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INTERNATIONAL MONETARY FUND

Treasurer's Department

Foreign Exchange and Financial Markets in September 1983

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Leading exchange markets were relatively quiet in September with the U.S. dollar easing by 1.87 percent in effective (MERM) terms and by 1.16 percent against the SDR after an extended period of firming (8 percent) from the end of February to the end of August. Currency values moved erratically around the weakening trend for the dollar, largely reflecting wide margins of difference between unofficial estimates of the M1 money supply and the weekly official announcements. All major currencies firmed against the dollar over the month with the Japanese yen (4.58 percent) and the Swiss franc (3.15 percent) firming the most among them (see Table 1).

The reversal of the dollar's strengthening trend in September was attributable in part to an unexpected shift of the M1 money supply below the upper limit of its target range coupled with continuing within-target growth of the broader M2 and M3 measures. Short-term U.S. interest rates eased over the month while some official European interest rates were raised. The Bundesbank raised its Lombard rate to 5.5 percent from 5 percent, in response to growth in the money stock above the target range, which prompted official interest rate increases in the Netherlands and Austria. Intervention by the Bundesbank, which had been relatively light in the first two weeks of the month, became negligible in the second half of the month.

Within the EMS, the Belgian franc became increasingly isolated at the bottom of the parity grid (see Chart 1) partly influenced by strikes by public sector workers in protest at proposed restrictions on pay and benefit increases as part of a program to narrow the budget deficit. In addition, Belgian sources reported that the Bank of France's transactions to keep the French franc firm against the Deutsche mark and at the top of the parity grid had adversely affected the Belgian franc's position in the system. The pressure on the Belgian franc

Table 1. Changes in Exchange Rates in September 1983 1/

(In percent)

	Monthly exchange rate changes			
	Against U.S. dollar 2/	Against SDR	Effective exchange rate 3/ (In percent)	Change in effective exchange rate since September 1982 3/
Belgium	+1.55	+0.55	+0.05	-3.0
Denmark	+2.21	+1.06	+0.88	-1.6
France	+1.50	+0.58	+0.27	-7.0
Germany	+2.49	+1.38	+0.20	+0.9
Ireland	+1.65	+0.67	+0.65	-7.2
Italy	+1.00	-0.17	-0.64	-7.2
Netherlands	+2.63	+1.42	+1.17	-0.8
Austria	+2.72	+1.35	+0.99	-0.3
Canada	+0.14	-1.05	-0.67	+2.2
Japan	+4.58	+3.24	+3.65	+19.2
Norway	+2.14	+0.97	+0.69	-1.2
Sweden	+1.47	+0.50	+0.15	-16.3
Switzerland	+3.15	+1.78	+1.34	+5.6
United Kingdom	+0.25	-1.00	-1.50	-8.2
United States	--	-1.16	-1.87	+2.8

1/ Positive sign indicates appreciation of the currency.
2/ Based on New York noon quotations.
3/ Based on the Fund's multilateral exchange rate model (MERM).

was reflected in the discount of the financial franc from the commercial franc, which widened from 0.8 percent at the end of August to 2.2 percent in midmonth but then narrowed somewhat to 1.7 percent at the end of September. By the end of the month, the divergence indicator for the franc (based on London noon quotations) had exceeded its lower threshold (see Chart 2), indicating that some economic policy adjustments might be called for to bring the currency into closer alignment with those of its EMS partner countries. Intervention by the National Bank of Belgium to support the Belgian franc was fairly steady throughout the month and amounted to the equivalent of about BF 30 billion. The French franc was at the top of the parity grid throughout most of the month but was occasionally displaced by the Irish pound. The Netherlands guilder and the Danish krone strengthened in the grid and by the end of September these currencies were closely clustered near the top with the French franc and the Irish pound. The Bank of France's strategy

has apparently been to maintain a cushion against the Deutsche mark in anticipation that the Deutsche mark might strengthen faster than other EMS currencies as the U.S. dollar eases. The Deutsche mark began the month near the bottom of the grid but steadily firmed to end the month mid-way in the grid. In New York, the spread in the narrow EMS band frequently exceeded the 2.25 percent margin in terms of ECU central rates maintained in the EMS member markets. The Italian lira continued to be the strongest currency in the EMS relative to ECU central parities but its margin above the Belgian franc narrowed from 5.21 percent at the end of August to 4.65 percent at the end of September with the seasonal weakening of the country's current account balance (the lira is permitted a maximum margin of 6.0 percent from the weakest currency in the exchange arrangements). The EMS currencies firmed by 1.00-2.63 percent against the U.S. dollar over the month, with the Italian lira firming the least and the Netherlands guilder firming the most.

The volatility of exchange rates against the U.S. dollar declined considerably in September. The range within which currencies traded narrowed for all currencies except the Japanese yen and the Swiss franc which gained the most against the dollar during the month. Day-to-day variations were also reduced, especially for the EMS currencies for which the average of absolute daily percentage changes (MAC in Table 2) declined to about one-third of a percentage point (similar to July's level) from the relatively high level in August of over half a percentage point. This MAC measure increased slightly for the Japanese yen but declined for other major currencies.

Changes in gross foreign exchange reserve levels in September were relatively modest as intervention activity by central banks was considerably reduced. Switzerland recorded a sizable reserve gain (from a downward revised reserve level in August) because of swap operations with commercial banks to satisfy end-of-quarter domestic liquidity requirements of the banks. Among the EMS members, reserves declined for Belgium, France, Italy and the Netherlands while Denmark, Germany and Ireland recorded modest increases.

The Federal Reserve Bank of New York revealed that in the six months to the end of July plus the first five days of August, central bank foreign exchange market intervention totaled $50 billion with more than half of this being used in the first quarter of the year prior to the March EMS realignment. This compared with the estimated $48 billion and $53 billion spent in intervention in the first and second halves of 1982, respectively.

Table 2. Intra-Month Variations of Exchange Rates of Major Currencies 1/

	September 2/		High-low spread in percent 3/		MAC 4/	
	High	Low	Aug.	Sept.	Aug.	Sept.
Belgium	53.385	54.205	3.7	1.5	0.56	0.32
Denmark	9.5000	9.6985	3.7	2.1	0.59	0.31
France	7.9925	8.1095	3.9	1.5	0.56	0.32
Germany	2.63100	2.69525	4.0	2.4	0.57	0.35
Ireland	1.18550	1.16700	3.9	1.6	0.58	0.30
Italy	1588.5	1625.5	3.2	2.3	0.53	0.38
Netherlands	2.9410	3.01325	4.0	2.5	0.57	0.33
Austria	18.4925	18.9400	4.0	2.4	0.57	0.34
Canada	0.81258	0.81047	0.7	0.3	0.08	0.06
Japan	235.60	246.75	1.7	4.7	0.32	0.35
Norway	7.3625	7.4975	2.6	1.8	0.43	0.28
Sweden	7.8075	7.92925	2.4	1.6	0.41	0.20
Switzerland	2.1195	2.1890	2.7	3.3	0.46	0.35
United Kingdom	1.5095	1.49035	3.5	1.3	0.48	0.27

1/ Exchange rates against the U.S. dollar in the New York market.
2/ Domestic currency units per U.S. dollar except for the pound sterling, the Irish pound and the Canadian dollar, which are in U.S. dollars per domestic currency unit.
3/ Intra-month variation in percent.
4/ Monthly average of absolute daily changes in spot exchange rates in percentage terms.

Table 3. Foreign Exchange Reserves in September 1983 1/

(In millions of U.S. dollars)

	End-month reserve level	Change in September	Change over 12 months
Belgium	3,858	-347	+487
Denmark	3,133	+300	+1,601
France	18,631	-233	+7,595
Germany	37,082	+364	+1,098
Ireland	2,502	+262	+244
Italy	17,670	-437	+3,498
Netherlands	8,477	-245	+1,496
Austria	4,104	+8	-77
Canada	3,249	+8	+651
Japan	20,452	+214	+247
Norway	5,379	+152	-965
Sweden	2,985	+149	+179
Switzerland	12,578	+1,046	-280
United Kingdom	8,904	+36	-2,017
United States	6,911	+254	-1,719

1/ Includes ECU holdings but excludes gold, SDRs and reserve position in the Fund. Foreign exchange reserves are gross and include balances drawn on short-term swap agreements and the proceeds from other official borrowings.

I. Developments in the Spot Exchange Markets

The U.S. dollar weakened against other leading currencies in September, the first significant monthly decline since February. The dollar eased by 1.87 percent in effective (MERM) terms and 1.16 percent against the SDR mainly on lower money supply growth and narrowing of the interest differential favoring the dollar. There were some indications that the rapid U.S. economic recovery might be slowing to a more sustainable pace. The index of leading economic indicators fell 0.1 percent in August, the first fall since August 1982. The growth of real GNP in the third quarter was estimated at a seasonally adjusted annual rate of 7.9 percent, following a rate of 9.7 percent recorded in the second quarter. The GNP deflator rose at an annual rate of 3.4 percent following a rise of 3.3 percent in the second quarter. The civilian unemployment rate in September declined to 9.3 percent from 9.5 percent in August. The index of industrial

production in September, seasonally adjusted, rose 1.5 percent and was up 11.9 percent year-on-year. The budget deficit and the trade deficit both continued to widen in August; the budget deficit was $17.5 billion compared with $14.7 billion a year earlier while the seasonally adjusted trade deficit was $7.19 billion compared with $6.36 billion in July. The producer price index in September rose a seasonally adjusted 0.2 percent and was up 1.4 percent year-on-year.

The Deutsche mark firmed by 2.49 percent against the U.S. dollar and slightly (0.20 percent) in effective (MERM) terms. Germany's index of industrial production was unchanged in August from a downward revised level in July and was also unchanged from August 1982. The unemployment rate in September declined to 8.6 percent from 8.9 percent in August. The current account deficit in August widened to DM 3.4 billion from DM 3.2 billion in July and DM 2.9 billion in August 1982. The wholesale price index rose 0.6 percent in September and 0.9 percent year-on-year, while the producer price index rose 0.3 percent for a year-on-year rise of 1.5 percent.

