial prices and providing some form of tax relief for capital gains. Although this program was expected to raise prices over the next few months, the market viewed the freeing-up of prices and the prospective slowdown in the public sector deficit as courageous moves. Moreover, news of a FF 1.2 billion trade surplus in March pointed toward further progress in redressing the external imbalance, even as the domestic economy began to recover.

Market confidence in the franc thus strengthened generally. With French interest rates remaining relatively high, the franc benefited throughout the rest of the spring from an unwinding of the adverse commercial leads and lags and speculative short positions that had been accumulated over many months prior to the elections. In addition, the exchange rate was aided by conversions of some foreign borrowings by French private corporations and by talk of a placement of a large amount of funds in francs by a major member of OPEC. As a result, the franc rose 8⅝ percent above its pre-election level to $0.2215 by early April. Then, as the dollar generally recovered, the franc eased back only slightly to $0.2127 during April and May, while gaining 3 to 5¾ percent against the mark and Swiss franc. Meanwhile, after mid-March the Bank of France bought sizable amounts of dollars and marks in the market. These operations were partially reflected in a $1.4 billion rise in France's foreign currency reserves over the three months to almost $6 billion by end-May.

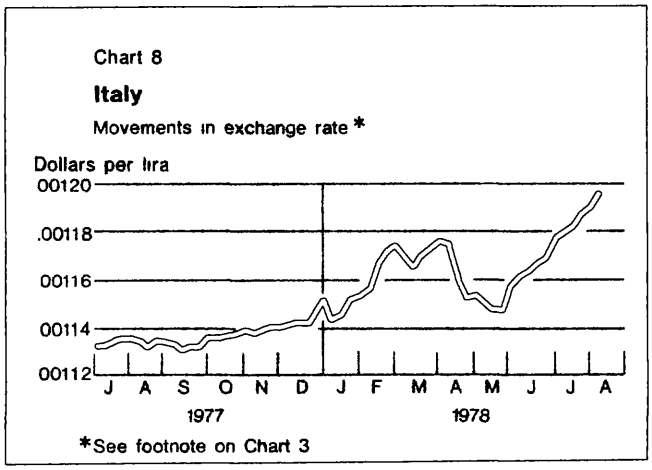
In early June, the franc remained well bid. With interest rates remaining high even after they had declined from pre-election levels, there continued to be large flows of interest-sensitive funds from abroad. Meanwhile, the market gradually became aware of the discussion, between French President Giscard d'Estaing and German Chancellor Schmidt, on ways

to reduce exchange rate fluctuations between European currencies. A late-June report from Luxembourg suggesting the possibility that France's rejoining the EC snake might be discussed at the EC summit meeting in Bremen on July 6-7 brought the franc quickly into demand, not only against the dollar but also against the mark. Although the French president denied the next day that the franc would reenter the snake as it was then constituted, talk of various proposals for some new joint floating arrangement kept alive the possibility that the franc might be linked to other EC currencies in some manner. As a result, a combination of speculative bidding and commercial demand to cover payments needs by the end of the half year pushed the spot rate up sharply against both the dollar and the mark. As expectations of a near-term agreement to link the franc with the other EC currencies faded following the Bremen summit, the franc edged back briefly against both the German mark and the dollar. However, when the dollar came under renewed selling pressure, the franc was climbing again as the period came to a close. Thus, by the end of July, the franc had risen 8¾ percent over the six-month period to $0.2293 and 4¾ percent on balance to FF 2.1452 per mark. Meanwhile, the Bank of France continued to buy dollars to moderate the franc's rise. These acquisitions were reflected in a $1.2 billion increase in France's foreign-currency reserves in June and July to $7.1 billion as of July 31, a net gain of $2.3 billion over the six-month period.

