

# Treasury and Federal Reserve Foreign Exchange Operations

The dollar was generally strong during the February through July period of this review. It climbed irregularly through the first half of the year, reaching by early July levels against several currencies not seen in many years. Although the dollar eased back from its highs during the last weeks of July, it closed on balance between 4 and 16 percent higher against major foreign currencies.

For much of the period, market participants focused on monetary policy developments here and abroad, though the movement of interest rate differentials had less impact on dollar exchange rates than in many earlier periods. In the United States, money growth was strong even as the economy contracted and an unexpectedly large bulge in the monetary aggregates in January pushed M-1 growth above its targeted range. Market participants anticipated that the Federal Reserve would tighten up on the availability of banks' reserves, thereby restraining the growth of money and credit even though concern was mounting over recession in the United States. Also, the prospect of continued large U.S. fiscal deficits, even after the economy was projected to emerge from recession, put pressures on the financial markets. Abroad, monetary authorities faced even more prolonged weakness of their domestic economies than experienced in the United States as well

as persistent inflationary pressures and structurally large fiscal deficits. Pressures to stimulate demand and to lower record or near-record rates of unemployment were intense. Expectations developed in the market that foreign authorities not only would be reluctant to raise their interest rates but would also take advantage of opportunities to relax their financial policies, at least in some measure.

In general, interest rate developments tended to confirm these expectations through the first half of the year. With the Federal Reserve restraining the growth of bank reserves, short-term U.S. interest rates were bid up sharply in March and again in June in anticipation of a renewed expansion in the monetary aggregates. When dollar interest rates rose, interest rates for assets denominated in other currencies barely increased. On those occasions when the demand for money and credit subsided and U.S. interest rates eased, such as in late February and late April-early May, interest rates abroad also tended to soften and some foreign central banks reduced official lending rates. Moreover, in view of improvements in inflation and balance-of-payments performances, some countries, notably Germany and the Netherlands, were prepared at times to see a lowering in their domestic interest rates even without comparable declines in U.S. interest rates. As a result, there was a tendency through June for actual and expected interest rate differentials favoring the dollar to widen when U.S. interest rates moved higher by more than the differentials narrowed when U.S. rates moved lower.

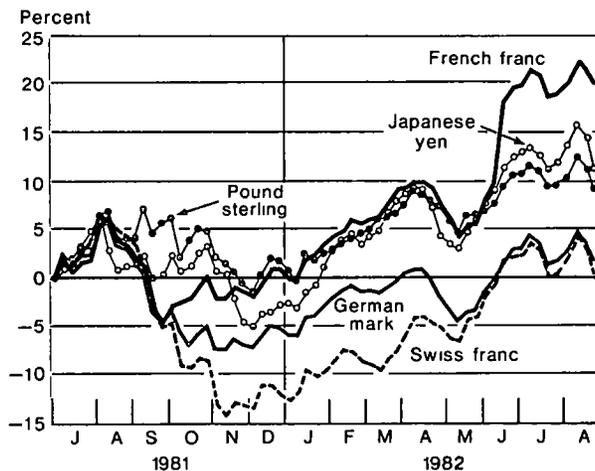
Table 1

**Federal Reserve Reciprocal Currency Arrangements**

In millions of dollars

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

Chart 1

**The Dollar Against Selected Foreign Currencies**

Meanwhile, several other factors supported the demand for dollars. Underpinning the dollar was growing evidence that inflation was receding in the United States. To be sure, market participants had concerns about the stance of fiscal policy, including fears that pressures would arise on the Federal Reserve to relax monetary policy prematurely and thereby dissipate the hard-won gains in the anti-inflation fight. But, for the time being, market participants were generally impressed by the commitment to reduce the role of government in the private sector, by the steadfastness of the U.S. monetary authorities in sticking with restrictive policies, and by the results achieved so far. Wage settlements proved surprisingly moderate, with some unions accepting pay cuts to prevent or cushion declines in employment, and many union settlements actually suspended or otherwise modified even the principle of cost-of-living increases. Forecasters anticipated that, even if food and energy prices were to increase again, the overall U.S. inflation rate would decelerate substantially for the year as a whole. Inflation in this country was therefore moving well below that of most U.S. trading partners and was rapidly converging toward the performance of traditionally "low inflation" countries, such as Germany, Japan, and Switzerland.

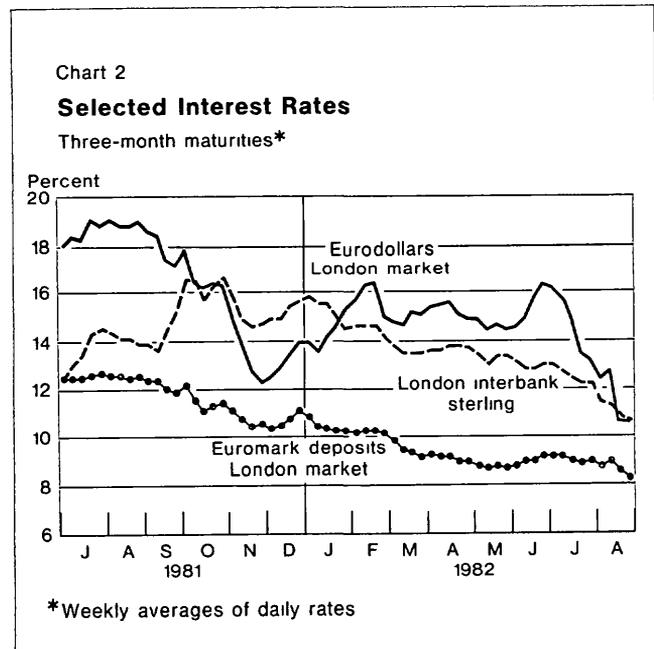
Also, the deepening international recession, an abrupt stagnation in the volume of world trade, and a buildup of pressures for protectionist measures affected the United States less adversely than many other countries. Confounding expectations of a swing into deficit, this country's current account remained in surplus. Import volumes, particularly of crude oil, declined sharply in response to the recession in the economy and continued reaction to previous oil price increases, while agricultural exports and the performance of services, most notably net investment income earnings, remained strong. Also, a softening of most commodities prices and the strengthening of the dollar led to an improvement in the terms of trade which helped hold down the total cost of imports. At the same time, further improvements in the current accounts of Germany and Japan were stalled by the weakening global demand for manufactured goods, as well as the slowdown of previously buoyant markets in Asia and in Organization of Petroleum Exporting Countries (OPEC) member states. Indeed, the more pessimistic outlook for growth of world trade heightened competitive pressures particularly for those countries in which trade is a major component of gross national product (GNP).

In addition, the United States continued to prove attractive to foreign investors. For one thing, economic policies of the United States embodied a clear anti-regulatory posture and a strong commitment to private

enterprise which, combined with a relatively flexible structure of management-worker relations, served as an inducement to foreign direct investment in the United States. The domestic political and economic climate in many other parts of the world, including continental Europe and Canada, was often more uncertain for business and financial investment. In the first six months of 1982, foreign direct investment in the United States continued to exceed U.S. direct investment abroad. For another, the United States increasingly came to be viewed as a safe haven for investors seeking outlets for funds at a time of mounting international insecurity. Instability in Eastern Europe and open hostilities in the Middle East were thought to have more serious economic and political implications for many countries abroad than for the United States. These international tensions posed difficult policy issues for authorities already grappling with divisive domestic problems, underlining in the market's view the difficulties foreign leaders confronted in dealing with the numerous challenges before them. These uncertainties therefore prompted sizable net flows of long-term portfolio capital into the United States that, to some extent, had their counterpart in outflows from Germany and Japan.

Several of the factors underpinning the dollar coalesced in early June. Hostilities in Lebanon intensified, other developments in the Middle East were temporarily unsettling, the financial markets in the United States were wary of a renewed bulge in the monetary aggregates, and market speculation built up that competitive pressures would soon force a realignment of the European Monetary System (EMS). In the event, the EMS was realigned over the June 12-13 weekend, following an earlier adjustment of parities in February. This time-intense bidding pushed the dollar up, not only against the currencies that had been devalued German mark which had just been revalued and against in the joint float, but also and unexpectedly against the non-EMS currencies as well. With the dollar rising sharply in unsettled markets, the U.S. authorities intervened on June 14 in an effort to restore orderly trading conditions. Operating through the Trading Desk, they bought \$21 million equivalent of German marks and \$9 million equivalent of Japanese yen. This operation provided resistance to the rapid run-up in dollar rates and helped restore more orderly trading conditions.

In July dollar interest rates dropped sharply. The domestic economy was proving far weaker than expected, with worrisome declines in production and increases in unemployment. Though corporate balance sheets remained generally strained by the burden of short-term debt, overall credit demands slackened in response to the continuing stagnation in demand and



output. Moreover, the growth of the monetary aggregates, for the first time in 1982, slowed sufficiently to bring M-1 into target range and, with short-term interest rates softening, the Federal Reserve twice announced cuts in its discount rate of ½ percentage point from 12 to 11 percent by end-July. Abroad, interest rates did not decline by nearly as much. The process of winding down inflationary pressures had stalled. Although economic conditions generally had deteriorated further as the recession deepened, only in a few countries such as Great Britain and France did the authorities continue the earlier trend toward an easing of monetary policy, and short-term interest rates in most foreign industrial countries were either unchanged or moved somewhat higher. Thus, interest rate differentials narrowed dramatically, for example, from 7½ to 4 percentage points *vis-à-vis* the German mark and from 9½ to 5¾ percentage points against the Japanese yen.

The dollar weakened only slightly, however. Market participants recognized that there continued to be important reasons other than interest rates for buying and holding dollars. In addition, by this time market participants were shoring up their liquidity positions in dollars as a precaution against any funding difficulties that might arise in the wake of the deteriorating financial positions of major private and public-sector borrowers. Some problems had arisen affecting U.S. banks and other financial concerns, as in the cases of Drysdale Securities and Penn Square Bank, as well as private institutions abroad. Still other difficulties re-

lated to the sovereign debts of various countries including major borrowers in Eastern Europe and Latin America. Among market participants the feeling prevailed that, while individual U.S. institutions were vulnerable to serious financial strains, they were as a group in a better position to cope with international financial pressures than nondollar-based institutions.

By end-July the dollar was off the highest levels of the period. Compared with end-January levels, it was still about 4½ percent higher on balance against the Canadian dollar and the German mark, nearly 7 percent higher against pound sterling, and about 11 percent higher against the Japanese yen and the Swiss franc. Against the currencies within the EMS that had been devalued, the dollar rose on balance between 9 percent and 16 percent. On a trade-weighted basis the dollar rose nearly 10 percent.

During the period, the Bank of Mexico requested and was granted three drawings on its swap line under the Federal Reserve's reciprocal currency arrangements. The drawings were made at end-April, end-June, and end-July, each for one-day maturity.

On May 12 and July 26 the U.S. Treasury redeemed further maturing German mark-denominated securities equivalent to \$1,011.6 million. After these redemptions, the Treasury had outstanding \$3,069.1 million equivalent of the foreign currency notes, public series, which had been issued in the German and Swiss markets with the cooperation of the respective authorities in connection with the dollar-support program of November 1978. Of the notes outstanding as of July 31, 1982, a total of \$2,610.6 million was denominated in German marks and \$458.5 million was denominated in Swiss francs. The maturity dates for those securities range between September 1, 1982 and July 26, 1983.

In the seven months through July 1982, the Federal Reserve had no gains or losses on its foreign currency transactions. The Exchange Stabilization Fund (ESF) gained \$15.7 million net in connection with sales of foreign currencies to the Treasury general account which the Treasury used to finance interest and principal payments on foreign currency-denominated securities. The Treasury general account gained \$133.1 million net, reflecting \$137.3 million of profits on the redemption of German mark-denominated securities partially offset by \$4.2 million of losses as a result of annual renewals at current market rates of the agreement to warehouse with the Federal Reserve Swiss-franc proceeds of Treasury securities. As of July 31, 1982, valuation losses on outstanding balances were \$617.4 million for the Federal Reserve and \$1,382.2 million for the ESF. The Treasury general account had valuation gains of \$722.2 million related to outstanding issues of securities denominated in foreign currencies.

### **German mark**

By late 1981-early 1982 Germany's economic situation had improved in major respects. Germany's export sector was enjoying boom conditions aided by improved competitiveness, which partly reflected the mark's prolonged depreciation against the dollar, and by exceptional buoyancy in OPEC markets. Meanwhile, import demand was sluggish, reflecting stagnation in the domestic economy. This combination generated a surplus in the current account in the fourth quarter of 1981 and, for the year as a whole, produced a dramatic narrowing of the deficit from DM 30 billion to DM 17 billion. Inflation, after peaking at an annual rate of 6.7 percent in October 1981, slowed markedly in response to softer international commodities prices, a flattening-out of unit labor costs, and the impact of economic slack on wage-price behavior. Greater progress by Germany than by most other countries in gaining balance-of-payments equilibrium and in the fight against inflation had for some time kept the mark strong within the EMS. Therefore, even as the German currency declined against the dollar to trade around DM 2.3420 at end-January, it tended to stabilize in effective terms. The authorities felt able to begin a cautious easing of monetary policy without incurring highly adverse exchange rate consequences and, beginning October 1981, lowered the Lombard rate three times from 12 percent to 10 percent by late January. Looking ahead, many exchange market participants expected the authorities would gain more room for maneuver, particularly once U.S. interest rates dropped from their high levels and large interest differentials adverse to the mark began to narrow.

