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Treasurer's Department

Foreign Exchange and Financial Markets in October 1985

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Exchange market developments in October continued to be affected by the agreement reached by G-5 Ministers in late September on coordinated efforts to encourage a lower U.S. dollar. ^{1/} During the first half of the month, when the U.S. dollar regained some firmness in the exchange markets, incipient buying pressures were offset by central bank intervention, while its subsequent depreciation was also a reaction to the release of data on the U.S. economy which indicated sluggish growth and the continuing large and persistent external imbalance. The U.S. dollar thus continued to depreciate over the month as a whole, for a cumulative effective (MERM) depreciation of about 8 percent since the announcement of the G-5 Agreement in late September. Central banks in Germany, Japan, and the United States sold an estimated \$3.0 billion during the month of October, with the Bank of Japan continuing to play the most active role. The U.S. Federal Reserve intervened not only in New York, but was reported to have bought yen and Deutsche mark in Tokyo and Frankfurt. Late in the month, the Bank of Japan allowed yen short-term interest rates to rise sharply by refraining from sterilizing its exchange market intervention. Deutsche mark short-term interest rates also increased, albeit more moderately than those for the Japanese yen, while interest rates on U.S. dollar-denominated instruments remained steady (see Section II). Although a specific agreement on interest rates was denied by some of the countries concerned, movements in interest rate differentials were viewed as consistent with the G-5 Agreement. Trading in October was generally active, but exchange rates were much less volatile than in the previous month. Over the month, the U.S. dollar depreciated by 1.71 percent in effective (MERM) terms and by 1.14 percent against the SDR; its 12-month effective (MERM) depreciation was 8.15 percent (Table 1).

* Michael Blackwell also contributed to this report.

^{1/} See DM/85/64, 10/17/85. The G-5 countries are France, Germany, Japan, the United Kingdom, and the United States.

Table 1. Changes in Exchange Rates in October 1985 1/

(In percent)

	<u>Monthly exchange rate changes</u>			Changes in effective exchange rate since October 1984
	Against U.S. dollar <u>2/</u>	Against SDR <u>3/</u>	Effective exchange rate <u>4/</u>	
Belgium	+2.16	+1.03	+0.43	+3.47
Denmark	+2.69	+1.25	+0.88	+6.54
France	+2.48	+1.03	+0.63	+7.92
Germany	+2.29	+0.86	+0.31	+5.07
Ireland	+2.62	+1.34	+1.00	+6.93
Italy	+2.21	+0.96	+0.43	-4.51
Netherlands	+2.11	+1.03	+0.59	+5.73
Austria	+2.24	+0.88	+0.51	+6.37
Canada	+0.30	-0.82	-0.37	-7.17
Japan	+2.34	+1.43	+1.64	+9.83
Norway	+1.30	+0.26	-0.14	+2.88
Sweden	+2.21	+1.41	+1.08	+1.11
Switzerland	+2.02	+0.40	+0.03	+6.67
United Kingdom	+2.20	+1.84	+1.49	+8.12
United States	--	-1.14	-1.71	-8.15

1/ Positive sign indicates appreciation of the currency.

2/ Based on New York noon quotations.

3/ SDR rates are derived from representative exchange rates advised to the Fund by members and the daily valuation of the SDR against the U.S. dollar.

4/ Based on the Fund's multilateral exchange rate model (MERM). Effective rates are based on representative exchange rates in the domestic markets, as officially advised to the Fund.

It may be recalled that following a steady depreciation against most other currencies during the 1970s, the U.S. dollar embarked on an upward trend that began in the third quarter of 1980 and continued almost without interruption through February 1985. In the 4 1/2 years through last February, the dollar appreciated by about 70 percent in effective (MERM) terms (Chart 1), but its effective value has declined by 17 percent since its February peaks, with somewhat less than half this decline having taken place since late September. Since last February, the Japanese yen has appreciated by 24 percent against the U.S. dollar, while the other G-5 currencies have firmed by 32-37 percent. The appreciation of the Japanese yen since the G-5 Agreement in late September has been 13 1/2 percent and that of the other G-5 currencies has ranged from 5 percent to 9 percent (Table 2).

Table 2. Changes in Selected Exchange Rates ^{1/}

(In percent)

	Between end-June 1980 and lows against the U.S. dollar (February 1985) ^{2/}	Through end-October 1985	
		From February 1985 ^{2/}	From September 20, 1985 ^{3/}
Deutsche mark	-48.90	+31.84	+8.73
Pound sterling	-55.33	+36.82	+5.20
French franc	-61.22	+32.39	+8.85
Japanese yen	-16.44	+24.38	+13.50
U.S. dollar effective exchange rate (MERM)	+73.82	-17.07	-7.65

^{1/} Based on New York noon quotations for the value of currencies in U.S. dollar terms, and on the Fund's multilateral exchange rate model (MERM) for the U.S. dollar effective exchange rate. Positive sign indicates appreciation of the currency.

^{2/} Dates are February 12 for the Japanese yen; February 25 for the Deutsche mark, the French franc and the U.S. dollar effective exchange rate (MERM); and February 26 for the pound sterling.

^{3/} Last business day prior to the G-5 statement on September 22, 1985 on concerted intervention in foreign exchange markets.

Of the several factors that have contributed to the dollar's prolonged strength, the relatively high level of real and nominal interest rates on U.S. dollar-denominated instruments appears to be among the most important. The high U.S. interest rates of 1980 and 1981 have been attributed to the tight monetary conditions which followed the oil price increase of 1979 and which were needed to counter the inflationary expectations that had been somewhat more persistent in the United States, even as shifts toward more restrictive monetary policies also took place in other key industrial countries. Since 1982, however, the fiscal policy stance in the United States has also become a factor in the exchange markets, with the large U.S. Government deficit contributing to high real interest rates on U.S. dollar-denominated assets. A further major element behind the dollar's rise was the marked improvement in the investment climate in the United States, which was enhanced in 1984 by the considerable and early recovery of the U.S. economy, particularly compared with those in Europe.

In October leading currencies firmed by 2.02-2.69 percent against the U.S. dollar, except for the Norwegian krone which firmed less markedly (by 1.30 percent) and the Canadian dollar which firmed slightly. (See Table 1 and Charts 2, 4, and 5). The currencies participating in the European Monetary System (EMS) firmed by 2.11-2.69 percent against the U.S. dollar. The spread in the narrow band of the EMS parity grid remained well below the permitted maximum 2.25 percent margin and the divergence indicators for all the currencies in the system remained well within their thresholds throughout the month (Chart 3). 1/ The Italian lira was the strongest currency in the EMS during most of the month, with its spread from the weakest currency fluctuating in the range of 1.60-2.28 percent. 2/ The Belgian franc remained the weakest currency in the narrow band throughout the month, while the French franc was the strongest during most of the month.

The volatility of exchange rates for major currencies against the U.S. dollar, as indicated by the measures given in Table 3, declined sharply in October from the very high levels of the preceding month. For the EMS currencies, the high-low spreads fell to 2.6-3.1 percent in October from 9.3-11.2 percent in September. For other currencies this measure fell similarly to 2.1-2.8 percent from 8.2-12.5 percent, except for the Canadian dollar which spread declined to 0.7 percent from 1.6 percent. The average of absolute daily percentage changes of major currencies (MAC in Table 3 and Chart 6) against the U.S. dollar also fell sharply. For the EMS currencies this measure fell to an average of 0.40 percent from an average of 0.90 percent in September, while for the other currencies it averaged 0.35 percent, compared with 0.76 percent in September. The Canadian dollar remained the least volatile currency against the U.S. dollar in October while the Japanese yen was among the most volatile.

1/ The calculation of the divergence indicators was revised back to September 17, 1984. As a consequence of the revision, the indicators became less positive (they moved down in the chart).

2/ The Italian lira is permitted a spread of 6 percent above (below) the weakest (strongest) currency in the EMS.

Table 3. Intra-Month Variations of Exchange Rates
of Major Currencies 1/

	October 2/		High-low spread in percent 3/		MAC 4/	
	High	Low	Sept.	Oct.	Sept.	Oct.
Belgium	52.725	54.295	10.7	3.0	0.90	0.40
Denmark	9.4500	9.7255	10.7	2.9	0.89	0.44
France	7.973	8.178	11.2	2.6	0.91	0.41
Germany	2.618	2.685	11.2	2.6	0.94	0.42
Ireland	1.187	1.154	10.7	2.9	0.92	0.39
Italy	1,766.0	1,813.0	9.3	2.7	0.82	0.38
Netherlands	2.93425	3.02600	10.8	3.1	0.93	0.39
Austria	18.390	18.846	11.5	2.5	0.97	0.38
Canada	0.734	0.729	1.6	0.7	0.19	0.13
Japan	211.45	217.25	12.5	2.7	0.76	0.46
Norway	7.830	8.007	8.6	2.3	0.77	0.39
Sweden	7.871	8.035	8.2	2.1	0.71	0.31
Switzerland	2.145	2.204	11.4	2.8	0.90	0.45
United Kingdom	1.442	1.408	9.9	2.4	1.05	0.34

1/ Exchange rates against the U.S. dollar at noon 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.

In October most major industrial countries registered losses in gross foreign exchange reserves (Table 4). The largest declines were those of Germany, Japan and Italy, which may be largely attributed to intervention. Germany sold some \$365 million at the fixing in Frankfurt, and both Germany and Japan intervened heavily in the open market selling U.S. dollars throughout the month, while Italy sold some \$155 million and DM 30 million at the fixing in Milan. The large increase in foreign exchange reserves in the United Kingdom reflects the proceeds from the Government's \$2.5 billion floating rate note

issue announced on September 16. Excluding new borrowing and repayments, there was an underlying decline of \$328 million in reserves. ^{1/} Over the latest 12-month period, large reserve losses were posted by Italy and Ireland whereas large gains were recorded by Norway, the United Kingdom, the United States and Denmark.

Table 4. Gross Foreign Exchange Reserves in October 1985 ^{1/}

(In millions of U.S. dollars)

	End-month reserve level	Change in October	Change over 12 months
Belgium	3,614	-186	-291
Denmark	4,716	+166	+831
France (September)	21,000	+464	+722
Germany	35,741	-1,815	-216
Ireland	3,051	-374	-1,153
Italy	17,027	-1,383	-1,707
Netherlands	8,583	-350	+462
Austria	3,465	-194	+179
Canada	1,524	-103	-566
Japan	21,957	-1,149	+245
Norway	13,160	+500	+4,763
Sweden (September)	3,551	-342	-345
Switzerland	13,521	-488	+1,709
United Kingdom	10,399	+2,213	+3,601
United States (September)	8,671	+777	+2,631

^{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 proceeds from other official borrowings.

^{1/} Revised data show a marginal increase in the U.K. foreign exchange reserves in September, instead of the large increase included in the report issued in October.

I. Developments in Major Factors Affecting
the Exchange Market in October

The U.S. dollar eased in October against other leading currencies, depreciating by 1.71 percent in effective (MERM) terms and by 1.14 percent against the SDR. During the early part of the month moderate intervention was sufficient to keep the dollar from appreciating significantly, but intervention became stronger as pressures intensified by midmonth. This coincided with the release of data that were interpreted by market participants to indicate weakness in overall economic activity. As a consequence, the U.S. dollar depreciated sharply over a few days and continued to decline at a more moderate pace through the end of the month. Industrial production declined in September by 0.1 percent (after rising by 0.3 percent in August) while the index of leading economic indicators rose by 0.1 percent (0.9 percent increase in August) and factory orders fell by 0.6 percent (0.8 percent increase in August). GNP growth in the third quarter was revised up to an annual rate of 3.3 percent (from the 2.8 percent "flash" estimate), while the GNP deflator was also revised upwards to a 3.3 percent annual rate (from the 3.1 percent "flash" estimate). Retail sales in September, however, rose by 2.7 percent over the previous month (0.6 percent excluding auto sales), and by 10.9 percent from year-earlier levels.