Italian lira

Following the implementation of a comprehensive stabilization program in Italy—one that had served as the basis for a new standby arrangement with the IMF—substantial progress was made during the second half of 1977 in turning around Italy's balance of payments and slowing the rate of domestic inflation. For the year as a whole, Italy's current account had strengthened sharply, swinging from a $2.8 billion deficit in 1976 to a $2.3 billion surplus for 1977. Moreover, the inflation rate had been brought down from 19 percent to 15 percent in just half a year. The completion of a stabilization program and restrictions on the availability of domestic credit had paved the way for more private external borrowing in 1977. Bolstered by both the current account and capital inflows, the lira thus rose gradually against the dollar in the exchange markets. In fact, the authorities were able to buy substantial amounts of dollars in the market so that, even after repayment of some official borrowings, Italy's foreign-currency reserves rose $4.8 billion in 1977 to nearly $8.0 billion by the year-end.

But these improvements resulted in a considerable slowing of the domestic economy. Industrial production dropped below levels of the previous year, unemployment rose, and with corporate profits squeezed by the high cost of borrowing funds the prospects for a strengthening of the labor market seemed dim. Consequently, by the year-end, pressure was building up for new action to stimulate the domestic economy now that progress had been achieved on the inflation and balance-of-payments fronts. At the same time, however, the public sector deficit exceeded the limit specified in the standby arrangement and subsequent discussions with the IMF. The minority government attempted to negotiate with the opposition parties and the trade unions new measures to increase public service prices and to reduce expenditures. But, when the fall of the government in January and subsequent political developments delayed the approval of the budget and the adoption of new measures, the budget deficit grew even larger, thereby playing an important role in stimulating economic activity in the early months of 1978.



These uncertainties overshadowed the market for the Italian lira early in 1978. During February, selling pressure on the French franc also spilled over to unsettle trading in lire. Flows of funds into Italy slowed, Italian banks repaid some of their external borrowings, and the lira came on offer. As a result, the lira lagged far behind the other currencies as the dollar declined generally. On occasion the Bank of Italy intervened forcefully, and these operations, together with the awareness of Italy's ample reserve position, helped keep the selling pressures from cumulating. By mid-February the lira was more nearly keeping pace with other currencies, and the Bank of Italy was able to buy dollars again.

Meanwhile, Italy's trade account remained in surplus

even through the normally adverse period of the year and despite a rapid recovery of economic activity. Unlike other periods of expansion, the recovery this time was not accompanied by a large buildup of inventories and hence of imports. Instead, imports were sluggish, because the recovery was expected to be only temporary in view of continuing discussion about the need to curb the public sector deficit. At the same time, exports continued to be buoyed by the existence of excess industrial capacity and by the competitive effects of the lira's previous decline against other European currencies. Looking ahead, the current account was expected to remain strong because of the bulge in tourist receipts over the spring and summer months. Moreover, by March, a compromise worked out between the two major political parties, in which the Communists would function as part of the governing coalition within the Parliament without actually being in the Cabinet, set the stage for renewed discussions on the government's economic policy. The strength of Italy's reserve position was further highlighted with the announcement of official repayments amounting to SDR 300 million to the IMF, $500 million of the gold-dollar swap to the Bundesbank, and a planned repayment of $350 million to the EC. In addition, an extension of ceilings for domestic bank credit signaled a continuation of the cautious monetary policy.

Against this background, the lira eased back against the dollar more gradually than other currencies during April and May. The relative strength in the lira rate, combined with the continued tightness in the domestic money market, generated a new rise in Eurodollar borrowings by Italian residents. Accordingly, the Bank of Italy bought steadily larger amounts of dollars in the market to repay external debt coming due this year.

During June and July, Italy's current account surplus became even stronger, generating expectations that it would exceed $3 billion for the year as a whole. At the same time the renewed selling of dollars enhanced the near-term prospects for lira stability and encouraged further capital inflows. Notwithstanding the continuing debate over ways of reducing inflation still further and of curbing the public sector deficit, the lira remained in heavy demand in the exchange markets. Thus the authorities were able to intensify their dollar purchases and continued to make substantial repayments of official debt to the IMF, the EC, and the Bundesbank. They also liberalized foreign exchange controls by removing the requirement that 25 percent of the financing of exports be done in foreign currencies. Even so, the lira advanced with the other European currencies against the dollar, rising 3¾ percent to $0.001189 (Lit 841.04) by July 31. At this level, the lira was at its peak for the six-month reporting period and at its highest level since October 1976. Over the six months, Italy's foreign exchange reserves increased $1.7 billion to $9.3 billion even after the authorities had liquidated $1.3 million net of external debt.