Despite these achievements, however, major economic problems persisted and were reflected to a large extent in the weak performance of the capital account. Domestically, nonwage labor costs remained high and the role of the government in the economy expanded despite efforts to consolidate the fiscal deficit. These trends were thought to imply a loss of private initiative and decision making. They also generated worries in the private sector about Germany's medium-term growth prospects in view of the potential need for future increases in taxes and the growing burden of social benefit programs. Internationally, there were heightened tensions in Poland, especially following the imposition of martial law, a general deterioration in East-West relations, and renewed hostilities in the Middle East as well as in some of the world's other trouble spots. Many of these developments generated important disagreements at the policy level and drew attention to divisions within the ruling coalition government. In an environment of political and economic uncertainty, large net flows of private direct investment and

long-term portfolio capital moved from Germany to other countries, particularly the United States. The pressure of long-term capital outflows intensified when, contrary to expectations, US money growth accelerated early in the year even as the US domestic economy was contracting. As short-term US interest rates moved higher, opening up interest differentials adverse to the mark to about 6½ percentage points by mid-February, capital flowed out of Germany more heavily than before.

Meanwhile, Germany's current account performance in January and February suffered a serious setback. The services balance reverted to sizable deficit, partly as the result of growing investment income outflows and mounting interest payments on public-sector borrowings. Also, the trade surplus narrowed substantially, underscoring the many risks to sustained, rapid export growth which had begun to develop. There were constraints presented by the financing problems of Eastern European countries, the decline of the OPEC surplus and oil revenues placed limits on previously expanding markets, and many large industrial economies were becoming locked into a pattern of domestic stagnation. By comparison, in the United States, recession-induced declines in import demand kept the current account in surplus when a deficit was expected, and forecasters began to assess the outlook for U.S. balance-of-payments performance more favorably. In view of the unexpected deterioration relative to the United States in both Germany's current and long-term private capital accounts, the mark declined against the dollar, moving lower almost without interruption through mid-April.

Within the EMS, however, the mark remained firm. In fact, following the realignment of the joint float on February 21, in which the central rates of the Belgian franc and the Danish krone were adjusted downward by 8½ and 3 percent, respectively, the mark was quick to move to the top of the newly aligned band. Germany's superior inflation performance in relation to other EMS member states and the authorities' established policy record of combating inflationary pressures brought the mark into renewed demand, as traders and investors accelerated the shift of short-term funds into the mark at the expense of other EMS currencies whose prospects were less promising. The renewed strength of the mark within the EMS served to mitigate conflicting pressures on domestic monetary and exchange rate policies. To be sure, outflows of long-term capital from Germany to the United States showed no signs of abating and the mark continued to weaken against the dollar. But, with the German currency firm within the EMS, the effective exchange rate held steady, thereby tempering the rise

in Germany's import prices. In addition, oil and other dollar-denominated commodities that loomed large in Germany's import bill and that had contributed previously to the phenomenon of imported inflation were declining in price. Furthermore, the outlook for domestically generated price rises improved when, early in the wage round, the pacesetter metals industry agreed on annual wage increases of only 4.2 percent, compared with about 5 percent a year earlier.

Altogether, these considerations provided greater insulation than before between developments in U.S. and German markets. The authorities were concerned, however, about the magnitude of the long-term outflows of funds. While resisting calls for the imposition of capital controls, the Bundesbank reached a new gentleman's agreement late in February, with large commercial banks limiting the size of individual foreign mark-denominated bond and note issues. On March 19

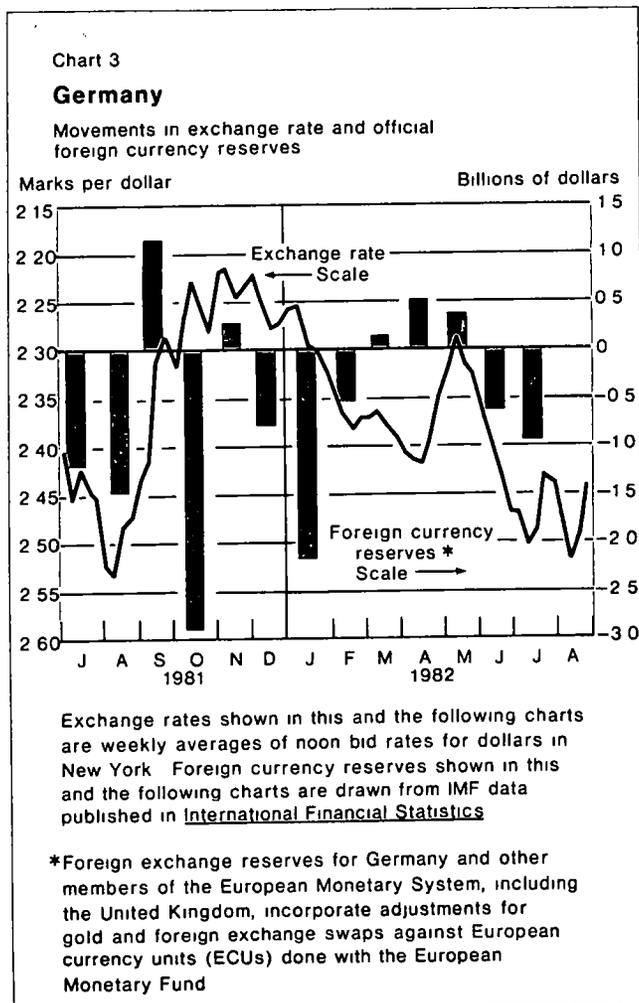


Table 2

### 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, 1982	1982 I	1982 II	1982 July	Outstanding July 31, 1982
Bank of Mexico .....	-0-	-0-	{ +800 0 -600 0	{ +700 0 -200 0	700 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, 1982	1982 I	1982 II	1982 July	Amount of commitments July 31, 1982
<b>Public series:</b>					
Germany . . . . .	3,622 3	-0-	-451 0	-560 6	2,610.6
Switzerland . . . . .	458 5	-0-	-0-	-0-	458 5
Total .....	4,080 8	-0-	-451 0	-560 6	3,069 1

Data are on a value-date basis

Because of rounding, figures may not add to totals

Table 4

### Net Profits (+) or 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 1982 . . . . .	-0-	+ 15 9	- 4 2
Second quarter 1982 . . . . .	-0-	+ 1 5	+ 78 5
July 1982 . . . . .	-0-	- 1 7	+ 58 8
Valuation profits and losses on outstanding assets and liabilities as of July 31, 1982 . . . . .	-617 4	-1,382 2	+722 2

Data are on a value-date basis

the central bank lowered the special Lombard rate  $\frac{1}{2}$  percentage point to  $9\frac{1}{2}$  percent. The Bundesbank also provided additional liquidity to the domestic markets but proceeded with considerable caution. The authorities feared that too abrupt or rapid an easing of monetary restrictiveness would undermine the progress achieved in reducing inflation and inflationary expectations. They also wished to avoid pushing the growth of central bank money beyond the top of the 4-7 percent annual growth target

The reduction of German interest rates was followed immediately by interest rate cuts in several other European centers, so that interest rate relationships within Europe were largely unchanged. By this time, interest differentials among EMS states were widely seen as inadequate compensation for divergent inflation prospects and performance, so that the pressure of large money flows into Germany persisted and kept the mark pinned to the top of a fully stretched EMS band. The Bundesbank and other EMS central banks absorbed part of the pressure through purchases of EMS currencies against the sale of marks. Meanwhile, unlike interest rates in Europe, those in the United States had begun to rise again, ahead of the anticipated bulge in money growth in April and against the background of large U.S. budget deficits overhanging the credit markets. In these circumstances, the mark continued to decline against the dollar, falling to DM 2.4225 by April 15, a drop of  $3\frac{1}{2}$  percent from late-January levels. The Bundesbank provided little intervention resistance to the mark's descent, partly not to aggravate strains within the EMS and partly because the authorities felt unable to provide through the mechanism of intervention a lasting and effective counterweight to the pressure of long-term capital outflows. Between end-January and end-March, Germany's foreign currency reserves declined only moderately from \$37.5 billion to \$37.1 billion.

After mid-April, market sentiment shifted for a time in favor of the mark, as traders reacted to Germany's record monthly trade surplus announced for March and to evidence of continued moderate pay settlements in the 1982 wage round. Moreover, U.S. interest rates turned suddenly downward as prolonged weakness of the U.S. economy encouraged expectations of a rapid unwinding of the April money bulge. Thus, the mark rose against the dollar in the exchanges. The Bundesbank, while welcoming the advance of the mark particularly for its favorable implications for inflation, remained concerned about the weakness of the domestic economy. Hopes for an improvement in domestic demand were disappointed by the continued slump in capital investment, the lack of consumer confidence, and the persistent rise in unemployment.

In these circumstances, the authorities acted further to lower domestic interest rates. On May 6 the Bundesbank closed the special Lombard facility and reintroduced regular Lombard credit at 9 percent,  $\frac{1}{2}$  percentage point lower than the special lending rate. Bundesbank President Poehl stated that the abolition of the special Lombard had symbolic meaning: it signified success in decoupling monetary policy in Germany from that of other countries and signaled generally easier credit conditions that would foster economic recovery. Following the reduction of the Lombard rate, German money market rates moved lower, but comparable U.S. rates declined even more, so that the adverse interest differential against the mark narrowed to  $5\frac{1}{2}$  percentage points. The mark thus continued to rise against the dollar and reached DM 2 2770 by mid-May, up 6 percent from the lows touched a month before.

However, the mark was unable to consolidate these gains, since again U.S. interest rates rebounded and market participants found reason to question the strength of the underlying fundamentals of the German economy. For example, Germany's trade surplus declined in April while the U.S. trade account registered impressive gains, raising new questions about the extent to which current account trends would benefit the mark. In addition, Germany's governing coalition was seen increasingly as threatened by protracted difficulties in reaching agreement on proposed spending cuts to reduce the 1983 federal budget deficit and financing requirement. Unsettling geopolitical developments, such as the Israeli invasion of Lebanon and the conflict between Iran and Iraq, were also thought to have more serious adverse consequences for Germany than for the United States and to a lesser extent the United Kingdom, considered less vulnerable to a disruption of internationally traded oil.

The mark's weakening tendency against the dollar contrasted with continued strength within the EMS, where speculation of another realignment kept the German currency in heavy demand throughout the spring against weaker currencies, particularly the French and the Belgian francs. In the event, shortly after the Versailles economic summit the EMS was again realigned. Over the June 12-13 weekend the mark and the Dutch guilder parties were adjusted upward by some 7 percent and 10 percent against the Italian lira and French franc, respectively, and  $4\frac{1}{4}$  percent against other participating currencies. That same weekend, international concerns, which for some time had supported the dollar in the exchanges, intensified with the death of King Khaled of Saudi Arabia and the extension of fighting in Lebanon among Israel, Syria, and the Palestine Liberation Organization

When trading resumed after the realignment on Monday, June 14, the mark emerged at the bottom of the newly aligned band and funds flowed as anticipated from the revalued EMS currencies into the currencies of the joint float that had been devalued. But a portion of the unwinding of long EMS currency positions was reflected in heavy bidding for dollars in unsettled trading conditions. The mark declined sharply and unexpectedly against the dollar first in Europe and then in New York. At this time the U.S. authorities intervened to purchase modest amounts of German marks, as well as Japanese yen. Operating on behalf of the Federal Reserve and the U.S. Treasury, the Desk acquired \$21 million equivalent of marks. It was publicly announced that the U.S. authorities had conducted some intervention, the first since March 1981, in accordance with stated U.S. policy of intervening to counter disorderly conditions. In subsequent days and weeks, talk spread in the market that concerted action was likely by the U.S., European, and Japanese authorities to halt the continuing run-up in dollar rates. While the European authorities did on occasion operate in a concerted fashion to restrain the decline of their currencies against the dollar, the intervention operations were relatively modest in amount. For their part the U.S. authorities did not again intervene during the period under review.

Between mid-June and mid-July the mark was pushed downward against the dollar, as exchange market participants grappled with several sources of concern that worked in the direction of further undermining confidence in the German currency. One such concern centered on the budget. Within the governing coalition, public disagreement over the persistence of large budgetary deficits was often intense and each party suffered heavy losses in local elections early in the summer. A compromise on the 1983 budget was finally reached in July, reducing the federal government's projected net borrowing by DM 6 billion to DM 28.5 billion. But, partly because the budget rested on economic growth assumptions which private analysts generally regarded as highly optimistic, many questioned whether the actual budget outcome would conform to the compromise.

Financial concerns, too, worked against the German currency. West German banks, of all Western banks, were the most heavily committed in Eastern Europe and therefore had the most to lose if Polish debt-rescheduling negotiations, which had already dragged on for months, failed to reach a successful conclusion. Unease about the risks to the German economy of its deep international involvement was also underscored by the U.S. decision to ban the sale of U.S. goods and technology, even if produced abroad under li-

cense, to the Soviet Union's gas pipeline project. Furthermore, the combination of restrictive monetary policy and slack demand generated in Germany, as in several other countries, liquidity strains in the private sector.

These various problems dragged the mark sharply lower, particularly as demands for dollar liquidity accelerated in late June-early July. At that time, banks bid aggressively in the money markets to lock in their funding to finance the heavy rollover of six-month credit coming due in the Euromarkets and to meet precautionary demands on the part of financial market participants laboring under the awareness of increased risk in international lending. On July 7 the mark dropped to as low as DM 2.52 in European trading, a decline of about 10½ percent from the high reached in May.

Subsequently, U.S. interest rates began to decline rapidly, narrowing the dollar's interest rate advantage over the mark. The growth of the U.S. monetary aggregates had slowed sufficiently to bring M-1 back into target range (for the first time in 1982) and, with short-term interest rates softening, the Federal Reserve twice announced cuts in its discount rate of ½ percentage point, thereby reducing the rate from 12 to 11 percent by end-July. But, even as interest differentials adverse to the mark narrowed to 4 percentage points, demand for the mark in the exchanges was muted. In part, this lack of enthusiasm reflected uncertainty in the exchange markets that the downtrend in U.S. interest rates would be sustained. Participants were mindful of frequent reversals in the past and focused on the threat of significantly higher interest rates posed by uncommonly large U.S. Government deficits projected for fiscal year 1983 and beyond. In addition, sentiment toward the mark remained adversely affected by the numerous challenges to German policy and leaders presented by financial, trade, and political problems and by worries that policies might not be adopted to deal with these problems effectively.