Data released during the month also indicated continued large external imbalances, with the September U.S. trade deficit amounting to a record \$15.6 billion, compared with a monthly average of \$11.4 billion during the preceding eight months; the deficit for the first nine months of 1985 reached \$106.7 billion, 12 percent above that for the same period a year earlier. The civilian unemployment rate remained unchanged in October at 7.1 percent. Inflation continued to be quite moderate, with consumer prices rising 0.2 percent in September and 3.2 percent year-on-year. The Federal Budget deficit for the fiscal year ended September amounted to \$202.8 billion, 16 percent above the deficit for the preceding fiscal year.

The Deutsche mark firmed by 2.29 percent against the U.S. dollar and by 0.31 percent in effective (MERM) terms. Germany's external current account shifted into a DM 4.3 billion surplus in September from a DM 800 million deficit in August, with the current account surplus for the first nine months of 1985 amounting to DM 21.1 billion, compared with DM 2.2 billion for the same period last year. Retail turnover rose a provisional 1.9 percent in real terms in August, compared with the same month last year; and for the first eight months of 1985 it was 0.4 percent above the same period a year ago. Industrial production dropped 0.2 percent in September, following a revised 3.2 percent increase in August, while the unemployment rate declined to 8.6 percent in October from 8.7 percent in the preceding month. The inflation rate remained moderate, with consumer prices rising 0.2 percent in October and 1.8 percent year-on-year; producer prices rose 0.2 percent in September and 2.0 percent year-on-year.

The French franc firmed by 2.48 percent against the U.S. dollar and by 0.63 percent in effective (MERM) terms, and was the strongest currency in the narrow EMS band during most of the month. France's trade account, seasonally adjusted, was in deficit for F 2.6 billion in September following a small surplus in August (F 4 million), and the deficit for the first nine months of 1985 rose to F 20.8 billion, 18 percent above that for the same period a year earlier. Real GDP rose a revised 0.9 percent in the second quarter, after falling by 0.4 percent in the first quarter. Industrial production, seasonally adjusted, remained unchanged in the second quarter but was up 0.8 percent from a year earlier; production rose sharply in July and August. The number of persons unemployed, seasonally adjusted, declined 1.7 percent in September following a 0.4 percent rise in August. Wholesale prices fell 1.0 percent in September but were up 0.9 percent year-on-year.

The Belgian franc firmed by 2.16 percent against the U.S. dollar and by 0.43 percent in effective (MERM) terms, but it remained the weakest currency in the EMS throughout October. Belgium's industrial production seasonally declined 3.0 percent in July but it rose 4.2 percent year-on-year. The unemployment rate declined to 13.1 percent at end-October from 13.4 percent at end-September. Consumer prices fell marginally in October but rose 4.0 percent year-on-year. The trade deficit of the Belgium-Luxembourg Economic Union (BLEU) narrowed to BF 24.7 billion in August from a BF 34.7 billion a year earlier, with the deficit for the first eight months of 1985 amounting to BF 119.5 billion, 24 percent below the deficit for the same period a year earlier.

The Netherlands guilder firmed by 2.11 percent against the U.S. dollar and by 0.59 percent in effective (MERM) terms. The Netherlands' trade account swung into a f. 600 million surplus in September from a f. 600 million deficit in the preceding month, with the surplus for the first nine months of 1985 amounting to f. 6.5 billion, 23 percent below that for the same period a year earlier. The number of persons unemployed, seasonally adjusted, declined by 1.3 percent in September and was 8.1 percent lower than a year earlier. Industrial production rose 2.0 percent in August and was unchanged from a year earlier. Consumer prices rose 2.3 percent in the year to mid-September, the same increase as in the year to mid-August.

The Danish krone firmed by 2.69 percent against the U.S. dollar and by 0.88 percent in effective (MERM) terms. Denmark's trade account switched into a DKr 640 million surplus in September from a DKr 644 million deficit in August. Its unemployment rate, seasonally adjusted, fell to 9.1 percent in August from 9.2 percent in July and 10.1 percent a year earlier. Wholesale prices fell by 0.4 percent in September but were up by 1.3 percent year-on-year.

The Irish pound firmed by 2.62 percent against the U.S. dollar and by 1.00 percent in effective (MERM) terms. Ireland's trade balance, seasonally adjusted, switched into a £Ir 72.9 million surplus in August, from a £Ir 12.2 million deficit in July, reflecting mainly a fall in imports. The number of unemployed persons fell by 2.1 percent in September, the largest monthly decline in over a year, with the unemployment rate declining to 17.3 percent from 17.7 percent in August. Retail prices rose by 5.5 percent in the year to mid-August, compared with 5.2 percent in the year to mid-May.

The Italian lira appreciated by 2.21 percent against the U.S. dollar and by 0.43 percent in effective (MERM) terms. As in the preceding two months, the Italian lira was the strongest currency in the EMS during most of October. Italy's trade deficit narrowed to Lit 420 billion in August from Lit 1,463 billion a year earlier; however, the deficit amounted to Lit 16,792 billion in the first eight months of 1985, 53 percent above that for the same period a year earlier. Industrial production fell sharply in August, reflecting vacation closures, but it also fell 5.6 percent from a year earlier; the number of persons unemployed was 6.5 percent larger in July than a year earlier. Inflation, as measured by changes in consumer prices, accelerated to 1.2 percent in September from 0.4 percent in August (consumer prices rose 8.5 percent year-on-year).

The pound sterling firmed by 2.20 percent against the U.S. dollar and by 1.49 percent in effective (MERM) terms. The U.K. external current account surplus, seasonally adjusted, narrowed marginally to £200 million in September, with the surplus for the first nine months of 1985 amounting to £1.4 billion, compared with £512 million for the same period of 1984. Industrial output, seasonally adjusted, rose 0.5 percent in August and was up 4.7 percent from a year earlier. The volume of retail sales, seasonally adjusted, fell 1.4 percent in September following a 1.3 percent rise in August, while the unemployment rate, also seasonally adjusted, remained in October at 13.1 percent, the same rate as in the preceding month. The public sector borrowing requirement amounted to £1.3 billion in September, bringing the total for the first half of the 1985/1986 fiscal year to £5.6 billion, down from £7.4 billion for the same period a year earlier. Producer prices rose 0.3 percent in September and 5.5 percent year-on-year, while input costs rose 0.2 percent in the same month but were down 1.5 percent year-on-year.

The Swiss franc firmed by 2.02 percent against the U.S. dollar but remained virtually unchanged in effective (MERM) terms. Switzerland's trade deficit amounted to Sw F 692 million in September compared with Sw F 870 million in August, with the cumulative deficit for the first nine months of 1985 reaching Sw F 7.1 billion, marginally above that for the same period last year. Its unemployment rate remained unchanged in September at 0.8 percent. Consumer prices rose 0.2 percent in October (3.0 percent year-on-year) and wholesale prices rose 0.4 percent in September (1.0 percent year-on-year).

The Japanese yen firmed by 2.34 percent against the U.S. dollar and by 1.64 percent in effective (MERM) terms. Since late September, the Bank of Japan has actively intervened in foreign exchange markets to encourage an appreciation of the yen, particularly against the U.S. dollar. Japan's external current account surplus widened to \$4.9 billion in September from \$4.3 billion in August, with the surplus for the first six months of the current fiscal year reaching a record \$26.6 billion (the trade surplus for the same period amounted to \$29.3 billion, also a record high). In order to reduce Japan's current account surplus, an earlier package of market-opening measures was followed in October by a plan to expand domestic demand and increase imports. Real consumer spending rose by 0.9 percent in July, following very slow growth in several months. In September industrial production rose at an annual rate of 8.1 percent, following an increase at an annual rate of 4.7 percent in the preceding month, and the unemployment rate narrowed to a seasonally adjusted rate of 2.7 percent (the rate was 2.8 percent in the preceding month). Wholesale prices declined by 0.3 percent in September and by 2.1 percent over the year.

The Canadian dollar changed little against the U.S. dollar as well as in effective (MERM) terms. Canada's trade surplus widened to Can\$1.8 billion in September from Can\$1.0 billion in August. Real GDP rose 0.3 percent in August following an increase of 0.9 percent in July, while the index of leading economic indicators rose by 0.4 percent in July following a slight increase in June and several consecutive declines in preceding months. The unemployment rate, seasonally adjusted, fell to 10.1 percent in September from 10.3 percent in August and 11.8 percent a year earlier. The Federal Government budget deficit narrowed to Can\$2.5 billion in August, with the deficit for the first five months of this fiscal year amounting to Can\$14.1 billion, marginally below that for the same period of last fiscal year. Consumer prices rose 0.2 percent in September and 4.1 percent year-on-year.

The Norwegian krone firmed by 1.30 percent against the U.S. dollar but eased marginally in effective (MERM) terms. Norway's trade surplus widened slightly to NKr 1.8 billion in September, with the surplus for the first eight months of 1985 rising to NKr 25.9 billion, 9 percent below that for the same period a year earlier. Its unemployment rate fell to 2.4 percent in October from 2.5 percent in September and 3.5 percent a year earlier. Consumer prices rose 1.0 percent in September and 5.8 percent year-on-year.

The Swedish krona firmed by 2.21 percent against the U.S. dollar and by 1.08 percent in effective (MERM) terms. Sweden's trade account was in surplus for SKr 1.7 billion in September, compared with a deficit of SKr 200 million in August, with the surplus for the first nine months of 1985 amounting to SKr 8.7 billion, roughly half that for the same period a year earlier. Its industrial production rose 5.2 percent in August and 4.5 percent year-on-year. The unemployment rate fell to 2.5 percent in October from 3.2 percent in September. Consumer prices rose 0.4 percent in September and 6.7 percent year-on-year. On October 18 the Government lifted completely a price freeze which had been imposed last March.

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

Short-term interest rates firmed in key major industrial countries in October, while in most others they were relatively easier. They rose particularly sharply in Japan where monetary conditions were allowed to tighten in support of the yen. However, official interest rates declined in France and Belgium. Inflation remained fairly subdued, with year-on-year price increases around five percent or less in most countries (Table 5 and Chart 8).

Interest rates in the United States were mixed in October, with market activity influenced by uncertainty over the Treasury's financing schedule, as net new borrowing was constrained by the Federal debt ceiling, while proposals to raise it remained under discussion in the U.S. Congress. Economic data released during the month showed mixed signals and were interpreted as having little impact on the Federal Reserve's monetary policies. The yield on three-month U.S. Treasury bills firmed by 0.16 percentage point to 7.42 percent at the end of the month, while the 90-day CD rate eased by 0.14 percentage point over the same period to close at 7.75 percent. The Federal Funds rate averaged 7.99 percent for October compared with 7.92 percent for September. However, longer-term interest rates eased after firming earlier in the month, with yields on U.S. Treasury securities with maturities from one year to 30 years falling by 0.07-0.33 percentage point; the five-year constant maturity rate fell from 9.73 percent at end-September to 9.47 percent at end-October. The M1 measure of the U.S. money supply, seasonally adjusted, averaged \$611.4 billion in the week ended October 28, compared with \$615.0 billion in the week ended September 30. Thus M1 at the end of October remained well above (by \$6.7 billion) the upper limit of the Federal Reserve's target range based on 3-8 percent annual growth from the second to the fourth quarter of 1985.

