EBS/85/69

CONFIDENTIAL

March 21, 1985

To: Members of the Executive Board

From: The Secretary

Subject: United States - Real Effective Exchange Rate - Information Notice

There is attached for the information of the Executive Directors an information notice on the real effective exchange rate of the U.S. dollar.

If Executive Directors have technical or factual questions relating to this paper, they should contact Mr. Hernández-Catá (ext. 8486).

Att: (1)

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INTERNATIONAL MONETARY FUND

UNITED STATES

Real Effective Exchange Rate--Information Notice

Prepared by the Western Hemisphere Department and the
Exchange and Trade Relations Department

(In consultation with other departments)

Approved by E. Wiesner and C. David Finch

March 21, 1985

As of February 1985, the U.S. dollar had appreciated in real effective terms by more than 10 percent since the last occasion on which the Executive Board had an opportunity to discuss exchange rate developments in the United States--the Article IV consultation in August 1984. The appreciation, which is measured by the index of relative normalized unit labor costs used in the information notice system, is estimated to have amounted to 11.5 percent (see attached table and Chart 1).

The effective nominal value of the dollar increased by 47 1/2 percent from a low point in July 1980 to December 1983. After appreciating further through late January 1984, the value of the dollar fell in February and March. Since then it has registered a large increase, and by December 1984 the effective value of the dollar was 11 percent above its December 1983 level. In the first two months of 1985, the dollar appreciated an additional 5 3/4 percent. In real effective terms, the value of the dollar rose by 42 percent from July 1980 to December 1983. Changes in the real value of the dollar during 1984 and the first two months of this year do not differ significantly from the movements in its nominal value; increases in normalized unit labor costs in the United States and other major industrial countries during this period were roughly similar.

By February 25, the effective value of the dollar was roughly 9 1/2 percent above its December 1984 level and nearly 16 percent above its level in August 1984. In the first three weeks of March the effective value of the dollar was on average 1 1/4 percent higher than in February 1984 and 13 percent higher than in August 1984; on March 21, 1985, the dollar was 2 1/2 percent below February 1985 and 9 percent above August 1984.

It should be noted that the increase in the value of the dollar since mid-1980 followed a period in which the dollar had depreciated sharply (Chart 2). By February 1985, the real effective value of the dollar was 41 1/2 percent above its average value over the floating rate period; the nominal effective value of the dollar was 45 percent higher than its average over the floating rate period.

Since the beginning of generalized floating in early 1973, movements in the real effective value of the dollar generally have been correlated with changes in real interest rate differentials between assets denominated in U.S. dollars and in other major currencies (see Chart 2). In particular, from its low point in 1980 to mid-1982, a large part of the real appreciation of the dollar can be associated with a widening of real interest differentials in favor of dollar assets. More recently, the correlation between the real exchange value of the dollar and the real interest rate differential has weakened considerably; indeed, from mid-1982 to the end of 1984 the real value of the dollar and the real interest differential often have moved in opposite directions.

To some extent, the increase in the real effective value of the dollar during the first two months of 1985 appears to have been related to a widening of interest rate differentials favoring dollar assets that began in late January and continued through February, and to expectations that such differentials might increase further. During this period, U.S. interest rates rose while interest rates in other major industrial countries, with the exceptions of Canada and the United Kingdom, did not change appreciably. Moreover, an acceleration of monetary growth in the latter part of 1984 and continued rapid growth since the start of 1985 (with M-1 rising above the upper limit of its target range) may have led market participants to expect a tightening of reserve provision by the Federal Reserve and a further rise in U.S. interest rates.