By midsummer the weakness of the mark against the dollar had become more of a constraint on the German authorities' policy options, even though on a trade-weighted effective basis the German currency remained steady. German policymakers hoped to lower domestic interest rates further to support the economy, which was stagnating far longer than expected. With foreign orders trending sharply downward and compounding persistently slack domestic demand, industrial production dropped sharply and unemployment climbed over 7 percent. But the authorities were reluctant to take action that would risk further undermining the mark in the exchanges. The nation's inflation rate, after decelerating to 5 percent year on year in March,

was headed higher, in part owing to the continuing weakness of the mark against the dollar and to administrative price increases. Moreover, the outflows of capital in the long-term sector—which reached nearly DM 13 billion in the first five months of the year—were being augmented by short-term outflows, as previous speculative inflows were for the most part unwound following the EMS realignment. There was concern lest these outflows gain momentum, particularly since the mark was trading at or near the bottom of the joint float and, following up on the February agreement with the commercial banks to limit the volume of individual mark Eurobond issues, the Bundesbank asked to be notified of any direct foreign credits of DM 50 million or more. At the same time, the authorities pointed to an erosion of confidence in the domestic bond markets where large financial requirements of the public sector appeared to hamper further reductions of long-term rates. For these reasons the Bundesbank did not further relax domestic monetary conditions as U.S. interest rates declined but rather left its credit policies unchanged at its Council meeting late in July.

At the end of July the mark was trading at DM 2.4430, up about 3 percent from its lows but down about 4¼ percent from end-January levels. Between April and July, Germany's foreign currency reserves were subject to diverse tendencies. At times, particularly in June, the Bundesbank was active in the market as a seller of dollars in support of the mark. The German authorities, along with others in the EMS, acted as sellers of marks to alleviate strains within the joint float. After the June realignment of the EMS, some of these mark sales were reversed. On balance, therefore, Germany's reserves showed little further change to stand at \$36.5 billion at end-July, down about \$1 billion over the six months under review. During the period, the U.S. Treasury paid off \$1,011.6 million equivalent of its German mark-denominated securities. These redemptions, which occurred on May 12 and July 26, left the Treasury with \$2,610.6 million equivalent of mark-denominated notes (public series) outstanding.

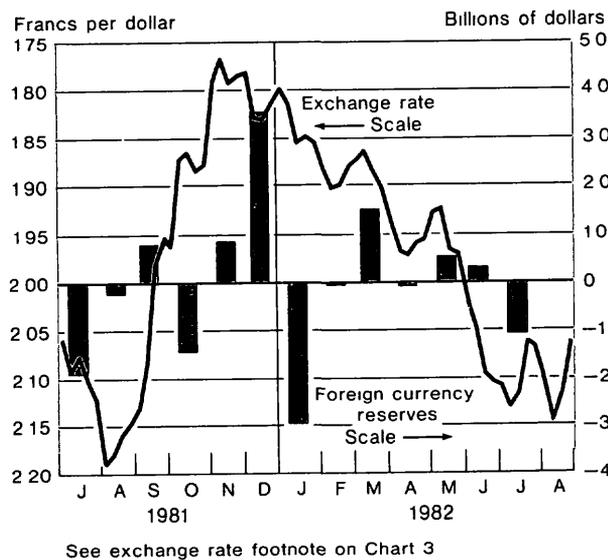
#### Swiss franc

Early in 1982 the Swiss economy, while lagging behind the downturn in demand and output in most industrialized countries, was showing clear signs of weakness. Domestic consumption was declining, while previously buoyant investment in plant and equipment leveled off and construction activity slackened in response to the higher cost of credit. The stagnation in the economy was cushioned to some extent by resilience in the export sector despite the strong apprecia-

Chart 4

#### Switzerland

Movements in exchange rate and official foreign currency reserves



tion of the franc, as export contracts received last year when foreign demand was stronger were filled. But the sluggishness of demand on the part of Switzerland's major customers, Germany in particular, coupled with the lagged effect of the rise in the franc, was expected to cause export volumes to stagnate in the months ahead. At the same time, inflation decelerated to about 6 percent at an annual rate from peaks of some 11 percent in the autumn. The improved price performance stemmed from the slowdown in domestic economic activity, a substantially tighter stance of monetary policy in 1981, and lower import costs—reflecting both the weakness of international commodities prices and the sharp rise of the franc on the exchanges.

Switzerland's encouraging progress on the inflation front, combined with its climate of political and social stability, made the franc an attractive asset, especially at a time when serious economic problems and political uncertainties undermined investor confidence in several other European currencies. Indeed, short-term funds flowed into the Swiss franc, keeping it relatively firm against other European currencies even as it weakened against the dollar. By end-January the franc was trading at SF 0.80 against the German mark, not far below its historical peaks, even as it had fallen back to SF 1.8680 against the dollar. In the weeks surrounding the late-February realignment of the EMS

joint float, these inflows intensified. The inflows, together with the demand for the franc arising from Switzerland's current account surplus, more than offset the impact of longer term, interest-sensitive capital outflows, as international borrowers took advantage of relatively lower interest rates in Switzerland than in most other industrial countries. As a result, the franc declined less rapidly than other currencies against the dollar in late February-early March to trade around SF 1.88 against the U.S. currency and as high as SF 0.7855 against the German mark.

With inflation moderating, the authorities hoped to maintain a relatively neutral monetary policy, pursuing the anti-inflation fight while at the same time providing sufficient liquidity to avoid exacerbating the developing weakness of the economy. Accordingly, the Swiss National Bank aimed to keep central bank money on its 3 percent targeted average growth for 1982. The authorities made use of foreign currency swaps to provide the domestic market with temporary liquidity, while also working in various ways to add liquidity on a permanent basis. Foreign currency swaps would necessarily remain the principal means of regulating liquidity in the short run. But, over the longer run, the authorities planned to expand open market operations in domestic assets. As the markets in Switzerland responded to the increase in liquidity, domestic interest rates in both the money and capital markets moved progressively lower, falling more rapidly than interest rates in other European centers. The Swiss National Bank confirmed this trend on March 19 by reducing the discount rate by  $\frac{1}{2}$  percentage point to  $5\frac{1}{2}$  percent. Almost immediately thereafter, four major Swiss banks cut their interest rates further on large time deposits.

The drop in Swiss interest rates was considerable, shifting out three-month interest differentials adverse to franc-denominated assets to  $3\frac{1}{2}$  percentage points against the German mark and  $9\frac{1}{2}$  percentage points against the dollar. Consequently, foreign official and corporate borrowers placed heavier demands on Switzerland's capital market and converted the proceeds of their Swiss franc-denominated borrowings in the exchanges. At the same time, market participants reportedly unwound speculative positions assumed earlier against weaker currencies within the EMS. The buildup of capital outflows was such that new foreign Swiss-franc bond issues in the first quarter of 1982 increased by 50 percent over the corresponding months of 1981. The pressure of these and other capital outflows offset demand for the franc arising from the current account surplus, which itself was proving unexpectedly large. Tourism receipts and investment income remained strong. Moreover, the traditional deficit on trade actu-

ally narrowed, principally reflecting the impact on imports of declining world oil prices and weakening domestic demand. But, in addition, exports slackened only moderately because exporters accepted declining profit margins to maintain market shares and because less price-sensitive, high-technology goods, which figure large in Switzerland's export basket, continued to find outlets in major foreign markets. Even so, exporters were thought to be facing the limits of their ability to compensate through decreasing profitability for the recent strong appreciation of the franc, and there were concerns that any further erosion in competitiveness would begin to cause problems.

In the event, however, declining Swiss interest rates induced large and rising net capital outflows which brought the franc under selling pressure in the exchange markets during the spring. Market participants sensed that the Swiss authorities were not intervening or otherwise taking measures to support the exchange rate and were not uncomfortable with a gradual decline of the currency. As the Swiss central bank continued, as planned, supplying generous amounts of liquidity to the domestic markets, Swiss interest rates and the exchange rate fell rapidly lower. On May 6, however, the Swiss authorities did not join other European authorities in reducing official interest rates. At that time, the Bundesbank suspended its special Lombard loan facility while the Netherlands Bank lowered its rate on discount borrowings and the rate on special advances. The Swiss authorities stated that, in leaving the discount and Lombard rates unchanged, they wished to discourage the view from developing in the domestic markets that monetary policy was directed toward interest rates rather than toward the monetary aggregates. The authorities also found it desirable to keep official lending rates at relatively high levels, compared with market interest rates, to discourage excessive commercial bank borrowing from the central bank, particularly at the month end. But, even as official rates held steady, market rates continued to ease so that by late May three-month interest differentials adverse to Swiss franc-denominated assets widened to about  $10\frac{1}{2}$  percentage points *vis-à-vis* the dollar and nearly 5 percentage points *vis-à-vis* the mark. In the exchange markets, the franc declined to around SF 1.9960 against the dollar and SF 0.8501 against the German mark at end-May.

By June, market participants sensed that the Swiss authorities might have less leeway than before to continue as forcefully with the comparatively easier monetary policy approach adopted early in the year. The rate of inflation had begun to move back up, largely owing to the rapid depreciation of the franc in the spring. There was concern that, if the increase

in prices went too far, it might reignite inflationary expectations, while also becoming embedded in domestic costs through the process of wage indexation. Moreover, the growth of central bank money, which in May grew at 2.4 percent year over year, began to approach the authorities' target. Thus, when the liquidity provided through foreign exchange swaps was not fully replaced, expectations developed that conditions in the domestic money market would be less liquid than before.

At the same time, broader concerns weighed on many other European currencies and worked to the advantage of the Swiss franc. The Swiss government continued to exercise tight control over federal finances, particularly on the expenditure side, and the budget deficit was expected to remain under 1 percent of GNP in 1982 even as economic activity stalled. Equilibrium in Swiss public finances stood in contrast to developments in other countries, most of which were experiencing serious difficulties in trying to hold their deficits to levels which, relative to GNP, already far exceeded that in Switzerland. Growing worries internationally about the risks of sovereign lending and concerns over developing liquidity strains posed less of a threat to the financial health of major institutions in Switzerland than to institutions elsewhere. In addition, political tensions, particularly the dangers of expanding warfare in the Middle East, underscored the role of the Swiss franc as a safe haven for international investors attracted by Switzerland's political stability.

For all these reasons, the franc became increasingly attractive to traders and investors during June and July. The spot rate steadied against the German mark, rather than weakening as before, and the franc moved in line with stronger EMS currencies against the dollar. At end-July the franc was trading at SF 2.08 against the dollar for a decline of about 11 percent since end-January and at SF 0.85 against the German mark, for a decline of about 6½ percent over the six months under review. Between end-January and end-July, Switzerland's foreign exchange reserves rose from \$10.5 billion to \$11.8 billion, principally in response to foreign currency swap operations and interest earnings on outstanding reserves. Intervention operations in the exchanges were both infrequent and limited in scale.

#### **Japanese yen**

By early 1982, Japan had succeeded in reducing its inflation rate to the lowest among the major industrial countries and had recorded a huge swing in its current account back into solid surplus. Economic growth, however, was falling short of the targeted 4 percent

rate for the year ended March 1982, and there were but limited choices available to the authorities to generate economic recovery. Though stimulative measures had been taken in 1981, domestic demand remained stagnant and gains in output were almost entirely concentrated in the foreign sector. Looking ahead, the contribution of exports to further growth appeared problematic. Further increases in Japan's penetration of foreign markets in a recessionary environment threatened to exacerbate tensions between Japan and its trading partners. Also, with slackening demand abroad, it began to appear that export growth might well be much weaker than expected in 1982 even if heightened trade tensions were avoided. On the domestic front, a relatively restrictive government budget had been announced in December for the fiscal year to start in April 1982, in pursuit not of short-run expansion but of the medium-term goal of further reducing the government's deficit as a proportion of GNP. As a result, monetary policy was left with the burden of providing stimulus to the economy—a decision that had taken account of Japan's success in curbing inflation and of its strong current account position. The Bank of Japan had reduced its discount rate and relaxed its "window guidance" for commercial bank lending in order to spur demand and announced that first-quarter growth of its main monetary aggregate (M-2 plus certificates of deposit) was expected to continue at the relatively expansive rate of about 11 percent.

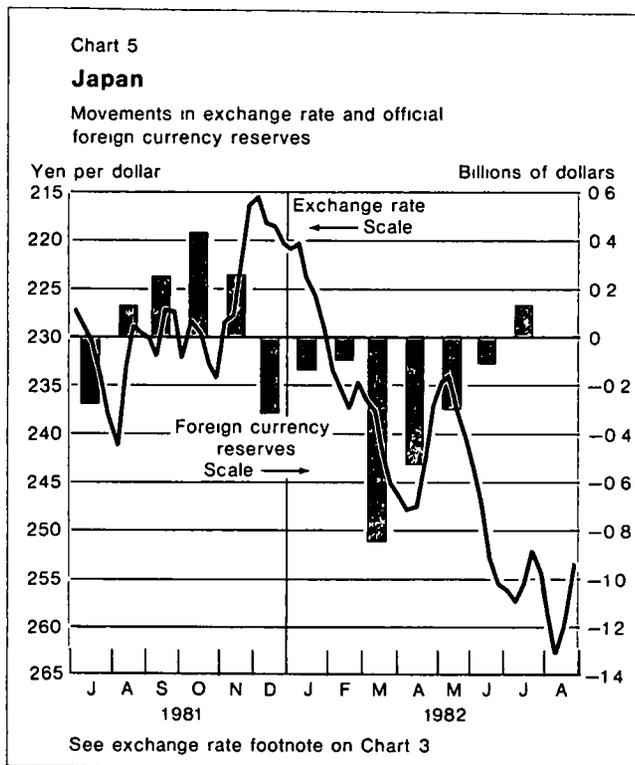
Following this shift in Japan's economic policy, interest rates in Japan eased when yields on dollar investments were rising once more. The further widening of rate differentials already unfavorable to the yen prompted Japanese investors to step up the flow of long-term capital abroad and encouraged foreigners to float Samurai bonds. The yen was thus under downward pressure in the exchange markets in December, and even more so after the new year. Despite the authorities' expressed determination to limit the easing of Japanese interest rates in order to protect the yen, market participants saw little scope for action to counter a sharp upward trend in foreign interest rates given the weakness of the Japanese economy and the policies then in force. Although the Bank of Japan sold dollars in the exchange markets to moderate the yen's decline, the exchange rate by the end of January 1982 had fallen to ¥ 230.00, 8 percent below the high reached at the end of November. In relation to the German mark the yen's decline was smaller, at about 1½ percent, bringing the cross rate on January 29 to ¥ 98.21. At that point, Japanese foreign exchange reserves stood at \$24.6 billion, down about \$400 million from end-November levels.