Among the countries participating in the exchange arrangements of the European Monetary System, short-term interest rates in September eased in France and Belgium but firmed in Germany and Italy. The Bank of France cut its money market intervention rate by 0.25 percentage point on October 17 to 9.13 percent. The rate had stood at 9.38 percent since September 19 when it was also reduced by 0.25 percentage point. The three-month interbank money rate in France fell from 9.63 percent at the end of September to 9.38 percent at the end of October. In Belgium, the discount rate was cut to 9 percent from 9.5 percent, effective October 17. The rate on four-month Fonds des Rentes certificates was reduced three times during the month to 8.85 percent; interest rates on the shorter-term Treasury certificates were also reduced by similar margins. In Germany, the three-month interbank deposit rate gradually firmed toward the end of the month and closed at 5.07 percent, compared with a level of 4.72 percent at the end of the previous month, and thus reversed a declining trend during the preceding four months. Germany's central bank money stock, seasonally adjusted, rose by just over DM 1 billion in October, leaving

Table 5. Inflation Rates and Short-Term Interest Rates

	Month <u>2/</u>	Inflation rates <u>1/</u> (year-on-year percent changes)				Short-term interest rates <u>4/</u> (end-of-month)	
		Wholesale price index		Consumer price index	<u>3/</u>	September	October
Austria	Sept./Oct.	3.1	(2.0)	2.7	(2.9)	4.00	4.00
Belgium	Sept./Oct.	-1.0	(-1.0)	4.0	(4.6)	9.35	8.85
Canada	September	2.3	(2.0)	4.1	(4.0)	8.78	8.51
Denmark	September	1.3	(2.1)	3.9	(4.1)	7.00	7.00
France	Sept./Oct.	0.9	(3.2)	4.9	(5.3)	9.63	9.38
Germany	October	-1.4	(0.3)	1.8	(2.2)	4.72	5.07
Italy	Aug./Oct.	6.9	(7.5)	8.5	(8.3)	14.06	14.81
Japan	September	-2.1	(-1.6)	1.7	(2.3)	6.44	7.85
Netherlands	Aug./Oct.	1.0	(1.3)	1.9	(2.3)	6.25	6.25
Norway	October	5.2	(5.7)	5.6	(5.8)	8.00	8.00
Sweden	Sept./Oct.	4.2	(4.6)	6.9	(6.7)	10.50	10.50
Switzerland	Sept./Oct.	1.0	(1.2)	3.0	(3.3)	4.69	4.56
United Kingdom	Sept./Oct.	5.5	(5.7)	5.4	(5.9)	11.33	11.44
United States	September	0.2	(0.8)	3.2	(3.4)	7.26	7.42

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 Belgium, 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; inter-bank rates for Germany, France, Italy, and the Netherlands; three-month euro-franc rate for Switzerland; discount rate on two-month private bills for Japan; four-month certificates of the Government Securities Stabilization Fund for Belgium; central bank discount rates for Austria, Denmark, Norway and Sweden.

its growth just under the upper limit of its 3-5 percent target range from the fourth quarter of 1984 through the fourth quarter of 1985. The three-month interbank money rate in Italy also firmed over the same period, rising from 14.06 percent to 14.81 percent.

Among the other major countries, short-term interest rates rose sharply in Japan but were little changed in the United Kingdom and Canada. In Japan, the rate for two-month (private) bills rose sharply on October 25, when the Bank of Japan announced a policy of leading short-term interest rates higher to support the yen. It continued to rise the following Monday and closed the month at 7.85 percent, 1.41 percent higher than end-September. Japan's broadly defined money supply M2+CDs rose 8.6 percent in October from its year-earlier level, compared with a 8.3 percent rise in September. In the United Kingdom, a major monetary policy was announced on October 17. The Government would no longer use bond sales as a tool of monetary control, thus formally ending a system which had been introduced in 1971. The focus of monetary policy will shift from the targeting of monetary aggregates--centered on the sterling M3 money supply measure--to achieving interest rate levels consistent with reducing inflation. The three-month Treasury bill rate and the interbank rate both firmed toward the end of the month, to 11.44 percent and 11.59 percent respectively at end-October, from 11.33 percent and 11.56 percent at end-September. The latest Bank of England data (released in November) showed that sterling M3, seasonally adjusted, rose by a provisional 0.8 percent in the four weeks to October 16, following a 1.8 percent rise in the four weeks to September 18. The year-on-year growth rate was 14.5 percent in banking October, compared with 14.1 percent growth in banking September and the year-on-year target for the year ending in March 1986 of 5-9 percent. The three-month Treasury bill rate in Canada eased from 8.78 percent at the end of September to 8.51 percent at the end of October.

In other industrial countries, the Bank of Sweden cut its penalty rate from 15 percent to 14 percent, effective October 24; however, the discount rate was left unchanged at 10.5 percent. The last change in these rates was on July 12, when the discount rate and the penalty rate were both lowered by one percentage point.

Three-month interest rates in the eurocurrency markets in October were mixed, with the euro-yen rate rising sharply toward the end of the month. The euro-yen rate rise followed that of domestic rates, rising by 1.12 percentage points on October 25, and closed the month at 7.81 percent, 1.27 percentage points higher than end-September. The euro-French franc rate remained fairly volatile, fluctuating in the range of 9.44-10.81 percent and ending the month at 9.81 percent, 0.69 percentage point lower than the previous month. The euro-Deutsche mark rate firmed by 0.32 percentage point to 4.88 percent while the eurodollar and euro-Swiss franc rates both eased by 0.13 percentage point to 8.00 percent and 4.56 percent respectively. The euro-sterling rate firmed by 0.06 percentage point to 11.56 percent.

As a result of the movements of eurodollar and domestic interest rates from the end of September to the end of October, the uncovered interest differentials favoring eurodollar investment narrowed sharply for Japan and less markedly for Germany and the Netherlands. Those favoring domestic investments narrowed for Belgium and France but widened for Italy and the United Kingdom (see Table 6).

Table 6. Covered Interest Differentials for
Three-Month Investments (End-month)

	Uncovered interest differentials <u>1/</u> (1)		Forward exchange quotations <u>2/</u> (2)		Covered interest differentials <u>1/</u> (3) = (1)-(2)	
	September	October	September	October	September	October
Belgium	-1.22	-0.85	-1.09	-0.66	-0.13	-0.19
France	-1.50	-1.38	-2.51	-1.70	+1.01	+0.32
Germany	+3.42	+2.93	+3.72	+3.12	-0.30	-0.19
Italy	-5.93	-6.81	-4.97	-5.31	-0.96	-1.50
Japan	+1.69	+0.15	+1.86	+0.29	-0.17	-0.14
Netherlands	+1.88	+1.75	+2.44	+1.67	-0.56	+0.08
United Kingdom	-3.20	-3.44	-3.23	-3.43	+0.03	-0.01

1/ Positive sign indicates differential in favor of eurodollar 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 Japan the discount rate for two-month private bills is used, for the United Kingdom the three-month Treasury bill rate, and for Belgium the rate on four-month certificates of the Government Securities Stabilization Fund.

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

In the forward exchange market, the premia against the U.S. dollar narrowed for the Deutsche mark, the Japanese yen, and the Netherlands guilder. The discounts against the U.S. dollar narrowed for the Belgian franc and the French franc, but widened for the Italian lira and the pound sterling. As a result of the above-mentioned movements in interest differentials and forward exchange quotations, the covered interest differential switched to favor eurodollar investments for the Netherlands and to favor domestic investments for the United Kingdom. The covered interest differential favoring eurodollar investments narrowed for France. The covered interest differential favoring domestic investments widened for Belgium and Italy but narrowed for Germany and Japan. (Table 6 and Charts 9 and 10.)

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

Reflecting the money market developments described in Section II above, the SDR interest rate rose to 7.56 percent for the week beginning October 28 from 7.24 percent for the week beginning September 30 (see Table 7). The discount rate on two-month private bills in Japan rose by 0.77 percentage point while the three-month U.S. Treasury bill rate rose by 0.31 percentage point. Yields on the relevant German and U.K. instruments also firmed--by 0.23 percentage point and 0.12 percentage point respectively. The three-month interbank money rate in France, however, eased by 0.25 percentage point. The rate of remuneration paid on creditor positions in the Fund (93 percent of the SDR interest rate) rose to 7.03 percent on the last week of October from 6.73 percent in the last week of September.

Table 7. The SDR Interest Rate and the
Rate of Remuneration ^{1/}

	September 30	October			
		7	14	21	28
SDR interest rate	7.24	7.29	7.41	7.42	7.56
Rate of remuneration	6.73	6.78	6.89	6.90	7.03

^{1/} The rates apply to the weeks beginning with the dates indicated.

Combined domestic interest rates for the various maturities firmed by 0.07-0.41 percentage point (see Table 8 and Chart 11). For maturities longer than one year, yields on the relevant instruments in the United States eased by 0.05-0.14 percentage point, while for maturities of one year or less they firmed by 0.10-0.45 percentage point. In Japan, yields on all maturities rose significantly, by as much as 1.34 percentage points for the three-month maturity and by 0.52-0.91 percentage point for the others. Yields also rose markedly across the board in Germany, by 0.36-0.58 percentage point. In the United Kingdom, yields for maturities of less than five years rose by 0.05-0.34 percentage point, while the yield on the five-year maturity edged marginally lower. Developments in France, where yields on all maturities eased by 0.07-0.38 percentage point went some way to offset the general firming of yields recorded on the other component currencies of the SDR basket.

Combined eurocurrency offered rates for the three- and six-month maturities firmed by 0.13-0.25 percentage point. Euro-yen rates rose sharply by 0.91-1.28 percentage points. Rates on euro-Deutsche marks and on euro-sterling rose by 0.38-0.44 percentage point and by 0.13-0.38 respectively. Eurodollar rates remained unchanged for the three-month maturity but eased by 0.06-0.19 percent for other maturities. Euro-French franc rates eased by 0.31-0.81 percentage point.

Average interest rates on SDR-denominated deposits of selected commercial banks firmed by 0.16-0.27 percentage point. Average deposit rates during the last week of October ranged from 7.71 percent for one-month deposits to 8.06 percent for 12-month deposits.

Chart 11, "Interest Rates on Fund-Related SDR Assets," has been added to this monthly report to supplement the information in Table 8. The chart shows the evolution, since the beginning of 1982, of some of the combined market interest rates set out in the table which are weighted averages of those for the five major currencies in the SDR basket. The chart shows that the sharp fall of interest rates in 1982 reflected the significant declines in inflation in the major industrial countries as well as the onset of recessionary conditions. Since then, the significant strengthening of economic activity has been accompanied by lessened inflationary tendencies and interest rates have tended to stabilize. U.S. interest rates, however, rose temporarily in 1984. More recent trends indicate a continued but slow convergence of nominal interest rates in the major industrial countries, with short-term rates lowest in Germany and highest in the United Kingdom.

