

Treasury and Federal Reserve Foreign Exchange Operations

There were two key turning points for the dollar in the exchange market during the August-through-January period under review. In early August, the year-long advance of the dollar against major foreign currencies came to an end. Then, after a four-month decline, dollar rates started to firm at the beginning of December, a trend which continued through the remainder of the period.

Several factors supported the long advance of the dollar through early August. U.S. inflation had begun to moderate even as the economy withstood recessionary tendencies longer than most forecasters had expected. The Reagan administration's leadership in translating its economic policy into action was greeted positively in the exchange markets, particularly as the program gained support in the Congress. At the same time, the U.S. current account continued to post a surplus. Meanwhile, the demand for credit in the United States remained strong and, with the Federal Reserve continuing to restrain monetary expansion, interest rates stayed high. Thus, although differentials favoring the dollar were well below their peaks of late 1980, they were widening again during the summer, attracting interest-sensitive funds into dollar-denominated assets once again.

Most other industrial countries, by contrast, continued to show disappointingly slow progress in pulling out of the difficulties associated with the prolonged ad-

justment to the 1979-80 oil price increases. In many countries there was public debate over the appropriate course of fiscal and monetary policy in the face of unacceptably high inflation and mounting unemployment. In this context, foreign governments expressed open concern over the high level of U.S. interest rates and the inflationary consequences of the depreciation of their currencies against the dollar. Furthermore, political developments in Eastern Europe and the Middle East clouded the outlook for many countries abroad, leaving traders and investors with the view that the United States was a relatively attractive outlet for investment.

As the dollar continued its advance in early August, however, sentiment became more cautious. Market participants were aware that major European central banks had stepped up their dollar sales and, in view of the rapid run-up of the dollar in late July-early August, began to expect a correction. Consequently, once the upward momentum broke, dollar rates fell back sharply in mid-August and then declined irregularly through late November.

The August turnaround in the exchange markets coincided with a shift in focus in the U.S. financial community from the immediate issues surrounding the passage of the Administration's program to its implications for the fiscal deficit and U.S. capital markets. As market attention turned to estimates of the fiscal gap, skepticism deepened that the Administration's program could proceed without having the government's burgeoning financing needs exert renewed strains on the credit markets. In this environment, there was growing

concern over the potential for conflict between fiscal and monetary policy, leading market participants to question whether the Federal Reserve might back away from its anti-inflation stance.

At the same time, the economy began to show signs of weakening. U.S. short-term interest rates were therefore easing, even though the Federal Reserve continued its policy of restraining monetary expansion. Reflecting the slow growth of the narrowly defined money supply, the Federal funds rate dropped about 600 basis points over the four months to end-November. The Federal Reserve progressively eliminated its 4 percent surcharge on large banks that frequently borrowed at the discount window, and by early December it reduced its basic discount rate 2 percentage points to 12 percent. Already by November evidence was mounting that the U.S. economy was in a sharp recession, leading to expectations that private-sector credit demands would decline substantially. These expectations contributed to a rally in the bond market which brought long-term rates down more than 200 basis points by the end of the month.

The four-month decline of short-term interest rates in the United States was reflected in a narrowing of interest differentials favorable to the dollar *vis-à-vis* most other currencies. At least initially, monetary authorities

abroad felt they had little room to respond to the lower U.S. interest rates by easing their own money market rates. They were concerned about entrenched inflationary pressures at home, and in some countries, notably France, Switzerland, and the United Kingdom, the central banks acted to raise interest rates. In addition, some countries felt constrained by the pressures against their currencies within the European Monetary System (EMS).

Beginning in October, however, as U.S. interest rates continued to decline, monetary authorities in some countries began to allow an easing of their own short-term interest rates. Their economies were making little headway in recovering from recession, and unemployment was rising rapidly. Government deficits were already large relative to historical standards and in many cases were placing strains on the domestic financial markets. Consequently, the authorities in several countries felt there was only limited scope for further fiscal stimulus. The current account deficits of a number of countries were beginning to decline so that the authorities felt they no longer needed such high interest rates to attract capital from abroad. There were widespread forecasts of a U.S. move from current account surplus to deficit in 1982; Japan's current account had already swung from a deep deficit into surplus;

Table 1
Federal Reserve Reciprocal Currency Arrangements

In millions of dollars

Institution	Amount of facility January 1, 1981	Decrease effective May 23, 1981	Amount of facility January 31, 1982
Austrian National Bank	250		250
National Bank of Belgium	1,000		1,000
Bank of Canada	2,000		2,000
National Bank of Denmark	250		250
Bank of England	3,000		3,000
Bank of France	2,000		2,000
German Federal Bank	6,000		6,000
Bank of Italy	3,000		3,000
Bank of Japan	5,000		5,000
Bank of Mexico	700		700
Netherlands Bank	500		500
Bank of Norway	250		250
Bank of Sweden	500	200	300
Swiss National Bank	4,000		4,000
Bank for International Settlements			
Swiss francs-dollars	600		600
Other authorized European currencies-dollars	1,250		1,250
Total	30,300	200	30,100

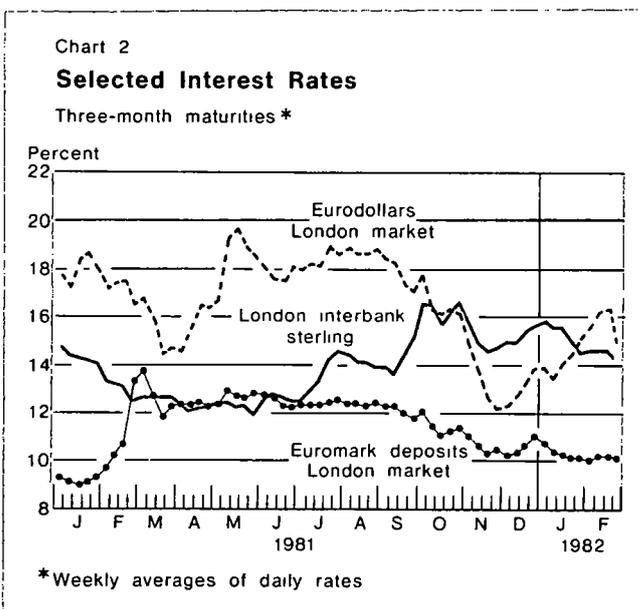
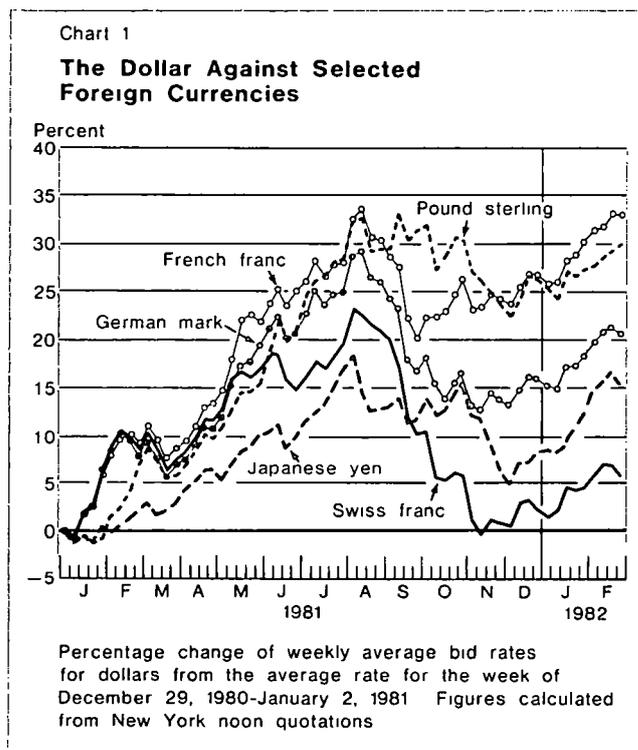
and a German export surge had led officials and private forecasters alike to predict an elimination of that country's current account deficit in 1982. Moreover, strains in the EMS were relieved by a multilateral realignment of parities on October 5. As a result, foreign monetary authorities felt they had greater scope for easing their domestic interest rates. Even so, with the drop in short-term US rates accelerating, particularly in November, interest differentials favoring the dollar continued to narrow.

Meanwhile, other factors lent support to the dollar. Orders to buy dollars emerged repeatedly whenever the dollar moved substantially lower, as commercial interest in a number of centers sought to take advantage of what they considered favorable rates for current payments or investments. From time to time there were also substantial purchases of dollars by the monetary authorities in Organization of Petroleum Exporting Countries (OPEC) and other countries outside the Group of Ten. In addition, there was a continuing inflow of funds into dollars from Japan, where residents were taking advantage of a recent relaxation of exchange controls or were for other reasons seeking to diversify their portfolios internationally. Furthermore, the November rally in the US bond market reportedly attracted capital from abroad, as investors sought to lock in high yields and position themselves for capital appreciation. Moreover, the increasingly fragile situation in the Middle East and Poland depressed sentiment toward those countries seen as more vulnerable than the United States to heightened geopolitical tensions. The recession in the US economy led forecasters to expect less deterioration in this country's current account than previously. Even so, by end-November the dollar dropped from end-July levels by 6¼ percent against sterling, about 11 percent against the Japanese yen and the German mark, and as much as 18 percent against the Swiss franc.

Early in December the dollar turned around once more and began an advance that carried through end-January. This second turning point was triggered by a reappraisal of the view that a continuing drop in economic activity in the United States would lead to further substantial declines in US interest rates and, therefore, to further movements adverse to the dollar in interest rate differentials.

That reappraisal was based on a number of developments. In the United States, the Federal Reserve was perceived as moving cautiously to reduce its discount rate and to supply bank liquidity. Although output was falling and unemployment was climbing, credit demands were not fading. In fact, commercial financing needs were heavy, with corporate issues flooding the bond market in December and commercial demand for

bank credit remaining strong. Also, estimates of the Federal deficit for current and future fiscal years had undergone repeated and large upward revisions, and



the prospective borrowing requirement for the first quarter of 1982 was seen as likely to be greater than previously had been estimated. Moreover, the release of figures showing no letup in a series of large weekly increases in the monetary aggregates began to generate expectations of a substantial tightening of money market conditions. Under these circumstances, U.S. money market rates rose in December and even more rapidly in January.

Abroad, by contrast, persistent weakness of domestic economies had led to near-record levels of unemployment, and in some countries official financial policies were coming under domestic criticism. As pressures for measures to boost employment intensified, expectations strengthened that some countries in Europe might ease their restrictive monetary postures even if U.S. interest rates did not decline further. In fact, during January, the central banks of many major industrialized countries either reduced their official lending rates or facilitated some easing of local money market rates.