The yen declined further during the first half of February, as interest rate differentials favoring dollar over yen investments widened more than 2 percentage points to over 10 percentage points. Long-term investment overseas by Japanese residents continued large while short-term capital inflows tapered off. Japanese individuals purchased nearly \$1 billion of the innovative "zero-coupon" bonds being offered in the Euromarkets during January and February, reflecting the attraction of these issues partly due to a proposed tightening in Japan of tax reporting of interest income on domestic bank deposits. Under these conditions the yen fell below ¥ 242 per dollar by February 15. Then, from mid-February to early March the yen gyrated widely with some net upward trend largely in response to reports that the Japanese authorities had intervened aggressively in the Tokyo market and were considering actions to limit the export of capital overseas. By early March the Bank of Japan permitted a slight rise in interest rates for call money to defend the exchange rate. The authorities asked Japanese securities companies to refrain temporarily from selling zero-coupon bonds (as of March 4), while the Ministry of Finance made public its intention to establish reporting requirements for holders of these securities to limit Japanese income tax avoidance. These developments lent support to the yen

in the exchanges and by March 8 the yen had recovered to ¥ 232.25 in the Far East, almost 4 percent above the level of three weeks earlier.

From that time through the middle of April the yen drifted lower in the exchanges. Foreign interest rates, especially those in the United States, failed to decline as expected and at home new indications of weakness appeared in the domestic economy. Publication of Japan's fourth-quarter GNP figures made a particularly strong impression, since they showed a sharp decline in net exports and resulted in the first quarterly decline in Japanese real GNP in nearly seven years. Prices began to drop sharply on the Tokyo stock exchange, partly in response to foreign sales of Japanese securities, reportedly including sales by important OPEC investors. These events in combination served to focus market attention once again on the difficult choices facing the Japanese authorities. In this climate, debate intensified over ways through which the government might help the domestic economy. With inflation running about 3 percent and the annual spring wage settlements promising to come out at a relatively moderate 7 percent average increase, it seemed that domestic considerations argued in favor of reductions of Japanese interest rates. Also depressing sentiment toward the yen were trade disputes with both the United States and European Community countries, as the latter announced their intention to file a formal General Agreement on Tariffs and Trade complaint against Japan's export practices. Trade figures for February showed that exports had declined by enough to turn that month's current account back into deficit.

In early April, some fiscal measures were taken to boost the domestic economy but they were milder than had been anticipated. While not increasing the government's overall net expenditures planned for the fiscal year just beginning, the government announced that it would accelerate the schedule of public works expenditures and housing loan approvals as it had done in the previous fiscal year. A shortfall of about 10 percent in the previous year's government tax revenues was also announced, adding to the government's borrowing requirement for the 1982-83 fiscal year. At the same time, the monetary authorities announced that yields on the government's current issue of long-term bonds would be lowered about ¼ percentage point—less than had been anticipated. They also acted to keep money market rates firm and to dispel expectations of a seasonal easing of rates, in part through a program of large-scale sales of Treasury bills, with a view toward preventing any further widening of the adverse interest rate differentials and containing the effects on domestic prices of the recent



decline of the yen. Furthermore, the Bank of Japan approved a scaling-back of second-quarter lending plans of commercial banks to an overall increase of 17.6 percent, and later announced its expectation that this would support a somewhat slower monetary growth rate of 10 percent. These announcements alleviated concern in the exchange markets that Japanese interest rates might ease, and trading in the yen came into better balance in the exchanges. In the two weeks after these measures the yen declined only slightly, reaching a low on April 15 of ¥ 248.15 against the dollar and ¥ 102.44 in terms of the German mark. The Bank of Japan, as in earlier months, sold substantial amounts of dollars at times when the yen was dropping most rapidly in the exchange markets. These sales were reflected in a \$900 million decline in foreign exchange reserves during March. When, in addition, U.S. and Eurodollar interest rates eased in mid-April, the yen briefly recovered. Also at this time, actions were taken to postpone foreigners' access to the Japanese capital market and to tighten approval procedures for yen-syndicated loans to foreign borrowers. The authorities regarded these actions as temporary departures from their longer term policy of liberalizing capital flows.

By mid-May the yen had moved back up to about midwinter levels. Several times thereafter, Bank of Japan Governor Mayekawa reaffirmed the authorities' determination to keep interest rates high in order to support the yen, and the central bank backed that announcement with large-scale Treasury bill sales. Yet market participants still worried that long-term interest rates would have to be held down to assist the government's coming bond flotation. Speculation also arose that the Japanese authorities might be moving to facilitate, rather than contain, capital outflows following the announcement in May of long-term liberalization measures affecting the purposes for which Japanese banks could grant syndicated loans in yen to foreigners. In addition, U.S. interest rates were firming once more and interest differentials favoring dollar investments widened. In this atmosphere, the yen declined steadily after mid-May. Expectations of an agreement at the Versailles summit to lower dollar interest rates were widespread in the Tokyo market, and the yen came under renewed selling pressure after that meeting ended in early June without any such announcement. The outbreak of fighting in Lebanon also made the dollar seem more attractive as an investment medium, compared with the yen and other currencies. Then, when the U.S. dollar rose strongly against all currencies following the EMS realignment during the June 12-13 weekend, the yen once again came on offer. The rate dropped rapidly during the New York trading session on Monday, June 14, falling below ¥ 250 before the

New York Desk entered the market to buy \$9 million equivalent of Japanese yen in order to restore more orderly conditions. Nevertheless, the currency resumed its fall, despite support from the Bank of Japan. By June 28, the rate had reached a 27-month low of more than ¥ 259 per dollar and ¥ 104 in terms of the German mark, and Japanese reserves had declined by more than \$1 billion since the end of May to stand at \$21.7 billion.

In early July, the yen began to rise in response to declining U.S. interest rates. The yen climbed above ¥ 250 on July 23, just before the Federal Reserve cut its official discount rate by ½ percentage point, but its tenuous recovery soon faded. Abroad, the better than expected current account performance of the United States and the deceleration of inflation globally tended to erode some of the benefits of Japan's earlier and superior economic performance. Within Japan, public criticism of the government's economic policies focused on the failure to reduce the government deficit as quickly as planned and interest rates rose on the government's long-term bonds trading in the secondary market. In these circumstances difficulties in setting an attractive enough yield for the government's own flotation of long-term bonds resulted in cancellation of the issue scheduled for July. The yen's decline, once started, received an additional push when participants on the International Monetary Market (IMM) rushed to liquidate very large long yen positions, producing some of the busiest trading ever of yen futures contracts and bringing large offers of yen into the forward interbank market. The yen thus fell back nearly to the ¥ 259 level before recovering some of its lost ground following the announcement of a second Federal Reserve discount rate reduction on the last day of the period.

The yen closed on July 30 at ¥ 255.60, down 10 percent from six months earlier and ¾ percent below the low point reached nearly a year earlier. The yen also declined against the German mark to close at ¥ 104.63, nearly equal to the lowest level reached in the previous year although still far above the cross rates prevailing before 1981. The Bank of Japan's periodic sales of dollars while the currency was declining reduced foreign exchange reserves by a total of \$2.8 billion for the six-month period, so that reserves stood at \$21.8 billion at the end of July.

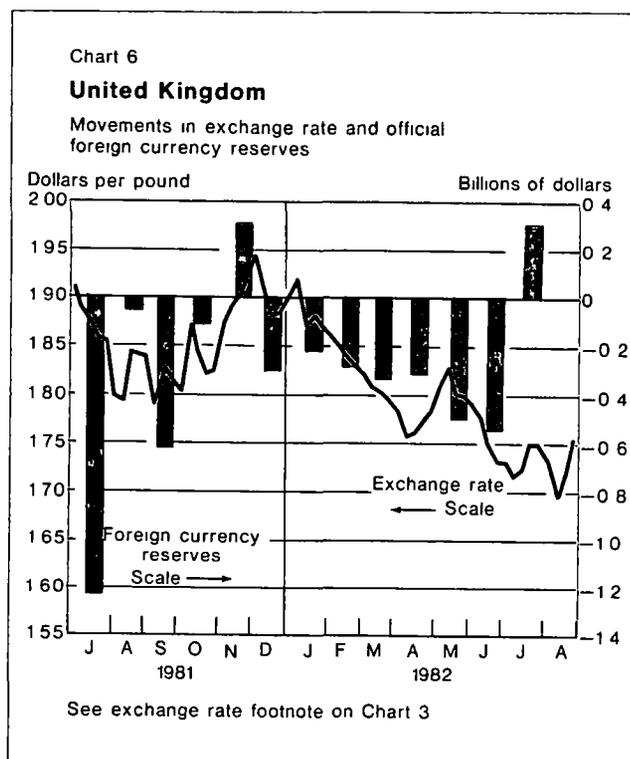
### **Sterling**

Early in 1982 sterling held steady in the exchange markets, trading on January 29 at \$1.8670 and 91.8 on the trade-weighted, effective index. The authorities in the United Kingdom were generally seen as adhering to policies of monetary and fiscal restraint, despite the

pressures of large-scale unemployment. Public-sector borrowing had gone down as a percentage of GNP both through increased taxes and the containment of expenditures, as the public-sector wage bill was brought under control. While the actual growth of sterling M-3 exceeded the 7-11 percent annual growth range, innovations in financial institutions and behavior appeared to have diminished the usefulness of the targeted aggregate as a guide to monetary conditions. Other indicators such as short-term interest rates, as well as the substantial decline in inflation itself, suggested continued monetary stringency.

Meanwhile, however, developments in the United Kingdom economy generated discussion about the desirability of some easing in the restrictiveness of policy. To be sure, the economy showed signs of recovery from the prolonged recession, as the previously rapid reduction of inventories slowed and as some types of investment began to revive. But unemployment continued rising, and there was reason to question whether the upturn in investment was sustainable without some policy stimulus to demand, a reduction of taxes, or other action to improve company profitability. At the same time, rapid gains in productivity, moderate wage settlements, and the earlier depreciation of sterling in 1981 improved the ability of British industry to compete internationally. The gains in competitiveness, however, only partially reversed the severe losses of the previous two years, so that the level of costs remained high in relation to Britain's major trading partners. Consequently, the surpluses on the trade and current accounts were expected to be eroded, even without a pickup in the economy.

Within the United Kingdom, several types of stimuli came under scrutiny. Lower interest rates, for example, would be expected to boost investment, particularly stockbuilding and construction. A depreciation of the exchange rate would improve competitiveness and enhance exporters' profit margins. Public works measures would provide the greatest number of jobs. A cut in indirect taxes would reduce costs. Among exchange market participants it was feared that, whatever the specific measures, any significant policy change aimed at restoring economic growth would jeopardize the hard-won progress already made in controlling inflation and inflationary expectations. As a result, sterling came under downward pressure during February amid market nervousness ahead of the government's statement of policy in the forthcoming 1982-83 budget. At this time, also, United Kingdom short-term interest rates eased lower, extending the softening trend established in autumn 1981, and major clearing banks lowered their base lending rates ½ percentage point to 13½ percent. These cuts coincided with a softening of interest



rates in the United States but were not matched, as in previous months, by lower interest rates elsewhere in Europe, so that selected interest differentials moved against sterling-denominated assets. Moreover, against the background of weakening world oil prices the British National Oil Corporation cut its price for North Sea oil, thereby reducing projected domestic government revenues as well as the contribution of oil earnings to the balance of payments. Sterling therefore eased back to \$1.83 and 90.4 in effective terms in early March.

On March 9 the government presented its 1982-83 budget, addressing the two principal elements of its medium-term financial strategy: the public-sector borrowing requirement and the growth of money. Personal tax allowances and excise taxes were increased about in line with inflation, while the national insurance surcharge paid by employers was reduced 1 percentage point to 2½ percent. On the expenditure side the share of resources claimed by the public sector was cut back. Altogether, the public-sector borrowing requirement was projected to decline from £ 10½ billion to £ 9½ billion, or from about 4½ percent to 3½ percent of GNP. With respect to the broad monetary aggregates, the government noted several factors boosting the growth of sterling M-3 above target. The civil service

dispute had postponed tax payments, the public had increased its demand for liquid assets as a medium for saving; other structural changes, such as a shift in housing finance away from the building societies, had enhanced the role of the banks in financial transactions. Taking account of these developments in the budget, the authorities raised the target range for sterling M-3 growth to 8-12 percent and also applied this growth range both to the narrow money supply (M-1) and to broad private-sector liquidity. In restating its financial strategy, the government recognized explicitly the usefulness of the exchange rate as an indicator of financial ease or stringency.

The budget was well received and was seen by the markets as compatible with a slowing of inflation to below 10 percent per annum and with a continued easing in short-term interest rates. On March 11, in fact, the clearing banks announced another ½ percentage point reduction of their base lending rates to 13 percent. Meanwhile, heavy official sales of public-sector debt to the nonbank public continued to be larger than needed to fund the public-sector borrowing requirement. The program of debt sales, begun in the winter, aimed at reducing the banks' cash holdings and thereby restraining the growth of broadly defined money. In effect, the authorities sought to reverse a part of the increased intermediation through the banking system that had swollen the growth of sterling M-3. The combination of heavy sales of debt and massive tax payments—reflecting the normal tax-gathering season as well as the ongoing reflux of revenue delayed earlier by the civil service dispute—put pressure on the domestic market's cash position. To relieve the shortages, the authorities acquired sizable amounts of commercial bills mainly through outright purchases. Even so, Britain's money markets remained comparatively tight at a time when many interest rates on the Continent were falling. With market sentiment also encouraged by the government's steadfast policy stance, sterling traded firmly in the exchange markets. Thus, the strong rise in the dollar at this time was reflected less in movements of sterling than in other currencies so that, even as the pound fell to as low as \$1.7780 in late March, it remained quite stable around 91.0-91.4 in effective terms.