EC snake

Late in 1977 the sharp rise in the German mark pulled up the other four currencies in the EC snake against the dollar. At times, these currencies had been caught at the bottom of the 2¼ percent band, prompting the respective central banks to provide support through intervention and by tightening up on domestic liquidity. Following more forceful United States intervention in early 1978, the market became more settled generally and, as the mark eased back against the dollar, the pressures in the snake largely dissipated. The four currencies at the bottom of the band all moved above their lower intervention limits against the mark, thereby enabling all the central banks to buy marks in the exchange market to repay debt to the Bundesbank. In addition, the central banks of the Netherlands, Belgium, and Denmark took advantage of reflows into their currencies to buy back dollars as well.

Among the snake currencies, the Norwegian krone remained relatively weak, however. Norway's trade deficit had widened following Sweden's withdrawal from the snake in August 1977 and the subsequent rise in the joint float as a group against the dollar. To restore Norway's competitiveness, after a meeting of EC monetary officials on February 10, the Norwegian authorities announced an 8 percent devaluation of the krone against the other snake currencies. Immediately, the krone rose to the top of the newly realigned EC snake, and funds flowed back into Norway even as the krone was pulled up further against the dollar by the rise in the mark. But, by late March, the market was concerned that some of the competitive gains from the February devaluation against currencies outside the EC band were being eroded by the snake's rise against the dollar. As a result, reflows from abroad slackened and the krone dropped back to the bottom of the joint float, occasionally coming under light selling pressure.

Meanwhile, the Danish krone, whose parity in the joint float had remained unchanged in February, also initially experienced some difficulty in keeping up with the mark's advance and required support through sales of dollars and marks by the Danmarks National Bank. But tight restrictions on the expansion of domestic credit in Denmark prompted Danish companies to finance domestic credit needs by borrowing heavily abroad. Thus, the pressures on the krone soon eased, and the rate rose more or less on its own with the mark against the dollar during March. Then, once the mark started easing back against the dollar in April, both

the Norwegian and the Danish krone were bolstered by reflows of funds out of marks and reversals of previously adverse commercial leads and lags. The entire snake thus narrowed to a width of as little as 1 percent, and the Danish krone was propelled to the top half of the band, where it remained for the next two months while the Danmarks National Bank took dollars into its reserves.

By early May the Netherlands guilder and commercial Belgian franc eased lower in the joint float, partly in response to seasonal declines in domestic interest rates but also in reaction to growing concerns in the market over the performance of the Dutch and Belgian economies. Fueled by rising consumer spending, Dutch imports rose, exports sagged, and the Netherlands' current account surplus thus was eroded. In Belgium, the domestic economy remained stagnant, unemployment continued high, and some within industry were in favor of a depreciation of the franc as a means of stimulating business activity. These factors influenced market sentiment toward both currencies, and the snake widened out again in the late spring and early summer as the mark moved back up above its mid-May lows against the dollar.

By June, trading relationships within the EC snake were affected first by talk and then—following the July 6-7 EC Bremen summit—by a commitment to study the idea of bringing the currencies of all EC countries back into a new joint floating arrangement. On the one hand, currencies that were new candidates for membership—sterling, the French franc, and to a lesser extent the Italian lira—were buoyed by this possibility. On the other hand, present snake members were affected by talk that the rules governing the snake might be diluted. As a result, the Dutch guilder weakened somewhat further in the joint float and the commercial Belgian franc, which had already fallen to the floor of the snake, came more heavily on offer. Consequently, the National Bank of Belgium intervened forcefully to maintain the franc's intervention limits against the mark. In addition, both the Netherlands Bank and the National Bank of Belgium raised their official discount rates in mid-July to contain the pressures on their respective currencies. These pressures were moderated by the tendency of the mark to lag behind the advances of the independently floating currencies against the dollar until early August.