Table 8. Yields on Selected SDR-Denominated Assets 1/

	September	October
Combined market interest rates: <u>2/</u>		
a. Based on domestic rates		
3-month maturity (Rule T-1)	7.25	7.66
6-month maturity	7.31	7.69
12-month maturity	7.56	7.75
2-1/2 year maturity	8.38	8.50
5-year maturity	8.81	8.88
b. Based on eurocurrency offered rates		
3-month maturity	7.88	8.13
6-month maturity	8.00	8.13
Average commercial bank deposit rates <u>3/</u>		
1-month deposits	7.54	7.71
3-month deposits	7.60	7.87
6-month deposits	7.73	7.96
12-month deposits	7.90	8.06

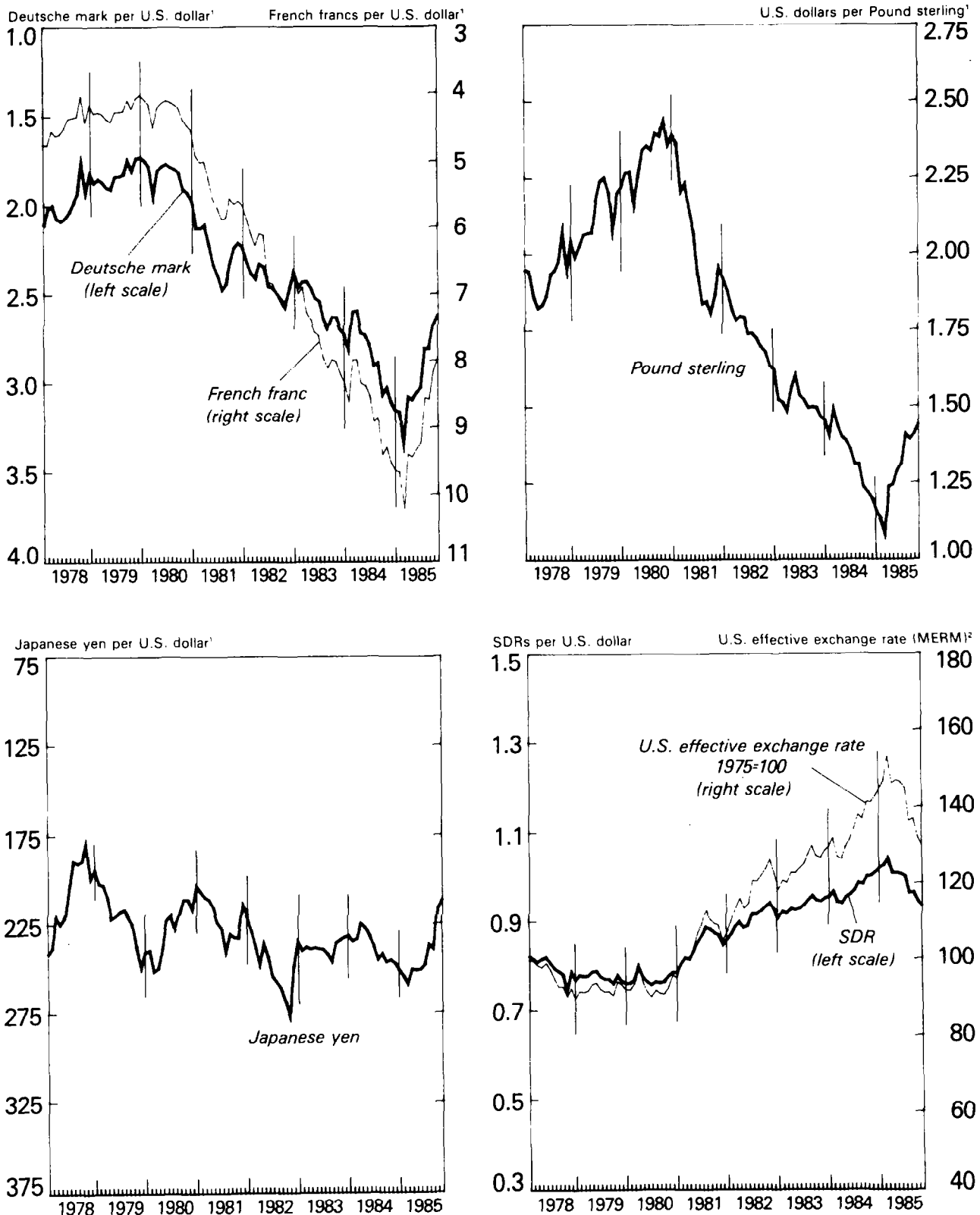
1/ Rates pertain to last Wednesday of the month.

2/ Combined market rates (according to the Rule T-1) are calculated by multiplying the yields or rates of each of the respective instruments by the number of units of the corresponding currency listed in Rule 0-1 and the value in terms of the SDR of a unit of that currency as determined by the Fund under Rule 0-2(a) and (b). Combined interest rates are those that are applicable to Fund-related assets, appropriately rounded.

3/ Average of rates quoted by selected commercial banks.

CHART 1 SPOT EXCHANGE RATES 1978-1985

(end of month)



¹New York noon quotations.

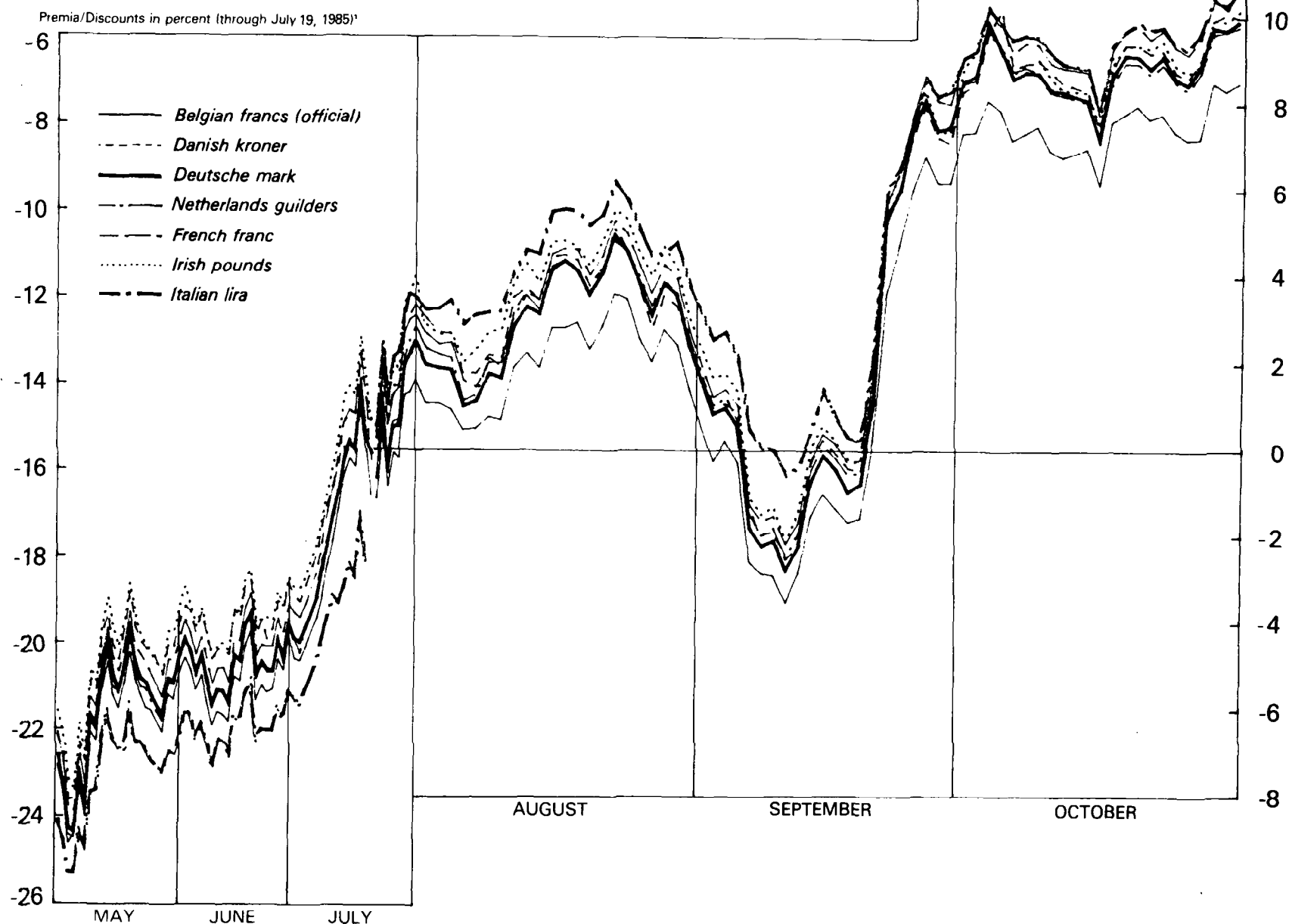
²IMF's multilateral exchange rate model. Increase in the index means appreciation.

CHART

SPOT EXCHANGE RATES: EUROPEAN MONETARY SYSTEM

(Based on noon quotations in New York)

Premia/Discounts in percent
(beginning July 22, 1985)²



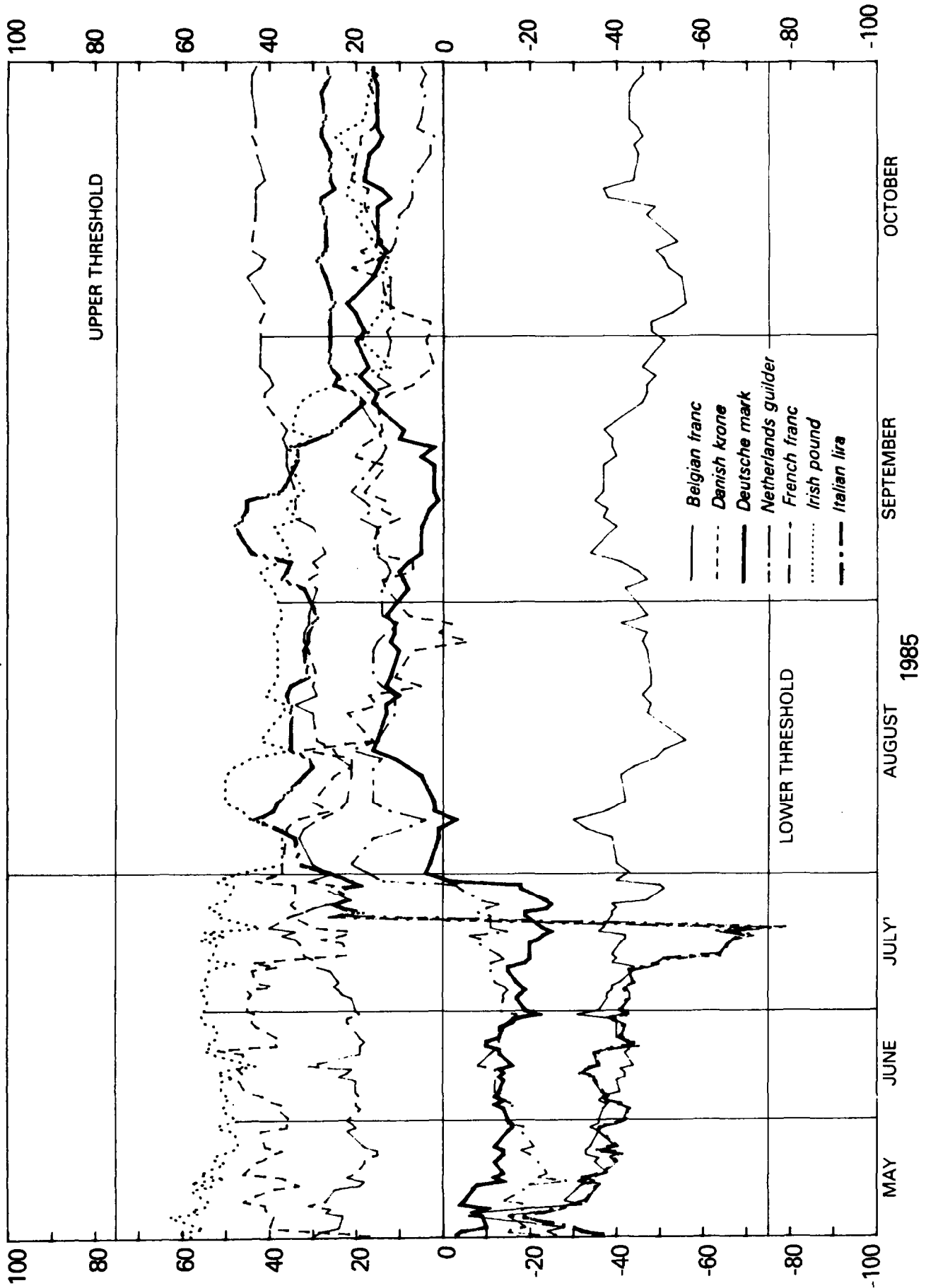
- 19 -

¹Premia/Discounts over declared ECU central rates converted to U.S. dollar terms on the basis of 1 ECU=\$0.920041 effective May 18, 1983.

²Effective July 22, 1985, the Italian lira was devalued by 6 percent while the other currencies were revalued by 2 percent. Consequently, the premia/discounts over declared ECU central rates are calculated on the basis of the rate as of July 22, 1985 of 1 ECU=\$0.777846.

CHART 3 EUROPEAN MONETARY SYSTEM: DIVERGENCE INDICATORS

(Based on noon quotations in London)



*On July 22, 1985, the Italian lira was devalued by 6 percent while the other currencies were revalued by 2 percent.

