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BALANCE-OF-PAYMENTS ADJUSTMENT FROM A U.S. PERSPECTIVE: THE LESSONS OF THE 1970S

by

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I. Introduction

The balance-of-payments adjustment process is one of the old chestnuts of political economy. For decades, and some would say for centuries, economists have analyzed the ways and means by which actual or potential imbalances in international transactions among nations are or should be eliminated. Similarly, policy makers have struggled for years with the implications of payments imbalances for the domestic economy and the international economy.

During the 1970s we have witnessed a significant change in the operation of the balance-of-payments adjustment process. Exchange-rate adjustments (especially for the U.S. dollar) have played a more central role than they did during the 1950s and 1960s. Some have argued that this change was an inevitable and necessary consequence of other real and financial developments affecting the international economy during this decade. Others have argued that many of the significant exchange-rate changes could and should have been avoided. The simple fact is that they have been part of the economic environment of the 1970s.

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* Director, Division of International Finance, Board of Governors of the Federal Reserve System. In writing this paper I have benefitted from the advice and assistance of Peter Hooper, Alice Loftin and Martha E. Terrie as well as from the comments of other colleagues. However, I am responsible for any errors, and the views expressed in this paper are solely those of the author and do not necessarily represent the views of the Board of Governors of the Federal Reserve System or its staff. An earlier version of this paper was presented in May 1979 to the Societe Universitaire Européenne de Recherches Financières Colloquium, "Europe and the Dollar in the World-Wide Disequilibrium."

The objective of this paper is to consider from a U.S. perspective the lessons that can be learned from the working of the balance-of-payments adjustment process as it has functioned during this decade. My point of departure is the proposition that one cannot realistically separate the analysis of countries' external sectors or of the global balance-of-payments adjustment process from the richer and more complex analysis of the relative performance of the major industrial economies.

In Section II I present a summary review of developments affecting the U.S. current account from 1971 to 1978. In Section III, in even more summary fashion, I examine from a global perspective the workings during this period of the international adjustment process; that examination reveals that in retrospect 1977 was a crucial year. In Section IV I offer some illustrative estimates of how current account developments for the United States might have been different. In Section V I suggest some of the lessons I would draw from the experience of the 1970s and advance some conclusions regarding the working of the balance-of-payments adjustment process in the future.

II. Review of U.S. Current Account Developments: 1971-1978[1/]

I have divided the following summary history of developments affecting the U.S. current account into six "chapters." In each chapter,

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1/ In keeping with the division of labor envisaged by those who planned this colloquium, I have concentrated almost exclusively on U.S. current account developments during the 1970s. This concentration should not be interpreted as reflecting a view that private and official capital flows have not had important influences during this decade; indeed, they have affected both the timing and extent of current account adjustment.

I review briefly the major factors (including policy developments) affecting U.S. current account transactions and the evolution of the foreign exchange value of the U.S. dollar. For convenience, a summary of U.S. current account and exchange rate developments is presented in Table 1.

Chapter 1. The Watershed: 1971-72

In 1971 the United States recorded its first trade deficit of the twentieth century. This deficit was largely a consequence of the structural changes in the international economy and the over-heating of the U.S. economy during the 1960s. However, its emergence contributed to President Nixon's decision on August 15 to suspend the conversion of official dollar holdings into gold, thus providing a date for the collapse of the Bretton Woods system of international monetary arrangements. Wage-price controls were imposed in the United States and, by December 1971, the dollar had been devalued, and the domestic economy was recovering rapidly from the 1970 recession.

The net result of these developments was that the U.S. trade deficit increased to $6.4 billion in 1972 from $2.3 billion in 1971. The U.S. current account deficits in these years were slightly smaller than the trade deficits if the present convention of including net reinvested earnings of incorporated affiliates in the current account is followed[1/]. The further deterioration in 1972 no doubt reflected the workings of

1/ Excluding these net earnings, the current account deficits were somewhat larger than the trade deficits. The change in accounting treatment did not occur until June 1978.

TABLE 1

Summary of U.S. Current Account Developments 1967-1978
(billions of U.S. dollars)