Canadian dollar

Following the buildup of severe inflationary pressures in the early 1970's, the Canadian government had adopted a medium-term and broad-based program of restraint that remained in force coming into the period under review. The modest stimulatory package of tax cuts, announced in October 1977, did not basically change the cautious stance of fiscal policy. The annual target for monetary expansion, also announced in October 1977, represented the second consecutive reduction—this year to a range of 7-11 percent. And, although Canada's wage-price program was approaching an end, the dismantling of controls was to be more gradual than originally expected and was taking place against the backdrop of clearly decelerating wage pressures.

But, after more than two years of this stabilization policy, the rate of economic growth in Canada slowed to a pace insufficient to absorb a rapidly expanding labor force, and unemployment continued edging up to new postwar highs. Even so, the inflationary excesses of earlier years had resulted in a deterioration of Canada's competitive position in world markets. For a time, Canada's sizable current account deficit was more than covered by large inflows of long-term capital. By 1977, however, the mounting debt service requirement added further strain to the current account. Also, capital inflows declined from the record levels of the previous year, partly because the cash-flow requirements of Canada's largest borrowers (the provinces and municipalities) were lower. Moreover, uncertainties arose in connection with political developments in Quebec, and a narrowing of favorable interest differentials *vis-à-vis* the United States reduced the incentive for Canadian borrowers to tap capital markets abroad. Thus, the Canadian dollar became exposed to downward pressure in the exchange markets. By end-January the spot rate, at $0.9031, was down by 12½ percent from its peak in October 1976. The Bank of Canada intervened to maintain orderly markets as the rate declined. But, since these operations resulted in large net dollar sales, they exerted a drain on Canada's reserves. Meanwhile, in response to the depreciation of the Canadian dollar, rising import as well as food prices aggravated price pressures in the domestic economy, keeping the rate of inflation around the 9 percent level.

The Canadian dollar remained on offer in February. With the drop in long-term placements abroad and an absence of a full calendar of new foreign issues, market participants were even more sensitive than usual to rumors about the timing of conversions of the few large borrowings that were known to have been done. A renewed tightening in the United States money market, which drove Eurodollar deposit rates above comparable Canadian interest rates, inhibited capital inflows even more. Reports that a major insurance company was thinking of moving its head office from Montreal to Toronto had also reinforced the market's concern about the possible political and economic consequences of

having in Quebec a government committed over the long term to establishing the province's independence. In this atmosphere, professional and commercial selling gathered force, driving the rate down still further. In response, the Bank of Canada stepped up its support, and Canada's reserves fell $700 million during February to $3.7 billion at the month end, the lowest level since 1970.

By this time, a succession of monthly trade figures pointed to a sharp improvement in Canada's net export position in response to the rapid growth of the United States economy and to the large effective depreciation of the Canadian dollar. The rise in the real trade balance, together with a modest pickup of consumer spending following the tax cuts of last fall, suggested some improvement in Canada's overall growth performance. But the continuing decline in the Canadian dollar was by now a serious political issue. Moreover, the most recent statistics showed sharp jumps in both wholesale and consumer price indexes. The wage and price control program was being phased out. Under these circumstances the impact of further depreciation on Canada's cost structure was threatening to undermine the government's efforts to achieve noninflationary growth for the Canadian economy.

The authorities, therefore, acted to shore up the Canadian dollar. To supplement the net inflow of capital, the government announced between late February and early April an activation of the standby facility arranged with Canadian banks last October, an increase in that credit line from $1.5 billion to $2.5 billion, and a new government $750 million bond issue in New York, its first external borrowing since 1968. Moreover, the Bank of Canada, judging that short-term interest rates could now be raised without prejudicing the achievement of an acceptable rate of monetary expansion, increased its discount rate in two successive ½ percentage point hikes to 8½ percent by April 4 to moderate pressures on the exchange rate.