Developments in the U.S. balance of payments are also significant in explaining movements in the real exchange rate during the period of generalized floating, although they do not make a major contribution to the explanation of the real appreciation of the dollar since 1980. In recent years the U.S. current account balance has deteriorated substantially, shifting from small surpluses in 1980-81 to growing deficits in 1982-84 (see following tabulation). Thus, the net international investment position of the United States deteriorated sharply over the period 1982-84, which would have been expected to exert some downward pressure on the exchange value of the dollar. In the event, however, the dollar continued to appreciate. Movements in the current account balance were accompanied by a large swing in the private capital account. Reported net outflows of private capital declined from 1980 to 1982 and gave way to sizable inflows in 1983 and 1984. At the same time, the statistical discrepancy in the U.S. balance of payments has registered substantial net inflows in the last five years, possibly reflecting unreported acquisitions by foreigners of assets in the United States.

United States: Balance of Payments

(In billions of dollars)

	1980	1981	1982	1983	1984
Current account balance	1.9	6.3	-9.2	-41.6	-101.6
Trade balance	-25.5	-28.0	-36.5	-61.1	-107.4
Invisibles, net	27.4	34.3	27.3	19.5	5.8
Net private capital flows	-30.2	-24.4	-15.9	33.1	77.2
Direct investment	-2.3	13.5	19.7	6.4	15.1
Banking flows	-36.1	-42.1	-45.2	23.7	20.2
Other	8.2	4.2	9.6	3.0	41.9
Net official reserve flows 1/	7.9	1.0	-2.0	3.9	-5.1
Other U.S. government assets, net	-4.5	-5.4	-5.8	-4.8	-0.5
Statistical discrepancy	25.0	22.3	32.9	9.3	30.0

In order to gauge the extent to which recent movements in the dollar might be explained in terms of historical relationships, the staff has estimated and simulated various exchange rate equations. Typically, these equations relate movements in the real exchange value of the U.S. dollar to such key factors as changes in real interest rate differentials and the current account balance of the United States, or its net foreign asset position.2/ The equations explain a large part of the real appreciation of the dollar from mid-1980 to mid-1983. However, in the period from mid-1983 to the end of 1984, the prediction errors increase rapidly as the dollar continued to rise while the equation predicts a depreciation (Chart 3). The difference between the actual change in the real value of the dollar and the change that would have been expected based on historical relationships was particularly sharp in the second half of 1984. Real interest rate differentials favoring dollar assets narrowed during this period, and the United States continued to run large trade and current account deficits. Nevertheless, the real effective value of the dollar increased by nearly 10 percent from the second to the fourth quarter of 1984.3/

1/ Includes allocations of Special Drawing Rights.

2/ For an example of a model of exchange rate determination underlying this approach, see SM/83/152, Appendix X.

3/ On the basis of the equation used to derive predicted values in Chart 3, the dollar would have been expected to depreciate by about 6 percent during that period.

Part of the difference between the actual and predicted values of the dollar may be related to difficulties in measuring real interest rates. In theory, the real interest rate is defined as the nominal interest rate less the expected rate of inflation. In practice, the real interest rate is measured as the nominal interest rate less an average of past inflation rates. During 1984, the expected rate of inflation in the United States may have declined by more than the actual rate of inflation as economic activity continued to expand without the acceleration of prices and wages that had occurred at comparable stages of past business cycles. Thus, the real interest rate differential favoring dollar assets as perceived by market participants may have exceeded its measured value. However, this factor alone would be unlikely to explain the large real appreciation of the dollar registered last year.

As noted in recent consultation reports on the United States, the rise in the real exchange value of the dollar since 1980 probably has been influenced by developments other than movements in real interest rates and balance of payments variables.1/ In fact, in the period since mid-1983, the continuing rise of the dollar is no doubt partly attributable to other factors that might be propelling capital toward the United States. Such factors include the relatively strong growth of the U.S. economy, a favorable climate for investment in the United States, the major reduction in U.S. inflation, and inflows of capital seeking a safe haven in the United States. In addition, new developments, such as the steps taken in the first half of 1984 to lift restrictions on Japanese capital flows and the repeal of the U.S. withholding tax on interest payments to foreigners, may have contributed to the dollar's continuing strength.2/

External current account deficits of the size now being experienced by the United States--and the even larger ones being projected--are unlikely to be sustained. Such deficits bulk large in relation to world saving, and their continuation would mean that foreign holdings of claims on the United States would rise rapidly. Moreover, U.S. domestic investment does not appear to be rising as much as the use of foreign saving; thus, over the long run, the growth of U.S. output capacity may not be sufficient to meet the interest and dividend payments associated with the deterioration in the country's international investment position. As indicated in the following tabulation, the ratio of net foreign saving to GNP in 1984 had increased by 3 percentage points relative to its

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1/ SM/84/162 (7/6/84) and SM/83/135 (6/20/83).