CHART 4 SPOT EXCHANGE RATES

(Noon quotations in New York)

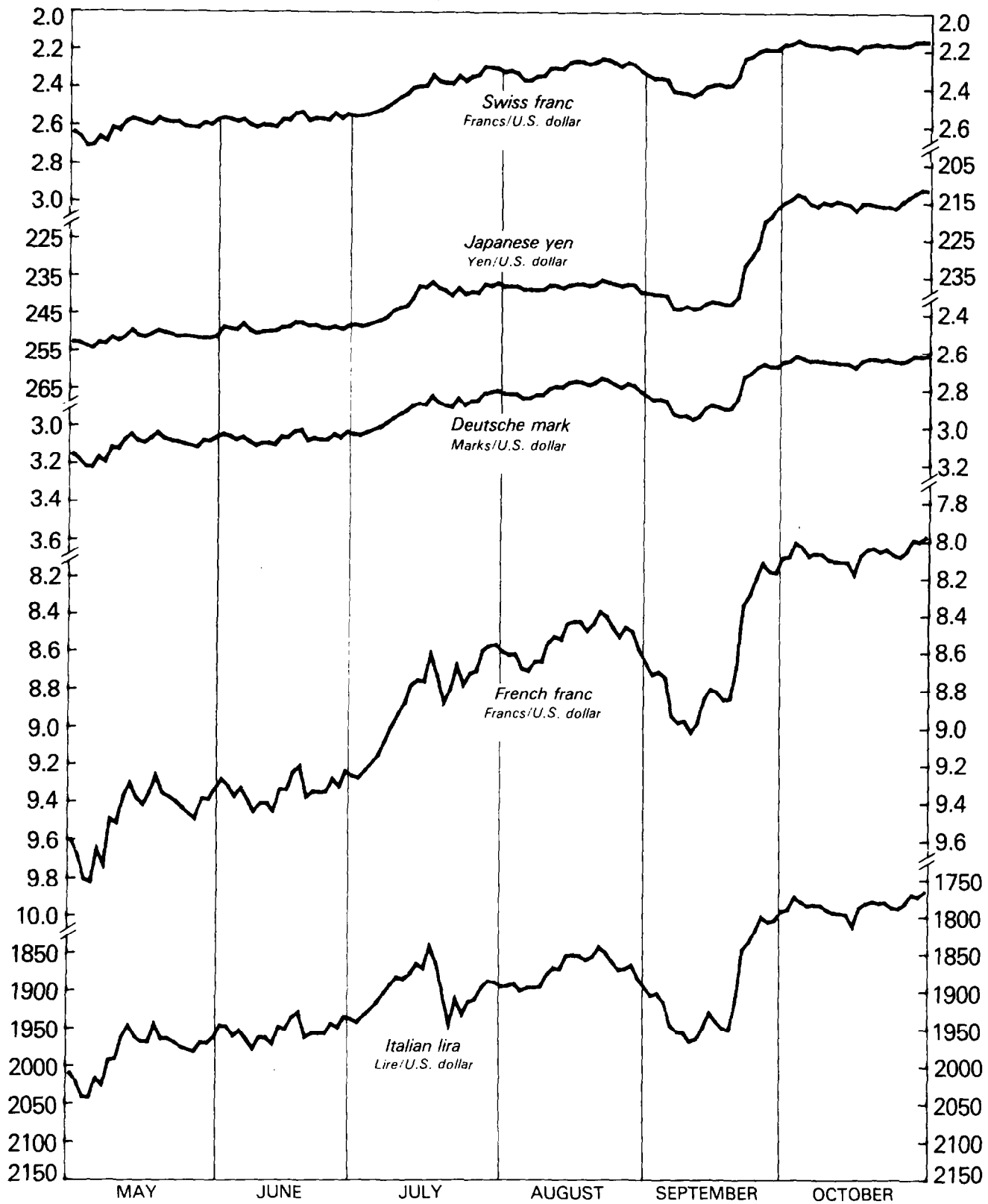
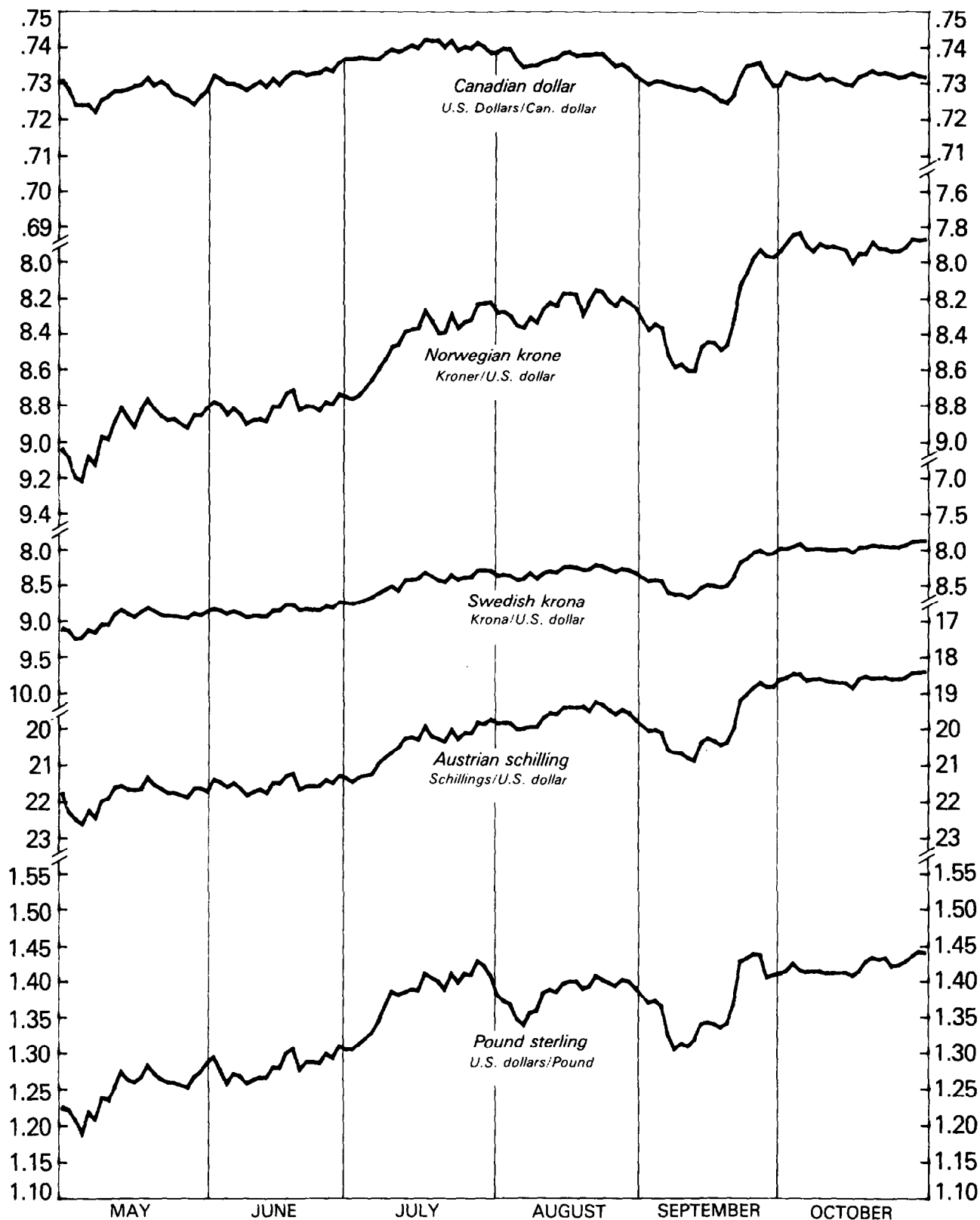


CHART 5 SPOT EXCHANGE RATES

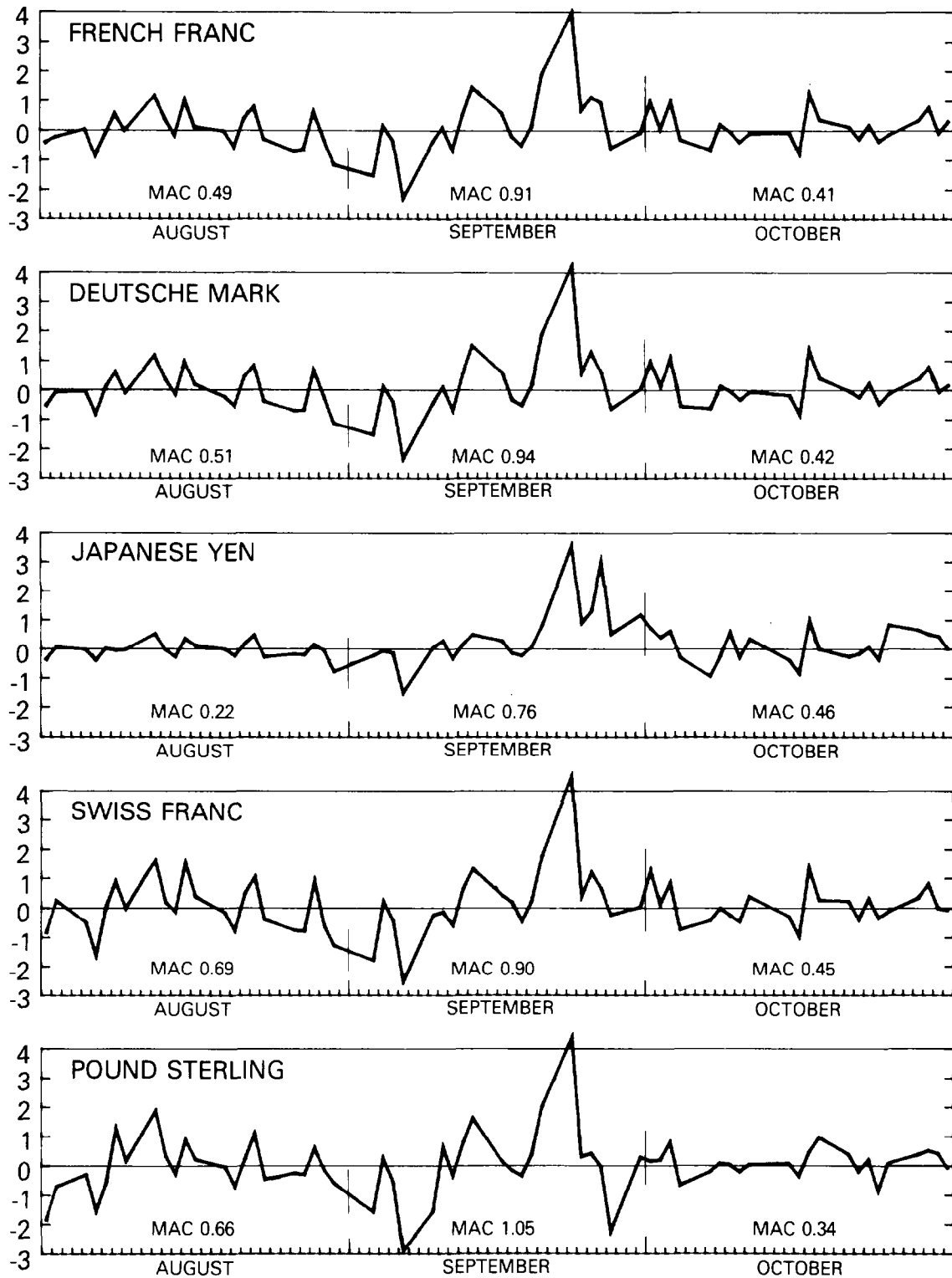
(Noon quotations in New York)



1985

CHART 6
DAILY CHANGES IN SPOT EXCHANGE RATES

(In percent against the U.S. dollar, based on noon quotations in New York)¹



1985

¹Monthly averages of absolute percentage changes (MAC) are also indicated

CHART 7
INDEXES OF EXCHANGE RATES OF
FIVE MAJOR CURRENCIES AGAINST THE SDR
JUNE 1974 - OCTOBER 1985
(June 28, 1974=100)