The French franc firmed 1.50 percent against the U.S. dollar and 0.27 percent in effective (MERM) terms. It remained one of the strongest currencies in the narrow band of the EMS parity grid; Belgian sources reported that the Bank of France had been intervening to maintain this position. France's trade balance, seasonally adjusted, swung into a surplus of F 323 million in September from a deficit in August of F 389 million. The 1984 budget proposal included a 6.3 percent rise in government spending (following rises averaging nearly 20 percent in the previous three years) and a deficit equivalent to about 3.0 percent of estimated GNP. The anti-inflation program was modified by increasing the wage rise target from 5.0 percent to 6.0 percent while industrial wholesale prices rose 1.9 percent in August (following a 0.9 percent rise in July) for the largest increase since March 1979; the index was up 11.7 percent year-on-year. The rate of growth of real GDP in the second quarter was revised from 0.2 percent to 0.5 percent. Industrial production in the July-August period rose 1.6 percent and was up 4.0 percent year-on-year.

The Belgian franc firmed 1.55 percent against the U.S. dollar but was essentially unchanged in effective (MERM) terms and became increasingly isolated at the bottom of the EMS parity grid; the franc's position on the exchange market was affected, as noted earlier, by strikes against proposed public sector pay and benefit cuts. The divergence indicator for the Belgian franc (based on noon quotations in London) fell below the lower threshold late in September and the discount of the financial franc from the commercial franc widened from 0.8 percent at the end of August to 2.2 percent in midmonth but then narrowed to 1.7 percent at the end of September. Intervention support by the National Bank of Belgium amounted to about BF 30 billion during the month. The unemployment rate at the end of September remained at 12.7 percent. Industrial production in June rose 5.0 percent but was unchanged from June 1982. The trade deficit of the Belgo-Luxembourg Economic Union (BLEU) narrowed

to BF 260 million in June from a revised deficit of BF 5.62 billion in May and BF 10.6 billion in June 1982. The wholesale price index in August rose 2.5 percent and was up 5.4 percent year-on-year.

The Netherlands guilder firmed by 2.63 percent against the U.S. dollar and 1.17 percent in effective (MERM) terms. The 1984 budget proposals involve both spending cuts and tax increases to narrow the deficit to the equivalent of 12.1 percent of GNP from an expected 12.4 percent in 1983. Industrial output in August declined by 4.6 percent but was up 2.0 percent year-on-year. The number of persons unemployed, seasonally adjusted, rose 0.4 percent in September; the unemployment rate was 17.6 percent in August. The trade balance in August swung into a deficit of f. 600 million from a surplus of f. 400 million in July and a balance in August 1982. The producer price index for consumer and investment goods in July rose 0.8 percent and was up 1.6 percent year-on-year.

The Danish krone firmed 2.21 percent against the U.S. dollar and 0.88 percent in effective (MERM) terms. The unemployment rate in August rose to 9.9 percent from 9.2 percent in July, while the trade deficit widened to DKr 400 million from DKr 124 million in July but narrowed from DKr 1.14 billion in August 1982. The wholesale price index in September rose 1.4 percent, the same as in August, for a 4.9 percent year-on-year rise.

The Irish pound firmed 1.65 percent against the U.S. dollar and 0.65 percent in effective (MERM) terms. The trade balance in September swung into a surplus of £Ir 30.9 million from a deficit in August of £Ir 69.0 million and a deficit of £Ir 4.4 million recorded in August 1982. For the first time since 1978 the budget deficit for the first nine months of the year was less than the target for the full year; the deficit was running at a rate equivalent to about 14.0 percent of GNP.

The Italian lira gained the least among the EMS currencies in September, firming by 1.00 percent against the U.S. dollar and easing by 0.64 percent in effective (MERM) terms. Relative to ECU central rates, however, the lira continued to be the strongest currency in the EMS although its margin above the Belgian franc declined during September. The relative weakness of the lira was attributed to seasonal deterioration in the current account; the trade deficit in August widened to Lit 1,391 billion from Lit 69 billion in July and Lit 995 billion in August 1982. The Prime Minister announced proposals to reduce the 1984 budget deficit from Lit 130,000 billion that would occur if policies were unchanged, to Lit 90,000 billion, equivalent to less than 15.0 percent of GDP. The unemployment rate in the quarter to July declined to 9.7 percent from 9.9 percent in the previous quarter. Industrial production in August declined by 9.5 percent and was down 4.5 percent year-on-year while the wholesale price index rose 0.8 percent and was up 8.7 percent year-on-year.

The pound sterling firmed marginally (0.25 percent) against the U.S. dollar and was easier in effective (MERM) terms by 1.50 percent. A report of the House of Lords investigation indicated that reduced dependence in the future on oil revenues for foreign exchange earnings and the weakness of the EMS currencies relative to other major currencies constituted favorable conditions for the pound sterling to join the exchange arrangements of the EMS. The central government's borrowing requirement in the six months to September widened to £6.993 billion from £5.595 billion in the same period of 1982. Industrial production in August, seasonally adjusted, declined by 0.3 percent but was up 2.5 percent year-on-year. The unemployment rate, seasonally adjusted, increased to 12.4 percent in September from 12.3 percent in August. The current account balance, seasonally adjusted, swung back into a surplus of £22 million in August following a deficit of £190 million in July. The index of producer output prices rose 0.6 percent in September after rising 0.2 percent in August for an unchanged year-on-year growth rate of 5.3 percent.

The Swiss franc firmed by 3.15 percent against the U.S. dollar and 1.34 percent in effective (MERM) terms. Switzerland continued to enjoy relatively stable economic conditions. The unemployment rate in September was unchanged at 0.8 percent. The trade deficit narrowed to Sw F 404 million from Sw F 1.075 billion in August and Sw F 890 million in September 1982. The wholesale price index rose 0.4 percent in September and was up only 0.8 percent year-on-year. The Swiss authorities imposed a ban on public bond issues by foreign export credit agencies on the Swiss market but certain private placements could continue.

The Japanese yen firmed 4.58 percent against the U.S. dollar and 3.65 percent in effective (MERM) terms largely because of a continuing strong trade performance. The Finance Ministry revealed that public agencies were considering issuing bonds on the U.S. market to help finance the public sector deficit and to strengthen the yen, while the U.S. Government was reported to have been urging further opening of the Japanese capital market and "internationalization" of the yen. Industrial production (seasonally adjusted) rose by 2.8 percent in July and was up 5.2 percent year-on-year. The unemployment rate, however, rose to a record 2.8 percent in August from 2.5 percent in July. The current account surplus, seasonally adjusted, narrowed slightly to $2.05 billion in August from $2.12 billion in July. The trade surplus, seasonally adjusted, narrowed in September to $1.34 billion compared with $2.39 billion in August. The wholesale price index rose 0.1 percent in September and was down 3.2 percent year-on-year.

The Canadian dollar firmed 0.14 percent against the U.S. dollar but eased 0.67 percent in effective (MERM) terms. The index of leading economic indicators rose 2.9 percent in June following gains of 3.1 percent in both April and May. The index of industrial production seasonally adjusted, rose 0.85 percent in July and was up 10 percent year-on-year but remained 8.7 percent below the pre-recession peak of

June 1981. Real GDP, seasonally adjusted, rose 0.3 percent in July and was up 5.0 percent year-on-year. The unemployment rate declined to 11.3 percent in September from 11.8 percent in August. The trade surplus in August, seasonally adjusted, narrowed to Can$1.28 billion from Can$1.40 billion in July.

The Austrian schilling continued to trade in close alignment with the EMS currencies; it firmed 2.72 percent against the U.S. dollar and 0.99 percent in effective (MERM) terms. The Norwegian krone firmed 2.14 percent against the U.S. dollar and 0.69 percent in effective (MERM) terms. The Swedish krona firmed 1.47 percent against the U.S. dollar and was only slightly firmer in effective (MERM) terms.

II. Monetary Developments, Forward Exchange Quotations and Covered Interest Differentials

There were some changes in monetary and credit conditions in some of the major industrial countries in September. In the United States and in the United Kingdom, short-term interest rates continued to ease along with the moderation of the growth of money supply, while in Germany, Austria and the Netherlands, central banks' lending rates were raised in line with the firming trend of the domestic money market rates. The conditions remained little changed in most other major countries.

In the United States, short-term interest rates continued their easing trend since mid-August, attributed in part to the moderate increases of closely watched M1 measure of money supply. M1 averaged $517.4 billion in September up from $516.7 billion in August, and for the latest 13 weeks it rose at an annual rate of 8.3 percent. M2 rose to $2.1457 trillion in September from $2.1369 trillion in August and M3 rose to $2.5440 trillion from $2.5285 trillion. The three-month bond equivalent yield on Treasury bonds eased by 0.59 percentage point to 9.05 percent between the end of August and the end of September while the 90-day CD rate eased by 0.61 percentage point to 9.15 percent. The Federal funds rate averaged 9.04 percent in the last week of September down from 9.44 percent in the last week of August. The prime lending rate, however, remained unchanged at 11.0 percent, since the last raising of the rate on August 8.

Among the countries in the European Monetary System, the Bundesbank raised the Lombard rate (the rate for central bank advances against collateral) by half a percentage point to 5.5 percent with effect from September 9, while leaving the discount rate unchanged at 4.0 percent. This measure was taken to curb the relatively sharp increase of Germany's money supply in the recent past; from the fourth quarter of 1982 to

Table 4. Inflation Rates and Short-Term Interest Rates

	Month 2/	Inflation rates 1/ (year-on-year percent changes) Wholesale price index		Consumer price index 3/		Short-term interest rates 4/ (end-of-month) Aug.	Sept.
Austria	June/Sept.	-1.5	(-3.0)	3.3	(3.1)	3.75	3.75
Belgium	Aug./Sept.	5.4	(3.0)	7.3	(7.9)	9.25	9.25
Canada	September			5.0	(5.5)	9.54	9.20
Denmark	Sept./Aug.	4.9	( )	6.1	(6.2)	7.50	7.50
France	August	11.7	(9.0)	9.7	(9.4)	12.55	12.67
Germany	September	0.9	(0.2)	2.9	(3.0)	5.88	5.91
Italy	Aug./Sept.	8.7	(9.4)	13.6	(13.7)	17.75	17.50
Japan	Sept./July	-3.2	(-2.9)	2.2	(2.0)	6.83	6.83
Netherlands	July/Sept.	1.6	(0.9)	2.5	(2.6)	6.31	6.19
Norway	Aug./Sept.	5.7	(5.9)	7.8	(7.6)	8.00	8.00
Sweden	July/Sept.	11.8	(11.7)	9.5	(9.3)	8.50	8.50
Switzerland	Aug./Sept.	0.8	(0.1)	1.4	(1.7)	4.50	4.13
United Kingdom	September	5.3	(5.3)	5.1	(4.6)	9.53	9.14
United States	Sept./Aug.	1.4	(1.4)	2.6	(2.4)	9.64	9.05

1/ Rates appearing in parentheses are those for the preceding month.