	Average 1967-1970	1971	1972	1973	1974	1975	1976	1977	1978
Total Exports	35.8	43.3	49.4	71.4	98.3	107.1	114.7	120.6	141.9
Agricultural	6.6	7.8	9.5	18.0	22.4	22.2	23.4	24.3	29.9
Non-Agricultural	29.2	35.5	39.9	53.4	75.9	84.8	91.3	96.2	112.0
Total Imports	33.9	45.6	55.8	70.5	103.6	98.0	124.0	151.7	176.0
Petroleum and Petroleum Products	2.5	3.7	4.7	8.4	26.6	27.0	34.6	45.0	42.3
Non-Petroleum	31.4	41.9	51.1	62.1	77.1	71.0	89.5	106.7	133.7
Trade Balance	1.9	-2.3	-6.4	0.9	-5.3	9.0	-9.4	-31.1	-34.1
Current Account Balance	1.5	-1.4	-6.0	6.9	3.9 a/	18.4	4.3	-15.3	-16.0
Memorandum:									
Foreign Exchange Value of the Dollar b/									
Level (December)	121.5	112.3	110.1	101.5	98.6	103.5	105.3	98.4	88.5
Percentage Change	--	-6.9	-2.0	-7.8	-2.9	5.0	1.7	-6.6	-10.1

a/ Excludes special loan-to-grant conversions with India ($2.0 billion) and Vietnam ($0.2 billion).

b/ Index of weighted average exchange value of U.S. dollar against currencies of other G-10 countries plus Switzerland. March 1973 = 100. Weights are 1972-76 global trade of each of the 10 countries.

Sources: Federal Reserve Bulletin.
U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, various issues.

so-called J-curve effects. It was argued at the time that the 1971 devaluation of the dollar was not large enough to provide the necessary adjustment in the U.S. current account. It was also argued that contemporary U.S. macro-economic policies were not sufficiently supportive of external adjustment. In retrospect, both arguments appear to have some merit.

Chapter 2. The Beginnings of Adjustment: 1973

The response of U.S. policy to the disappointing current account results for 1972 was to devalue the dollar a second time in February 1973. The devaluation was quickly followed by the generalized floating of currencies in March -- an exchange-rate regime that few officials at that time wanted or expected to persist. The adoption of generalized floating was, in turn, followed by a further 11 per cent depreciation of the U.S. dollar against the currencies of the other G-10 countries plus Switzerland from early April to early July 1973 -- the so-called third devaluation of the dollar.1/ The rest of 1973 saw the resumption of U.S. intervention in exchange markets, the oil embargo, and the dramatic increase in the price of imported oil. From July 1973 to January 1974 the dollar appreciated by 20 per cent on a weighted-average basis.

In 1973 the United States recorded a small trade surplus, which reached an annual rate of $5½ billion by the fourth quarter,

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1/ See Table 1 for an explanation of the measure of the foreign exchange value of the dollar used in this paper.

and an improvement of over $10 billion in its current account position. This turnaround was, in part, produced by the earlier devaluations of the dollar. It was also strongly influenced by the worldwide commodity boom and agricultural shortages; between 1972 and 1973, U.S. exports of industrial supplies rose 40 per cent and U.S. agricultural exports almost doubled -- much of the latter increase was the consequence of higher prices.

Chapter 3. Recession: 1974-75

In the United States, real gross national product (GNP) peaked in the fourth quarter of 1973. A downturn in economic activity in the other major industrial countries also began at about this time as policy makers began to grapple with the effects of the oil crisis and the aftermath of the somewhat too vigorous expansion of the early 1970s. The downturn in the U.S. economy was deeper than the average downturn in other industrial countries; see Table 2. The dollar depreciated on a weighted-average basis during the early months of 1974, but this was generally regarded as a correction of the rapid appreciation in late 1973 and evoked little criticism.

In 1974, the U.S. trade balance moved back into a small deficit, but the $6 billion swing was small relative to the $18 billion increase in the value of U.S. imports of petroleum and petroleum products, and the decline in the U.S. current account surplus was even smaller than the decline in the trade balance because of a sharp rise in net investment income. The increase in oil imports was offset in large part by a further rise in non-agricultural exports. In the aftermath

TABLE 2

Real Output in the United States and Other Industrial Countries (Index 1975=100)

	United States GNP (1)	Foreign Industrial Countries[a/] (2)	Ratio (3)=(2)÷(1)x100
1967	83.8	72.1	86.0
1968	87.5	76.5	87.4
1969	89.7	81.5	90.9
1970	89.4	85.8	96.0
1971	92.1	89.3	97.0
1972	97.4	93.6	96.1
1973	102.7	99.5	96.9
1974	101.3	101.2	99.9
1975	100.0	100.0	100.0
1976	105.7	105.0	99.3
1977	110.8	107.6[e]	97.1[e]
1978	115.2	110.9[e]	96.3[e]
Memorandum: Average Annual Percentage Change			
1967-1973	3.8	6.3	2.1
1975-1978	5.1	3.6	-1.2

e = Preliminary estimate.

a/ Weighted average of real GNP/GDP for other G-10 countries plus Switzerland using 1972-76 global trade of these countries.

Source: 1967-1975--IMF, International Financial Statistics, 1978 Supplement, May 1978; 1976-1978--national sources.

of the global expansion and commodity boom, U.S. exports of industrial supplies rose more than 50 per cent in 1974 and exports of capital goods rose 40 per cent. As the U.S. recession deepened, the trade balance moved back into surplus, reaching a peak of $13 billion at an annual rate in the second quarter of 1975.