2/ It should be noted in this connection that U.S. balance of payments statistics indicate an unusually large swing (of about $14 billion) in foreign purchases of U.S. Treasury securities from 1983 to 1984. Most of this swing is thought to have represented purchases by Japanese residents. Indeed, the Japanese balance of payments shows that outflows in the form of purchases of foreign securities by Japanese increased by approximately $15 billion from 1983 to 1984.

average during the 1970s, while the ratio of private domestic investment to GNP exceeded the average for the 1970s by 1 1/2 percentage points.

United States: Sources and Uses of Funds 1/

(In percent of GNP)

	Average 1970-79	1980	1981	1982	1983	1984
Gross private domestic saving	16.9	16.5	17.2	17.1	17.3	18.5
General government deficit (-)	-0.9	-1.2	-0.9	-3.7	-4.1	-3.3
Net inflow of foreign saving	--	-0.2	-0.2	0.2	1.0	2.5
Gross private domestic investment	16.0	15.3	16.4	13.5	14.3	17.4

The large U.S. current account deficit is a reflection of an imbalance between saving and investment in the United States. If the United States is to reduce its vulnerability to the prospective weakening of its international investment position and to possible shifts in capital flows--and thus bring about an orderly correction of the external current account imbalance and of the exchange value of the U.S. dollar--domestic saving would have to be increased by cutting back the federal deficit. It cannot be taken for granted, however, that a reduction of the U.S. federal deficit will result in a lower inflow of funds into the United States and a depreciation of the dollar in the near term, because it is possible that the effects of an improvement in investor confidence might more than offset the effects of a cutback in the deficit on interest rates. In such circumstances there would be scope for a boost in U.S. capital formation as a counterpart to foreign lending and investment in the United States, and the danger from the weakening of the international investment position would be reduced. Nevertheless, over the longer term the value of the dollar would be likely to decline (and the U.S. current account deficit to improve) because it is doubtful that the portion of world saving flowing to the United States would continue indefinitely at its recent rate.

1/ Sources and uses of funds may not add up to the same total because of rounding and the statistical discrepancy in the National Income and Product Accounts. The net inflow of foreign saving is roughly equal to the deficit in the current account of the balance of payments.

Staff Appraisal

The rise of the U.S. dollar and the associated deterioration in the U.S. external current account position in recent years have reflected in part pressures stemming from the expansion of the government deficit and growth of private domestic investment in the United States. The effects of these factors have tended to show up in changes in real interest differentials in relation to other countries and, as was discussed above, movements in such differentials help to explain a part of the rise of the dollar in recent years. Part of the rise of the U.S. dollar since mid-1980 (and of the deterioration in the external current account of the United States) appears to have also reflected other factors, such as favorable prospects for real growth in the United States relative to other countries and the attractiveness of the United States as a safe haven.

Irrespective of the origin of the high dollar and the large U.S. external current account deficit, the situation that has developed is one that poses risks and problems for both the United States and other countries. These include the possible disruptive effects that would come from a sudden shift in capital flows away from the United States, the dangers inherent in a deterioration of the U.S. international investment position without a compensating increase in domestic capital formation, and demands for protection by U.S. producers.

The surest relief for the pressures that have been built up would be a reduction in the claims on saving by the U.S. Government. An early and sustantial reduction in the U.S. federal deficit would create the conditions for an orderly and effective adjustment of the U.S. external current account deficit and of the exchange value of the U.S. dollar. Such action on the fiscal front would serve in due course to lessen the debt service burdens of the developing countries, improve the conditions for capital formation in the United States and elsewhere, and increase the chances for sustained economic expansion in the United States.