2/ In case of double entry (month/month), the first entry applies to the wholesale price index and the second entry applies to the consumer price index.

3/ Retail price index for France and the United Kingdom, and cost of living index for Germany, the Netherlands, and Switzerland.

4/ Three-month rates are: Market yields on Treasury bills for the United States and the United Kingdom; Treasury bill rate for Canada; interbank rates for Germany, France, Italy, and the Netherlands; three-month euro-franc rate for Switzerland; discount rate on two-month private bills for Japan; central bank discount rates for Austria, Belgium, Denmark, Norway and Sweden.

August 1983, the central bank money stock had risen at an annual rate of 8.5 percent, well above the target to the fourth quarter of this year of 4-7 percent. The new Lombard rate is now in line with domestic money market rates, which had risen by about half a percentage point since April, attributed in part to the influence of U.S. interest rates. The reduction of the interest rate differentials vis-à-vis other major countries is expected to sustain the exchange rate of the Deutsche mark. The Austrian National Bank also raised its Lombard rate by half a percentage point to 4.75 percent with effect from September 9, while leaving the discount rate unchanged at 3.75 percent. The Netherlands' Bank raised its official rates by half a percentage point with effect from the same date, in view of higher interest rates abroad and as an adjustment to the domestic money market rates. The new rates are: discount on bills of exchange: 5 percent, interest on advances: 5.5 percent, and discount on promissory notes: 6 percent. The Irish Central Bank cut its official rates by half a percentage point also on the same day; the rate for short-term facility is now 13 percent. The measure was taken for domestic policy purposes in light of the strength of the Irish pound within the European Monetary System. The National Bank of Belgium raised the interest rate on one-month Treasury certificates from 8.75 percent to 9.0 percent and that on two-month certificates from 9.0 percent to 9.25 percent on September 19. The rate on three-month certificates was left unchanged at 9.25 percent.

In the United Kingdom, sterling M3 fell by £440 million or 0.4 percent in the banking month ended September 21, compared with increases of 0.2 percent in August and 0.8 percent in July. M1 fell by 0.2 percent in September after an increase of 0.9 percent in August and Public Sector Liquidity 2 rose by 0.2 percent, compared with an increase of 0.8 percent in August. Over the seven months since mid-February, sterling M3 grew at an annual rate of 9.7 percent, M1 at 11.6 percent, and PSL 2 at 13.1 percent. This brought sterling M3 growth in the middle of the target band of an annual growth of 7-11 percent during the 14 months from mid-February 1983 to mid-April 1984. The moderate rate of money growth in relation to the target helped ease pressures on the domestic money markets and led interest rates lower; the three-month interbank rate fell by 0.25 percentage point to 9.56 percent between the end of August and the end of September and the three-month Treasury bill rate eased from 9.53 percent to 9.14 percent.

The Bank of Japan raised its net domestic lending ceilings for Japanese banks in the October-December quarter from the year-earlier level. The ceiling for the 13 city banks was raised by 15 percent from the actual lending levels in the same quarter of 1982, compared with actual increases of 10 percent in the third quarter and 13.3 percent in the second quarter. This somewhat easier policy reflects an anticipated pickup in loan demand as the pace of Japan's economic recovery increases. In August, Japan's broadly defined money supply,

M2 and CDs, grew at the slowest pace this year of 6.9 percent from the year-earlier level, down from 7.1 percent recorded in July. The average rate of increase stayed within a range of 7.1 percent to 7.7 percent between January and July.

The Swiss National Bank reported that its adjusted money stock increased by 4 percent in August from a year earlier, after a year-on-year increase of 1.5 percent in July and compared with the official target of 3 percent for 1983. The Bank announced in June that it would tolerate an overshooting of the target by up to one percentage point. The Bank of Sweden raised the penalty rate (the rate of interest banks have to pay for borrowing from the central bank in excess of a certain limit) from 11 percent to 12 percent on September 22 to curb further deterioration in Sweden's capital account and also as an adjustment to the firming trend of the domestic money market rates.

In the euro-currency markets, the three-month euro-dollar interest rate eased sharply by 0.75 percentage point to 9.56 percent at the end of September. As a result, the uncovered interest differentials favoring euro-dollar investment narrowed for Belgium, Germany, Japan, the Netherlands, and the United Kingdom and those favoring domestic investment widened for France and Italy.

In the forward exchange market, the premia against the U.S. dollar narrowed for the Deutsche mark, the Japanese yen, the Netherlands guilder, and the pound sterling and that for the Belgian franc turned to a discount. The discount against the U.S. dollar widened for the French franc and the Italian lira. Consequently, the covered interest differentials favoring domestic investment widened for Japan while they narrowed for Germany and the Netherlands and switched to favor euro-dollar investment for Italy. Those favoring euro-dollar investment narrowed for Belgium and France but widened for the United Kingdom between the end of August and the end of September.

Table 5. Covered Interest Differentials for Three-Month Investments (End-month)

	Uncovered interest differentials 1/ (1)		Forward exchange quotations 2/ (2)		Covered interest differentials 1/ (3) = (1)-(2)	
	Aug.	Sept.	Aug.	Sept.	Aug.	Sept.
Belgium 3/	+1.00	+0.31	+0.67	-0.01	+0.33	+0.32
France	-2.24	-3.11	-4.54	-4.58	+2.30	+1.47
Germany	+4.43	+3.65	+4.82	+3.87	-0.39	-0.22
Italy	-7.44	-7.94	-7.05	-8.10	-0.39	+0.16
Japan	+3.48	+2.73	+3.61	+2.97	-0.13	-0.24
Netherlands	+4.00	+3.37	+4.13	+3.44	-0.13	-0.07
United Kingdom	+0.78	+0.42	+0.59	+0.15	+0.19	+0.27

1/ Positive sign indicates differential in favor of euro-dollar investment relative to domestic investment, while negative sign indicates the reverse. Domestic interest rates for France, Germany, Italy and the Netherlands are interbank rates. For Belgium the rate on four-month certificates of the Government Securities Stabilization Fund is used, for Japan the discount rate for two-month private bills, and for the United Kingdom the three-month Treasury bill rate.

2/ Positive sign indicates three-month forward premium of domestic currency against the U.S. dollar, while negative sign indicates forward discount.

3/ Rates pertain to the last Tuesday of the month.

III. Yields on the SDR and Other SDR-Denominated Assets

The SDR interest rate rose to 8.93 percent in the first week of September from 8.84 percent in the last week of August, but declined later to 8.84 percent, 8.79 percent, and 8.64 percent in the second, third, and fourth week, respectively, reflecting mainly the easing trend of interest rates on the relevant financial instruments for the United States and the United Kingdom. The rate of remuneration paid on creditor positions in the Fund (85 percent of the SDR interest rate) eased to 7.34 percent in the last week of September from 7.51 percent in the last week of August.

Table 6. The SDR Interest Rate and the Rate of Remuneration 1/

	Aug. 29	September 5	12	19	26
SDR interest rate	8.84	8.93	8.84	8.79	8.64
Rate of remuneration	7.51	7.59	7.51	7.47	7.34

1/ The rate pertains to the week beginning on the date indicated above.

As shown in Appendix B, the monthly averages of interest rates on the domestic instruments for the currencies included in the SDR basket eased by 0.01-0.38 percentage point in the United States, the United Kingdom, and France while they firmed by 0.06-0.16 percentage point in Germany and Japan. As a result, the average combined market interest rate eased to 8.74 percent in September from 8.93 percent in August.

The combined domestic interest rates for maturities ranging from three months to five years eased by 0.31-0.47 percentage point from the end of August to the end of September, reflecting easier interest rates on the relevant instruments in the United States and in the United Kingdom, which eased by 0.39-1.04 percentage points, partly offset by those in France which firmed by 0.08-0.19 percentage point, while those in Germany and in Japan were mixed. The combined domestic rates displayed a rising yield curve which moved up from 8.59 percent on the three-month maturity through 8.88 percent and 9.24 percent on the six- and twelve-month maturities, respectively, to 10.48 percent on the five-year maturity.

The combined euro-currency interest rates for three, six, and twelve months eased relatively sharply by 0.53, 0.67, and 0.74 percentage point, respectively, to 8.91 percent, 9.20 percent, and 9.44 percent at the end of September. This reflected lower euro-dollar, euro-sterling, and euro-French franc interest rates which eased by 0.25-1.06 percentage points during September, partly offset by a slight increase in euro-yen rates which firmed by 0.06 percentage point while euro-Deutsche mark rates were narrowly mixed.

Average interest rates on SDR-denominated deposits of selected commercial banks eased by 0.24-0.66 percentage point at the end of September. The deposit rates displayed a rising yield curve moving up from 8.59 percent on one-month deposits through 8.78 percent and 9.07 percent on three- and six-month deposits, respectively, to 9.30 percent

on twelve-month deposits. The current yield on SDR-denominated bonds quoted on the Luxembourg Stock Exchange ranged from 8.79 percent to 11.39 percent, with the average current yield remaining practically unchanged at 9.85 percent at the end of September from that of August. The yield to maturity ranged from 9.54 percent to 14.59 percent with the average yield to maturity firming by 0.13 percentage point to 11.24 percent between the end of August and the end of September.

Table 7. Yields on Alternative SDR-Denominated Assets 1/

	August	September
Combined market interest rates 2/		
Based on domestic rates		
3-month maturity (Rule T-1)	8.90	8.59
6-month maturity	9.26	8.88
12-month maturity	9.71	9.24
5-year maturity	10.93	10.48
Based on euro-currency rates		
3-month maturity	9.44	8.91
6-month maturity	9.87	9.20
12 month maturity	10.18	9.44
Average commercial bank deposit rates 3/		
1-month deposits	8.83	8.59
3-month deposits	9.26	8.78
6-month deposits	9.65	9.07
12-month deposits	9.96	9.30
Bonds quoted on the Luxembourg Stock Exchange 4/		
Average current yield	9.86	9.85
Average yield to maturity	11.11	11.24

1/ Rates pertain to last Wednesday of the month.