On April 2, Argentina invaded the Falkland Islands, initiating a crisis that in varying degrees kept the sterling money and exchange markets off balance through mid-June. At first, the pound came under severe selling pressure, dropping to as low as \$1.7465 and in effective terms to 89.5 amid fears that the crisis could force the resignation of the Thatcher government and end its conservative economic policies. But the Bank of England reacted quickly, supporting ster-

ling in the exchanges to prevent sharp, disorderly movements from cumulating and acting to stabilize the gilt-edge market as well. Thereafter, the authorities continued to stabilize the markets which alternated between fears of prolonged fighting and hopes of an early peaceful settlement. Sterling traded mostly within an effective range between 89 and 91, and for the most part between 90 and 91, despite the markets' vulnerability to news and rumors concerning the Falklands. Against the dollar, the pound fluctuated more widely, rising to as high as \$1.8360 in early May when U.S. interest rates dropped back sharply but falling again to around \$1.77 by mid-June.

Meanwhile, during the Falkland crisis, underlying sentiment toward the pound improved. There was evidence of subdued monetary growth, with recent statistics showing that the monetary aggregates, including sterling M-3, were growing within the government's 8-12 percent target range. Inflation decelerated both on the wholesale and on the retail levels. Manufacturing pay settlements averaged some 7 percent in the current wage round, compared with more than 20 percent only two years previously, improving prospects for inflation to remain below double-digit rates. Moreover, public-sector borrowing in 1981-82 unexpectedly turned out to be nearly £ 2 billion less than the official target, and preliminary indications suggested that the public-sector borrowing requirement would fall short of the £ 9½ billion projection for fiscal 1982-83. In addition, data on the balance of payments showed that, while the current account surplus was shrinking, the deterioration was less rapid than anticipated. To be sure, imports, particularly of semimanufactured goods, posted large increases but the volume of United Kingdom nonoil exports registered sizable growth as well.

After mid-June, when the United Kingdom regained military control of the Falkland Islands and the pressures of the crisis passed, favorable developments within the United Kingdom economy showed through decisively and benefited sterling in several respects. Domestically, optimism that progress on inflation would endure helped short-term interest rates resume their decline and lent support to the rally that had earlier developed in common stocks and gilt-edge instruments. In the exchange markets, participants expressed confidence in the resolve of the authorities to maintain steady and stringent financial policies over an extended period. Moreover, the perceived ability of British policy to meet stated goals stood in contrast to market doubts about policy coherence and credibility in many other industrial countries. At the same time, other aspects of the international environment favored the pound. There were growing worries

over potential disruptions to the flow of oil from the Middle East as the result of fighting in Lebanon and between Iran and Iraq. In an environment where large banks and nonfinancial institutions in other countries were experiencing severe liquidity problems, traders and investors became increasingly concerned about the creditworthiness of counterparties and the safety of their assets. In these circumstances, both Britain's oil self-sufficiency and the favorable reputation of London's financial system made sterling a relatively attractive and secure asset. As funds flowed into the United Kingdom, sterling held up better than most other major currencies against the surge of the dollar in the exchanges. Although the pound declined to as low as \$1.7065 early in July, it nonetheless remained steady on an effective basis, trading around 91.2.

During July, attention turned decisively to the state of the economy. Growing evidence confirmed that after bottoming-out in mid-1981 the economy had shown little growth. In key areas of British industry the outlook for a sustained recovery deteriorated badly. Private forecasters and major international organizations, such as the Organization for Economic Cooperation and Development, revised downward their growth forecasts for 1983. Deep disappointment about the prospects for expansion in the economy and the continued rise in unemployment prompted renewed calls for some easing in government policies. By this time, however, the feeling had developed in the exchange markets that declines in inflation, in the public-sector borrowing requirement, and in the growth of the monetary aggregates were all consistent with some easing in interest rate policy and should not damage confidence in the pound. In the event, the Bank of England steadily lowered its money market intervention rates, and United Kingdom interest rates fell more rapidly than those in the United States. By end-July, United Kingdom bank rates reached the lowest level since November 1978 and interest rate differentials moved against sterling-denominated assets. Even so, the pound gave up comparatively little ground in the exchange markets.

At the month end the pound traded at \$1.7475 against the dollar for a 7 percent decline over the six months under review. On an effective basis, the pound closed the period at 91.5, down about  $\frac{1}{4}$  percent. Between end-January and end-July the foreign exchange reserves of the United Kingdom declined from \$12.6 billion to \$10.9 billion. The loss of reserves reflected only in small part the authorities' intervention operations in the exchange market, particularly in the wake of the Falkland Islands crisis. For the most part, the decline in reserves reflected the revaluation losses of gold and dollar swaps against European currency units (ECUs) done with the European Fund for Mone-

tary Cooperation (FECOM) and other factors, such as the repayments and accruals of external public-sector borrowings.

### **French franc**

Early in 1982 the French franc traded comfortably in the exchanges even as market sentiment remained skeptical about the currency's longer term outlook. Supporting the franc was a combination of foreign exchange controls, conversions of public-sector foreign borrowings, and short-term capital inflows by investors taking advantage of higher nominal interest rates in France than in many other EMS countries. The franc therefore remained in the upper portion of the joint float in the early weeks of 1982, while trading against the dollar at FF 5.9600 at end-January. In the background, however, market participants expressed worry that French policies had placed insufficient emphasis on curbing inflation since the October 1981 realignment, thereby allowing the benefits of the franc's depreciation to erode. The government appeared committed to its original strategy of economic expansion aimed at boosting jobs and absorbing the rapidly growing labor force. However, the stimulus provided to consumption had not been accompanied by a pickup in domestic investment and employment. Rather, the boost to demand was reflected primarily in higher domestic prices, burgeoning imports, and a worrisome increase in the government's budget deficit. At the same time, export growth was hampered by depressed economic conditions in most foreign markets. As a result, France's trade and inflation performance deteriorated in relation both to earlier trends and to several other industrial countries, particularly those like Germany that had chosen to follow economic policies of greater restraint.

These concerns found little reflection in exchange rate movements so long as official parities within the EMS could be expected to hold. But, unexpectedly, on February 21 the Belgian franc and the Danish krone were devalued by 8½ percent and 3 percent, respectively, *vis-à-vis* the French franc and all other EMS currencies. Almost immediately, market participants began to question the durability of the new parities in view of concern, in private as well as official circles, that the exchange rate relationships for the franc did not accurately reflect the relative competitiveness of the French economy and the divergence of French economic policy from that of other EMS countries. Speculation thus developed that the French currency would soon be devalued in the context of another and more extensive realignment of the EMS and, amid heavy outflows of capital, the franc dropped to the bottom of the joint float arrangement by end-February

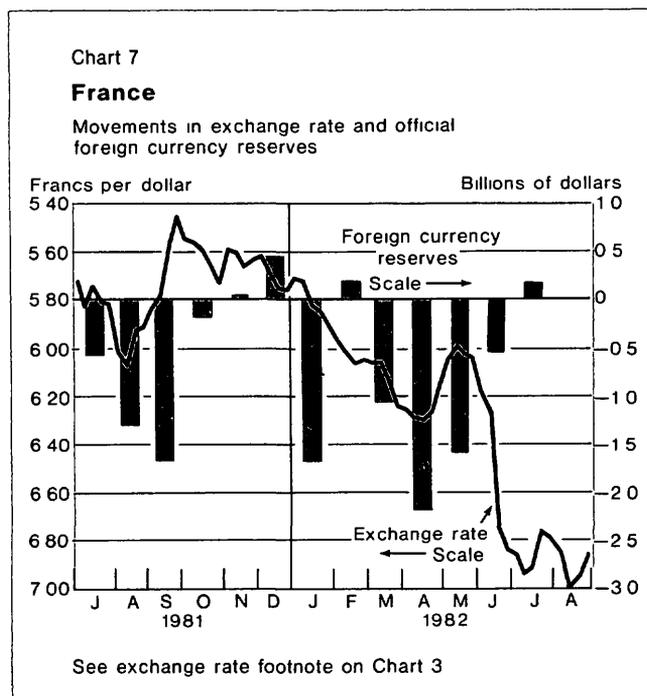
The French authorities were concerned about the weakness of the French franc, but the top priority remained providing stimulus to the domestic economy—particularly to avert heavy social and political costs of growing unemployment. Consequently, the authorities sought to stem the selling pressures on the franc without major revisions in domestic economic programs. They also urged other countries to begin relaxing their policies of restraint, believing that policy stimulus elsewhere, particularly in the monetary sphere, was important to promote a general decline in international interest rates, a recovery of the sagging world economy, and some improvement in the overall employment situation. Meanwhile, to defend the franc the Bank of France during March raised domestic interest rates, moving call money rates for example to some 18 percent from about 14 percent. These actions reversed the previously easier tendency in domestic interest rates, while also moving counter to the downward trend in interest rates in most other European centers. The central bank also intervened heavily in the exchanges as a seller of foreign currencies to keep the franc trading within the required 2¼ percent band against the German mark and Dutch guilder. Moreover, the government tightened exchange controls. Henceforth, exporters were required to repatriate the proceeds of sales abroad within two weeks rather than one month as previously. French investments abroad

in excess of FF 1 million were to be financed totally abroad rather than up to 75 percent from foreign sources as before. Approval from the Bank of France was required in more cases than before for financial transfers of funds abroad. At the same time, Finance Minister Delors spoke out strongly against a devaluation of the franc.

These actions were seen in the market as strong signals of the government's determination to avoid a devaluation of the franc and prompted nonresidents to begin covering their short currency positions. The purchases of franc balances coincided with a tapering-off of special factors that had also weighed on the franc, such as compensation payments to nonresidents for their ownership share in nationalized industries. Selling pressures on the franc therefore abated, particularly once the long Easter weekend passed without a realignment of the EMS. As a result, the French currency moved from the bottom to the middle of the joint float even as it weakened further against the dollar, declining to FF 6.2950 around mid-April.

But, otherwise, with respect to objectives for the domestic economy, the French government experienced difficulties. Heavier spending in the public sector, enlarged by the nationalization of twelve industrial groups, did not lead as expected to an improvement in business conditions. In fact, investment activity remained weak, particularly in the private sector where industry faced increased payments for imported materials and had to shoulder the growing costs of domestic reforms. The introduction of a shorter working week and in some sectors a longer vacation period, with no accompanying decrease in compensation, together with higher taxes to finance additional social benefits, exerted a considerable squeeze on corporate profit margins. Meanwhile, consumer demand—the main factor sustaining the economy in the latter part of 1981—began to falter, further removing incentives to capital expenditure. Consequently, in the first quarter of 1982, industrial production and real GNP declined, and unemployment rose further, approaching the two million level.

Disappointment over the economy's performance prompted the French authorities to introduce several measures in the spring. For selected investments, the government provided loans at below-market interest rates. It also reduced employers' social security contributions in hard-hit industries as well as in those pledged to maintain a certain level of investment or employment. In May the government proposed a supplementary 1982 budget, authorizing FF 5 billion in expenditures for the purpose of supporting nationalized companies, reducing selected business taxes, and extending tax incentives to the agricultural sector. To



contain the rise in the budget deficit, the government reduced certain expenditures and raised taxes. Specifically, expenditures by the Social and Economic Development Fund were cut back. With respect to revenues, the authorities boosted the value-added tax, effective July 1, by 1 percentage point to 18.6 percent, increased taxes on banks and other financial and public-sector institutions, and requested banks to provide equity financing and participation loans of about FF 6 billion to nationalized firms to strengthen their capital base. Meanwhile, to minimize the monetary impact of these measures and to help keep the monetary aggregates from growing beyond the targeted 12½-13½ percent annual range, the government began selling floating-rate Treasury bills. The new bills were designed to attract institutional investors, such as insurance companies and pension funds, previously reluctant to invest in fixed interest rate paper.

Exchange market participants welcomed the authorities' move toward some tax relief for business but worried that, unless basic elements of the overall strategy were changed, France would move increasingly out of step with its competitors regarding inflation, balance of payments, and budgetary developments. They noted that France's inflation rate had accelerated to 14 percent, compared with only 5 percent in Germany. The cumulative trade deficit widened to FF 81 billion at an annual rate in the first four months of the year, compared with a FF 50.8 billion deficit for all of 1981 and FF 62.4 billion in 1980. And the budget deficit, officially projected to rise to FF 95 billion, about 3 percent of GNP, was privately forecast to exceed FF 100 billion. Moreover, differing views among industrial countries about the appropriate policy approach to deal with stagflation in the world economy persisted, and thus few market participants counted on policy convergence at the international level to bring France into closer alignment with its competitors.

Speculation therefore mounted that the franc would be devalued as part of an EMS realignment or would be withdrawn from the joint float altogether—perhaps even before the seven-nation economic summit in Versailles. Between late April and early June the franc came under repeated bouts of selling pressure particularly before weekends. The Bank of France again raised domestic interest rates and intervened heavily in the exchanges. But market participants, sensing the magnitude of the support operations, viewed the authorities as having only limited resources to maintain the franc within the mandatory EMS limits and so the selling pressures remained intense.

Over the June 12-13 weekend the French franc was devalued within the EMS. Against the German mark

and Dutch guilder, which were revalued against all other currencies within the EMS, the franc was in effect devalued by some 10 percent. Against currencies whose official parities were unchanged, the franc was adjusted downward by 5¾ percent. Against the Italian lira, itself adjusted downward by 2¾ percent against all participating currencies, the franc was in effect depreciated by some 3 percent. To support the devaluation and to help promote a convergence of inflation rates between France and other EMS countries, the government introduced a four-month wage-price freeze to be followed by a system of guidelines designed to slow inflation to 10 percent in 1982 and to 8 percent in 1983. The government also pledged to restrain the growth of the government budget deficit to no more than 3 percent of GNP this year and next, largely through cutbacks in current expenditure.