As was recognized above, even if the U.S. budget deficit were reduced, it is possible that the value of the dollar and the external current account deficit would remain at relatively high levels for a significant period of time. A particular danger in these circumstances would be the continuing (and perhaps growing) pressures for protection. The U.S. authorities would need to be particularly forceful in resisting such pressures, given the need in such a situation to reallocate resources efficiently as the economy adjusts to a continuing current account deficit.

Table 1. United States: Real Effective Exchange Rate and Related Series 1/

(Indexes: 1980 = 100)

	Real Effective Exchange Rate 2/	Nominal Effective Exchange Rate 2/	Relative Normalized Unit Labor Costs (local currencies) 3/	Normalized Unit Labor Costs 3/
Quarterly				
1979				
I	98.5	100.5	98.0	88.7
II	100.4	102.2	98.3	90.4
III	97.4	99.6	97.8	91.5
IV	98.5	100.5	98.0	93.2
1980				
I	100.2	100.5	99.7	96.1
II	101.0	100.6	100.3	98.9
III	98.1	98.0	100.1	101.5
IV	101.2	101.3	99.9	103.4
1981				
I	106.0	106.5	99.6	104.9
II	113.7	114.9	98.9	106.3
III	120.1	122.1	98.4	107.8
IV	115.5	117.4	98.4	109.6
1982				
I	121.5	122.0	99.6	112.2
II	126.0	126.3	99.7	113.7
III	132.0	132.3	99.8	115.0
IV	133.0	134.4	98.9	115.2
1983				
I	129.4	131.2	98.7	115.8
II	131.5	134.6	97.7	115.4
III	135.7	139.9	97.0	115.2
IV	135.8	141.1	96.2	115.4
1984				
I	137.5	142.6	96.4	116.5
II	138.4	144.0	96.1	117.0
III	146.9	152.8	96.1	117.7
IV	151.9	158.0	96.1	118.2
Monthly				
1984				
Aug. 4/	145.6	151.4	96.1	117.7
Sep.	150.4	156.3	96.2	117.9
Oct.	152.5	158.5	96.2	118.1
Nov.	149.6	155.6	96.1	118.2
Dec.	153.6	159.9	96.0	118.3
1985				
Jan.	156.9	163.4	96.0	118.4
Feb.	162.4	169.0	96.1	118.7
Percentage change				
Aug. 1984-Feb. 1985	11.5	11.6	-0.1	0.9

Source: Information Notice System.

1/ For a description of the weighting scheme used in the Fund's measures of cost and price comparisons for manufacturing, see the notes to that table in International Financial Statistics.

2/ Increases mean appreciation.