2/ As of January 1, 1981, combined market rates (according to the Rule T-1) are calculated by multiplying the yields or rates of each of the respective instrument by the number of units of the corresponding currency listed in Rule O-1 and the value in terms of the SDR of a unit of that currency as determined by the Fund under Rule O-2(a) and (b). Domestic rates are those used to determine interest rates on the SDR or on borrowings by the Fund. Euro-currency rates are midpoint midmorning rates in London, and for sterling, in Paris.

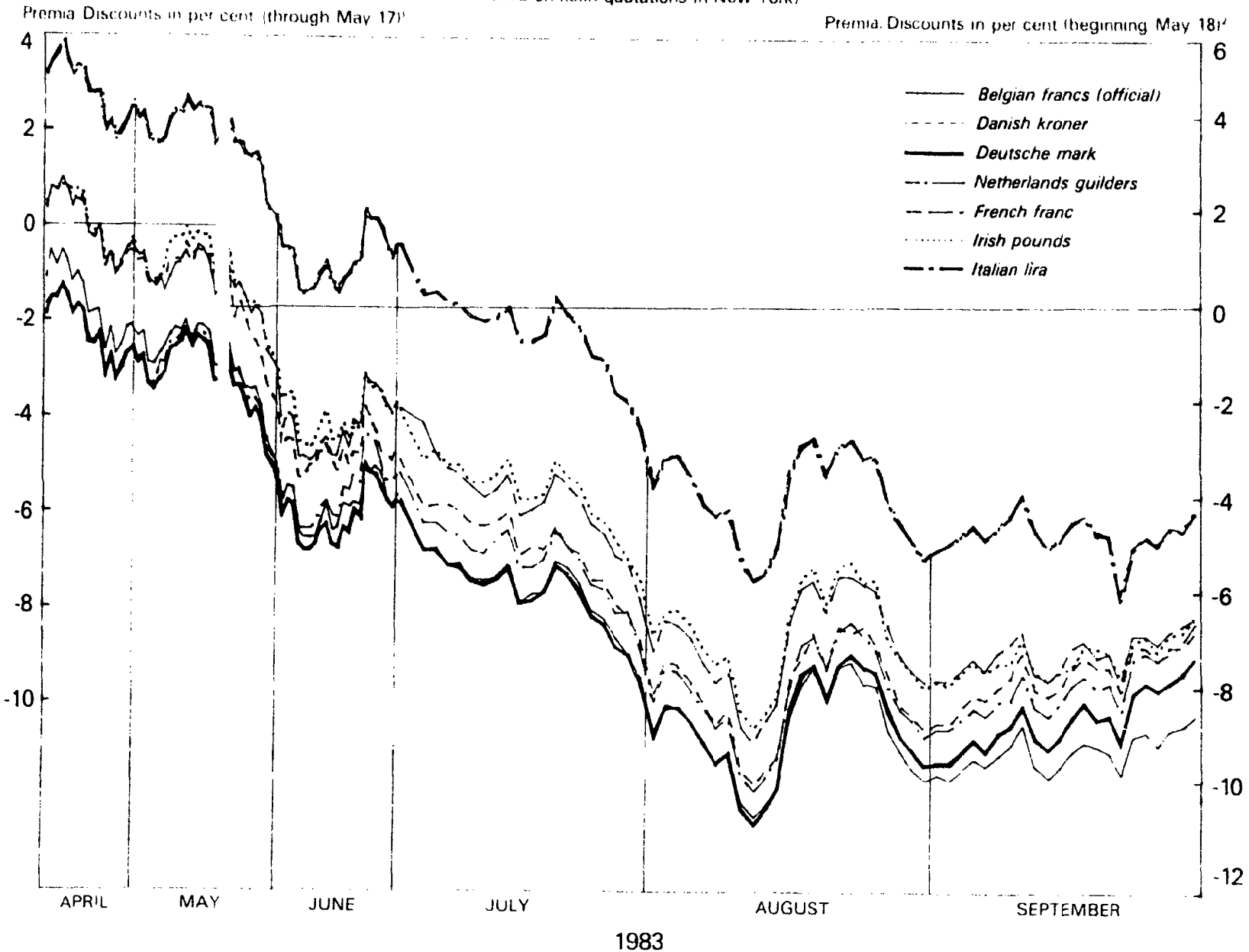
3/ Average of rates quoted by selected commercial banks.

4/ Maturity dates for these issues range from 1984 to 1989.

CHART 1

SPOT EXCHANGE RATES: EUROPEAN MONETARY SYSTEM

(Based on noon quotations in New York)



[illegible] March 21 the Danish kroner, the Netherlands guilder, the Danish kroner and the Belgian franc were revalued by 5.5, 3.5, 2.5 and 1.5 per cent respectively [illegible] 2.5 and 3.5 per cent [illegible] on the basis of the rates as of March 21 [illegible] ECU [illegible] 930217

[illegible]

CHART 2

EUROPEAN MONETARY SYSTEM: DIVERGENCE INDICATORS

(Based on noon quotations in London)

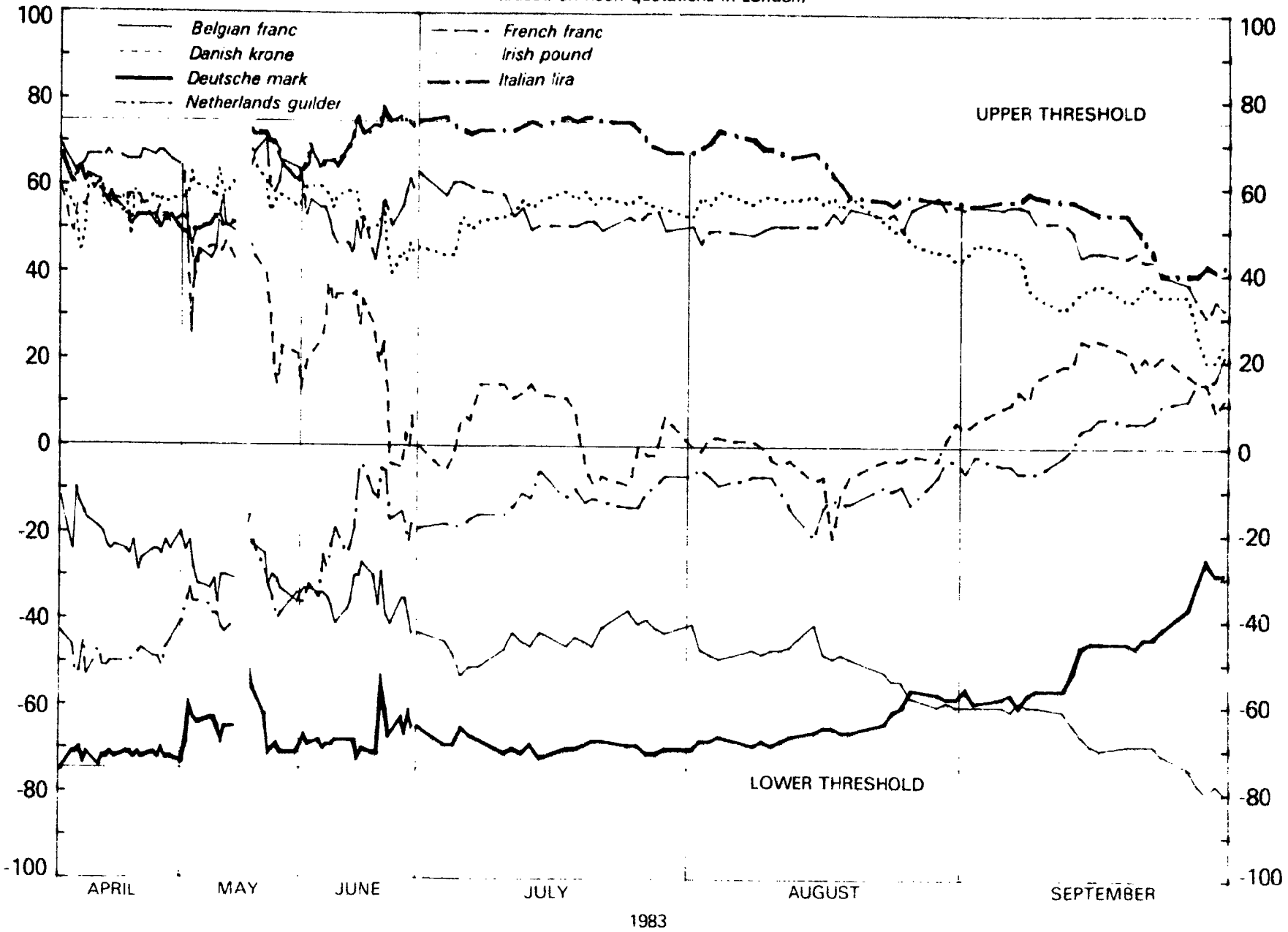


CHART 3

SPOT EXCHANGE RATES

(Noon quotations in New York)