In the exchange markets the French stabilization plan was seen as a compromise between the desired policy of stimulus to respond to the unemployment problem and the pressures for restraint to deal with mounting inflation and the weakness of the franc. Participants adopted a cautious attitude, wondering whether the government would gain acceptance for its program which in some respects, e.g., stiff wage controls, appeared tougher than anti-inflation measures imposed by its more conservative predecessors. Initially, at least, French unions—a major source of political support for the Socialist government—objected to the loss of purchasing power implicit in the wage freeze and were reluctant to give up the nearly automatic system of wage indexing that for years had helped wages keep pace with inflation. Industry, for its part, objected to the price freeze. For, despite the government's move after the devaluation to lower domestic interest rates, the rebuilding of profit margins was thought still to be difficult, all the more so without improvements in productivity.

As a result of the wait-and-see attitude in the exchange markets, international investors were hesitant to reconstitute franc-denominated assets, and the reflux of funds that developed immediately after the realignment soon tapered off. Nonetheless, in the six weeks to end-July the franc traded comfortably in the upper part of the EMS and the Bank of France was able to enter the market as a purchaser of currencies in order to begin repaying debt and rebuilding reserves. Against the dollar the franc weakened along with other major currencies, falling to FF 7.00 on July 8 before recovering somewhat to trade at FF 6.8025 in the New York market at end-July. At this level, the franc was about 14 percent lower on balance over the six-month period under review. France's foreign exchange reserves declined from \$18.3 billion

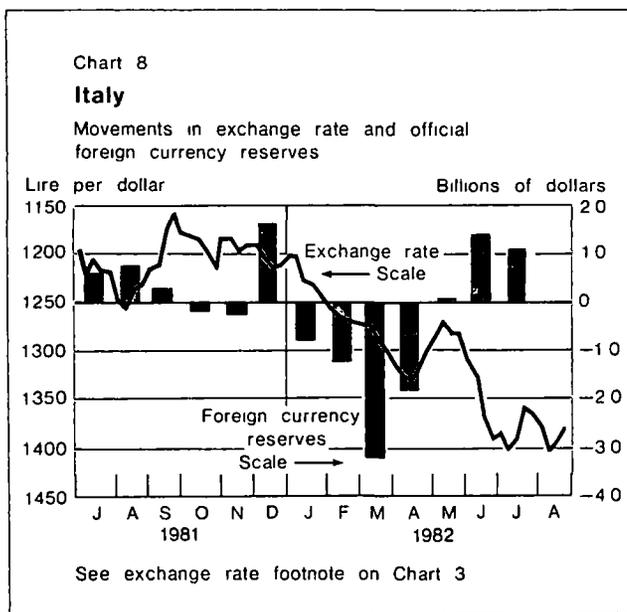
at end-January to \$13.3 billion at end-July. In part, the decline reflected intervention support for the franc by the Bank of France, financed through reserve holdings and very short-term borrowings within the EMS. The drop in reserves also reflected revaluation losses on gold and dollar swaps against ECUs done with FECON.

### Italian lira

The Italian lira was trading firmly at the top of the EMS early in 1982, although it had fallen back to Lit 1,250 against the rising U.S. dollar. The lira's strength in the EMS partly reflected its two devaluations within that currency arrangement during 1981. Also, there had been some recent improvement in the Italian external balance and domestic inflation rate, and substantial inflows of capital had been attracted by high Italian interest rates. The Bank of Italy had taken advantage of the lira's relative strength to rebuild its foreign currency reserves to a level of \$17.8 billion at the end of January 1982.

The Italian inflation rate had begun to slow in 1981 and moderated further in January 1982. In part, this progress reflected falling world prices of oil and other raw materials, those price movements stemming from deepening recession in most industrial economies. Moreover, price increases were slowing in Italy as the restrictive monetary policy of the Bank of Italy began to dampen domestic inflationary pressures. The lira was also supported at this point by improvement in the Italian current account deficit, which had contracted from a \$10 billion annual rate early in 1981 to a \$3 billion rate by the year-end. The improvement derived from both strong growth of export volume and declines in imports. The gains in exports reflected the 1981 devaluations of the lira within the EMS and a surge in orders from those OPEC nations that developed large current account surpluses after the 1979-80 oil price increases. At the same time, Italian imports had declined due to the weak domestic economy and the import deposit scheme which had been adopted in May 1981. (The deposit scheme required that a percentage of the foreign exchange value of imports be placed in a noninterest-bearing account with the Italian central bank. Initially the deposit was set at 30 percent, but the ratio had been gradually reduced to 15 percent by end-January 1982.)

The markets remained concerned that the recent Italian gains on inflation and external account would be difficult to sustain. OPEC current account surpluses had begun to contract, threatening to limit further expansion of Italian exports, while failure to make additional gains on domestic inflation and wage increases was thought likely to result in declining competitive-



ness of Italian exports to industrial economies. Moreover, any upturn in domestic incomes would be likely to spur imports. In contrast to the favorable performance of the trade balance, the surplus on the invisibles account deteriorated during 1981, as increased borrowing abroad and the high level of international interest rates sharply pushed up the cost of servicing Italy's external debt—a drain on the current account not likely to be relieved substantially in 1982.

The inflation outlook was also clouded by the long-standing problems of the huge government deficit and steeply rising wage costs. The government had proposed an official ceiling of Lit 50 trillion for the 1982 public-sector borrowing requirement, slightly below last year's actual result. But, in 1981, the outcome had exceeded the original ceiling of Lit 37.5 trillion by some Lit 17 trillion. Thus, market participants were skeptical that such an ambitious goal for 1982 was feasible and worried that fiscal stimulus would contribute to renewed inflationary pressures. On the wage front, the government had begun negotiations with business and labor in the middle of 1981 to modify Italy's *scala mobile*, which provides for automatic quarterly adjustments in pay to offset inflation. Into 1982, however, no significant progress had been made in these negotiations.

Finally, the Italian economy had weakened in the last half of 1981, with real GNP declining for the year as a whole for only the second time since World War II. The softening of the domestic economy had contributed to slower price increases in the short run but

had led to calls for an easing of the strong anti-inflation stance of monetary policy, which had held nominal Italian interest rates well above those of Italy's major trading partners into 1982. Many market participants remained concerned that any easing of monetary policy would quickly release new inflationary pressures in the domestic economy and also tend to reduce capital inflows.

Despite these concerns about the future, the lira remained firm within the EMS into February 1982. The Italian authorities took advantage of the lira's strength to suspend the import deposit scheme in early February, about a month ahead of its scheduled termination. This action was taken to minimize speculative pressures in the exchange market that otherwise were expected to result from the market's anticipation of the change at the end of the month. Although some selling pressure emerged on the day of the announcement, the Bank of Italy was quick to intervene and the lira soon steadied.

In the EMS realignment on February 21, the lira, like the French franc, was left unchanged. The realignment focused the market's attention on the question of the future competitiveness of Italian exports and domestic economic problems. In addition, Italian market interest rates were easing, fostering rumors that the Bank of Italy would lower its discount rate either independently or in cooperation with the monetary authorities in Germany and France. In these circumstances, the lira became caught up in speculation over another EMS realignment, and residents scrambled to purchase foreign currencies and to repay mark-denominated debt. As a result, the lira, which had traded around the middle of the new EMS band immediately after the realignment, declined faster than other Continental currencies against the dollar during March. At times, it traded at or near the bottom of the joint float despite heavy intervention by the Bank of Italy, including its first sales of marks in six months. Italian foreign currency reserves declined \$4.5 million during February and March.

During April and the first part of May, the lira generally remained under downward pressure in the exchanges. The latest balance-of-payments data, including the report of a record February trade deficit of Lit 2.9 trillion, confirmed the market's worry that export growth might stagnate, mainly as a result of the dwindling OPEC surplus and the increased financing difficulties of certain less developed countries which limited the scale of their imports. Also, Italian imports had surged in the wake of the elimination of the import deposit scheme, mostly to rebuild domestic inventories. At home, inflation remained considerably higher than that of Italy's major trading partners, despite hav-

ing slowed somewhat further, while market concern increased over the deepening crisis within the government. Sharp divisions over economic policy, particularly between the Christian Democrats and the Socialists, threatened to impede Parliamentary adoption of a proposed austerity budget and to bring down the Spadolini coalition government.

The market thus came to view the lira as a candidate for devaluation within the EMS, generating adverse movements in leads and lags and prompting Italian residents to repay foreign currency loans and to borrow lire. In order to curb the leading and lagging of payments, the Foreign Trade Ministry moved to tighten foreign exchange controls. In addition, residents were no longer permitted to repay foreign currency loans borrowed from Italian banks prior to maturity. Subsequently, the Bank of Italy announced it would increase its progressive penalties on lira credit extensions in excess of its established ceilings to counteract the widespread substitution by Italian borrowers of home currency for foreign currency financing. In addition, the Bank of Italy intervened frequently in the exchanges to resist the decline in the rate, and it kept Italian interest rates high and steady even though rates abroad tended to ease. Nonetheless, the selling pressures on the lira persisted, and late in April it slipped below the 2¼ percent limit required for its partner currencies in the EMS, even though it remained well within the broader 6 percent band applying to the lira.

By late May, however, foreign currency inflows from the start of the tourist season, together with the earlier exchange control measures, helped bring trading into better balance. In these circumstances the view developed in the market that a devaluation of the lira might be put off at least until after the Versailles summit in June and perhaps through the summer. The Bank of Italy was able to scale back its support operations considerably and, on occasion, even purchase dollars to rebuild reserves. Nonetheless, foreign currency reserves fell another \$1.8 billion during the two months.

Over the June 12-13 weekend the lira's central rate within the EMS was adjusted downward 2¾ percent against those currencies in the system whose central rates remained unchanged, as part of a realignment involving the French franc. In effect, the lira was devalued by about 7 percent against the German mark and Dutch guilder, each of which was revalued 4¼ percent. In public statements following the realignment, Prime Minister Spadolini asserted that the lira was devalued solely to protect the competitiveness of Italian exports in the face of the devaluation of the French franc and not because the move was necessary in the short run. At that point, Italy expected an influx

of funds during the tourist season by then well under way. The government also announced the devaluation would be followed up with a package of austerity measures.

Following the realignment, the lira traded above the 2¼ percent limit required for other participating currencies. The Bank of Italy took advantage of the lira's comfortable position within the EMS to rebuild reserves and to ease short-term domestic interest rates. Nonetheless, Italian rates remained high in relation to interest rates abroad and continued to attract capital inflows, particularly with a lira devaluation no longer a near-term prospect. The relative strength of the lira also enabled the Italian authorities to relax foreign exchange controls on export-related credit. Against the strong dollar, however, the lira fell back to a record low of Lit 1,401.50 in European trading.

Despite the firmness of the lira within the EMS, the market remained concerned over several issues. Impatience over the lack of progress in negotiating ways to modify the *scala mobile* had prompted first the private- and then the public-sector employers' associations to announce they would withdraw from the 1975 agreement with labor unions on wage indexation when it expires in February 1983. Employers were seeking a number of reforms to the system, including the exclusion of indirect taxes and externally generated cost increases from the calculation of wage increases, a more flexible escalator which would allow firms to differentiate among various wage and salary categories, and adjustments in wages every four or six months rather than every three months. Although many labor leaders accepted the need for some modification of the agreement, the unions were sharply divided over the nature and extent of any changes. The breakdown of negotiations to change the wage indexation system was a serious setback to the government's efforts to forge a social pact and to limit wage increases in 1982 to 16 percent, and it raised the possibility of protracted strikes by the unions. Also, the outcome of the three-year wage contract negotiations, which had not yet begun in earnest even though some of the contracts had expired the previous December, had been thrown into greater doubt.

Meanwhile, after months of fractious debate, the Italian cabinet finally approved a major stabilization program designed to hold the increase in the state borrowing requirements in 1982 to a level well beyond the original proposed ceiling of Lit 50 trillion but lower than the estimated Lit 70 trillion that would result if no action were taken. However, even after this action, the state borrowing requirement would exceed that of most other industrial countries and pose a threat to the progress already made on the inflation

front. Furthermore, the program still awaited final Parliamentary approval.

By end-July the lira was trading at Lit 1,367.00 against the dollar, down 9¼ percent over the six-month period under review and down 5 percent against the German mark. Meanwhile, Italy's foreign exchange reserves stood at \$13.9 billion, an increase of \$3.9 billion over the period.

### European Monetary System

In early 1982 most countries participating in the EMS joint float arrangement had been pursuing generally restrictive macroeconomic policies for about two years to counter inflationary pressures arising from the second round of international oil price increases. Some had made considerable progress in reducing inflation and in limiting the impact of higher oil prices and depreciating exchange rates on domestic wages and costs. Meanwhile, the dramatic softening of previously tight conditions in the world oil market and the weakening of economic activity in the EMS (and among industrial countries more generally) helped erode many of the larger payments imbalances that had emerged in the aftermath of the oil shock. But there were major problems as well. Rigidities in economic and social structures—which in varying degrees characterize all industrial countries—hampered the implementation of restrictive policies in individual EMS member states or meant that success in the battle against inflation was achieved only at considerable cost. Restrictive policies proved costly in terms of output losses and unemployment, and the prospects for growth appeared more pessimistic than expected earlier, even for countries that had chosen to adopt policies of greater stimulus. Also, while the progress on inflation was achieved through tight monetary policies and high interest rates, the outlook for maintaining a durable reduction of inflation was being undermined by the persistence of unacceptably high government deficits. Within individual countries the listless state of domestic demand generated efforts by domestic firms to sell in external markets, competitive pressures among member states were strong, and protectionist tendencies were growing. Moreover, underlying the more balanced pattern of payments positions were substantial disparities in competitiveness.