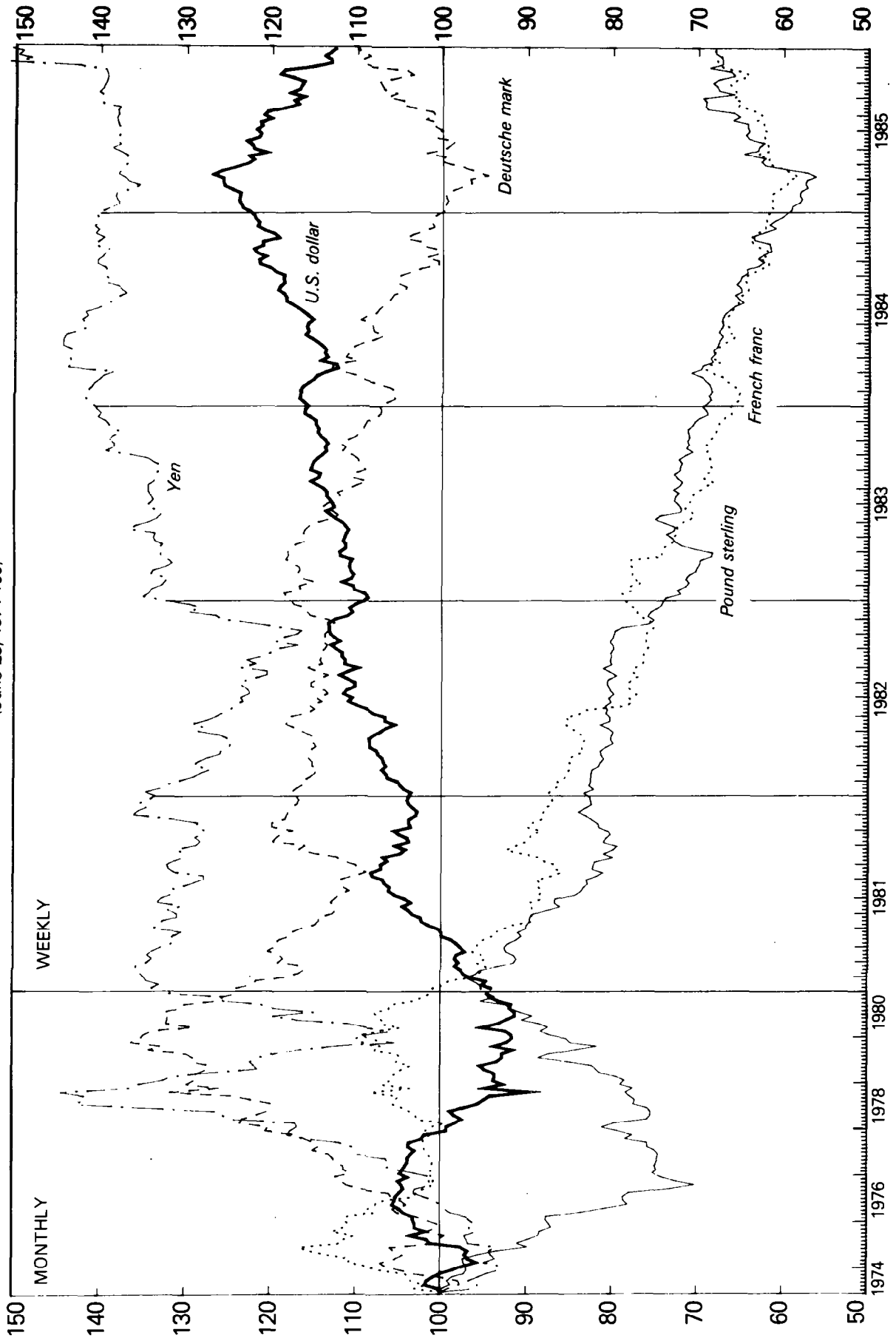
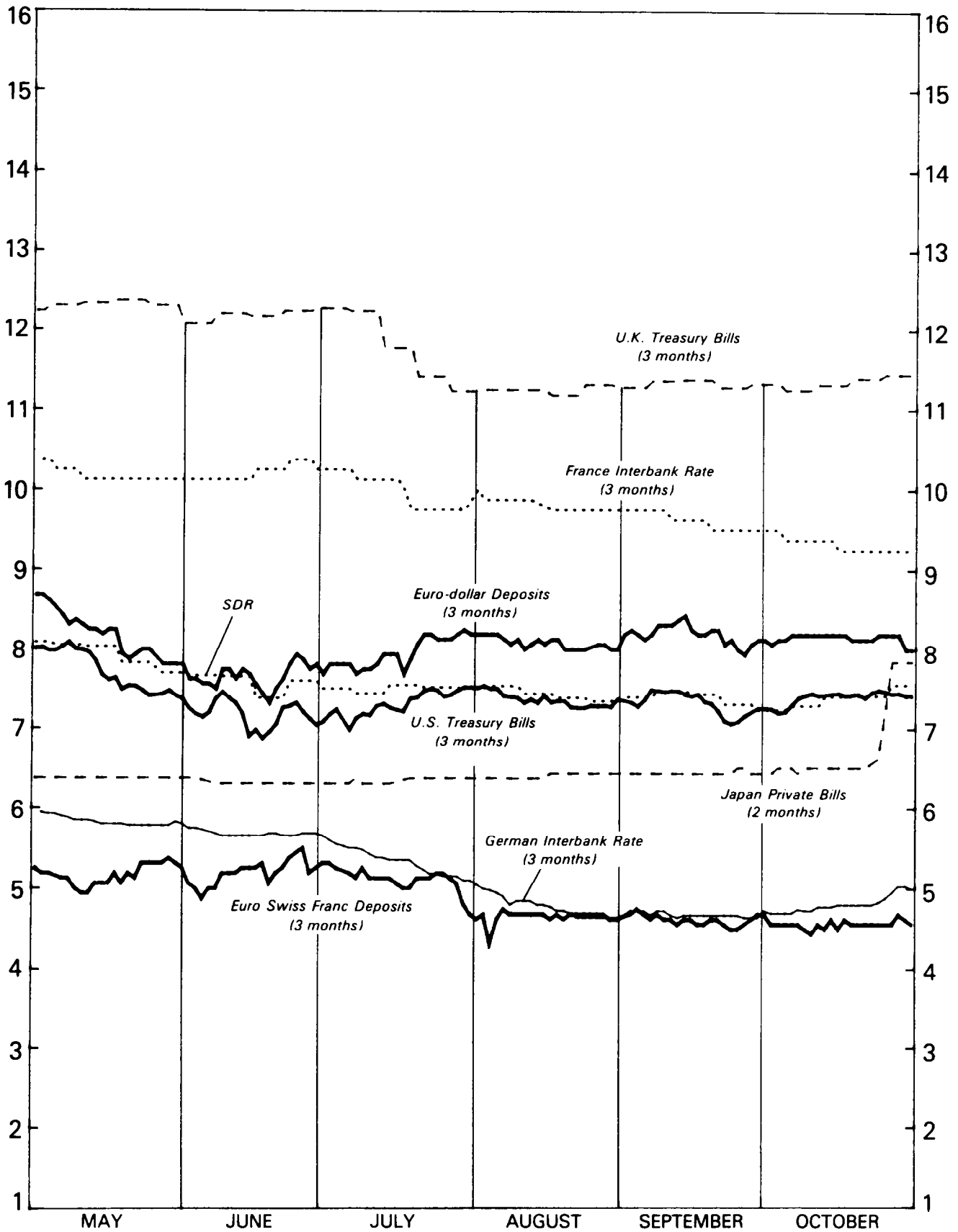


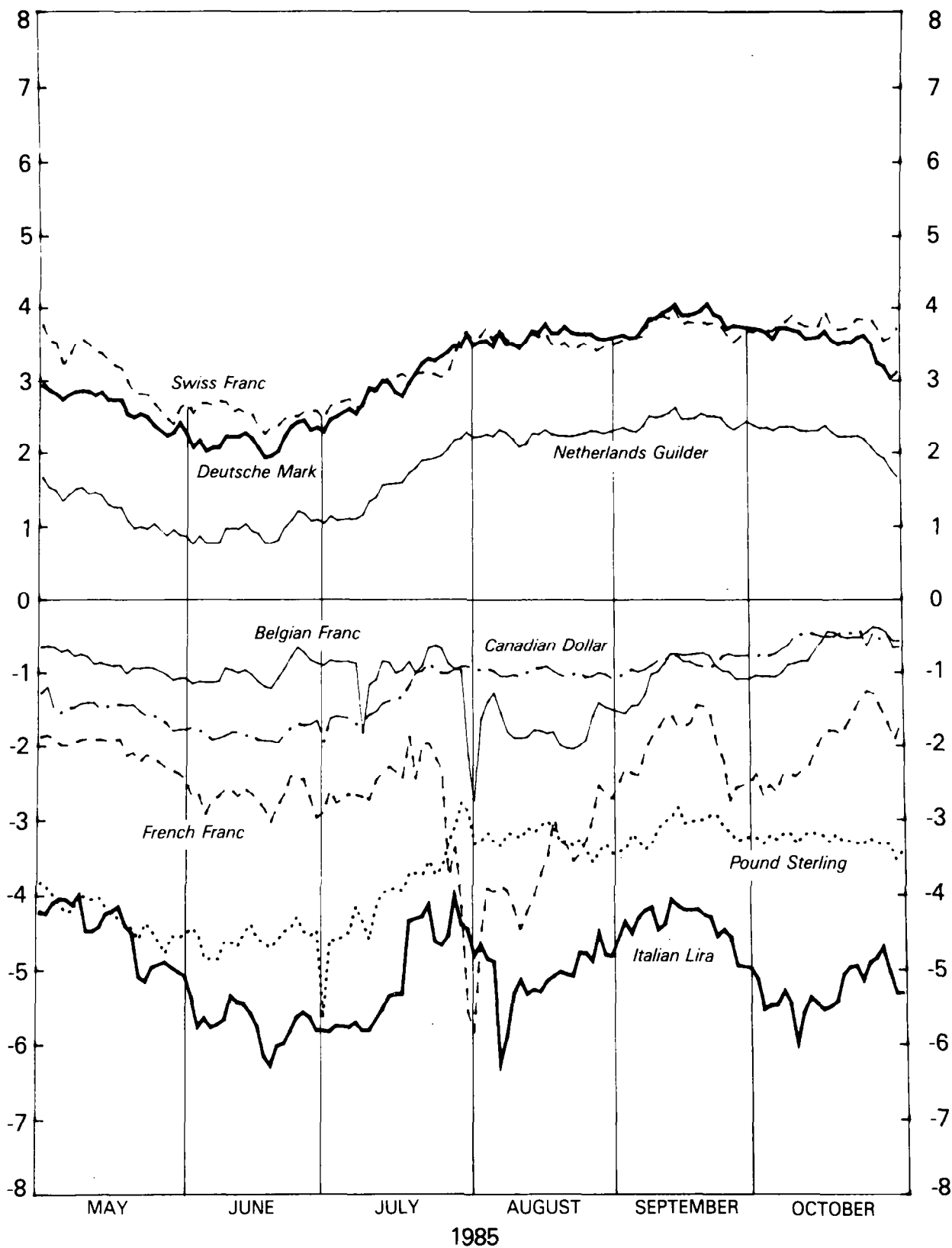
CHART 8 SHORT-TERM MONEY MARKET RATES

(Percent per annum)



1985

CHART 9
THREE-MONTH FORWARD RATES
Margins from Spot Rates based on noon quotations in New York
(Percent per annum)



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)