As interest rate differentials once more moved strongly in favor of the dollar, they began to attract funds into dollar-denominated assets. The dollar was bid up across the board during the final two months of the period. By end-January it was about 6 percent higher against the European currencies and 8 percent higher against the yen from the levels of end-November. As a result, the dollar closed the six-month period down on balance about 1 percent against sterling, 4 percent against the yen, 5½ percent against the German mark, and 13 percent against the Swiss franc. The trade-weighted value of the dollar in terms of ten major currencies declined 3½ percent during the period.

During the six-month period, there were occasions when the market experienced unusually sudden and sharp exchange rate movements during a single day. Some of these episodes were associated with major political events, such as the assassination of Egypt's President Anwar Sadat on October 6 and the imposition of martial law in Poland over the December 12-13 weekend. Other episodes were less dramatic and were not associated with such identifiable events. The U.S. authorities were prepared to intervene on some occasions had the market disturbances persisted or cumulated during the U.S. trading session; as it turned out, the Federal Reserve undertook no intervention operations on behalf of the U.S. authorities. The Trading Desk continued its long-standing practice of cooperating with other central banks by intervening as their agent from time to time in the New York market.

On September 1 and December 15 the U.S. Treasury paid off the two maturing tranches equivalent to

\$1,611.4 million of its German mark-denominated securities. After those redemptions, the Treasury had outstanding \$4,080.8 million equivalent of the foreign currency notes, public series, which had been issued with the cooperation of the German and Swiss authorities in connection with the dollar-support program of November 1978. Of the notes outstanding as of January 31, 1982, a total of \$3,622.3 million is denominated in German marks and \$458.5 million is denominated in Swiss francs. The maturity dates for the remaining securities range between May 12, 1982 and July 26, 1983.

In the seven months through January 1982, the Federal Reserve had gains of \$0.1 million on its foreign currency transactions. The Exchange Stabilization Fund (ESF) gained \$15.2 million in connection with sales of foreign currencies to the Treasury general account to finance interest and principal payments on foreign currency-denominated securities. The Treasury's general account gained \$425 million net. This gain reflected \$94.8 million of profits on the redemption at maturity of Swiss franc- and German mark-denominated securities, partly offset by \$52.3 million of losses as a result of annual renewals at current market rates of the agreement to warehouse with the Federal Reserve Swiss franc and German mark proceeds of Treasury securities. As of January 31, 1982, valuation losses on outstanding balances were \$374.8 million for the Federal Reserve and \$1,102.1 million for the ESF. The Treasury's general account had valuation gains of \$826.4 million related to outstanding issues of securities denominated in foreign currencies.

German mark

In early August the German mark was subject to divergent tendencies—weak against the dollar but strong against European currencies.

With respect to the dollar, market sentiment toward the mark remained bearish. Domestically, the German economy was relatively weak, unemployment was rising, and inflation was high by historical standards. Moreover, the government deficit remained large, capital markets continued under strain, and fiscal policy was under heated discussion publicly and within Germany's coalition government. Internationally, Germany had experienced substantial deterioration in its terms of trade because of the increase in oil prices and the depreciation of the mark. The current account was in heavy deficit, and there were wide interest rate differentials favoring investment in the United States. On top of these economic considerations, the mark was seen in the exchanges as more exposed than the dollar to international political tensions. This vulnerability reflected Germany's strategic position, its ties to Eastern Europe, and its greater reliance on the Middle

Table 2

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, 1981	1981 I	1981 II	1981 III	1981 IV	1982 January	Outstanding January 31, 1982
Bank of Sweden	-0-	+200 0	-200 0	-0-	-0-	-0-	-0-

Data are on a value-date basis.

Table 3

United States Treasury Securities, Foreign Currency Denominated

In millions of dollars equivalent; issues (+) or redemptions (-)

Issues	Amount of commitments January 1, 1981	1981 I	1981 II	1981 III	1981 IV	1982 January	Amount of commitments January 31, 1982
Public series:							
Germany	5,233 6	-0-	-0-	- 680 3	-931.1	-0-	3,622.3
Switzerland	1,203 0	-0-	-0-	- 744 5	-0-	-0-	458.5
Total	6,436.6	-0-	-0-	-1,424.8	-931.1	-0-	4,080 8

Data are on a value-date basis

Because of rounding, figures may not add to totals.

Table 4

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

In millions of dollars

Period	Federal Reserve	United States Treasury	
		Exchange Stabilization Fund	General account
First quarter 1981	+ 6 2	- 0.7	-144.3
Second quarter 1981	- 1 4	- 3 8	-0-
Third quarter 1981	+ 0.1	-0-	+ 85 9
Fourth quarter 1981	-0-	-0-	- 39 2
January 1982	-0-	+ 15 2	- 4 2
Valuation profits and losses on outstanding assets and liabilities as of January 31, 1982	-374 8	-1,102 1	+826 4

Data are on a value-date basis

East for energy resources and export markets. In consequence, the mark was subject to capital outflows, all the more as market sentiment toward the dollar became increasingly bullish. On August 10 the rate plunged to a five-year low of DM 2.5773, a decline of some 45 percent since mid-1980.

Against other EMS currencies, however, the mark remained strong. It benefited from the market's view that the authorities in Germany were still placing priority on correcting the external imbalance and on financing the current account deficit in the interim by inflows of private and official capital. The federal government continued the practice, unusual for Germany, of placing Deutsche mark-denominated debt instruments directly with foreign official institutions. Following the move in February 1981 to introduce a special Lombard facility, German interest rates increased so that adverse interest rate differentials *vis-à-vis* other EMS currencies were either narrowed or eliminated. The Bundesbank had announced its intention that because of the inflation problem it would aim at the lower part of the 4 to 7 percent target range for the growth of central bank money. Thus, with the market apprehensive about prospects for other EMS currencies, the mark had moved toward the top of the EMS, at times hitting its upper intervention limit.

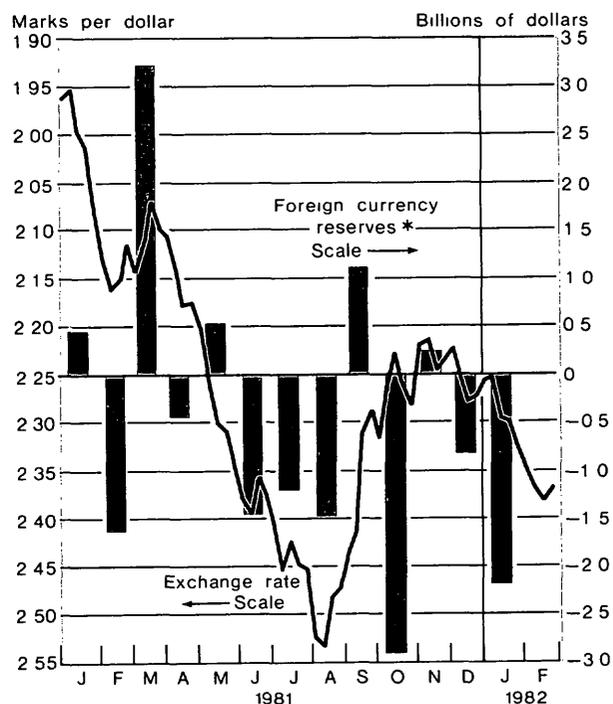
As a result of these crosscurrents in the exchanges, the Bundesbank had frequently bought French and Belgian francs to ease pressures within the EMS while selling dollars, at times heavily, to support the mark against the dollar. Through end-July, Germany's foreign currency reserves had increased to stand at \$43.4 billion. During August, however, as the Bundesbank stepped up its dollar sales to support the mark, German foreign currency reserves fell by \$1.5 billion.

Once the mark came close to its lows, market participants became wary of a shift in market direction and professionals moved quickly to cover their short positions. The mark bounced back sharply and, as the dollar fell lower in the exchanges, market sentiment toward the German currency became more favorable. In part, the turnaround reflected developments in the United States, where the initial euphoria surrounding the adoption of the U.S. Administration's economic program gave way to skepticism that the program would achieve all its goals. At the same time in Germany, trade and current account figures for July were released, pointing to a dramatic improvement in export sales and providing the first concrete evidence that the earlier surge in export orders was finally showing through. Official commentary about this improvement gave rise to expectations that Germany's current account deficit would continue to narrow in subsequent

Chart 3

Germany

Movements in exchange rate and official foreign currency reserves



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

* Foreign exchange reserves for Germany and other members of the European Monetary System include adjustments for gold deposited with the EMS and for foreign exchange swaps.

months—a time when most forecasters were expecting the U.S. current account to deteriorate. Furthermore, the government finalized a 1982 budget proposal according to which nominal expenditure growth would be slowed to 4 percent and the net financing requirement of the federal government would be cut to DM 27 billion or 1.6 percent of gross national product (GNP), down from a revised estimate for 1981 of DM 34.3 billion or 2.2 percent of GNP. As the dollar eased, therefore, the German mark moved up to trade around DM 2.3195 by end-September.

Meanwhile, the strengthening of the mark added to strains within the EMS. The markets became vulner-

able, especially prior to weekends, to repeated rumors of an imminent realignment of the participating currencies. Speculative bidding for marks against the French and Belgian francs frequently stretched the EMS to its limits, generating sizable intervention in several centers and pushing the mark up against the dollar as well. The Bundesbank responded to these pressures by purchasing both dollars and EMS currencies in the exchanges so that, by the end of September, German foreign exchange reserves increased by \$1.1 billion.

Over the weekend of October 3 and 4, the EMS finance ministers announced a realignment of parities to take effect October 5. The mark, as well as the Dutch guilder, was revalued by 5½ percent against those currencies whose parities remained unchanged and in effect by 8½ percent against the French franc and the Italian lira. Immediately thereafter, the mark traded in the lower portion of the new band, reflecting reflows of speculative investments as well as a reversal of commercial leads and lags. Accordingly, other central banks began purchasing marks in the exchanges so as to cover the liabilities within the EMS that had built up over preceding months. Against the dollar, however, the realignment was seen as freeing the mark to strengthen further, and in subsequent days the mark moved up to DM 2.1815, 15½ percent above its August low.