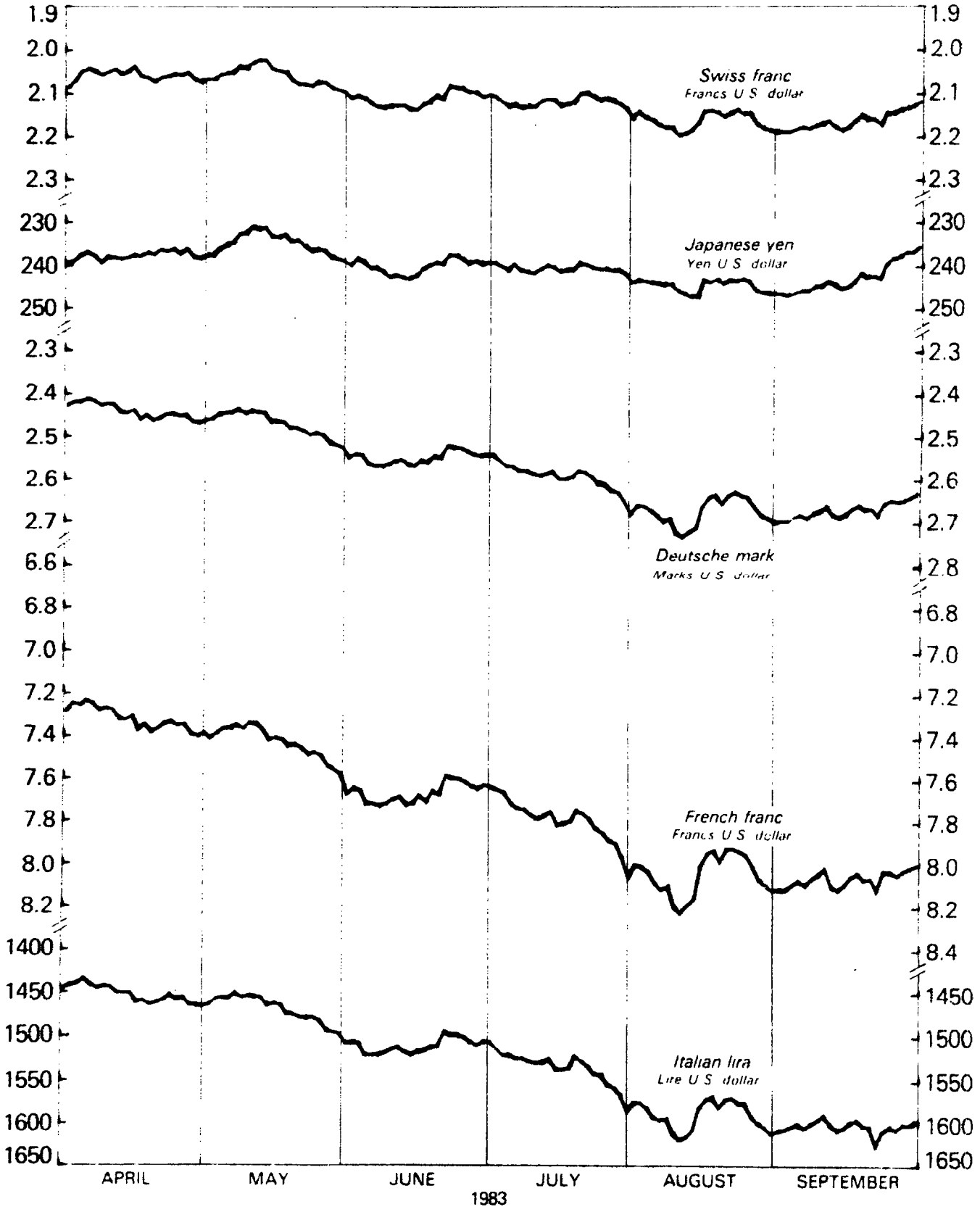


CHART 4

SPOT EXCHANGE RATES

(Noon quotations in New York)

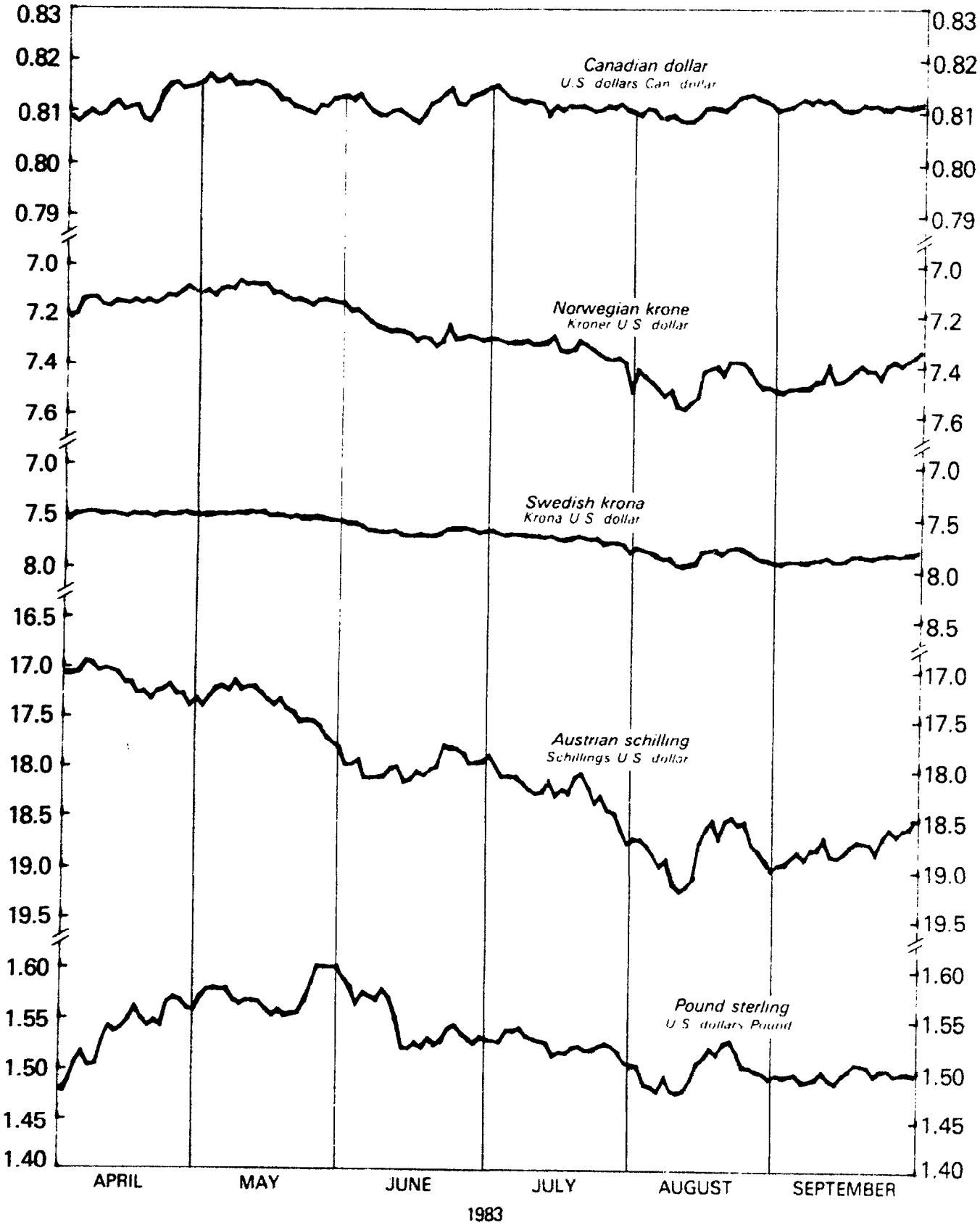
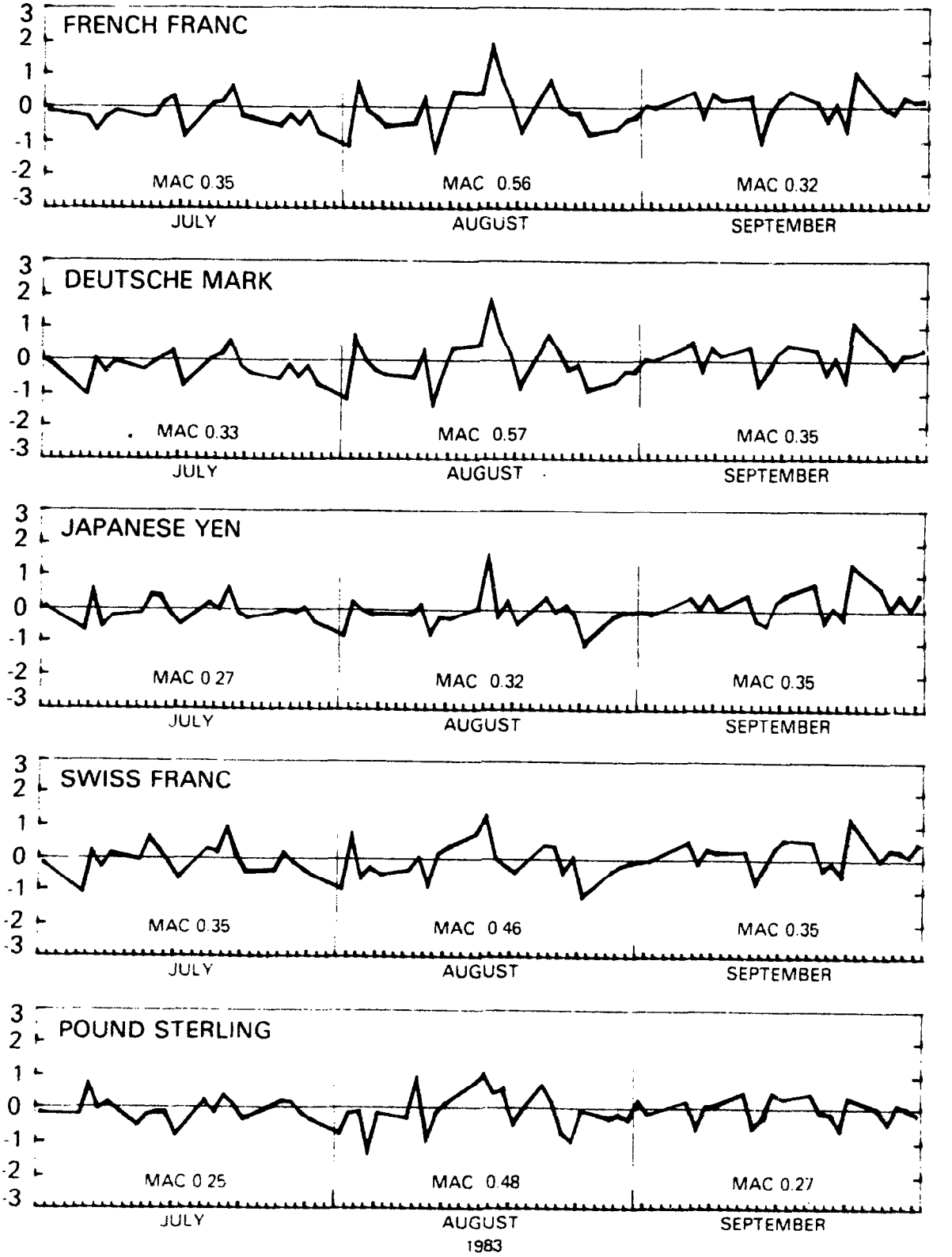


CHART 5

DAILY CHANGES IN SPOT EXCHANGE RATES

(In per cent against the U.S. dollar, based on noon quotations in New York)[1]



[1] Monthly averages of absolute changes (MAC) are also indicated.