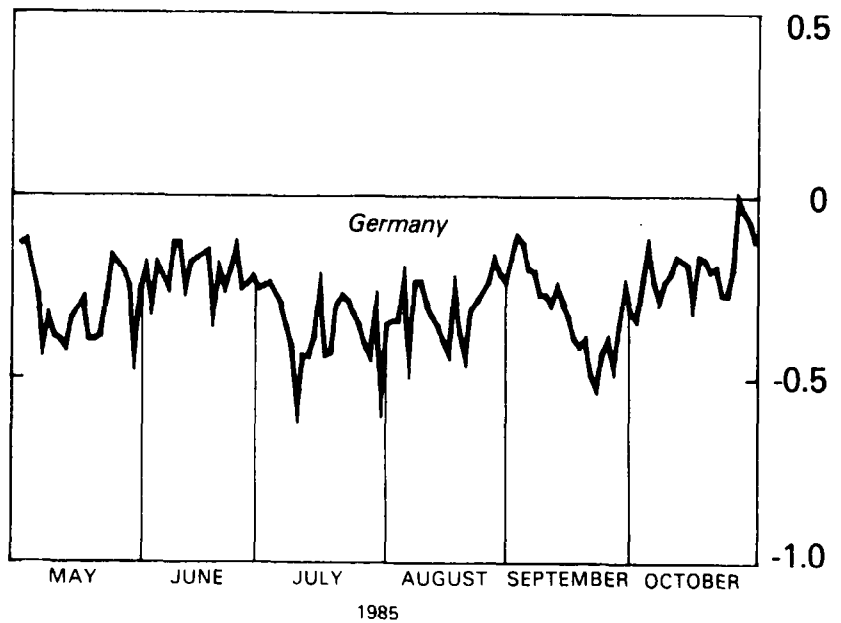
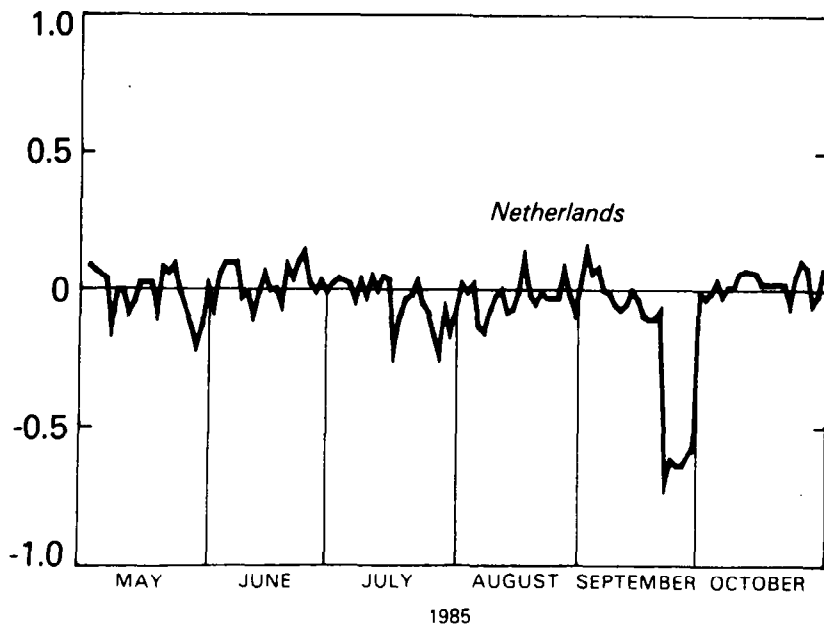
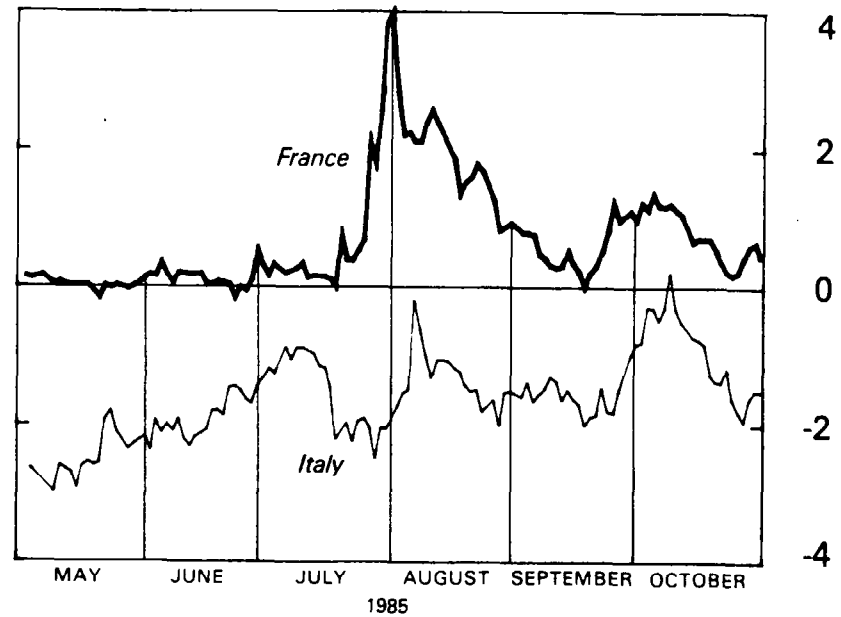
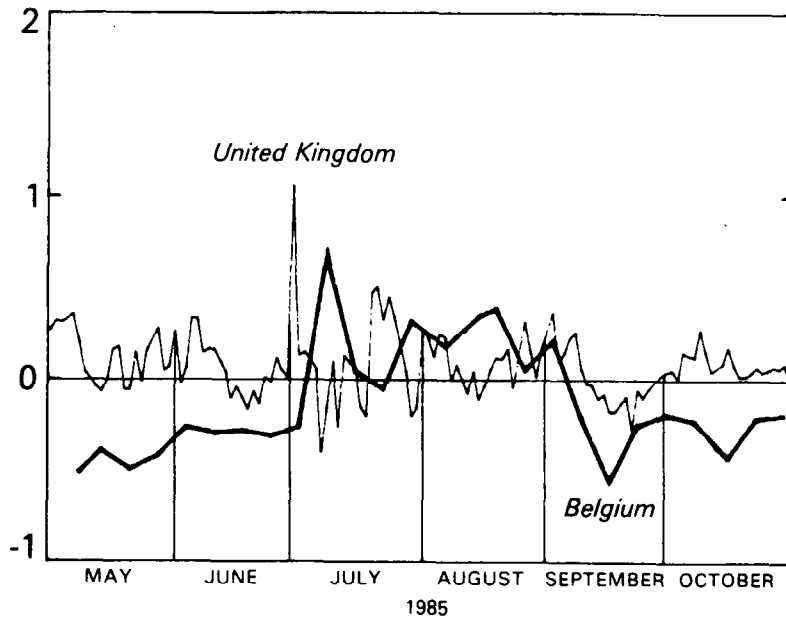
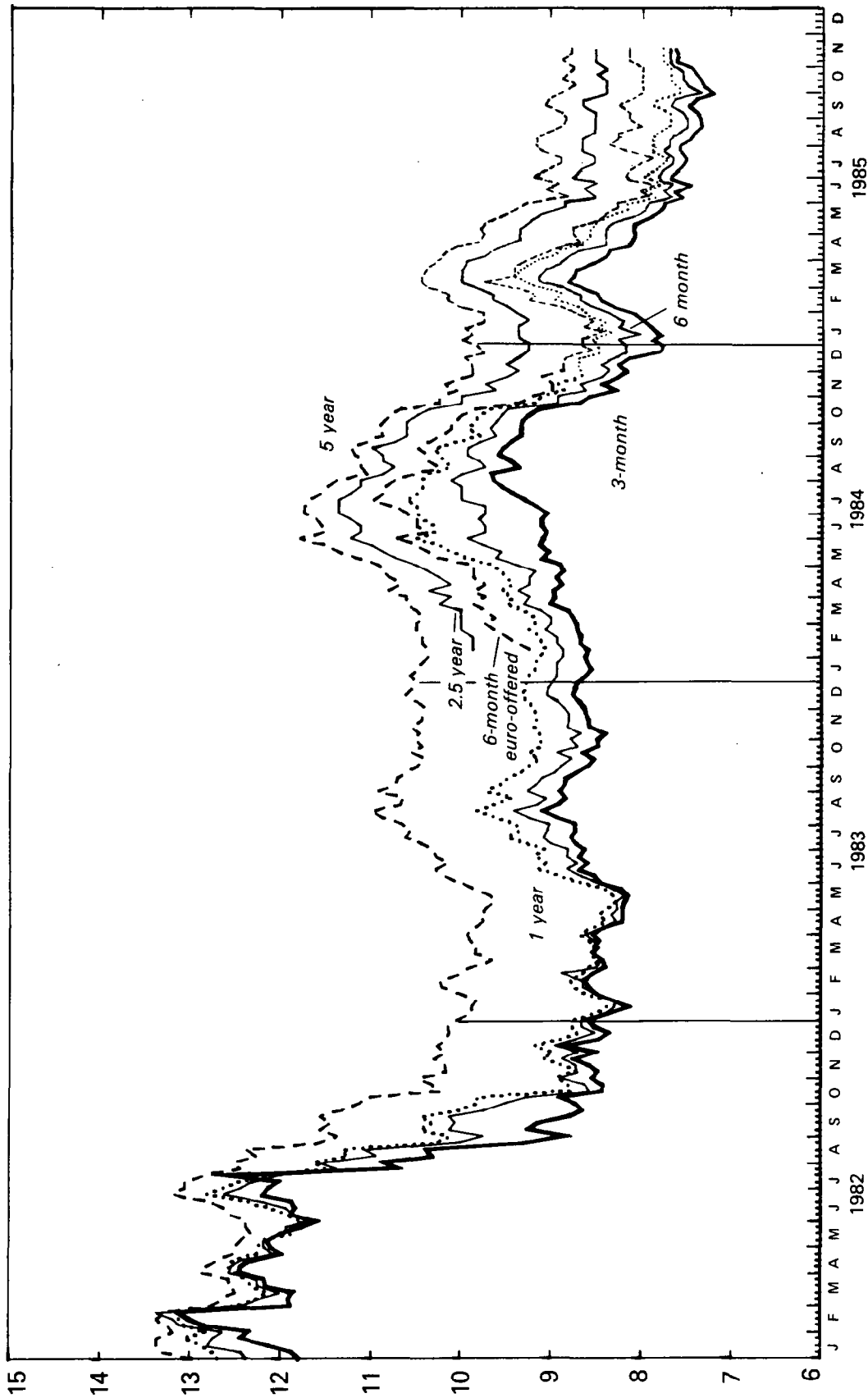


CHART 11
INTEREST RATES ON FUND-RELATED SDR ASSETS¹
(In percent per annum; weekly Wednesday observations)



¹Combined market rates according to Rule T 1.

Foreign Exchange Rates, September-October 1985 ^{1/}

	S e p t e m b e r				O c t o b e r				
	7	14	21	28	2	9	16	23	30
Austrian schilling	20.0220	20.7900	20.4515	18.8325	18.5613	18.5850	18.8463	18.5395	18.4025
Belgian franc									
Official	57.520	59.745	58.615	54.365	53.685	53.615	54.295	53.475	53.210
Financial	58.075	60.125	58.975	55.900	54.075	54.125	54.625	53.900	53.575
Canadian dollars	0.73067	0.72862	0.72540	0.73527	0.73308	0.73263	0.72947	0.73308	0.73198
Danish kroner	10.3400	10.7200	10.4955	9.7450	9.6338	9.5875	9.7255	9.5665	9.4925
Deutsche mark	2.85000	2.96000	2.90600	2.67925	2.64850	2.64700	2.68450	2.63750	2.62300
French francs	8.7030	9.0225	8.8550	8.1950	8.0850	8.0675	8.1775	8.0425	7.9995
Irish pounds	1.0925	1.0505	1.0710	1.1545	1.1723	1.1705	1.1540	1.1750	1.1800
Italian lire	11903.000	1966.500	1949.000	1819.000	1790.000	1784.500	1813.000	1780.500	1773.500
Japanese yen	239.575	243.500	242.200	226.800	214.050	214.700	217.250	215.850	211.450
Netherlands guilder	3.2030	3.3248	3.2620	3.0210	2.9868	2.9818	3.0260	2.9765	2.9560
Norwegian kroner	8.3400	8.6050	8.4850	7.9710	7.8850	7.8925	8.0065	7.9200	7.8750
Pounds sterling	1.3731	1.3090	1.3355	1.4380	1.4140	1.4145	1.4079	1.4337	1.4415
Swedish kronor	8.4200	8.6550	8.5225	8.0345	7.9775	7.9775	8.0345	7.9460	7.8725
Swiss francs	2.34550	2.43900	2.38800	2.20450	2.16400	2.17500	2.20375	2.16450	2.14900

^{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.