Following the realignment of the EMS, the Bundesbank confirmed the easing of interest rates that had already begun in Germany's money and capital markets by cutting the special Lombard facility rate from 12 percent to 11 percent effective October 9. The Bundesbank felt able to take action to support the domestic economy because of the overall strength of the mark, the improving outlook for the balance of payments, and the achievement of a compromise on fiscal policy. Even so, the Bundesbank was careful not to signal more forceful action, since at home inflation continued to accelerate to an annual rate of 7 percent year on year and in the United States interest rates remained high so that interest rate differentials adverse to the mark remained large. Later the same day the Federal Reserve lowered its surcharge on discount window borrowing by large banks from 3 percent to 2 percent, the second 1 percentage point cut in this rate in three weeks. Thus, the Bundesbank's action did not contribute to any further widening of interest rate differentials versus dollar assets.

After mid-October a number of developments within Germany weighed on the mark. Unemployment was increasing as declining corporate profits forced many firms to move aggressively to economize on labor. As a result, market participants came to expect that the

Bundesbank would take advantage of whatever opportunity developed to allow German interest rates to follow U.S. rates down. In addition, the earlier optimism over a quick and sustained improvement in Germany's balance of payments faded, as first August and then September monthly trade figures disappointed market expectations. Late in October the government revised its budget estimates for 1982 to take account of climbing unemployment and lower than expected revenues, thereby eliminating virtually all the planned drop in the borrowing requirement. Although this new budget gap was later covered, largely by an expected increase in Bundesbank profits available to be transferred to the government, the episode underscored the differences that still existed within the government coalition on major issues of economic policy. Also, political tensions abroad adversely affected sentiment toward the mark. The assassination of Egyptian President Anwar Sadat pointed out the potential for instability in the Middle East and Germany's reliance on that region for oil supplies. Repeated reports of military maneuvers around Poland were also an unsettling reminder of Germany's vulnerability to potential Soviet interference in Eastern Europe.

Under these circumstances, the mark did not strengthen even though interest differentials adverse to the mark were narrowing sharply. Also, the Bundesbank moved cautiously to provide some short-term liquidity to the banking system through swaps and repurchase agreements and did not change official interest rates again until December 4, when it cut its special Lombard rate ½ percentage point to 10.5 percent. By contrast, in the two months to early December, the Federal Reserve had twice lowered its discount rate by 1 percentage point to 12 percent and also eliminated the remaining 2 percentage point surcharge on frequent borrowers. Short-term interest rates in the United States had fallen sufficiently to cut in half—from about 5 percentage points to 2½ percentage points—the short-term differentials *vis-à-vis* the mark.

During the six weeks to end-November, the mark occasionally came into demand, especially at times when U.S. interest rates were declining. But the mark did not keep pace with currencies outside the EMS that were continuing to strengthen against the dollar. Instead, movements of the rate above the DM 2.20 level regularly prompted commercial and investor selling of marks against dollars. On occasion, the mark came sharply on offer, especially in the wake of political developments in Eastern Europe or the Middle East. At these times, the Bundesbank intervened promptly and forcefully to sell dollars while EMS central banks were also buying marks. These operations contributed to better market balance.

In December and January the mark was adversely affected by developments abroad. On December 14, martial law was declared in Poland, triggering a brief scramble for dollars against marks and sending the rate as low as DM 2.3650 for a few hours. Prompt intervention by the Bundesbank and other central banks, together with commercial activity and professional profit taking, quickly restored balance to the market, and the rate almost fully recovered in just a matter of hours. Yet the Polish situation remained a matter of market concern. In the United States, interest rates stopped declining, disappointing market expectations that the deepening U.S. recession would continue to ease credit demands. Indeed, U.S. money market rates moved strongly higher, casting doubt that the strengthening of Germany's external position would show through in the mark exchange rate.

This development focused attention anew on the dilemma facing the German authorities. With the level of unemployment heading to a record two million persons, political pressures mounted, not only from labor unions but also within parties in the governing coalition, for more action to deal with the deteriorating unemployment situation. But the government was concerned about actions that either would increase taxes and thereby hamper a recovery or would increase government borrowing and thereby add to inflation. There were also pressures to ease monetary conditions. But the Bundesbank remained concerned that a renewed easing in interest rates would exacerbate the decline in the mark which would exert a further upward push on costs and prices.

In the event, the government presented to Parliament a compromise program, approved shortly after the close of the period, that was designed to stimulate jobs through investment subsidies, lending programs for small companies, and modest direct government spending on energy-saving projects—financed mainly by a 1 percentage point increase in the value-added tax in 1983. Meanwhile, new figures showed that an export surge late in the year had boosted Germany's trade account and helped pull its current account deficit for 1981 as a whole down to DM 17.5 billion, significantly lower than had been forecast. The improving external position gave the Bundesbank scope to lower its special Lombard rate a further ½ percentage point to 10 percent on January 21 and ensure a similarly modest easing in money market rates.

At the end of January the mark was trading at DM 2.3420, down about 6¼ percent from the late-November levels while up about 9 percent from its lows of early August. The Bundesbank was at times active in the markets during December and January, selling dollars in support of the mark, while other

central banks within the EMS continued to acquire marks. Reflecting Bundesbank dollar sales during the two months, German foreign currency reserves fell \$3.0 billion to close the period at \$37.5 billion, down \$5.9 billion for the period as a whole.

Swiss franc

In mid-1981, Switzerland was faced with a resurgence of inflationary pressures. Part of the inflationary impulse stemmed from the buoyancy of the domestic economy—in contrast to the stagnation in other European countries—led by strong consumption and construction activity. Shortages developed in the housing market, and domestic house prices and rents exhibited sharp increases, contributing to a strong rise in consumer prices. In addition, the decline of the Swiss franc in the exchanges substantially boosted the cost of imports, particularly by raising the domestic price of oil and other dollar-denominated raw materials.

Though Swiss interest rates had risen progressively, they were still well below those in other industrial countries. At midyear, interest differentials adverse to the franc were about 9-10 percentage points *vis-à-vis* the dollar and more than 3 percentage points *vis-à-vis* the German mark. Consequently, foreign official and corporate borrowers continued to place heavy demands on the Swiss franc money and capital markets. The Swiss authorities did not seek to restrain these outflows. They hoped to avoid the development of sizable external markets in Swiss franc-denominated assets, particularly for longer maturities, and in any event the current account had moved into surplus, estimated to be \$2.0-2.5 billion for 1981. Nonetheless, the pressure of outflows of capital pushed the Swiss franc down in the exchanges. At end-July the franc was trading at SF 2.15 against the dollar and SF 0.87 against the German mark. Along with other major currencies, it declined further against the rising dollar to a four-year low of SF 2.2095 on August 10, a decline of some 39 percent since its peak of 1980. On July 31, Switzerland's foreign exchange reserves stood at \$9.9 billion.

The Swiss authorities continued to pursue a policy of monetary restraint to combat inflationary pressures. Increasingly, however, the authorities had reason to question whether policy was as restrictive as developments in the monetary aggregates would suggest or, in view of the inflationary situation, whether policy was as tight as circumstances warranted. For some time the monetary base was below the 4 percent annual growth target for 1981. However, as in many other countries, continuing financial innovations in Switzerland, coupled with unusually high interest rates by historical standards, had altered the behavior of banks and the public, making the monetary base as well as the broader

monetary aggregates less reliable than in the past as a guide to policy. Questions about the adequacy of monetary restraint were highlighted by the release of consumer price numbers for August, showing inflation rising 11.3 percent at an annual rate in the most recent quarter and 7.4 percent year on year.

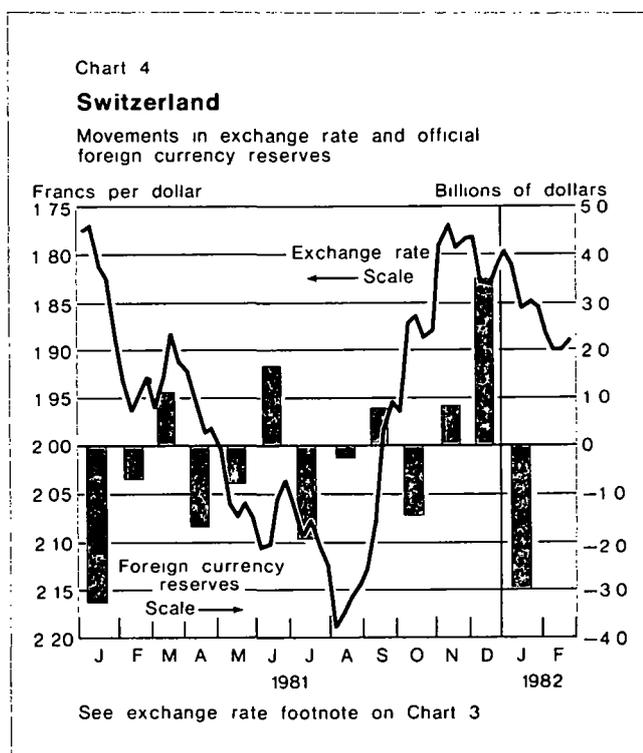
Early in September the authorities began taking aggressive action to tighten monetary policy and thereby underscore the primacy of the anti-inflation struggle. Effective September 2 the Swiss National Bank boosted its discount rate to 6 percent from 5 percent and its Lombard rate to 7.5 percent from 6.5 percent, the fourth rise in 1981 in those official lending rates. The authorities also made the refinancing of credit through foreign exchange swaps with the central bank more expensive. Following these actions, Swiss franc interest rates shot up temporarily before settling down around 11 percent.

The rise in Swiss interest rates during September and October, which occurred at a time when interest rates in other centers were easing, meant that differentials adverse to the franc either narrowed dramatically, as in the case of the dollar, or were reversed, as in the case of the German mark. Nonresidents therefore found incentives to begin repaying their Swiss franc-denominated debt, while in-

vestors sought out higher yielding franc investments, and these actions helped propel the franc sharply higher in the exchanges. As the franc strengthened, the view developed in the market that the Swiss authorities might allow the franc to appreciate beyond SF 0.80 against the mark—a level considered an upper bound in the market since September 1978 when the Swiss National Bank had intervened forcefully at that rate. In addition, many European countries were regarded as more vulnerable than Switzerland to political tensions in Eastern Europe and the Middle East, and this concern over the prospects for other currencies continued to benefit the Swiss franc. In these circumstances, the franc became exceptionally well bid. By mid-November the rate advanced 18 percent from early-September levels to a high of SF 1.7475 against the dollar and some 10 percent to SF 0.7935 against the German mark.

The strong appreciation of the franc, while welcome as a contribution in the fight against inflation, was nevertheless a matter of concern to the authorities. Of special worry was the rapid rise against the German mark, the currency of Switzerland's main foreign trade partner and major competitor in third markets, since it threatened to put Swiss exporting and tourist industries in a difficult position. Still, the authorities made clear in public statements that large-scale intervention similar to that undertaken in 1978 would be inappropriate. Sizable sales of Swiss francs would lead to an expansion in Switzerland's money supply, and large purchases of dollars would push the dollar higher in the exchanges—both developments that would exacerbate inflationary pressures.