Within the joint float arrangement, the Netherlands guilder, French franc, and Italian lira traded at the top while the German mark, the Belgian franc, Danish krone, and Irish pound traded in the middle and lower portions of the band. The upper group contained currencies which were vulnerable on fundamental economic grounds but nonetheless remained firm, benefit-

ing from a combination of relatively high interest rates, exchange controls, and expectations in the market that official parities established in October 1981 would hold at least in the near term. At the bottom, requiring persistent intervention support, was the Belgian franc. Structural problems in the Belgian economy were reflected in mounting public-sector fiscal deficits, in excess of 15 percent of GNP, and current account deficits which for some years had been financed through government-arranged loans in dollars and in other currencies. The external public debt which was practically nil in 1977 had risen by end-1981 to more than 10 percent of GNP.

Like governments in other small, open economies, the government of Belgium had for some time rejected devaluation of its currency, arguing that the benefits of such action would be quickly eroded in view of the large role of international trade in total GNP and the high degree of domestic wage indexation. But, because of the mounting gravity of the situation, the new government that came to office after the November 1981 election had been granted special powers by Parliament, including authority to constrain the growth of wage increases. Consequently, a change in the official parity of the Belgian franc seemed more likely than before. Meanwhile, Denmark and Ireland, which had also relied heavily on foreign borrowings to finance large fiscal and current account deficits, found the inflows of private capital had slowed. To maintain balance in the foreign exchange market, Ireland continued to place reliance on foreign exchange controls. In Denmark, concern developed that the exchange rate for the krone did not reflect the deterioration that had occurred in the economy's external competitive position.

On February 21, the Belgian franc was devalued by 8½ percent and the Danish krone by 3 percent against all other participating currencies. In connection with the realignment, the Belgian authorities introduced measures aimed at stimulating private investment while reducing the government borrowing requirement. They included a limited price freeze, the temporary suspension of wage indexation, and selected tax reductions for business and industry. Immediately after the realignment, the Belgian franc and Danish krone rose to the top of the newly aligned band, the Netherlands guilder traded around the middle, and the German mark, French franc, Italian lira, and Irish pound moved to the lower portion of the EMS band.

Exchange market participants were skeptical that the new parities would stick, citing concerns about relative competitiveness, unresolved structural problems, and continued policy divergences. It was known in the market that the governments of Belgium and

Denmark had requested larger depreciations of their currencies than had been agreed to by other member states, and participants therefore questioned whether the realignment was sufficient to rectify the various imbalances that had already emerged. At the same time, the realignment appeared too narrow in scope. It was seen in the market as failing to address differences between currencies of countries benefiting from improving current account and inflation performances, such as the German mark and the Netherlands guilder, and currencies of countries where the outlook was decidedly less favorable, such as the French franc and the Italian lira. With respect to structural issues, Belgium and Denmark were not alone in facing problems of large and growing budget deficits and rigid wage bargaining systems. In general, market participants felt that there was additional need in those and other countries—France and Italy in particular—to contain wage demands, to reduce government expenditures, and to alleviate the pressures of deficit financing on the financial markets and ultimately on the growth of money. Looking ahead, participants expressed worry that divergences in economic policy would compound existing differences in economic performance. They noted that not all countries maintained equal vigilance in the fight against inflation. In the case of France, emphasis continued to be placed on expansionary programs to curtail unemployment.

These concerns generated renewed tension within the joint float and, as speculation mounted that another realignment was inevitable, the German mark and the Dutch guilder moved to the top of the system, while the Danish krone weakened, falling for a time to the middle of the band. Meanwhile, the Belgian franc dropped to the bottom of the joint float where it alternated with the French franc. The Irish pound traded in the lower portion of the band. The Italian lira, trading in its wider 6 percent margin, fell below the currencies in the narrow 2¼ percent band. On March 19 and again on May 6—with the EMS fully stretched—the central banks of Germany and the Netherlands reduced their official lending rates. The authorities in the Netherlands had room to provide some stimulus to stagnant domestic demand, owing to the favorable external position of the Netherlands. Indeed, with domestic demand weaker than in most other EMS countries, competitiveness improving, and natural gas export revenues boosted by earlier price hikes, the Dutch current account posted a surplus estimated around 4½ percent of GNP.

The reduction of interest rates in Germany and the Netherlands provided only temporary relief to the weaker currencies. The psychology of the market grew increasingly pessimistic, as skepticism intensi-

fied about the willingness and ability of the authorities in the weaker currency countries to correct imbalances in their economies. Adverse social reaction within Belgium provoked by the post-February devaluation program and by specific problems in the steel sector (including demonstrations and strikes) cast doubt on the durability of the government's austerity measures. Elsewhere, institutional arrangements, coupled with the pressures of high and rising unemployment, appeared to make a tightening of financial policies very nearly untenable, particularly in Denmark and Ireland where domestic budget deficits widened sharply. To defend existing parities, the authorities of Belgium, Ireland, and France raised official interest rates while money market rates in Denmark moved higher. France and Italy also tightened exchange controls. And, in all cases, intervention sales of dollars and of stronger EMS currencies became heavier and more frequent.

Over the weekend of June 12-13, the EMS was again realigned. The central parities of the German mark and Dutch guilder were revalued by 4¼ percent, while those of the French franc and Italian lira were devalued by 5¾ percent and 2¾ percent, respectively, against the other participating currencies. The bilateral central rates of the Belgian franc, Irish pound, and Danish krone were otherwise left unchanged. In subsequent days and weeks, the Italian lira and French franc traded at the top of the newly aligned band, the Irish pound and Danish krone moved near the top, while the Belgian franc traded in the middle of the band. The German mark and Netherlands guilder traded at the bottom of the new alignment. The new exchange rate structure and the relaxation of tensions enabled several EMS countries previously constrained from easing monetary conditions to reduce domestic interest rates. France, Denmark, and Ireland permitted money market rates to ease, while Belgium lowered official lending rates. The tendency of interest rates to ease occurred largely during July, when U.S. interest rates were registering sharp declines from the high levels that prevailed in previous months.

However, the reduction of European interest rates lagged behind the cuts in the United States. The weakness of the EMS currency bloc as a whole against the rising dollar made the authorities reluctant to take actions that could contribute to a further depreciation of their currencies. In addition, within the EMS the reflux of funds from revalued currencies into those that were devalued was comparatively modest both in scale and in duration, owing to the cautious reaction of the market to the newly established parities. To be sure, participants appreciated that greater efforts than earlier in the year were being made to harmonize

economic policies, particularly in view of restrictive policy measures in France and Italy that accompanied the realignment. Nonetheless, participants awaited the evolution within various EMS countries of the proposed austerity and budget-tightening programs, sensing that political and institutional difficulties would make it hard for many governments to carry out intended remedial measures. In these circumstances, part of the unwinding of speculative positions occurred not within the EMS between revalued and devalued currencies but *vis-à-vis* the dollar instead. This meant that, while the EMS mechanism operated free of strains during the balance of June and July, individual member states had less leeway than after previous realignments to relax monetary policy or to enter the exchange market as buyers of currency in order to repay debt or to rebuild international reserve positions.

#### **Canadian dollar**

The Canadian dollar was declining against the U.S. currency at end-January 1982, having fallen nearly 2 percent since November to U.S. \$0.8342 (Can.\$1.1988), a level about 3 percent above its fifty-year low of August 1981. The Canadian economy was in a deepening slump in early 1982, but little apparent progress had yet been made on Canada's persistent double-digit inflation rate or the high rate of new wage settlements. Because of the inflation problem and the risk it would be worsened by further declines in the exchange rate, Canadian monetary and fiscal policy remained anti-inflationary. But the policy had been widely criticized in Canada in a debate which appeared to intensify each time new evidence appeared of declining productive activity and worsening unemployment. The Canadian dollar tended to weaken in the exchanges at such points, mainly reflecting concern that interest rates would be lowered to stimulate the economy and would trigger additional capital outflows. In fact, Canadian interest rates had lagged behind the rapid rise of U.S. rates during December and January, and by the end of the month the favorable differential had narrowed by as much as 5 percentage points and had been reversed for some maturities.

Downward pressure on the Canadian dollar also reflected the earlier worsening of Canada's external position and the closely related controversy over energy policy. Despite the weakening domestic economy, Canada's balance-of-payments position had deteriorated progressively through the first three quarters of 1981, mainly because of climbing external debt-service costs but also because declining demand abroad cut into Canadian exports. The deficit on current account widened just as massive net investment outflows de-

veloped in connection with the "Canadianization" of ownership in energy-related industries. If anything, Canadian energy policy became even more controversial because of the deteriorating financial position of Canadian energy companies. Falling world energy prices and declining demand stretched the cash flows of those companies at the same time that debt-service costs were climbing as a result of buyouts of foreign equity interests. Moreover, the ownership goals of the national energy program had not been reached, raising the specter of further large capital outflows even though the Canadian government was thought prepared to accept a further slowing of the rate of buyout because of financing difficulties and pressure on the exchange rate.

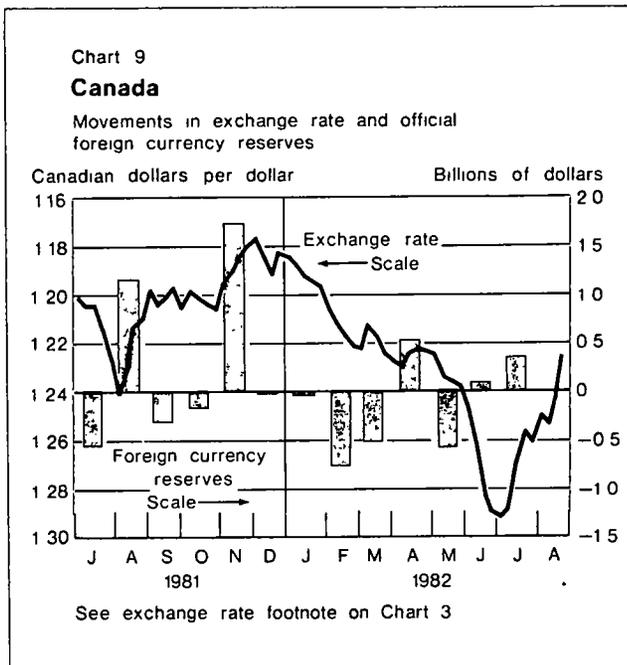
Reflecting this background, sentiment toward the Canadian dollar was decidedly bearish as the period opened. Large sales on Chicago's IMM pushed the rate through the psychologically important US \$0.83 level (equivalent to Can \$1 2057 in the interbank market) on the first day of February, and the rate declined through most of the month as interest rate differentials adverse to the Canadian currency opened up. Highly publicized criticism of the government's anti-inflation policies during a conference of the ten provincial premiers contributed to nervousness in the exchanges, despite Prime Minister Trudeau's strong reaffirmation of the government's policy stance. Then, three major private participants withdrew from the Alsands development

project in Alberta, drawing attention to the problems being encountered in the government's long-term program for Canada's energy development. In all, the Canadian dollar fell another 2½ percent during February to US \$0.81 (Can \$1 2346). Official operations moderated pressures in the exchanges and Canadian foreign currency reserves declined nearly \$800 million during the month.

From late February through early May, the Canadian dollar fluctuated between about US \$0.81 (Can \$1 2346) and US \$0.825 (Can \$1 2121). During early March the Canadian dollar firmed in the exchanges, following actions by the Bank of Canada to push interest rates sharply higher and reestablish an interest rate differential favorable to the Canadian dollar. Market participants were reassured by these actions and the accompanying statement by the Bank of Canada which reaffirmed the policy of maintaining a positive interest rate spread relative to the United States sufficient to attract needed capital inflows. Also, Canada's trade surplus had increased significantly in late 1981 and had jumped to a US \$1.3 billion surplus in January, the largest in a year. In fact, the Canadian trade surplus remained large, subsequently underpinning the currency for the remainder of the period under review.

This recovery for the Canadian dollar proved brief, as selling pressure against the Canadian dollar re-emerged by the middle of March. US interest rate increases outpaced those in Canada, partly eroding the positive interest differentials which had opened up, while evidence of the Canadian economy's weakness continued to cumulate. The Canadian currency thus declined during the rest of March but met resistance when it approached the technically important US \$0.81 (Can \$1 2346) level. Through early May, the exchange rate fluctuated just above this level, responding mainly to modest variations in Canadian-U.S. interest rate differentials and participating only slightly in the general rise and then fall of foreign currencies against the US dollar which took place.

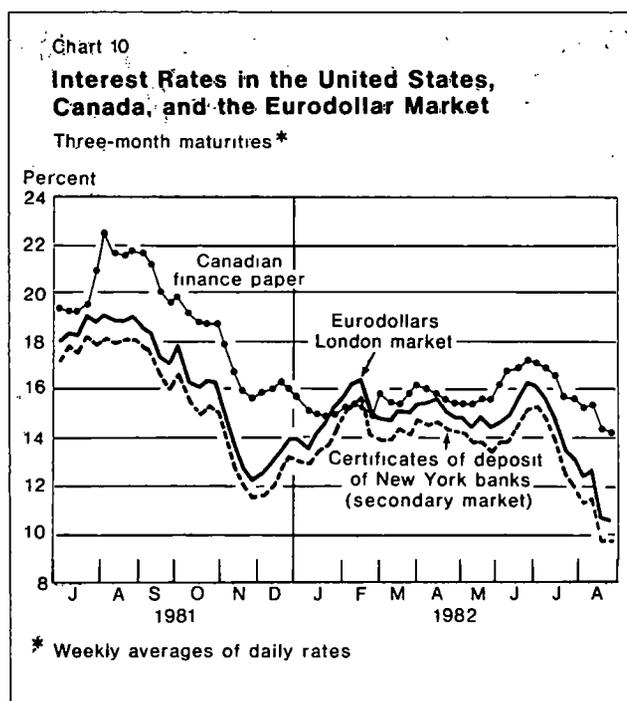
Market participants remained preoccupied with the state of Canadian economic policy. Their concerns gained new emphasis from the news that unemployment had risen to 9 percent in March, while consumer prices had registered their second consecutive monthly increase of more than 1 percent. Rumors developed in the market, and were confirmed by an announcement on May 1, that the Alberta oil sands development project would be abandoned following withdrawal by all its private participants. The Bank of Canada was a net seller of US dollars during March, recording a drop of approximately \$500 million in reserves, but during April its net reserve position remained about



unchanged as the central bank drew \$500 million on its credit lines with U.S. commercial banks to bolster reserves.