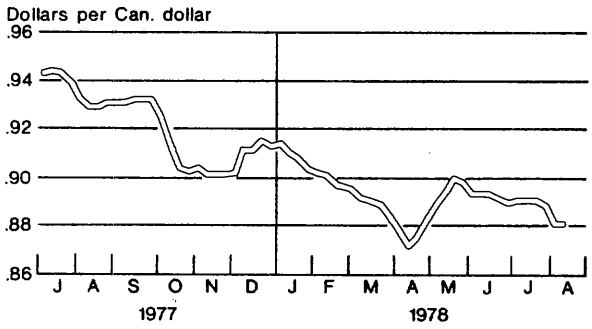
Nevertheless, market sentiment toward the Canadian dollar remained bearish. The impact of the announced government bond issue was undercut by the news of a similarly sized drop in official reserves for February. Moreover, market participants were expecting that, with unemployment stubbornly above 8 percent and a national election to be scheduled over the next year, the upcoming budget would generally be stimulatory. Thus, the Canadian dollar continued to come heavily on offer, with the pressures especially strong when United States corporations came into the market to repatriate funds to cover their quarter-end needs or mid-April tax payments. As the selling continued, the rate fell with increasing speed, declining virtually every day in early April until it hit a 45-year low of $0.8663 on April 14. At this level, the rate was 4 percent below early-February levels.

Meanwhile, Finance Minister Chrétien presented on April 10 a budget proposing a temporary cut in the sales tax and a modest increase in an already large budget deficit. But, with these measures less stimulatory than some in the market feared and in response to a resumption of foreign borrowings and conversions, the market for Canadian dollars came into better balance. The spot rate began to move off its lows. Around the end of April the Canadian government announced plans for three new medium-term mark placements,

Chart 9

Canada

Movements in exchange rate*

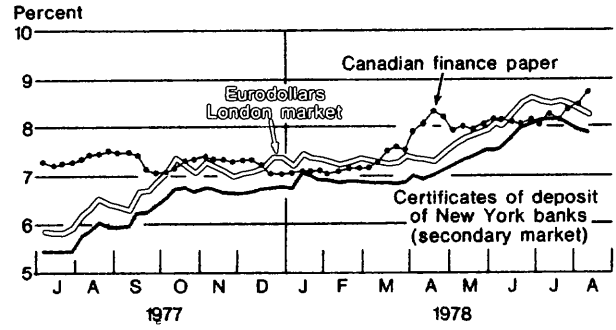


*See footnote on Chart 3.

Chart 10

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

Three-month maturities*



*Weekly averages of daily rates.

totaling over $700 million equivalent, and a $3 billion standby credit with a consortium of United States and other foreign banks. The announcement of these arrangements brought the total credits immediately available to the authorities to roughly $7 billion. In addition, the announcement of a Can.$840 million trade surplus for March indicated an underlying improvement in that account. These developments gave a boost to market sentiment, triggering the reversal of some short positions and previously adverse commercial leads and lags. The Canadian dollar thus advanced further to recover all its losses since end-January, moving back to as high as $0.9035 by mid-May. The Bank of Canada continued to intervene, buying dollars in May, thereby replenishing some of the reserve losses of earlier months.

But before long, in the face of unsettling news about prices and the Quebec issue, the Canadian dollar eased back from its mid-May peak. An unexpected drop in Canada's trade surplus in April also contributed to the market's skeptical attitude toward the Canadian currency. Moreover, the squeezing-out of interest rate differentials favorable to Canada continued as United States money rates rose further. Also, some United States corporations were again in the market to hedge their Canadian holdings ahead of the quarter end for tax purposes. In this atmosphere, the Canadian dollar eased back to $0.89 by end-June; the rate then fluctuated narrowly around this level through most of July.

The market became unsettled again in late July when, with the United States dollar coming under increasingly heavy selling pressure, participants came to expect that further increases in United States short-term interest rates would virtually eliminate the interest differential favoring Canada. Even after the Bank of Canada raised its discount rate another ½ percentage point to 9 percent on July 26, trading remained unsettled. The announcement that Canada's trade account fell into deficit during June (later revised to a small surplus) gave the market a further jolt. As a result, the rate declined to $0.8813 on July 31, down 2⅜ percent for the reporting period as a whole but still almost 2 percent above its mid-April lows. Meanwhile, the Bank of Canada intervened more heavily again, selling dollars in June and July. But, at the same time, since March it had drawn a total of $1.2 billion on its credit facilities with Canadian and foreign banks. Bolstered by these takedowns and the other external borrowings in marks and dollars, Canada's official reserves rose nearly $900 million net above end-February lows to $4.6 billion as of July 31, a net increase of $186 million for the period.