CHART 6

INDEXES OF EXCHANGE RATES OF FIVE MAJOR CURRENCIES AGAINST THE SDR

JUN. 1974 SEP. 1983

(June 28, 1974 = 100)

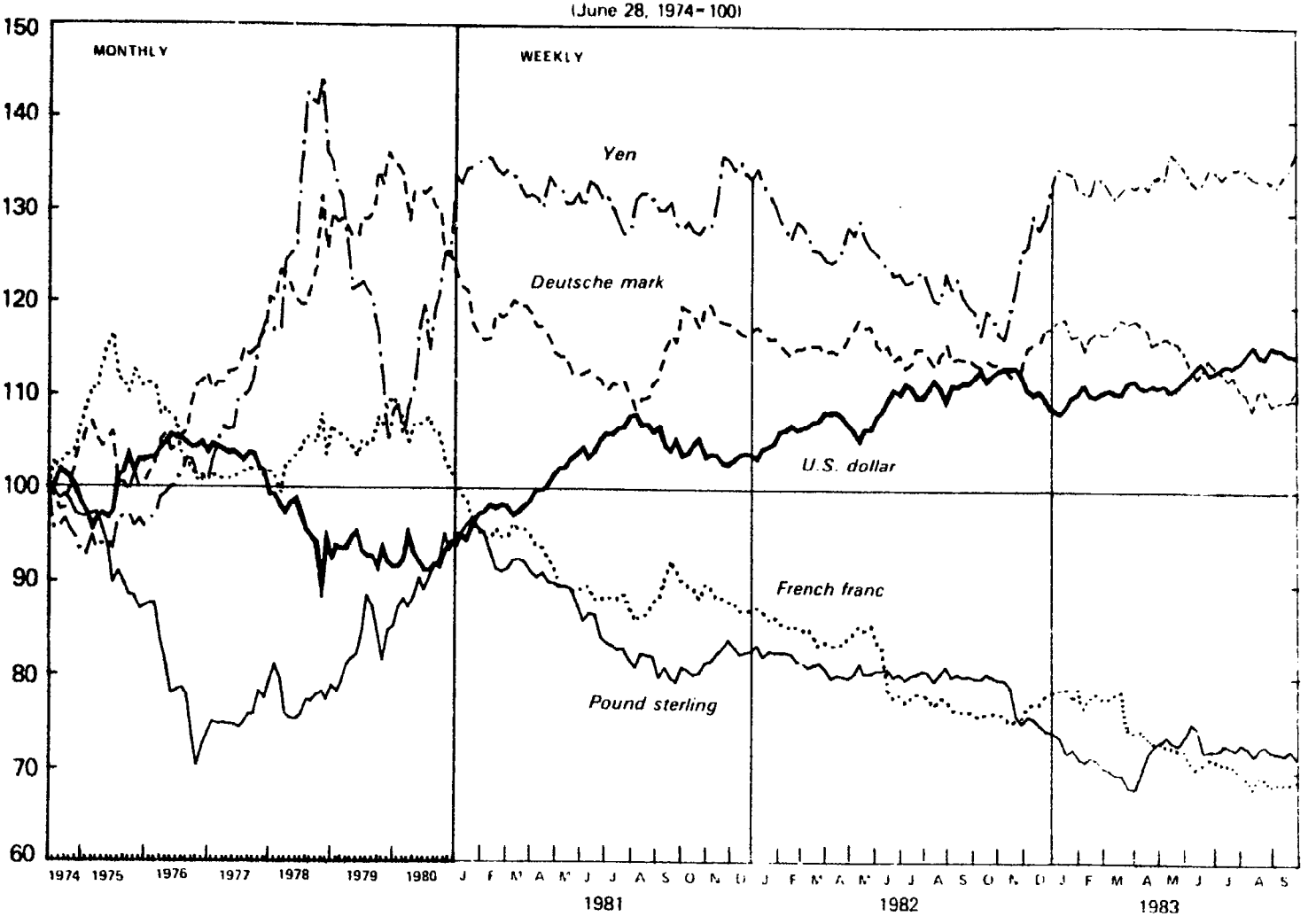
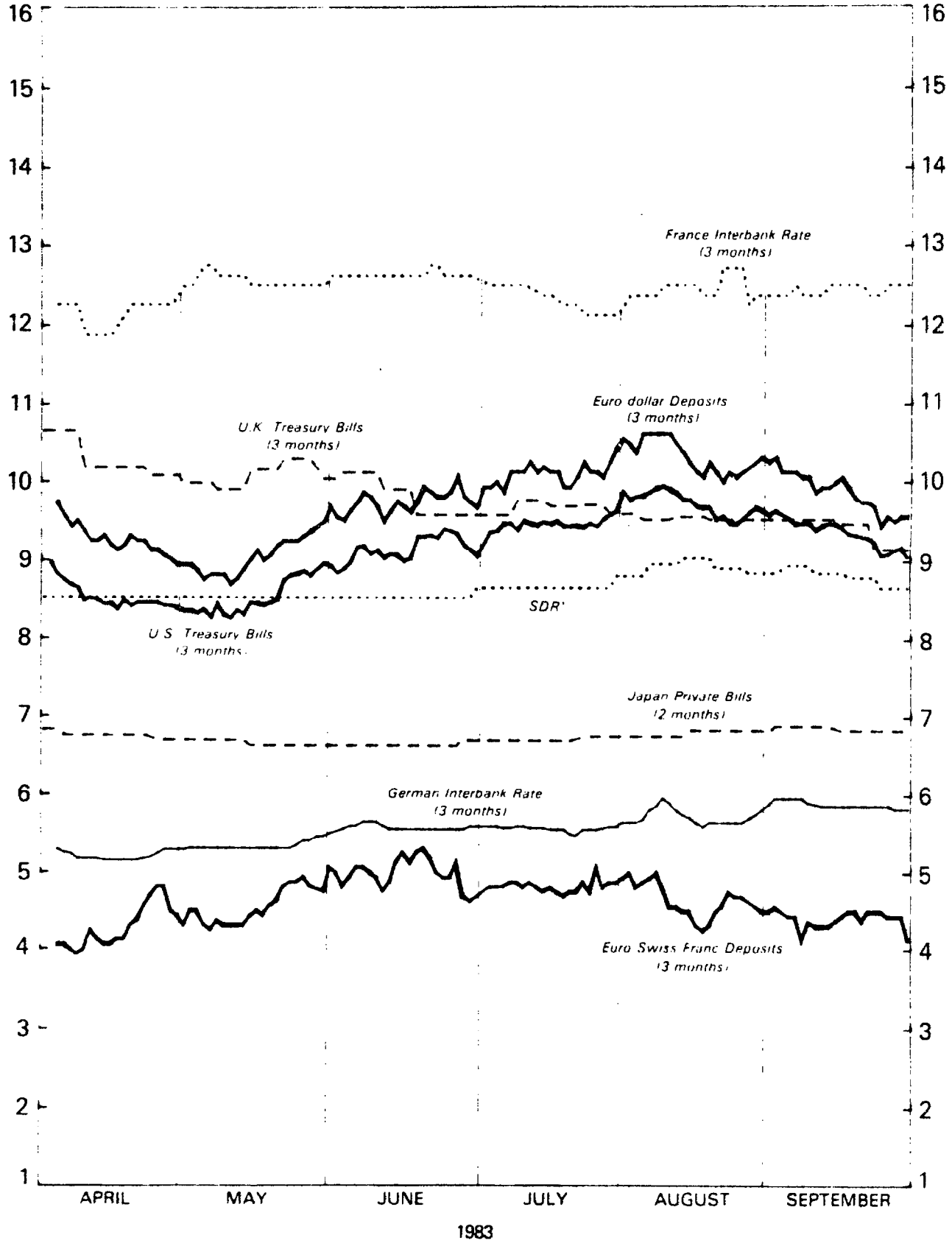


CHART 7

SHORT-TERM MONEY MARKET RATES

(Per cent per annum)



The rate of interest on SDR holdings for each quarter, under Rule T-1(b), is based on a combined market rate of interest

CHART 8

THREE-MONTH FORWARD RATES

Margins from Spot Rates based on noon quotations in New York

(Per cent per annum)