In the event, by November the economy showed clear signs of flattening out and some private forecasters began to express fears that economic activity would weaken to the point where unemployment might rise. In addition, the need to avoid liquidity strains from developing with the approach of the year-end argued for some relaxation in monetary restraint. Accordingly, the Swiss National Bank progressively reduced the rate charged to domestic banks for Swiss franc swap credit against dollars and provided somewhat more liquidity than it absorbed via maturing swaps. On December 4 the authorities reduced the Lombard rate from 7.5 percent to 7.0 percent—an action taken in coordination with interest rate reductions in other industrial countries and designed to bring the Lombard rate more closely in line with prevailing Swiss money market rates. But at the same time the Swiss National Bank was anxious to avoid the impression of a fundamental shift in policy course and consequently left the discount rate unchanged at 6 percent. In the exchange market the franc lost its



upward momentum as domestic and Euro-Swiss money market rates eased downward. Against the dollar the franc slipped back to trade around SF 1.80 by end-December. Against the mark, however, the franc remained well bid around SF 0.7985, principally in response to market concerns over the foreign and domestic implications for Germany of the declaration of martial law in Poland.

By January the need for such a tight monetary policy in Switzerland appeared to have passed, particularly with the release of inflation figures showing a marked deceleration in consumer prices to around 6 percent. The 3 percent monetary growth target announced by the authorities for 1982 was generally viewed as consistent with the policy of fighting inflation, while also providing sufficient liquidity so as not to exacerbate the developing weakness of the economy. Even so, the Swiss authorities were thought to be under less pressure than others in Europe to ease credit conditions, given Switzerland's low unemployment rate and the still relatively favorable performance of the economy. In fact, the Swiss National Bank did not lower its official lending rates following the reduction by the Bundesbank on January 21 of its special Lombard rate. In these circumstances the franc, though fluctuating widely at times, remained firm against the German mark. But *vis-à-vis* the dollar, the franc continued to ease as money and capital market rates in the United States firmed substantially and were generally expected to remain high despite the weakness of the U.S. economy.

By the end of January the franc was trading at SF 1.8680 against the dollar and at SF 0.7976 against the German mark. At these levels the franc was up 15½ percent against the dollar since its August low. Over the six months under review the franc gained 13½ percent against the dollar and 8 percent against the German mark. Between end-July and end-January, Switzerland's foreign exchange reserves rose \$600 million to \$10.5 billion in response to foreign currency swap operations, the net purchase of dollars in intervention operations, and interest earnings on outstanding reserves.

Japanese yen

By mid-1981 the Japanese economy had made impressive adjustments to the second round of oil price increases of 1979-80. Changes in production processes in many of Japan's largest enterprises had substantially reduced Japan's dependence on oil imports. These developments, together with a continuing impact of the 1979-80 depreciation of the yen, had led to a sharp improvement in Japan's current account, which swung from deep deficit to moderate surplus in

just one and a half years. The rate of inflation at the wholesale level, which at one point in 1980 had reached 24 percent, had slowed to just about 1 percent. Meanwhile, restrictive monetary and fiscal policies had helped limit the extent to which rising material prices were passed on in the economy so that inflation at the consumer level, which had never exceeded 9 percent, was around 5 percent per annum.

The process of adjustment had been uneven, however, and domestic demand remained weak. Important sectors of the economy remained severely depressed. Moreover, consumer expenditures were slow to recover from the deflationary impact of rising energy prices, despite the moderation of inflation. The sluggishness of domestic demand cast doubt that a firm basis for sustained recovery had been established, and domestic pressures on the authorities intensified to adopt reflationary measures. Moreover, it heightened anxieties that the weakness of demand at home, in combination with the legacy of the yen's earlier depreciation, would provoke another surge of exports and exacerbate protectionist reactions in Japan's major markets overseas.

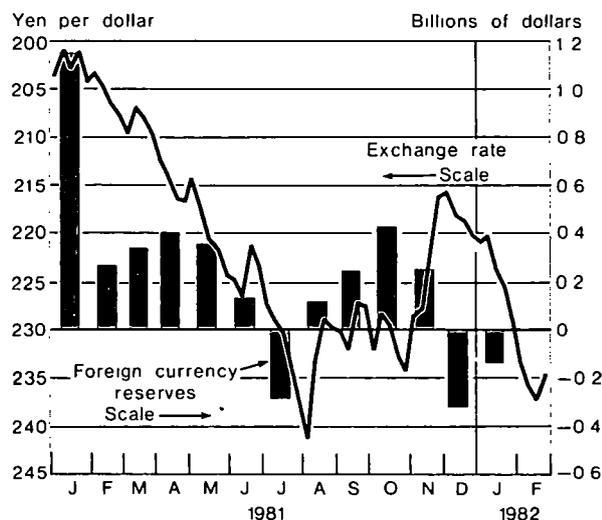
As a result, the authorities had already begun to provide stimulus to the economy. The government had announced measures to aid small companies and to speed up expenditures for public works. But the scope for further expansionary fiscal policies was limited by virtue of the fact that the levels of the government's overall deficit and borrowing requirement continued to be considered excessive by many Japanese and were already exerting pressures in the local capital markets. Thus, the larger source of stimulus came from an easing of monetary policy. During the spring, the Bank of Japan lowered its discount rate, eased banks' reserve requirements, and substantially relaxed "window guidance" ceilings on the growth of bank lending.

In the exchange markets, the yen had benefited from Japan's improving economic performance to recover from its 1980 lows against most European currencies. Relative to the German mark, it had risen nearly 40 percent to trade at 97 yen to the mark by early August. Against the dollar, however, a tentative recovery late in 1980 had given way to a renewed and protracted decline. With interest rates in Japan lower than in any other industrialized country, Japanese residents had taken advantage of newly liberalized foreign exchange controls to make long-term investments abroad. Then during midsummer, when a long-awaited decline in U.S. interest rates failed to materialize, market participants lost hope that the large interest differentials adverse to the yen would soon narrow so as to permit Japan's improving competitiveness to

Chart 5

Japan

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

show through in the yen-dollar exchange rate. Thus, as Japanese importers sought to limit their losses during the August vacation period, they accelerated their yen sales to hedge remaining future dollar needs. In addition, foreign corporations continued short-term yen borrowings to meet financing needs in other currencies. As the selling of yen gathered force, it pushed the spot rate down to ¥ 246 10 by the first business day in August—a level only about 6 percent above its 1980 low

At this point, many market participants felt that the yen's decline had been overdone in view of Japan's steadily improving current account position. With banks generally in an oversold position, the market was ripe for a reversal of sentiment toward the yen when the dollar began its general decline during August. Reports that some Middle Eastern investors had been attracted in size by the rally in Japan's securities markets and purchases on the International Monetary Market helped spur the turnaround in demand for the currency in early August. The yen's rise initially outpaced that of other currencies against the dollar, bringing the exchange rate to ¥ 228 20 against the dollar and to a high of ¥ 91 64 against the German mark on August 18

A sense of caution soon overcame the yen market,

however. Participants recalled the disappointment earlier in the year when the yen's appreciation had not gone as far as expected. They worried about the possibility that new protectionist barriers might be erected in markets where Japan's exports were penetrating rapidly. Moreover, pressures built up over the summer and autumn for the government to introduce further monetary and fiscal stimulus to the still flagging domestic economy. In this atmosphere, the yen's rise seemed to stall after mid-August at around the ¥ 230 level against the dollar even as the European currencies continued rising.

In September, the monetary authorities announced that window guidance ceilings on commercial banks' lending would be further increased for the fourth quarter, even though monetary growth, running close to 10 percent at an annual rate, was just within the Bank of Japan's projections. Further, the government announced on October 2 a four-point program of fiscal and other measures intended to stimulate domestic demand and imports while assisting Japanese industries and regions that were experiencing particularly severe structural difficulties. The Ministry of Finance also set wider limits on Japanese banks' foreign lending for the half year beginning in October, in keeping with the projected financing needs accompanying the growing surplus on the current account and reflecting the continuing policy of allowing the country's banks to maintain their overall share of lending in the Euro-markets.

Long-term capital outflows from Japan remained large even though interest differentials favoring dollar investments narrowed during the late summer and autumn. Using their new freedom under the 1980 Foreign Exchange Law, Japanese institutional investors continued programs begun earlier in the year to diversify internationally. Also, some Japanese firms with large import requirements had experienced significant losses earlier in the year on their uncovered future dollar commitments and were now adopting more conservative policies regarding the hedging of forward obligations in foreign currency. In the case of firms in some structurally depressed industries, such as oil refining, the need to protect weak financial positions by hedging more of their future import requirements was encouraged as part of the government's efforts to support long-term adjustment. Under these influences, the yen-dollar rate wavered around the ¥ 230 level through September and October. Against the German mark, whose continuing rise against the dollar was partly influenced by the pressures building for realignment within the EMS, the yen declined steadily to reach a low point of nearly ¥ 105 per mark on October 30.

During November the yen became well bid again, as U.S. interest rates declined further and hopes became widespread that this trend would continue. Market participants felt that, despite renewed arguments being heard in Japan for a further easing of monetary policy, Japan's already low interest rates offered less scope for the monetary authorities in Japan as compared with those in Europe to match U.S. interest rate reductions. Therefore, further drops in U.S. rates were expected to be reflected in a significant narrowing of the differentials adverse to yen investments. Foreign transactions in Japan's securities markets, including purchases of bonds under short-term repurchase arrangements, reversed direction in November to become sizable net purchases. Market participants were also impressed by trade figures released for September and October that showed a further strong improvement in the current account surplus, even though the October figures on export letters of credit already gave some warning that the growth of exports might be slowing in subsequent months. Under these positive influences, the yen rose some 8 percent against the dollar during November, reaching its high for the six-month period of ¥ 213.40 on November 30 while recovering to ¥ 96.80 against the German mark.

Toward the end of the year there still was no clear evidence of recovery in the domestic economy and predictions of a very large current account surplus in 1982 became widely accepted. Statistics on consumer and wholesale prices continued to show the lowest rate of inflation among industrial countries. Information released about the real economy indicated that growth of the third quarter had been heavily concentrated in the foreign sector. Public-sector spending and domestic consumption were virtually flat, while private investment actually declined slightly for the third quarter in a row. Investment by small- and medium-sized firms showed an especially large drop, continuing the trend which had been a concern to policymakers for sometime. After the third quarter, monthly trade statistics revealed that even export growth had slowed at least temporarily in November under the influence of government-imposed restraints as well as sluggish demand in major export markets. While welcome from the point of view of mitigating trade frictions, this development lent further emphasis to the need for recovery in the domestic economy.