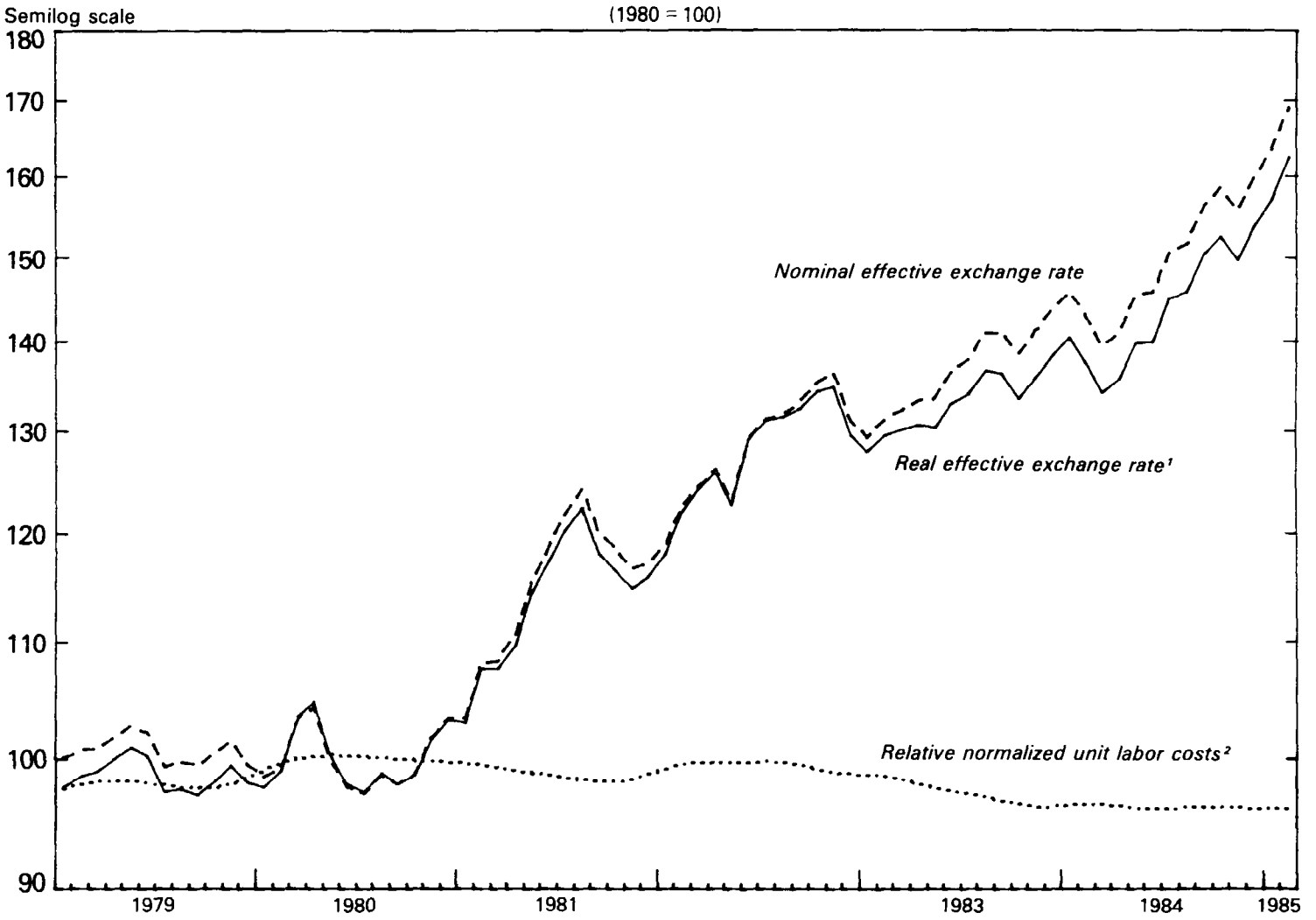
3/ Unit labor costs for last quarter of 1984 and for 1985 are staff estimates based on partial data.

4/ Date of latest consideration by Executive Board.