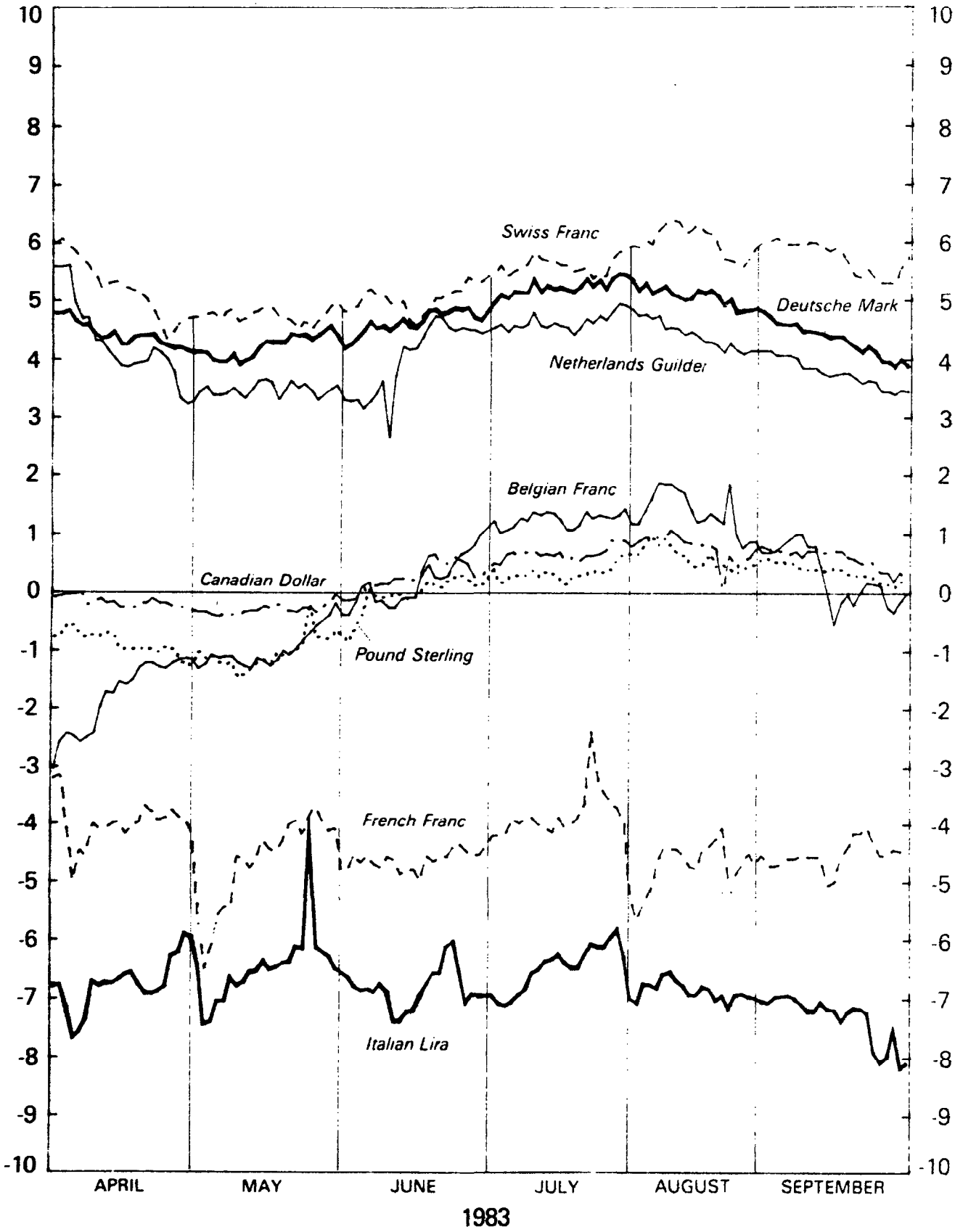
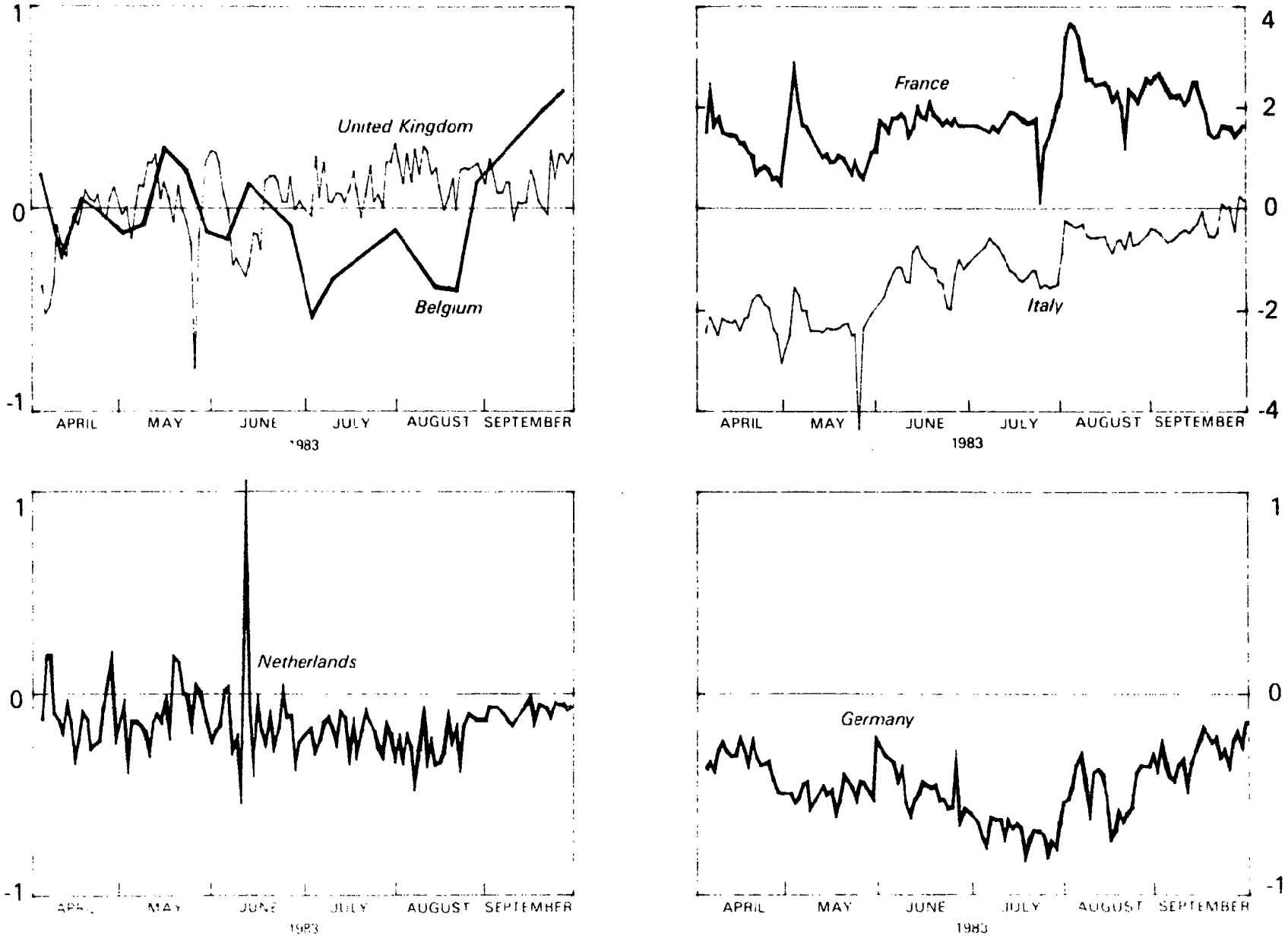


CHART 9

COVERED INTEREST DIFFERENTIALS BETWEEN THREE-MONTH EURO-DOLLAR DEPOSITS AND LOCAL SHORT-TERM INVESTMENTS

(+ IN FAVOR OF EURO DOLLAR AND – IN FAVOR OF DOMESTIC INVESTMENT)



Foreign Exchange Rates, August-September 1983 1/

	August					September			
	3	10	17	24	31	7	14	21	28
Austrian schilling	18.7025	19.1425	18.5875	18.5525	18.9950	18.8925	18.8675	18.7350	18.5850
Belgian franc									
Official	53.295	54.510	53.005	52.990	54.210	54.025	54.170	53.850	53.570
Financial	53.485	54.475	53.290	53.425	54.655	54.445	54.935	54.775	54.325
Canadian dollars	0.81087	0.80857	0.81103	0.81314	0.81044	0.81192	0.81060	0.81152	0.81103
Danish kroner	9.5675	9.8025	9.5500	9.4850	9.7095	9.6450	9.6355	9.5750	9.5300
Deutsche mark	2.66105	2.72430	2.64000	2.63550	2.69650	2.68750	2.68635	2.66600	2.64550
French francs	8.0050	8.1965	7.9413	7.9325	8.1125	8.0898	8.1088	8.0575	8.0205
Irish pounds	1.1871	1.1600	1.1955	1.1945	1.1663	1.1707	1.1685	1.1758	1.1805
Italian lire	1574.625	1610.500	1571.000	1575.500	1610.500	1603.500	1606.500	1602.500	1600.000
Japanese yen	243.200	245.750	243.550	242.850	246.400	245.650	245.250	242.225	236.825
Netherlands guilder	2.9736	3.0465	2.9550	2.9493	3.0183	3.0040	3.0035	2.9813	2.9608
Norwegian kroner	7.4365	7.5575	7.4075	7.3840	7.4925	7.4813	7.4535	7.4125	7.3725
Pounds sterling	1.5062	1.4815	1.5150	1.5203	1.4944	1.4910	1.4904	1.5065	1.4996
Swedish kroner	7.8035	7.9525	7.8100	7.7825	7.9225	7.9150	7.9045	7.8750	7.8335
Swiss francs	2.15325	2.19475	2.14000	2.14575	2.18625	2.18025	2.18450	2.16050	2.13225

1/ Wednesday noon spot quotations in New York, expressed in terms of currency units per U.S. dollar, except for the Canadian dollar, the Irish pound, and the pound sterling which are expressed in U.S. dollars per currency unit.

APPENDIX 5

Short- and Medium-Term Interest Rates

(Monthly and weekly averages)