The new budget, announced in December for the fiscal year beginning in April 1982, retained the relatively restrictive stance that had been adopted for fiscal year 1981 in keeping with the long-range objective of containing and eventually reducing the size of the government's deficit and borrowing requirement. In these circumstances and with the yen exhibiting more

strength than it had in the earlier part of the year, the monetary authorities took further action to help spur the faltering recovery. On December 11, the Bank of Japan reduced its discount rate for lending to commercial banks by $\frac{3}{4}$ percentage point to $5\frac{1}{2}$ percent following similar actions in the United States and other industrial countries. This step was supplemented later in the month by the announcement that overall credit ceilings limiting loans extended by Japan's leading commercial banks, already progressively eased in previous quarters, would be lifted entirely for the calendar quarter beginning in January 1982.

In announcing the cut in the official lending rate, the authorities made it clear that they had confined the reduction to less than 1 percentage point so as not to interfere with the recent rising tendency of the yen and that they were prepared to counter any short-term effect on the yen-dollar rate by intervening in the exchange markets. Nonetheless, when the U.S. and Euro-dollar interest rates began to rise during December, the relative unattractiveness of yields on yen-denominated assets showed through in the exchanges once again and the yen began moving down. When the upward movement of U.S. interest rates continued into January, rather than reversing with the new year as many had hoped, the depreciation of the yen continued. Potential yen holders became increasingly impressed with the discrepancy between the pressures building for sustained high interest rates in the United States, as new statistics were released showing higher than expected growth of the U.S. monetary aggregates, and the situation of Japan's monetary authorities, who faced a continuing need to ease credit policy to stimulate the flagging domestic economy. Hope that wide interest differentials might soon be reversed thus faded in the first weeks of the new year. Pressure against the yen intensified, bringing the exchange rate against the dollar to ¥ 230.00 by the close of January, down 8 percent from the November 30 high but up $6\frac{1}{2}$ percent above the low of August 1981. The yen's cross rate in terms of the German mark had changed even less on balance, to ¥ 98.21 by end-January as compared with ¥ 97.00 six months earlier.

The Bank of Japan continued its policy of intervening in the exchange markets to smooth erratic fluctuations in the exchange rate, intervening to support the yen at various times when the rate moved down rapidly. Such dollar sales contributed to net declines recorded in Japan's foreign exchange reserves for December and January. For the six months as a whole, however, Japan's foreign exchange reserves rose \$600 million to \$24.6 billion by end-January, mainly reflecting interest earnings on Japan's outstanding holdings

Sterling

In mid-1981, deep-seated concerns over the prospects for the economy of the United Kingdom continued to weigh on market sentiment toward the pound. While the worst of the 2½-year-old recession appeared over, evidence of an economic upturn had not yet materialized and, with United Kingdom interest rates lower than earlier in the year, there was concern that the government might be easing its stringent financial policies prematurely. It appeared likely that the United Kingdom share in world export markets was falling—inasmuch as persistently high rates of inflation and the earlier appreciation of the exchange rate had severely eroded the competitiveness of British industry. The trade and current accounts remained in surplus. However, softening world oil prices prompted worries that the substantial benefits Britain's oil self-sufficiency had provided to the balance of payments might diminish. Moreover, in other major industrial countries interest rates had increased, particularly over the summer. But in the United Kingdom the pressures of high and rising unemployment were seen in the exchange market as limiting the rationale, as well as the scope, for the authorities to raise domestic interest rates, and interest differentials in fact moved adversely to sterling-denominated assets. By end-July the pound had dropped 24 percent from the highs registered in January of last year to \$1.84 against the dollar. It also declined 10½ percent to DM 4.55 against the German mark and 10 percent in effective terms to 92.5 on a trade-weighted basis. The Bank of England, acting to smooth fluctuations in the exchange rate, had maintained its policy of intervening modestly on both sides of the market. Nonetheless, mainly due to the repayment of outstanding loans, Britain's foreign exchange reserves had declined to \$13.6 billion by end-July.

The pronounced drop of the dollar in August was reflected in only a temporary rebound of sterling in the exchanges. Indeed, bearish sentiment toward the pound deepened in September and October so that, while other European currencies were advancing against the dollar, the pound declined in the exchanges. In part, renewed downward pressure on sterling stemmed from fears that the monetary authorities had relaxed the restrictive stance of monetary policy before inflationary expectations had been firmly laid to rest, thereby threatening the progress already under way in bringing inflation under control. In the view of many, the growth of the targeted aggregate sterling M-3 substantially above its 6-10 percent annual range could not be fully explained by temporary distortions, such as the delay of tax payments caused by a civil servants' strike or by technical factors, such

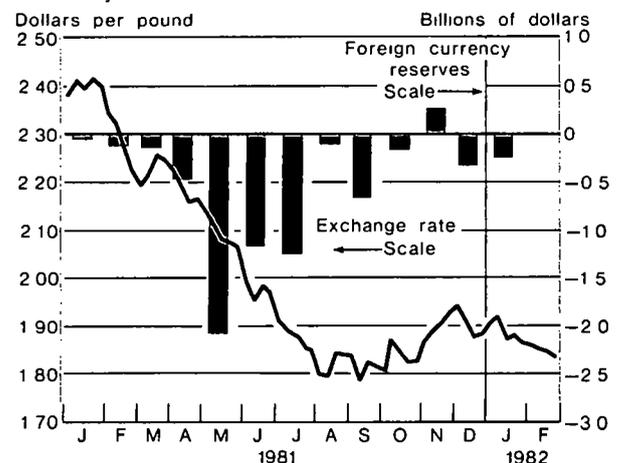
as a shift in housing finance from the building societies to the banks. After allowing for these considerations, the "underlying" rate of sterling M-3 growth remained high. The banking data released for August were particularly discouraging in this respect, reflecting a rapid expansion of bank lending to finance personal consumption and to satisfy growing needs of the corporate sector.

The downward pressure on sterling also resulted from nervousness ahead of the publication of trade figures for September and October—the first full figures since February 1981 when the civil service pay dispute interrupted the compilation of data. In the interval, expectations for a reduction of the trade surplus had developed. Weakened competitiveness was thought likely to restrict the volume of exports, while import volume was expected to rebound as the previous sharp rundown of domestic stocks abated and was gradually reversed. The decline of sterling during 1981 was also presumed to have weakened the terms of trade. In the event, the actual trade figures confirmed a fall in the trade surplus from the exceptional level of the winter of 1980-81, though gaps in the data posed greater than usual problems of interpretation. Looking ahead, crude oil price reductions, which had taken place on a selective basis following the breakdown of OPEC price discussions in late summer,

Chart 6

United Kingdom

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

added to the unfavorable outlook for Britain's balance-of-payments trends.

As broad-based selling pushed the pound precipitously lower, the rate dropped in September to \$1.7695 against the dollar and to DM 4.10 against the mark. In effective terms it traded as low as 86, representing a trade-weighted drop in sterling to the lowest levels since March 1979. At this point British policy-makers faced a choice. On the one hand, the depreciation of the exchange rate improved competitiveness and brightened the outlook for a recovery of depressed profit margins and of investment activity. But, on the other hand, the fall in the exchange rate following the decline that had already taken place earlier in 1981 threatened anti-inflationary goals at a time when wage and price inflation was showing improvement. Inflation had already fallen to around 10 percent, close to rates prevailing among Britain's major trading partners. Moreover, a sharp drop in average wage settlements had occurred which, coupled with productivity gains, had stabilized unit labor costs for the first time in a decade. A failure by the authorities to respond forcefully to the rapid buildup of selling pressures might risk accelerating sterling's fall given the development of a severely adverse market psychology. Furthermore, domestic monetary developments, particularly the expansion of bank lending, suggested that policy action was appropriate to avoid a further buildup of domestic liquidity. Thus, on balance, both external and internal considerations pointed to the desirability of increasing United Kingdom money market rates.

Accordingly, in mid-September the authorities raised short-term interest rates sharply, under new monetary control arrangements that came into effect the previous month, first through the discount window and then by their operations in the bill market. In addition, the authorities began operating more actively in the exchange market as a seller of dollars. Meanwhile, interest rates moved lower in the United States and, as a result, British interest rates stood above comparable U.S. interest rates for the first time since November 1980. Then, immediately following the realignment within the EMS, interest rates softened in a number of continental European countries as well so that interest differentials moved generally more favorably for sterling. These developments prompted widespread demand for sterling, which gathered momentum in November when the rally in the U.S. bond market carried over to the gilt-edged market and attracted foreign investors seeking to benefit from capital gains in addition to exchange rate returns. By late November the pound had recovered 11 percent from its lows to trade around \$1.98 against the dollar and 91.9 on an effective basis.

During December, domestic debate over the state of the economy intensified against the background of increased labor unrest. On December 2, Chancellor Howe announced a £5 billion increase in projected public spending for the 1982-83 fiscal year (April-March), mainly for the local authorities and for spending on employment and training programs. But these measures were generally seen as no more than a passive adjustment by the government to rising unemployment and continued low levels of economic activity since they did not imply a significant shift in the already restrictive stance of fiscal policy. Most private forecasters remained relatively pessimistic concerning the strength of any recovery given the lackluster prospects for government expenditure, consumer spending, and exports. The rebuilding of inventories was thought to compensate only partly for the weakness in other areas of economic activity. In these circumstances, exchange market participants remained concerned that the government would have to relax its restrictive policies after all and the pound again came under selling pressure, with the rate slipping back 6 percent from its late-November highs to \$1.8690 by mid-December before steadying around the year-end.

Sentiment toward sterling turned more optimistic during January. The labor situation improved, particularly following the unexpected decision of the miners not to strike and instead to accept the management pay offer—a development which seemed to validate the perseverance of the government in its overall strategy. The miners' decision brightened the outlook for inflation to abate, and in the exchange market this boosted sentiment for sterling. Domestically, this prospect gave a lift to the capital markets and generated hopes that conditions in the money markets would ease. In fact, a softening in short-term interest rates materialized and was not resisted by the authorities. Even so, the decline in short-term United Kingdom interest rates was less than reductions on the Continent where the monetary authorities were taking advantage of some improvement in their external positions to allow interest rates to decline and thus support their economies. As a result, interest rate differentials favoring sterling investments over those denominated in Continental currencies widened. At the same time, trade figures released for December were better than expected and the pound also benefited from oil company demand. As a result, sterling held generally firm against the rising dollar and advanced strongly against the Continental currencies. By end-January the pound was trading at \$1.8670 for a net rise of 1½ percent against the dollar since end-July. On an effective basis, sterling stood at 91.8 for a ¾ percent decline over the six-month period under review.