CHART 1

UNITED STATES

INFORMATION NOTICE SYSTEM INDEX OF REAL EFFECTIVE EXCHANGE RATE



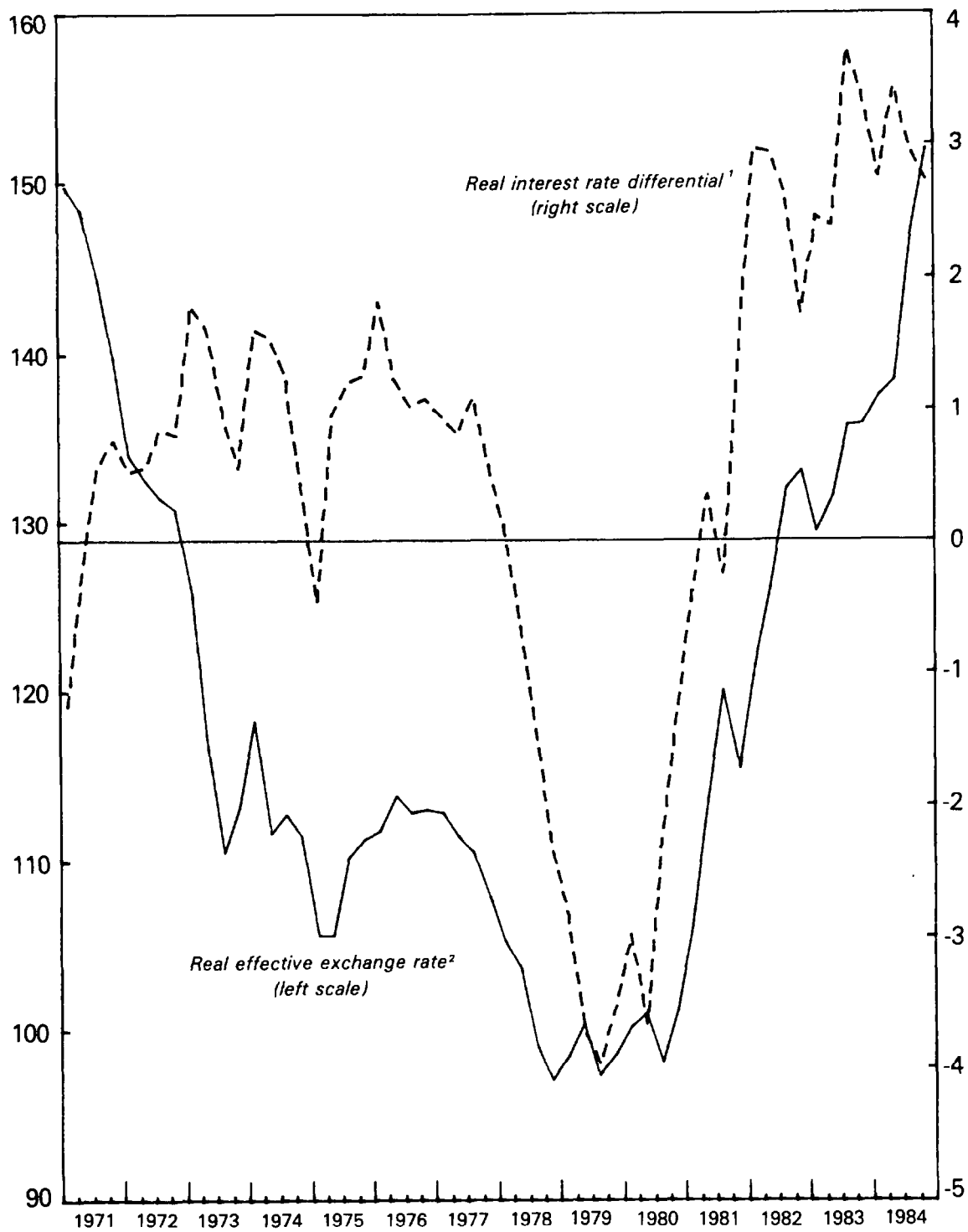
[1]Trade weighted index of nominal exchange rates deflated by relative normalized unit labor costs; increase means real appreciation.

[2]In terms of local currencies. Data for last quarter of 1984 and for 1985 are staff estimates based on partial information.