	National Money Markets 1/						Euro-currency Markets 2/						Lending Rate		
	United States (1)	Germany (2)	United Kingdom (3)	France (4)	Japan (5)	Weighted average (6)	U.S. dollar (7)	Deutsche mark (8)	Pound sterling (9)	French franc (10)	Japanese yen (11)	Swiss franc (12)	LIBOR 3/ (13)	U.S. prime 4/ (14)	Treasury Securities 5/ (15)
1982															
Oct.	7.49	5.55	9.59	13.65	7.19	8.36	9.51	7.14	9.82	19.01	7.03	[illegible]	12.52	12.52	10.80
Nov.	8.34	5.41	9.08	13.16	7.21	8.59	9.42	7.17	9.35	18.7	7.12	3.64	12.06	11.85	10.48
Dec.	8.26	5.71	11.00	12.90	7.19	8.49	9.57	6.14	10.55	22.46	7.05	3.74	9.56	11.50	10.22
1983															
Jan.	[illegible]	5.90	10.72	12.76	7.00	8.32	9.01	5.51	11.17	21.16	6.52	2.85	9.25	11.16	[illegible]
Feb.	8.40	5.92	11.14	13.07	6.92	8.51	9.22	5.66	11.33	22.11	6.71	2.98	9.51	10.99	[illegible]
Mar.	8.62	5.52	10.93	12.77	6.85	8.50	9.32	[illegible]	10.98	26.42	6.71	3.67	9.51	[illegible]	[illegible]
Apr.	8.52	5.27	10.19	12.31	6.76	[illegible]	9.26	5.02	10.25	11.17	6.29	[illegible]	9.44	10.50	[illegible]
May	5.50	5.19	10.08	12.73	6.66	8.27	9.03	5.04	10.25	13.90	6.29	[illegible]	9.19	10.50	10.01
June	9.14	5.55	9.85	12.81	6.63	8.62	9.75	5.31	10.00	14.35	6.55	3.00	10.05	10.50	10.61
July	9.54	5.63	9.69	12.45	6.72	8.74	10.07	5.18	9.89	15.15	6.58	2.81	10.51	10.5	11.23
Aug.	9.72	5.78	9.56	13.02	6.89	8.93	10.35	5.47	9.86	15.22	6.67	3.66	10.42	10.50	11.63
Sept.	9.14	5.95	9.41	12.81	6.86	8.74	9.88	5.70	9.64	14.71	6.81	4.41	10.19	11.0	11.0[illegible]
1982 weekly															
Oct. 1	7.72	5.22	[illegible]	13.04	7.25	8.68	11.65	7.8[illegible]	10.74	18.28	7.29	3.14	12.29	13.50	11.34
8	8.26	8.00	10.12	13.98	7.21	8.82	11.56	7.59	10.50	17.34	7.30	3.25	12.00	13.36	11.29
15	7.72	7.[illegible]	9.52	13.76	7.21	8.46	10.24	7.05	9.71	17.88	6.88	3.55	11.35	12.86	11.[illegible]
22	7.78	7.[illegible]	9.35	13.59	7.15	8.40	9.94	6.95	9.43	20.43	6.91	3.49	10.23	12.06	10.[illegible]
29	8.19	7.44	9.96	13.24	7.17	8.52	10.07	7.04	9.50	20.35	6.95	3.61	10.35	12.00	10.73
Nov. 5	8.[illegible]	7.42	9.25	13.10	7.19	8.46	9.74	6.99	9.29	19.00	7.11	3.49	9.91	12.00	10.[illegible]
12	8.35	7.35	8.78	13.12	7.2[illegible]	8.55	9.82	7.07	9.16	[illegible]	7.19	3.69	9.98	12.[illegible]	[illegible]
19	8.60	7.46	8.38	13.22	7.25	8.70	10.03	7.12	9.20	18.13	7.28	[illegible]	[illegible]	12.00	[illegible]
26	8.21	7.21	8.96	13.18	7.21	8.51	9.89	7.08	9.22	18.46	7.13	[illegible]	10.31	11.50	10.21
Dec. 3	8.32	7.23	10.32	13.03	7.21	8.17	9.80	6.88	10.21	19.35	7.12	3.49	10.15	11.50	10.31
10	8.23	6.37	9.98	12.80	7.21	8.04	9.50	6.34	10.11	19.84	6.96	3.37	9.78	11.50	10.26
17	8.07	6.67	10.31	12.90	7.21	8.43	9.63	6.44	10.66	22.45	7.03	[illegible]	9.93	11.50	10.23
24	8.17	6.26	10.42	13.46	7.13	8.50	9.61	6.44	11.06	26.59	7.[illegible]	3.97	9.86	11.50	10.7[illegible]
31	8.28	6.62	10.25	12.94	7.13	8.51	9.41	5.98	10.22	24.21	6.48	3.16	9.61	11.[illegible]	[illegible]
1983 weekly															
Jan. 7	8.36	6.05	11.[illegible]	12.[illegible]	7.08	8.18	9.03	5.7[illegible]	10.52	21.[illegible]	6.57	3.1[illegible]	[illegible]	11.50	10.[illegible]
14	7.92	5.74	10.25	12.67	7.02	8.12	8.69	5.18	11.33	21.53	[illegible]	2.69	[illegible]	11.36	9.69
21	8.01	5.73	11.13	12.72	[illegible]	n.a.	8.98	5.40	11.15	20.28	[illegible]	2.[illegible]	9.10	11.50	9.92
28	8.33	6.05	11.20	12.80	6.95	8.48	9.27	5.57	11.00	19.31	6.65	2.44	9.58	11.[illegible]	10.[illegible]
Feb. 4	8.45	6.13	11.15	12.95	6.94	8.50	9.45	5.75	11.57	20.33	6.69	2.95	9.80	11.00	10.38
11	8.51	6.0	11.3	13.05	6.95	8.59	9.29	5.80	11.24	21.[illegible]	6.23	2.98	9.66	11.00	1[illegible]
18	8.44	5.90	11.[illegible]	13.10	6.91	8.51	9.18	5.68	11.13	23.[illegible]	6.[illegible]	2.89	9.46	11.00	10.29
25	8.[illegible]	5.78	11.00	13.05	6.89	8.37	9.08	5.49	11.40	22.86	6.75	3.03	9.31	11.00	9.9[illegible]
Mar. 4	8.[illegible]	5.68	11.16	13.15	6.89	8.40	8.95	5.26	11.14	24.86	[illegible]	[illegible]	9.06	10.50	9.76
11	8.56	5.58	11.12	13.18	6.89	8.52	9.15	5.10	11.16	36.70	6.74	3.33	9.32	10.50	10.03
18	8.63	5.53	11.23	12.49	6.86	8.52	9.12	5.08	10.78	41.70	6.74	3.48	9.56	10.50	10.09
25	8.88	5.41	11.52	12.52	6.83	8.49	9.56	5.33	8.63	15.53	6.24	3.94	9.72	10.50	10.26
Apr. 1	8.97	5.41	10.26	12.1	6.81	8.51	9.70	5.95	10.56	1[illegible].22	[illegible]	[illegible]	9.46	10.50	10.28
8	8.37	5.30	10.06	[illegible]	6.79	8.43	9.56	5.02	10.28	14.11	[illegible]	[illegible]	9.7[illegible]	10.50	10.14
15	8.[illegible]	5.2[illegible]	1[illegible].19	[illegible]	6.76	8.18	9.25	[illegible]	10.15	13.18	[illegible]	[illegible]	9.46	10.[illegible]	9.98
22	8.43	5.23	10.14	1[illegible].46	6.76	8.19	9.23	5.07	10.26	13.46	6.29	3.4	9.19	1[illegible]	10.0[illegible]
29	8.42	5.33	10.08	12.[illegible]	6.70	8.20	9.05	5.[illegible]	10.25	12.98	6.25	[illegible]	9.[illegible]	10.0	9.95
May 6	8.32	5.37	9.94	12.80	6.70	8.18	8.84	5.00	10.15	15.7[illegible]	[illegible]	4.12	8.96	10.50	9.77
13	8.33	5.37	9.92	12.80	6.70	8.18	8.79	[illegible].99	10.19	13.96	6.20	3.12	8.91	10.50	9.84
20	8.45	5.37	10.17	12.67	6.63	8.24	9.07	5.02	10.35	13.70	6.3[illegible]	3.51	8.91	10.50	10.10
27	8.50	[illegible]	10.24	12.67	6.61	8.45	9.29	5.10	10.32	13.19	[illegible]	[illegible]	8.[illegible]	10.50	10.12
June 3	8.91	5.[illegible]	10.[illegible]	12.77	6.63	8.51	9.56	5.09	10.35	13.97	[illegible]	[illegible]	[illegible]	10.50	[illegible]
10	9.10	5.51	10.12	12.[illegible]	6.61	8.64	9.72	5.16	10.25	14.44	6.54	5.[illegible]	10.05	10.50	10.65
17	9.04	5.64	9.42	12.[illegible]	6.65	8.57	9.84	5.27	9.88	14.40	6.29	5.73	9.88	10.50	[illegible]
24	9.33	5.53	9.54	12.[illegible]	6.63	8.69	9.66	5.22	9.[illegible]	15.[illegible]	6.29	[illegible]	10.15	10.50	10.21
July 1	9.22	[illegible]	9.54	[illegible]	[illegible]	8.64	9.84	5.[illegible]	9.[illegible]	14.[illegible]	[illegible]	[illegible]	[illegible]	10.50	[illegible]
8	9.42	[illegible]	9.58	12.[illegible]	[illegible]	8.76	9.94	5.22	9.96	14.14	6.76	[illegible]	10.31	10.50	11.07
15	9.4[illegible]	5.67	9.78	12.61	[illegible]	[illegible]	10.17	[illegible]	[illegible]	14.19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	5.60	9.[illegible]	12.[illegible]	[illegible]	[illegible]	10.[illegible]	[illegible]	9.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.50	[illegible]
29	[illegible]	5.6[illegible]	9.[illegible]	[illegible]	6.76	[illegible]	10.16	[illegible]	9.[illegible]	14.[illegible]	[illegible]	[illegible]	[illegible]	10.50	11.50
Aug.	[illegible]	[illegible]	9.6[illegible]	[illegible]	[illegible]	[illegible]	10.50	5.30	9.90	[illegible]	6.65	[illegible]	10.99	10.50	[illegible]
12	9.91	5.96	9.56	12.62	6.76	8.[illegible]	10.60	5.75	9.92	[illegible]	6.69	[illegible]	11.13	11.[illegible]	11.80
19	9.73	5.75	9.[illegible]	12.61	6.82	8.92	10.21	5.38	9.91	[illegible]	6.65	[illegible]	11.68	11.[illegible]	11.19
26	9.52	5.73	9.53	12.[illegible]	6.83	8.84	10.09	5.31	9.37	[illegible]	6.65	[illegible]	[illegible]	11.[illegible]	11.35
Sept. 2	9.61	5.9[illegible]	9.53	12.[illegible]	6.[illegible]	8.90	10.[illegible]	5.61	9.8[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.[illegible]	11.73
9	9.50	[illegible]	9.53	12.56	6.89	8.85	10.10	5.68	9.22	[illegible]	[illegible]	[illegible]	10.[illegible]	11.[illegible]	11.[illegible]
16	9.45	5.94	9.53	12.62	6.88	8.87	9.96	5.70	9.6[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.00	[illegible]
23	9.30	5.91	9.[illegible]	12.62	6.83	8.72	9.79	5.71	9.6[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.[illegible]	11.[illegible]
30	9.[illegible]	5.92	9.13	12.66	6.73	8.68	9.52	5.71	9.46	[illegible]	[illegible]	[illegible]	9.37	11.[illegible]	[illegible]

1/ As of January 1, 1981, the combined market interest rate under the amended Rule O-1 is calculated by multiplying the yield or rate of each of the respective instruments listed below by the number of units of the corresponding currency listed in Rule O-1 and the value in terms of the SDR of a unit of that currency as determined by the Fund under Rule O-2(c) [illegible]. The interest rates and the respective currency units shown in parentheses are as follows: market yield for three-month U.S. Treasury Bills (1); [illegible] three-month interbank deposit rate in Germany (2); [illegible] three-month interbank money rate against private paper in France [illegible] discount rate for two-month private bills in Japan (5); and market yield for three-month U.K. Treasury bills [illegible].

2/ Euro-currency interest rates are those on three-month deposits for the U.S. dollar, the Deutsche mark, the Swiss franc, and the French franc (in London), and for the pound sterling (in Paris).

3/ LIBOR is six-month euro-dollar offered rate in London.

4/ Prime lending rate of major New York banks.

5/ Yield is adjusted to constant five-year maturity by the U.S. Treasury and is based on only recently issued, actively traded securities. The interest rate paid to lenders and charges on drawings under the Supplementary Financing Facility are based on this rate.