Between end-July 1981 and end-January 1982 the foreign exchange reserves of the United Kingdom declined by \$10 billion to \$12.6 billion. The authorities' intervention operations in the exchange market had a small impact on reserves as compared with other influences, such as the repayments and accruals of external public-sector borrowings and the revaluation losses of gold and dollar swaps against European currency units (ECUs) done with the European Fund for Monetary Cooperation (FECOM).

French franc

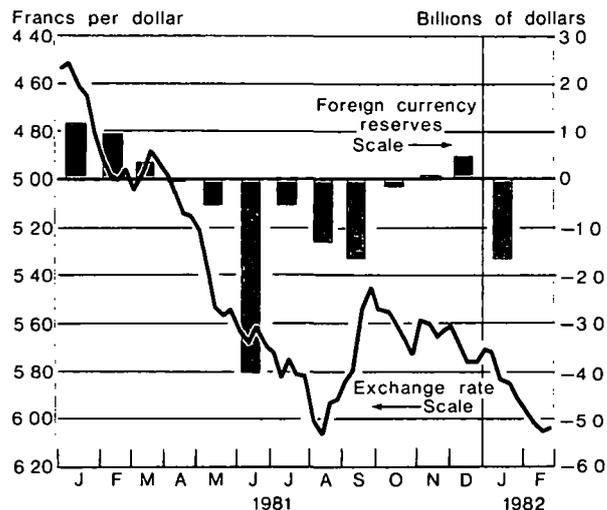
During late summer 1981, major elements of the economic strategy adopted by France's new government were under exchange market scrutiny. The government had moved aggressively to reduce burgeoning unemployment through monetary and fiscal measures to stimulate consumption and investment, and it was pledged to a program to redistribute income and to nationalize major banks and industrial groups. In other European countries the case for a shift toward policy stimulus was under intense political debate, but most governments opted for continued monetary and fiscal restraint. Consequently, pessimism deepened in the exchange markets over the outlook for the French franc, since the divergence in policies was expected to produce a deterioration in inflation and the current account deficit in France while improvements were anticipated in some other European countries. The franc fell in these circumstances more rapidly than other European currencies against the rising dollar. From FF 5.8775 at end-July it plummeted to a record low of FF 6.1870 on August 10, while also dropping to the floor of the EMS. Moreover, in subsequent weeks as the dollar declined in the exchanges, the franc had difficulty keeping pace with the advance of the German mark and other EMS currencies against the U.S. currency.

The French government sought to contain the selling pressures on the franc during August and September so as not to jeopardize its domestic program. The Bank of France intervened heavily in the exchange markets, selling mainly dollars as well as European currencies, to keep the franc within the mandatory 2¼ percent trading limit against the German mark and occasionally also against other currencies which traded at the top of the joint float. The government also tightened exchange controls to limit further the scope for leading and lagging of commercial payments by temporarily suspending the facility for importers to purchase foreign currency forward. Previously, one-month forward cover had been permitted except for importers of raw materials who were allowed up to three months to purchase forward exchange ahead of de-

Chart 7

France

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

livery. In addition, the Bank of France raised on September 21 its money market intervention rates by 1 percentage point—to 19½ percent for seven-day maturities—thereby reversing the previously easier tendency in domestic interest rates. However, the authorities did not wish to undercut the basic policy aim of reducing the high interest rate burden on French industry, and thus the government requested that the increase in banks' costs be financed out of profits and not by raising base lending rates.

Otherwise, with respect to domestic policy, the government continued to address the problems of an economy showing only limited signs of recovery from more than sixteen-eighteen months of recession. Late in September the government presented its 1982 budget proposals, aimed foremost at increasing employment by supporting economic activity. The budget provided for the creation of 70,000 new public-sector jobs, increased spending on private and public investment, raised aid and financial incentives to industry, and hiked outlays on education and various social welfare programs. On the revenue side the imposition of new taxes, higher tax rates, and steps to reduce tax evasion fell short of the nearly 27 percent increase in expenditures, leaving the government with a projected fiscal deficit of FF 95 billion, roughly equivalent

to 3 percent of GNP, compared with about FF 70 billion in 1981 or about 2.4 percent of GNP. The government also approved a bill nationalizing five industrial groups and a large segment of the private banking sector, with the takeover shifting approximately 750,000 workers from private industry to the government sector.

In the exchange market, participants continued to be concerned about the direction of economic policy. They feared an adverse impact on already depressed business spending plans of the government's efforts to nationalize and restructure industry. They were troubled by the prospect of a sharp rise in the fiscal deficit, which seemed likely if an economic recovery did not materialize. They worried that an expansion in the deficit in a short period could compromise the government's growth target for the monetary aggregates and, thereby, risk substantially increasing inflationary pressures. These concerns prompted large flows of funds to move out of France amid growing speculation that the franc would be devalued within the EMS. The outflows of funds were reflected in a \$3 billion decline in French foreign exchange reserves from \$22.6 billion at end-July to \$19.6 billion by end-September.

On October 5 the central EMS parity of the French franc, along with the Italian lira, was adjusted downward 3 percent against the Danish krone, Irish pound, and the Belgian franc—whose central rates remained unchanged—and in effect by 8½ percent against the German mark and the Netherlands guilder, currencies whose central rates were moved upward within the joint float. Immediately after the EMS realignment, the franc traded at the top of the new band amid a reflow of funds that took the form of a reversal of commercial leads and lags and also represented a reflux of speculative and investment capital. As a result, the franc rose in tandem with the mark against the dollar to trade around FF 5.56 by mid-October.

In the weeks that followed, French government officials stated that henceforth the government would give the same priority to fighting inflation as to unemployment to ensure maximum positive effects from the currency realignment. The authorities acted on several fronts to blunt the inflationary impact of the devaluation of the franc. The government imposed temporary price controls or freezes on a wide range of services and food items, where prices had shown marked acceleration, and introduced an 8 percent guideline on annual increases for industrial products. Regarding wages, the government began discussions with the country's main unions to alter cost-of-living provisions in future wage negotiations so as to stabilize real earnings. In addition, the government froze FF 15 billion in budgeted 1982 expenditures, while

also raising employer and worker contributions to the social security fund. These various measures helped improve the atmosphere in the domestic bond market, and the government, for sometime previously unable to issue new bonds, began to borrow successfully on a large scale. The government's access to the bond market in financing its deficit made it possible for monetary growth to decelerate and enhanced prospects for the monetary aggregates to stay within the 1982 range.

With the realignment in place and with policies in France appearing to move toward greater balance between the goals of combating unemployment and curbing inflation, the franc remained firm within the EMS. The impact of stimulative policies on France's inflation and trade performance remained a source of concern. However, these issues became somewhat less acute, as other countries moved cautiously to provide stimulus to their flagging economies through an easing in monetary conditions and as they came under growing pressure to adopt programs of fiscal stimulus. With the divergence in policies somewhat less pronounced, some forecasters began to look for a smaller deterioration than previously expected in the 1982 French current account.

Moreover, nominal French interest rates remained relatively high—commanding a 6-7 percentage point premium over German interest rates—even though the authorities had renewed their efforts to reduce French money market rates in the aftermath of the EMS realignment. French firms sought foreign currency loans to finance domestic expenditures, while foreign official and private investors maintained and even increased their holdings of franc-denominated assets. In these circumstances, the French authorities were able to ease the ban on forward purchases of foreign currencies, allowing importers of selected basic commodities to purchase foreign exchange up to three months ahead of delivery. Otherwise, exchange controls remained intact, limiting the scope for resident outflows. Moreover, France continued to be seen in the exchanges as less vulnerable than other Continental countries to political disruptions in the Middle East and in Eastern Europe, a perception that helped bolster the franc particularly following the declaration of martial law in Poland in December.

For all these reasons, the franc remained firm at the top of the joint float even as EMS currencies as a group weakened against the dollar during December and January. By end-January the franc was trading at FF 5.96 against the dollar, a net decline of about 1¼ percent over the six-month period under review but a rise of more than 3½ percent from its August lows. The relative strength of the franc enabled the Bank of France

to acquire sufficient marks in the market to reimburse in advance the main part of its very short-term obligations to FECOM stemming from earlier exchange market intervention in 1981. The outstanding amount was fully repaid by early January in ECUs, foreign currency, and special drawing rights. By end-January, France's foreign exchange reserves stood at \$18.3 billion. At this level, France's foreign exchange reserves were \$4.3 billion lower over the six-month period under review, in part reflecting these repayments as well as the revaluation losses of gold and dollar swaps against ECUs done with FECOM.

Italian lira

At the beginning of August the Italian lira had fallen against the strongly rising dollar to stand at LIT 1,227.50. However, it was trading comfortably near the top of the EMS, holding its position firmly in relation to other European currencies following its earlier downward adjustment within the joint float. The Bank of Italy had recently taken advantage of the lira's position within the EMS to rebuild foreign currency reserves to a level of \$16.5 billion.

The relatively firm performance of the lira at that time reflected sizable tourist inflows which offset the adverse impact of Italy's deteriorating terms of trade following the sharp increase in dollar prices for energy and other products as well as a weakening of demand in Italy's principal export markets. In addition, a tight control on liquidity and credit at home helped shield the lira from high interest rates abroad. The Bank of Italy, as part of its continuing struggle against inflation, had tightened monetary policy progressively by widening the scope of its ceilings on bank lending, raising reserve requirements, and hiking its discount rate to 19 percent. In addition, the monetary authorities were changing their procedures for issuing Treasury bills so that the Bank of Italy could vary its purchases of bills according to its assessment of domestic liquidity needs rather than buy all unsold Treasury bills at auction. Moreover, a deposit scheme had been imposed in May for a four-month period on purchases of foreign exchange for imports. This scheme, which required the placement with the Bank of Italy for ninety days of a noninterest-bearing lira deposit equal to 30 percent of the exchange transaction, had the effect of increasing the cost of payments in foreign currency as well as cutting into credit available for domestic purposes.