Short- and Medium-Term Interest Rates

APPENDIX B

(Monthly and weekly averages)

	Domestic Money Markets 1/ (three-month)						Eurocurrency Markets 2/ (three-month)						Lending Rates			U.S. Treasury Securities (five-year) 5/ (15)
	United States (1)	Germany (2)	United Kingdom (3)	France (4)	Japan (5)	Combined rate (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)		
1984																
Oct.	10.12	6.16	10.10	10.96	6.32	9.16	10.83	5.87	10.65	11.32	6.32	5.29	11.18	12.58	12.06	
Nov.	8.92	6.04	9.50	10.69	6.43	8.32	9.56	5.76	9.91	11.12	6.42	5.07	9.90	11.77	11.33	
Dec.	8.34	5.91	9.29	10.83	6.41	7.98	9.04	5.65	9.80	10.81	6.31	4.97	9.51	11.06	11.07	
1985																
Jan.	8.02	5.95	10.61	10.60	6.29	7.89	8.44	5.77	11.64	10.71	6.31	5.12	8.91	10.61	10.93	
Feb.	8.55	6.24	13.07	10.79	6.45	8.47	9.11	6.19	13.78	11.06	6.42	5.72	9.57	10.50	11.13	
Mar.	8.82	6.48	13.45	10.88	6.48	8.70	9.36	6.18	13.62	11.11	6.41	5.80	10.04	10.50	11.52	
Apr.	8.42	6.11	12.33	10.65	6.34	8.21	8.76	5.89	12.80	10.70	6.33	5.42	9.18	10.50	11.01	
May	7.73	5.92	12.31	10.31	6.38	7.89	8.17	5.61	12.65	10.28	6.32	5.16	8.54	10.31	10.34	
June	7.17	5.75	12.18	10.45	6.32	7.55	7.65	5.51	12.44	10.37	6.28	5.19	7.95	9.78	9.60	
July	7.31	5.42	11.79	10.12	6.35	7.54	7.95	5.13	12.08	10.51	6.33	5.11	8.18	9.50	9.70	
Aug.	7.36	4.85	11.24	9.95	6.41	7.42	8.08	4.65	11.50	11.86	6.37	4.66	8.33	9.50	9.81	
Sept.	7.33	4.75	11.33	9.75	6.45	7.38	8.20	4.52	11.52	10.23	6.43	4.62	8.46	9.50	9.81	
Oct.	7.39	4.87	11.34	9.46	6.80	7.44	8.15	4.71	11.54	10.17	6.80	4.57	8.32	9.50	9.69	
1984 Week ending:																
Oct. 5	10.60	6.17	10.14	11.25	6.31	9.35	11.49	5.84	10.71	11.67	6.35	5.18	11.76	12.75	12.46	
12	10.40	6.13	9.96	11.28	6.31	9.22	11.23	5.88	10.59	11.61	6.32	5.23	11.55	12.75	12.26	
19	10.20	6.18	10.03	11.15	6.29	9.12	10.80	5.95	10.79	11.35	6.29	5.48	11.15	12.75	12.10	
26	9.69	6.15	10.26	10.39	6.35	8.79	10.19	5.82	10.56	10.86	6.30	5.36	10.59	12.50	11.69	
Nov.																
2	9.44	6.13	10.06	10.39	6.38	8.64	10.09	5.85	10.53	10.97	6.34	5.11	10.43	12.29	11.58	
9	8.96	6.10	9.77	10.54	6.38	8.36	9.75	5.76	10.03	11.05	6.43	4.88	10.03	12.00	11.47	
16	8.99	6.08	9.59	10.75	6.41	8.37	9.66	5.85	9.91	11.14	6.41	5.10	9.99	11.79	11.53	
23	8.85	5.99	9.26	10.77	6.46	8.27	9.51	5.77	9.74	11.30	6.46	5.24	9.88	11.75	11.21	
30	8.71	5.93	9.21	10.77	6.51	8.19	9.16	5.64	9.77	11.08	6.40	5.06	9.60	11.68	11.09	
Dec.																
7	8.74	5.94	9.25	10.82	6.49	8.21	9.29	5.73	9.74	10.93	6.34	4.99	9.71	11.25	11.21	
14	8.56	5.93	9.30	10.75	6.44	8.11	9.20	5.73	9.72	10.77	6.36	5.05	9.71	11.25	11.19	
21	8.08	5.86	9.30	10.67	6.39	7.84	8.70	5.55	9.86	10.77	6.29	5.11	9.30	11.25	10.90	
28	7.93	5.88	9.29	10.90	6.36	7.75	9.02	5.58	9.96	10.79	6.27	4.83	9.27	10.75	10.96	
1985 Week ending:																
Jan. 4	8.09	5.86	9.33	10.81	6.31	7.83	8.73	5.61	10.27	10.72	6.19	4.77	9.27	10.75	11.16	
11	8.01	5.85	9.57	10.67	6.25	7.79	8.39	5.60	10.23	10.80	6.22	4.75	8.94	10.75	11.07	
18	7.99	6.02	10.52	10.52	6.31	7.87	8.41	5.90	12.05	10.81	6.31	5.28	8.93	10.68	11.01	
25	7.91	5.96	11.74	10.52	6.31	7.91	8.31	5.77	12.17	10.77	6.39	5.35	8.75	10.50	10.70	
Feb.																
1	6.19	6.07	11.89	10.57	6.31	8.11	8.55	5.99	13.28	10.69	6.38	5.41	8.86	10.50	10.76	
8	6.45	6.29	12.24	10.65	6.40	8.34	8.96	6.29	13.41	11.03	6.40	5.56	9.28	10.50	10.99	
15	6.49	6.26	12.93	10.82	6.44	8.42	9.04	6.24	13.91	10.98	6.44	5.69	9.53	10.50	11.00	
22	6.60	6.22	13.62	10.82	6.47	8.54	9.16	6.08	13.96	11.18	6.44	5.83	9.69	10.50	11.17	
Mar.																
1	6.77	6.26	13.84	10.87	6.50	8.66	9.41	6.15	14.07	11.14	6.43	5.88	10.02	10.50	11.47	
8	6.90	6.32	13.82	10.90	6.50	8.83	9.61	6.31	14.01	11.33	6.43	5.91	10.40	10.50	11.51	
15	6.65	6.60	13.73	10.90	6.48	8.75	9.33	6.31	13.59	11.15	6.43	5.80	10.01	10.50	11.54	
22	6.81	6.45	13.41	10.90	6.51	8.70	9.24	6.09	13.32	11.01	6.42	5.78	9.93	10.50	11.60	
29	6.58	6.39	12.74	10.82	6.44	8.50	9.20	6.00	13.47	10.95	6.38	5.73	9.78	10.50	11.43	
Apr.																
5	6.45	6.24	12.64	10.74	6.38	8.39	9.08	5.99	13.27	10.97	6.39	5.83	9.58	10.50	11.33	
12	6.36	6.20	12.62	10.68	6.33	8.32	8.92	5.99	13.03	10.80	6.31	5.58	9.38	10.50	11.19	
19	6.12	6.08	12.21	10.65	6.32	8.14	8.65	5.80	12.43	10.63	6.32	5.24	8.99	10.50	10.81	
26	6.03	6.01	12.03	10.60	6.32	8.05	8.54	5.61	12.61	10.56	6.30	5.35	8.93	10.50	10.79	
May																
3	6.05	6.03	12.15	10.52	6.36	8.08	8.65	5.83	12.72	10.50	6.32	5.23	9.34	10.50	10.85	
10	6.01	5.96	12.31	10.36	6.36	8.05	8.36	5.66	12.72	10.38	6.31	5.05	8.74	10.50	10.68	
17	7.25	5.90	12.36	10.27	6.38	8.00	8.24	5.56	12.63	10.24	6.32	5.06	8.63	10.50	10.39	
24	7.49	5.86	12.36	10.27	6.38	7.76	7.95	5.54	12.60	10.19	6.34	5.20	8.31	10.29	10.06	
31	7.42	5.86	12.25	10.27	6.36	7.71	7.61	5.58	12.65	10.20	6.33	5.31	8.16	10.00	9.84	
June																
7	7.23	5.81	12.10	10.27	6.36	7.58	7.58	5.49	12.40	10.34	6.30	4.99	7.83	10.00	9.45	
14	7.25	5.73	12.20	10.27	6.31	7.58	7.71	5.54	12.52	10.35	6.26	5.21	7.99	10.00	9.60	
21	7.02	5.74	12.18	10.39	6.31	7.47	7.49	5.50	12.30	10.34	6.28	5.21	7.79	9.86	9.50	
28	7.19	5.75	12.24	10.49	6.31	7.58	7.64	5.51	12.54	10.46	6.30	5.35	8.18	9.50	9.85	
July																
5	7.12	5.84	12.26	10.39	6.31	7.52	7.78	5.41	12.54	10.62	6.32	5.27	8.00	9.50	9.53	
12	7.21	5.51	12.14	10.27	6.32	7.55	7.79	5.20	12.42	10.42	6.33	5.15	7.95	9.50	9.50	
19	7.29	5.41	11.70	10.04	6.36	7.52	7.90	5.13	11.95	10.12	6.34	5.06	8.11	9.50	9.64	
26	7.45	5.25	11.57	9.89	6.38	7.54	8.15	5.02	11.92	10.24	6.32	5.15	8.39	9.50	9.91	
Aug.																
2	7.51	5.15	11.23	9.99	6.38	7.55	8.20	4.86	11.40	12.42	6.32	4.78	8.53	9.50	10.01	
9	7.44	4.96	11.24	10.01	6.36	7.47	8.14	4.76	11.54	12.00	6.33	4.61	8.43	9.50	9.98	
16	7.35	4.88	11.23	9.97	6.39	7.41	8.08	4.67	11.43	12.30	6.38	4.66	8.37	9.50	9.84	
23	7.30	4.76	11.20	9.89	6.44	7.36	8.03	4.50	11.41	11.38	6.40	4.66	8.25	9.50	9.67	
30	7.30	4.71	11.30	9.69	6.44	7.37	8.03	4.55	11.61	11.06	6.40	4.67	8.27	9.50	9.66	
Sept.																
6	7.57	4.76	11.29	9.89	6.44	7.41	8.19	4.61	11.63	10.55	6.41	4.69	8.38	9.50	9.76	
13	7.47	4.76	11.36	9.81	6.44	7.46	8.35	4.55	11.62	10.14	6.41	4.63	8.68	9.50	9.95	
20	7.35	4.75	11.36	9.70	6.44	7.38	8.23	4.47	11.50	9.84	6.42	4.60	8.55	9.50	9.85	
27	7.10	4.73	11.29	9.63	6.48	7.25	8.04	4.45	11.34	10.42	6.45	4.55	8.28	9.50	9.66	
Oct.																
4	7.24	4.70	11.31	9.61	6.47	7.31	8.12	4.50	11.51	10.64	6.44	4.61	8.27	9.50	10.16	
11	7.40	4.60	11.26	9.51	6.49	7.38	8.19	4.64	11.52	10.56	6.45	4.52	8.38	9.50	10.26	
18	7.44	4.80	11.33	9.43	6.51	7.42	8.18	4.70	11.51	10.19	6.54	4.56	8.37	9.50	10.11	
25	7.45	4.84	11.40	9.36	6.59	7.46	8.15	4.73	11.56	9.71	6.92	4.56	8.31	9.50	10.03	