CHART 2

UNITED STATES

THE REAL EFFECTIVE EXCHANGE RATE AND REAL INTEREST RATE DIFFERENTIALS



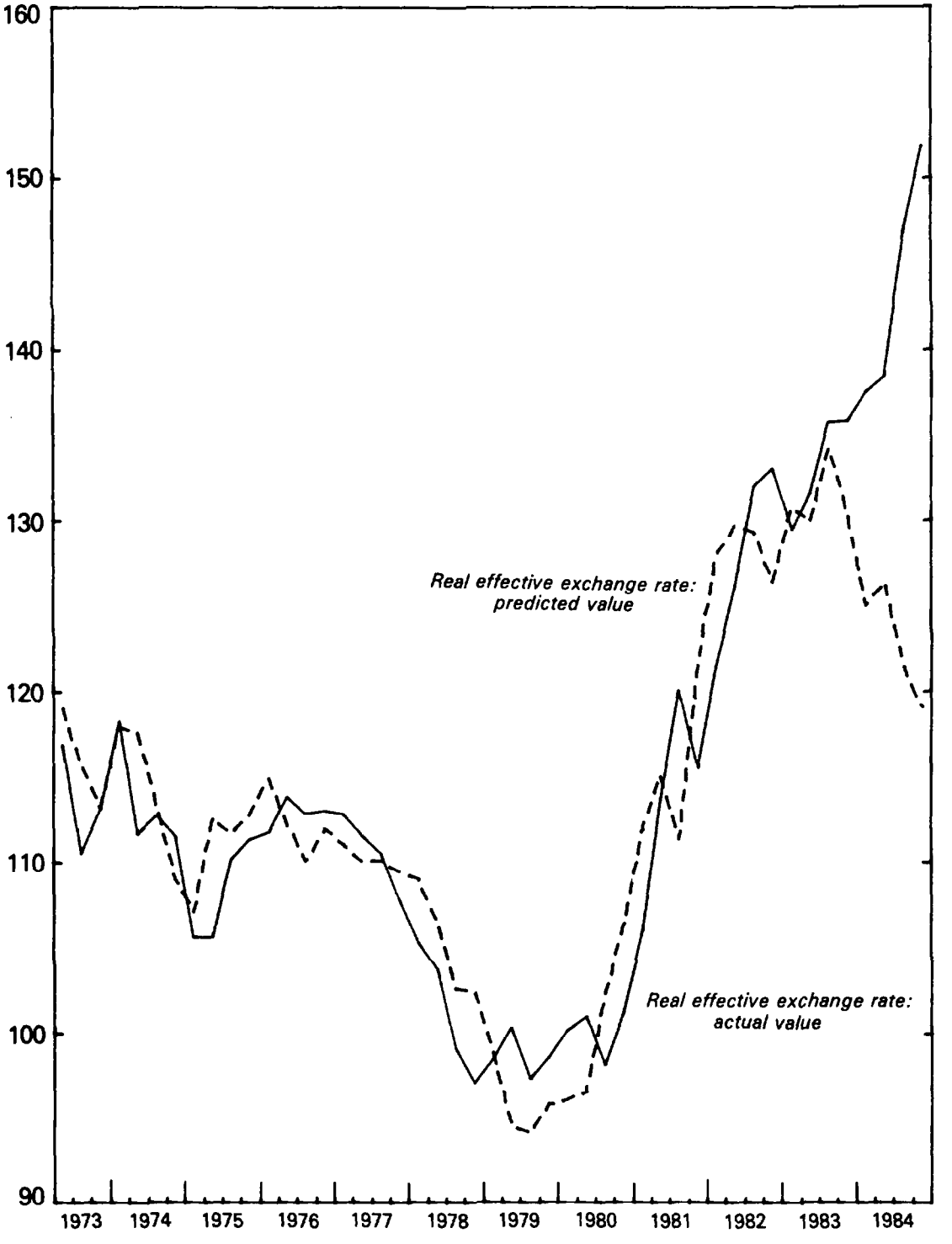
[1]Real interest rates are defined as nominal rates on long-term government bonds less the 12-month rates of change in consumer prices. Foreign real interest rates are measured as weighted averages (using 1976 GNPs) of real rates in Canada, France, Germany, Japan, Switzerland, and the United Kingdom.

[2]Index of the ratio of U.S. normalized unit labor costs to a trade weighted average of unit labor costs in other major industrial countries, adjusted for exchange rates (1980 = 100).

CHART 3

UNITED STATES

ACTUAL AND PREDICTED VALUES FOR THE REAL EFFECTIVE EXCHANGE RATE[1]



[1] Index of the ratio of U.S. normalized unit labor costs to a trade weighted average of unit labor costs in other major industrial countries, adjusted for exchange rates (1980 = 100).