Nevertheless, there were continuing problems. Inflation was still running at a rate of 18 percent, considerably higher than most of Italy's trading partners. The public-sector debt had continued to exceed expectations despite persistent attempts at expenditure control. A collapse in the stock market had seriously

threatened the authorities' long-standing efforts to rebuild the financial structure of Italy's industrial sector. Evidence then available indicated that the domestic economy was weak, with industrial production still declining. The terms of trade were falling, as the U.S. dollar continued to climb in the exchanges and the traditional surplus on service income was contracting because of growing international debt service.

To deal with these problems, a new coalition government led by Republican Giovanni Spadolini announced that it would not rely on any further sharp contraction of economic activity to curb inflation. Instead, it would seek to contain inflationary pressures through a series of negotiations with business, labor, and various political interests aimed foremost at adjusting Italy's wage indexation system, the *scala mobile*. For the first time, two of the three major labor unions indicated a willingness to negotiate limited adjustments to the system. Furthermore, proposals were put forth for "receding targets" and "norms" for prices, wages, and public utility rates. At the same time, the government decided to extend the four-month-old import deposit scheme until end-February 1982. In an agreement with the European Community, however, it announced a phased reduction of the proportion of foreign exchange purchases held in noninterest-bearing deposits and increased somewhat the products exempted from the deposit requirement.

During August-September, the lira remained firm within the joint float even as seasonal tourist inflows tapered off. Italy's trade balance was beginning to improve, as export volumes picked up in response to the earlier devaluation and as softness in the domestic economy held import volumes down. Although the weakness of the EMS bloc had pushed the lira to a new record low of LIT 1,268.50 against the dollar on August 10, the Bank of Italy was able to purchase sizable amounts of dollars to rebuild its reserve position through early September. These purchases were reflected in the \$1.0 billion increase in foreign currency reserves over the two months.

Late in September the lira dropped from the middle to the bottom of the joint float. Rumors began to circulate in the market that an EMS realignment would be broad enough to include the lira, whereas previously only a limited adjustment focusing on other currencies was thought likely. New estimates, putting the public-sector borrowing requirement as large as 12.5 percent of gross domestic product, also generated concern that the escalating deficit would undermine the efforts to curb inflation. As Italian importers moved to accelerate foreign currency purchases, sizable intervention by the Bank of Italy was required to steady the rate.

On October 5 the lira was, in fact, devalued along with the French franc by 3 percent against the currencies whose official parities remained unchanged and, in effect, by 8½ percent against the German mark and Dutch guilder. In public statements after the realignment, the Italian government stressed that it had not taken the initiative for the change and that the effect of the revaluation of the mark versus the lira, while insufficient to reestablish the competitive position of Italian exports to West Germany, would make German exports to Italy more expensive and thereby add to Italian inflation in the short run.

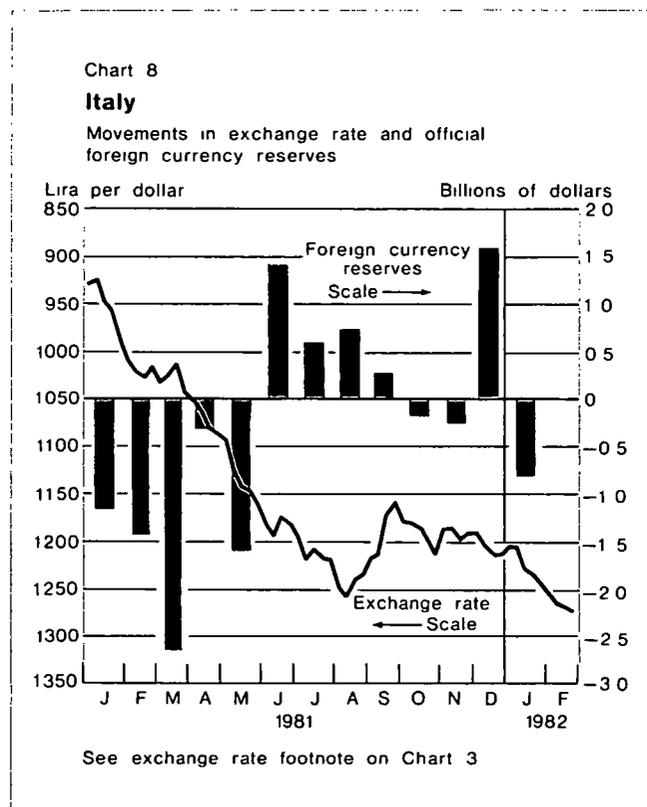
After the EMS realignment and through end-November the lira, although generally trading around the middle of the EMS band, firmed against the dollar. Italian interest rates remained high while those in other centers were generally declining so that favorable interest rate differentials for the lira widened against most currencies. Concern remained, however, that the new government would not win quick agreement from unions and business on approaches to reduce price and wage pressures. Similarly, in November a record rise in the *scala mobile* underscored the risk that the gains in international competitiveness resulting from

the two devaluations would be quickly eroded by inflation. Thus, at times the lira came on offer and the Bank of Italy promptly intervened to resist declines in the rate, as reflected in the two-month drop of \$469 million in foreign currency reserves.

Beginning in late December and continuing through the end of January, the lira firmed to trade at or near the top of the EMS, even though it fell back in relation to the U.S. dollar along with other currencies in the joint float. The Italian trade and current accounts had made considerable and sustained improvement. Export and import volumes, as well as service income, were responding favorably to the depreciation of the lira, declining real incomes in Italy, and inventory liquidation. Moreover, long-term capital continued to flow into Italy, mainly in the form of Eurodollar borrowings, as credit availability at home remained tight. To reinforce the slowdown in inflation under way, the Bank of Italy extended in late December the 1981 ceilings on growth of bank lending until the end of 1982. These ceilings were extremely restrictive in that they required a reduction of lending in real terms. Nevertheless, the lira came on offer on occasion, for example, when a bunching of foreign currency purchases entered the market following reductions in the proportion of transactions covered by the import deposit scheme. But intervention by the Bank of Italy helped the lira remain near the top of the EMS. By end-January the lira was trading at LIT 1,250.00 against the dollar, up 1½ percent from its August lows. However, over the six-month period under review, the lira declined 1¼ percent against the dollar and 7¼ percent against the mark, in part reflecting the results of the October EMS realignment. Meanwhile, Italy's foreign exchange reserves advanced \$1.3 billion over the period to stand at \$17.8 billion at end-January.

European Monetary System

The persistence of serious recession and high inflation provoked major policy debates in most countries in the EMS over the summer of 1981. Complaints intensified that high U.S. interest rates were exacerbating the already difficult process of adjustment by forcing a choice between accepting the inflationary consequences of depreciation of their currencies against the rising dollar or by raising interest rates in defense of home currencies and accepting a loss in economic output. Domestically, pressures built up for a relaxation in monetary policy, for fiscal expansion—through some combination of increased expenditures and tax cuts—or otherwise for a change in policy emphasis. In some countries, such as Germany, the commitment to restrictive policies already in place remained firm. In other nations, including Belgium and the Netherlands,



the debate made it difficult for newly elected legislatures to reach agreement on a ruling government or on a common program. In France there was an explicit shift in strategy, under new leadership elected in the spring, in favor of reducing unemployment through domestic stimulus and specific job-creating measures.

In the exchange markets, expectations intensified during the summer and early autumn that divergent policies and economic trends among participating EMS countries—particularly Germany and France—would force a realignment of the joint float. These expectations gained strength, particularly after the turnaround of the dollar in August, since market participants felt that tensions within the joint float would more readily show through once there was greater scope for the mark to rise in the exchanges. In the event, large speculative flows emerged, imposing major strains on the joint float arrangement. To contain the selling pressures, the monetary authorities in many countries raised domestic interest rates. Moreover, EMS central banks intervened heavily during August and September to keep their currencies within agreed limits. In contrast to the spring, the intervention largely took the form of sales of dollars rather than EMS currencies. Then, on October 5 the EMS currencies were realigned with the German mark and Dutch guilder each revalued 5½ percent and the French franc and the Italian lira each devalued 3 percent in relation to the Belgian franc, Danish krone, and the Irish pound whose bilateral central rates against each other remained unchanged.

The new exchange rate structure and the lessening of strains within the EMS provided more countries than previously with the scope to begin lowering interest rates and thereby provide some monetary stimulus to their economies. France and Denmark permitted money market rates to ease, while Germany and the Netherlands lowered official lending rates in the October-December period. However, the reduction of European interest rates lagged behind the decline of rates in the United States and partly for this reason EMS currencies advanced against the dollar by as much as 11 to 16 percent from their August lows. In December when U.S. interest rates moved higher, the currencies of the EMS started to decline against the rising dollar in the exchanges. Although there were rather wide exchange rate fluctuations against the dollar, the configuration of currencies within the EMS remained comparatively stable.

The French franc, which moved to the top of the band immediately after the realignment, was soon joined by the Dutch guilder in the upper part of the EMS. The guilder was supported by a current account surplus and improving inflation prospects in the Neth-

erlands. From a deficit in 1980, the current account moved to a surplus of about NG 7 billion last year, with further improvement expected this year. The turnaround in the current account reflected delayed increases in the price of natural gas exports and the effect on imports of weak domestic investment and consumer demand. In addition, direct incomes policies pursued by the authorities in 1980 and 1981 improved competitiveness, with labor costs per unit of output lagging behind those of most other countries. Also contributing to the guilder's strength in the EMS was the formation of a government in the autumn after many false starts since the general elections in May. The government was pledged to a program of reducing the fiscal deficit as a proportion of GNP, while also directing part of the country's substantial gas revenues to specific employment-creating projects.

Even though Denmark in contrast to the Netherlands was running a current account deficit, the Danish krone also traded firmly in the upper portion of the joint float. Gains in export market shares and the depressed level of imports supported the krone by narrowing Denmark's current account deficit over the course of 1981. The central bank also made sizable foreign currency payments on behalf of the government from official reserves, thereby helping maintain balance in the exchange market.

Trading around the middle of the EMS band was the Italian lira, bolstered by a contraction in Italy's current account deficit and a tight monetary policy which induced long-term capital to flow in from abroad. Meanwhile, the Irish pound tended to fluctuate somewhat below the middle of the joint float even as Irish domestic interest rates rose significantly. Although conversions of private- and public-sector foreign borrowings helped underpin the pound, the inflows of capital had difficulty keeping pace with the widening of the current account deficit, as a recovery in stock building and fixed investment from earlier depressed levels began to draw in imports.