The Canadian currency's relative steadiness since late February ended abruptly in early May, and a sustained slide began which took the Canadian dollar to record levels below \$0.77 (Can\$1.30) by the third week of June. In a sudden wave of selling, the exchange rate plummeted through the U.S.\$0.81 level on May 12 for the first time since August 1981. While market participants were encouraged by another large trade surplus in March, this good news was swamped by an April jump in the unemployment rate to 9.6 percent and by an article published in a leading Toronto newspaper which suggested that the Canadian authorities might be considering a shift in policy toward stimulating the economy and allowing the currency to depreciate. Government officials were quick to refute this suggestion. Still, the Canadian dollar dropped nearly 1 percent that day to close at U.S.\$0.8059 (Can\$1.2408). The Bank of Canada provided exchange market support and acted to tighten cash reserves of the banking system. Following a ¼ percentage point rise in the central bank's discount rate and the Prime Minister's statement assuring Parliament that there would be no devaluation or imposition of exchange controls, market participants were reassured that, for the moment, policy would not be changed. Announcement of modification to the export licensing criteria for natural gas also helped the currency.

Market sentiment deteriorated further in June, however, on news of another decline in industrial production and a record 10.2 percent unemployment rate in May, prompting more public calls for lower interest rates. In addition, greater concern developed about the financial strains affecting Canadian corporations and even some large Canadian banks. In this environment, news which otherwise might have been favorable to the exchange rate, such as better trade figures and a higher Bank of Canada discount rate, only served to confirm the likelihood of further weakening of the economy and thereby deepened the mood of pessimism about prospects for the Canadian currency. Then, following the close of the Versailles summit meeting, Prime Minister Trudeau indicated that Canada might take independent action if U.S. interest rates did not fall by mid-July, suggesting to the market the possibility of a change of heart by the authorities about accepting the consequences of currency depreciation. Heavy speculative sales occurred in an increasingly bearish atmosphere, particularly after the announcements of a further acceleration of consumer price inflation during May and an 8 percent decline at an annual rate in real GNP for the first three months of the year.



The exchange rate thus fell to a historic low of U.S.\$0.7683 (Can\$1.3016) on June 22.

At these levels, the Canadian dollar met resistance to further declines, steadied through early July, and began a recovery which coincided with the rapid declines in U.S. interest rates and a softening of the U.S. dollar through the end of the period. Corporations took advantage of the historic low rates to meet their needs for Canadian currency, while professionals began taking profits on their very large short positions. A new budget was announced on June 28 and the main feature was a proposal for a two-year national effort to brake inflation. The program included a cap on salary increases of government employees, limits on price increases in federally regulated sectors of the economy, some temporary deindexation of personal income taxes and social security payments, and new measures to assist those most severely affected by the recession. Market reaction to the budget announcement was primarily negative, focusing on the Can\$9 billion increase to nearly Can\$20 billion in the government's estimated total deficit for the current fiscal year, a change which resulted from the low level of actual economic activity, compared with what had been assumed in the previous budget. On the positive side, market participants were relieved that government policy remained firmly anti-inflationary. Thus, the exchange rate fluctuated without significant gains.

Canadian gross foreign exchange holdings declined some \$500 million through May and June, even after additional drawings on the credit lines with Canadian and foreign banks amounting to \$300 million in May and \$1.4 billion in June.

The Canadian dollar firmed in the exchanges in July, initially supported by technical factors, as some widely used statistical models gave strong "buy" signals and participants on the IMM began turning their large short positions. U.S. interest rates also began a decline which was not immediately matched by equivalent cuts in Canadian rates, and there was speculation in the market that the authorities planned to tap foreign credit markets again to bolster official reserves. These supporting factors were reinforced by a continued strong trade performance, seasonal inflows from tourism, and an unusually heavy schedule of foreign borrowing conversions, which in combination appeared to swamp any negative impact on sentiment from the report of yet another increase in June unemployment to 10.9 percent and the downgrading of some major Canadian borrowers' debt issues by an American bond-rating service. Some selling emerged later in the month when wage talks between Prime Minister Trudeau and the Canadian Labor Congress ended in disagreement, but this pressure soon abated and the Canadian currency continued to firm despite a temporary rise in U.S. interest rates toward the end of the month. The Canadian dollar thus closed the period at U.S.\$0.7987 (Can \$1.2520) on July 30, 4½ percent lower than six months earlier but still nearly 4 percent higher than its lowest level reached in June. As the Canadian dollar reversed strongly during July, the Bank of Canada made substantial net purchases of U.S. dollars and repaid \$750 million of its drawings on commercial banks, while adding about \$400 million to official foreign exchange reserves. During the six months as a whole, Canada's official foreign exchange reserves fell some \$800 million to \$2.1 billion and \$1.65 billion of the borrowings on commercial bank credit lines remained outstanding as of the end of July.

#### **Mexican peso**

By early 1982, the Mexican peso was widely seen by market participants as significantly overvalued in the exchange markets, reflecting the accumulated effects of a high and accelerating domestic inflation rate, a nearly fixed exchange rate against the U.S. dollar over a period of several years, and to an extent the appreciation of the U.S. dollar after the middle of 1980. Dating from early 1977 and increasingly after 1979, the Mexican authorities had followed an aggressive policy of industrialization and expansion of domestic

employment, based on rapidly expanding oil production and exports, and a program of borrowing abroad in order to finance the import of industrial capital goods. These policies succeeded in their major objectives, with real output expanding in Mexico at an annual rate of over 8 percent in the four years through 1981 and with commensurate effects on employment.

At the same time, however, signs of strain appeared on both the domestic and international fronts. Domestically, fiscal deficits climbed to approximately 15 percent of gross domestic product by 1981, money supply expansion held steady at about 33 percent per annum for four consecutive years, wage increases climbed, and in consequence the rate of inflation accelerated in 1980 and 1981 to nearly 30 percent. On the international front, the relatively stable peso exchange rate and rising domestic prices combined to spur imports of consumer goods and to depress Mexican nonoil exports, and worsened a trade deficit already deepened by expanding capital goods imports and recession in the industrial world. Meanwhile, the rapid growth of external indebtedness and historically high international interest rates led to rapidly climbing debt-service costs. Indeed, by the end of 1981, Mexican public and private foreign currency debt reached an estimated \$75 billion, with debt-service costs virtually absorbing total oil revenues in that year. The oil price jump of 1979-80 had worked initially to increase Mexican foreign currency earnings sharply, but the high prices by 1981 produced an opposite effect, cutting deeply into world oil demand and thereby halting the rapid rise in Mexican oil production as well as lowering export earnings below what had been expected. Moreover, late in 1981, the Mexican authorities announced a 1982 public-sector budget clearly intended to continue the rapid expansion of the economy—a policy which intensified fears of even more inflation and a peso devaluation, particularly in view of the deterioration in the external account. Despite these developments, the peso late in 1981 was trading at about Mex.\$26 (\$0.038), in nominal terms only about 15 percent below its level five years earlier but in real terms substantially higher.

The authorities initially responded to the growing pressure on the peso by accelerating the gradual depreciation of the currency in the exchanges to about a 17 percent annual rate by the end of 1981. Nevertheless, there were frequent rumors of an impending maxi-devaluation—such as had occurred in 1976—prompting bursts of foreign currency purchases by Mexican residents and an erosion of Mexico's foreign currency reserves, which at the end of 1981 were reported at \$3.7 billion. Then, on February 17, 1982, the Banco de Mexico announced that, in view of the exter-

nal situation, it would temporarily withdraw intervention support from the peso, so that the peso could find an equilibrium level in the market. The Mexican authorities saw the problem primarily as one of external balance and stated that an exchange rate adjustment would make it possible to continue efforts to industrialize Mexico and to expand employment. Accordingly, such corrective measures as were announced to go along with the floating exchange rate were addressed mainly to external considerations and to cushioning the domestic effects of the devaluation. Public spending was to be reduced, with the savings used to cushion the incomes of the workers from the effect of currency devaluation and to cover the increased peso costs of servicing the public-sector external debt. Price controls were announced, and domestic interest rates were to be kept high, but measures were also taken to ensure adequate credit flows to critical sectors of the economy.

On the external side, the Mexican authorities expected that the decline in the peso exchange rate would substantially restore Mexico's competitive position in nonoil exports, sharply reduce nonessential imports, and halt the capital flight. The expected swing in the Mexican trade account was in turn thought likely to reduce Mexico's need for external borrowing through 1982. In addition, import licensing was to be tightened. Immediately following the announcement, the peso dropped in the exchanges from Mex.\$26.74 to Mex.\$38.0 and in the next two weeks fell to about Mex \$45, a devaluation of about 40 percent from the February 17 level. Once trading settled down, some capital reflows occurred, enabling Mexico to buy back some of the reserves lost earlier. Through March and much of April, an uneasy peace existed in the exchange markets. The peso first climbed somewhat and then drifted lower amid some resident selling, with market participants increasingly concerned whether the February policy actions were sufficient to correct the external imbalance.

But it soon became clear that much if not all of the potential benefit of the devaluation would be lost in a burst of inflation brought on by actions taken by the government aimed at cushioning the domestic impacts of the devaluation. The main issue concerned wages. The government agreed in late March with the trade unions for increases ranging from 10 to 30 percent, increases which followed a 34 percent boost in the minimum wage on January 1, 1982. Employers then contended that the wage increases could not be absorbed without adjustments on the price front, leading the government to announce a number of tax concessions, and promises of a sympathetic review of requests for increases in controlled prices. In the wake

of these developments, estimates in the market of 1982 Mexican inflation were revised sharply higher, some predicting a rate near 60 percent. In consequence, the peso again came under sustained downward pressure in the exchanges and capital flowed out of Mexico. The terms of Mexico's new international borrowings, which had begun to harden even before the February devaluation, hardened further. In mid-April the peso stood at about Mex.\$46, and was being allowed to decline in the exchanges at an annual rate of about 22 percent.

Then, on April 21, the government of Mexico announced a stabilization program, prompted by the deteriorating external situation but in this instance including a major domestic austerity program designed to facilitate improvement in the external account. The seventeen-point program was aimed at sharp reduction of government spending and the fiscal deficit, largely through increases in prices of public-sector goods and services, a tightening of monetary policy, and substantial further reductions of imports which in turn would reduce the need to borrow abroad. This program, if implemented as announced, was thought by market participants likely to result in a virtual cessation of Mexican economic expansion in 1982 and thus was taken as a more concerted attempt to deal with the external situation than the February program. The announcement of such a program only about two months before national elections was also taken by the market as an indication that the Mexican authorities viewed the situation as increasingly serious. At the end of April, the Federal Reserve received and granted a request from the Banco de Mexico for a \$600 million drawing on the swap facility to meet month-end liquidity needs.

In the weeks that followed, market concerns focused on two closely linked issues. First, whether the stabilization program would be implemented aggressively enough to redress the serious internal and external imbalances and, second, whether Mexico would be able to borrow enough on the international capital markets to bridge the gap until the program had time to work. With respect to the first issue, there was concern that political pressures ahead of and even following the July 4 national elections would force postponement of key program elements, particularly the sharp price increases in domestic energy and critical foodstuffs.

Through the late spring and early summer, it became increasingly clear that Mexico was encountering considerable difficulty in rolling over maturing foreign currency credits and raising needed new cash. A "jumbo loan" of \$2½ billion was floated in late May, about half of which was new cash used to bolster for-

eign exchange reserves. The terms of the loan called for higher interest rate spreads above LIBOR (London interbank offer rate) than had existed only a few months before, but loan participations were slow to sell outside the lead underwriting syndicate despite the higher interest yield. A few weeks later, Mexico successfully floated a Eurobond issue but only by offering a record interest yield on such issues of 18½ percent. At the same time, private-sector borrowers also were experiencing difficulties, particularly Grupo Industrial Alfa, the large Mexican industrial conglomerate, which earlier had suspended payments on its international obligations. And again, at the end of June, the Banco de Mexico requested and was granted a \$200 million drawing on its swap line with the Federal Reserve to meet a temporary liquidity need, with the funds taken down on June 30 and repaid on July 1.

As the period drew to a close, there were signs that the April economic program was beginning to take effect, although at the same time many came to question whether the program was sufficient to restore external and internal balance even if fully implemented. Imports had come down sharply, partly in consequence of the February devaluation but also reflecting the April import control program. While non-oil exports had been sluggish to respond, oil exports on a daily basis had rebounded to nearly the levels originally targeted for all of 1982. On the domestic side, limitations on peso credit were showing up in con-

tinuing interest rate increases. By late July, rates on most short-term deposits had climbed from just over 30 percent in February to about 50 percent, high by historical standards in Mexico but still well below the expected rate of inflation. But the government expenditure reductions and price increases were proceeding less rapidly than called for in the April program, suggesting that the reduction of the fiscal deficit in 1982 would be at best only about two thirds of the amount targeted in April.

Capital flight apparently tapered off somewhat through late June and July, although downward pressure on the peso in the exchanges continued. However, with estimates of the inflation rate progressively revised upward, market participants came to expect an acceleration in the gradual peso depreciation or another major devaluation, and concern remained over the possibility of a renewal of significant speculative pressure. Thus, it was clear that more time and continued forceful government action would be required before economic balance could be restored, with the implication that liquidity pressures would continue to be serious for some time. At the end of July the peso had declined to about Mex.\$49 to the U.S. dollar. And, on the final day of the period, Mexico again drew on its swap line with the Federal Reserve to finance a short-run liquidity need, taking down \$700 million on July 30 and repaying the amount in full the following business day.