The German mark, after having initially moved to the floor of the EMS following the October realignment, remained near the bottom of the joint float through end-1981. Accordingly, EMS central banks were able to purchase marks in the exchanges to cover liabilities incurred earlier in the year to FECOM. Together with the mark at the bottom of the EMS was the Belgian franc, pushed lower by concerns over Belgium's large and protracted budget and current account deficits. After elections in November, expectations built up that a downward adjustment of the franc within the EMS would occur. As selling pressures intensified in late November-early December, the Belgian National Bank supported the franc at the

floor of the 2¼ percent band through increasingly heavy sales of foreign currency. The authorities also raised the discount rate and the Lombard rate each by 2 percentage points to 15 percent and 17 percent, respectively, effective December 11 and enforced other measures making it prohibitively expensive for non-residents to speculate against the franc. Then, over the December 13-14 weekend, a new government was formed, pledged to restrain wage increases under the wage indexation system and to curtail the budget deficit. With the new government providing grounds for a more effective approach than previously to reducing government expenditures and lowering the costs of industry, market sentiment toward the Belgian franc improved.

After the new year, as the currency bloc declined against the dollar, the configuration of currencies within the EMS shifted somewhat, but without imposing new strains on the joint-float mechanism itself. As before, the Dutch guilder and the French franc remained strong within the joint float, and the authorities in both countries were able to lower interest rates in line with reductions in Germany. The Italian lira also traded at the top of the band as the authorities kept interest rates high. The Danish krone slipped lower in the middle of the band in response to projections of a widening in Denmark's current account deficit in 1982, and the authorities, unable to take advantage of the tendency for major European interest rates to come down, tightened money market conditions instead.

The German mark moved higher in the joint float even as the Bundesbank, acting to stimulate domestic demand, lowered on January 21 the special Lombard rate for the third time in six months. As the mark moved higher and as debate within Ireland over economic policy intensified, the Irish pound came under modest pressure and moved into the lower half of the EMS band. For its part, the Belgian franc traded steadily at the bottom of the EMS and the authorities cut the discount rate effective January 7 by 1 percentage point to 14 percent and the Lombard rate by 2 percentage points to 15 percent. The authorities did not, however, further reduce lending rates when the Bundesbank acted on January 21 to cut its official lending rate. By the end of January the EMS currencies had relinquished much of the gains recorded against the dollar in the autumn months to end the six-month period about 1½ percent to 10¼ percent higher against the U.S. currency from their August lows.

Canadian dollar

The Canadian dollar was heavily on offer in mid-1981, dropping on August 4 to a fifty-year low of Can.\$1.2445 (U S \$ 8035) The decline reflected market concerns

over the balance-of-payments implications of Canadian energy policy, constitutional issues, and persistent inflation.

The main focus of exchange market attention was Canadian energy policy announced in autumn 1980, especially the establishment of incentives for exploration and development of domestic energy which favor Canadian ownership, and an ensuing dispute between the federal government and Alberta over energy pricing and taxation. By mid-1981, the "Canadianization" policy had stimulated sales of foreign-owned energy companies and outflows of capital. Moreover, the policy was seen as threatening the inflows of investment capital needed to offset the traditional current account deficit and to provide capital required to develop Canadian energy reserves and other economic resources. Also, to press their position in the dispute with the federal government, the provincial authorities in Alberta had cut oil production temporarily within the province, increasing Canada's short-term dependence on imported crude oil.

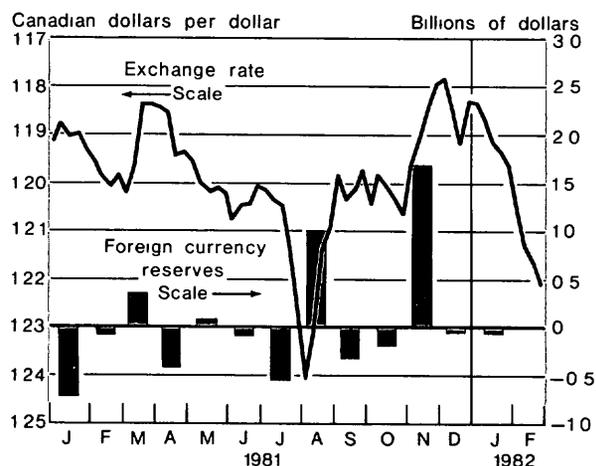
Other factors beyond the energy problems weighed on market sentiment in early August. Strong upward pressure on Canadian prices and wage costs had continued through the first half of 1981 in contrast to the United States where improvement on the inflation front had begun to appear. The move to "patriate" the Canadian constitution by the federal government led to legal challenges by provincial governments at a time when relations were already strained by the energy issues. Earlier in the summer, the traditional interest rate differentials in favor of the Canadian currency nearly disappeared at times when short-term U.S. rates climbed sharply.

Against this background, the Canadian dollar had become increasingly vulnerable, dropping sharply at the end of July and the first week of August. The authorities took several actions in response. The Bank of Canada intervened heavily to support the rate and, by end-July, Canadian foreign currency reserves had declined to \$748 million. It also drew \$700 million in July and \$500 million in August under the \$3.5 billion standby facility with domestic chartered banks to replenish reserves. At the end of August total borrowings under the facility stood at \$1.5 billion. Beginning in late July, the Bank of Canada aggressively pushed up interest rates. In roughly three weeks, short-term rates jumped by about 3 percentage points, restoring substantial interest rate differentials in favor of Canadian assets by early August. In addition, the Canadian Ministry of Finance asked commercial banks to reduce their lending to corporations for purposes of financing buyouts involving foreign currency conversions.

In the wake of these actions, the Canadian dollar re-

Chart 9
Canada

Movements in exchange rate and official foreign currency reserves



See exchange rate footnote on Chart 3

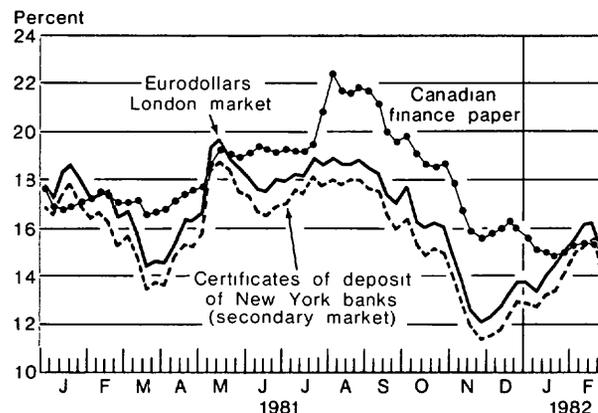
bounded in the exchanges. Also during August, expectations developed that a compromise would soon be reached between the federal and provincial governments on the troublesome issues of pricing, taxation, and revenue sharing in the energy field. On September 1, an agreement was in fact announced which provided for the rapid move of domestic oil prices toward world market levels, helping alleviate exchange market concern that the government's policy would limit future energy development. With agreement now reached, chances increased that several major oil exploration projects that had been suspended in earlier months would be resumed. Also, Alberta moved to restore oil production cutbacks, easing Canadian needs for imported crude. A compromise on revenue sharing was also achieved, providing for increases in federal revenues. Under these circumstances, and with the U.S. dollar generally in decline, the Canadian dollar recovered substantially after mid-August to Can. \$1.1929 by September 3. The Bank of Canada was a net purchaser of U.S. dollars during August-September and repaid \$700 million of the \$1.5 billion in credits drawn during the summer.

The Canadian dollar then steadied to trade in a fairly narrow range, easing back slightly on balance through the remainder of September and October. The Bank of Canada, stressing its view that reduction of inflation was crucial to a return to healthy economic growth and external balance, resisted declines in Ca-

Chart 10

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

Three-month maturities*



* Weekly averages of daily rates

nadian interest rates as large as those then developing in the United States. Nevertheless, a sudden increase in unemployment in September and other signs of developing economic slack led to questions in the market as to how much longer the authorities could maintain their policies of restraint even though there was no evidence of a slowing of inflation. Moreover, the Canadian trade surplus had weakened through the summer, pushing the current account more deeply into deficit. The Bank of Canada was a net purchaser of U.S. dollars during these two months. It paid down \$200 million in borrowings from domestic banks, and by the end of October foreign currency reserves stood at \$1,270 million.

During November, the Canadian dollar climbed about 2 percent as the U.S. dollar declined against most major currencies and as several factors shifted in favor of the Canadian dollar. The Bank of Canada responded to the continued decline in U.S. interest rates by limiting the fall in Canadian interest rates. As a result, interest rate differentials favorable to the Canadian dollar widened, spurring borrowings abroad especially by public authorities. As the exchange rate rose, borrowers moved to accelerate conversions of foreign currency. The government also introduced a generally restrictive 1982 federal budget to Parliament. The exchange market was impressed that monetary and fiscal policy in Canada continued to be directed toward control of entrenched inflationary pres-

tures At about the same time, new oil and gas finds in the Beaufort Sea seemed to improve the chances of achieving the Canadian goal of energy self-sufficiency by 1990. Also, Prime Minister Trudeau announced in early November a compromise agreement, with all provinces except Quebec approving "patriation" of the Canadian constitution

By November 30, the Canadian dollar had reached Can.\$1.1761 (U.S. \$0.8503), its highest level in over a year. With the Canadian dollar strengthening sharply, the Bank of Canada bought U.S. dollars in the exchange markets. During November, the government finalized a \$300 million medium-term loan from the Saudi Arabian Monetary Agency. In total, Canadian foreign currency reserves rose \$1.75 billion during the month and stood at \$3.0 billion at the month end. In November and December the Bank of Canada repaid the final amounts borrowed to finance intervention during the summer.

In December and January, with U.S. interest rates rising, concern developed that Canadian interest rates would not increase sufficiently to maintain interest rate differentials. Successive monthly figures on unemployment confirmed the weakness of the Canadian econ-

omy and triggered a debate over fiscal and monetary policy. The restrictive tone of the 1982 budget had generated substantial domestic criticism, and many analysts were predicting that the Canadian economy had by then entered its worst recession of the postwar period. Yet inflation had not decelerated and wage settlements continued above 12 percent at a time when the United States was showing progress in both of these areas. In the event, Canadian interest rates drifted slightly lower, and favorable differentials, which at their peak had been over 5 percentage points, nearly evaporated by the end of January. Capital inflows tapered off and the Canadian dollar dropped back to Can.\$1.1988.

Thus, by the end of January, the Canadian dollar was trading about 2 percent below its end-November highs but still nearly 3 percent above its lows reached just after the opening of the period. The Bank of Canada was a net seller of U.S. dollars, so that Canadian foreign currency reserves declined in January to stand at \$2.9 billion. Even so, over the six-month period, Canadian foreign currency reserves increased \$2.2 billion and all drawings on the standby facility with domestic chartered banks were repaid.