The dollar appreciated slightly on a weighted-average basis during the summer of 1974, and then, from September 1974 to early March 1975, depreciated by 10 per cent. This depreciation was largely associated with declining interest rates on dollar-denominated assets relative to those on assets denominated in other currencies. It occurred at a time when the U.S. trade and current account positions were moving into surplus. The depreciation of the dollar was widely regarded as disruptive and unacceptable. By February, it was agreed that the dollar had sunk to unrealistically low levels, and the United States, Germany and Switzerland undertook a program of massive, coordinated purchases of dollars in exchange markets.

Chapter 4. Recovery: 1975-76

As the U.S. economy began to recover at a rate as fast or faster than the average recovery in other industrial countries -- see Table 2 -- the U.S. trade deficit moved back into deficit. Following a surplus of $9 billion in 1975, the United States recorded a $9.4 billion deficit in 1976; the reduction in the current account surplus was $14 billion. U.S. oil and non-oil imports picked up dramatically and both agricultural and non-agricultural exports stagnated. However, these developments were not regarded as alarming. They were generally viewed as evidence of the U.S. economic recovery that, in turn, benefitted other countries.

During this period when the U.S. trade balance was moving into deficit, the dollar appreciated on a weighted-average basis -- by about 16 per cent from March 1975 to June 1976. The appreciation was, in part, a reflection of the problems faced by the pound sterling and Italian lira. The relative decline in German and Japanese interest rates also was a contributing factor. Finally, the United States experienced a dramatic improvement in its inflation rate; the rate of increase in the consumer price index declined from 11 per cent in 1974 to 5.3 per cent in 1976.

The United States ended 1976 with a "strong" currency, a trade deficit of $9.4 billion for the year ($14.4 billion at an annual rate in the fourth quarter), and a small current account surplus -- $4.3 billion for the year and $0.7 billion in the fourth quarter. These moderate trends were generally expected to continue in 1977 and not to cause significant disruption.

Chapter 5. The Turning Point: 1977

The big story in 1977 was the sharp deterioration of the U.S. trade and current account positions. The trade deficit increased by over $20 billion in 1977 with much of the deterioration coming in the first quarter. Oil and non-oil imports rose significantly further, as economic activity in the United States expanded even more rapidly than was expected, and agricultural and non-agricultural exports continued to stagnate. The decline in the current account balance was almost $20 billion. One of the main factors contributing to these developments was the slowing of growth abroad relative to that in the United States. In 1977, U.S. real GNP rose 4.9 per cent after a rise of 5.7 per cent in 1976, while the average increase in real output in the other industrial countries was 2.4 per cent in 1977 -- compared with 5.0 per cent in 1976. The rate of consumer price inflation in the United States also began to increase in 1977 at a time when inflation rates abroad were moderating somewhat. The effects of stabilization policies adopted in a number of larger, non-oil developing countries and of rising coffee prices also helped to swing the U.S. trade position into larger deficit. The U.S. bilateral trade balance with the non-oil developing countries declined by $6 billion in 1977 following a decline of a similar magnitude in 1976. In comparison, the U.S. bilateral trade balance with Japan declined by $3½ billion in 1976 and by less than $3 billion in 1977.

As the large U.S. trade deficit emerged, the dollar on a weighted-average basis remained reasonably stable. However, during the summer of 1977 exchange market conditions became unsettled. By September 1977, it appeared to many observers that the conditions giving rise to the large U.S. trade and current account deficits would probably continue throughout 1978. Exchange market participants concluded that a significant depreciation of the dollar was inevitable, and by December 1977 the weighted-average exchange value of the dollar had moved to 6.6 per cent below its level in December 1976, in a series of adjustments that were not very smooth.

Chapter 6. Catharsis: 1978

The dollar's decline continued into the early months of 1978. This decline was abetted by the very large U.S. trade deficit recorded for the first quarter of 1978 ($47.7 billion at an annual rate) and by the impasse that developed regarding the U.S. energy program. Furthermore, it came to be recognized that while U.S. price inflation was rising inflation abroad was declining. By early 1978 the U.S. rate of consumer price inflation was higher than the average for other industrial countries and substantially higher than rates in Switzerland, Germany and Japan. Finally, the outlook for sustained economic expansion abroad remained problematical.

In the United States it was increasingly recognized during 1978 that changes in policies would be needed to arrest the decline in the dollar and the acceleration of inflation. Monetary policy became increasingly tight, fiscal policy moved in the same direction, scaled-down energy legislation finally cleared Congress, and a program of voluntary wage-price restraint was designed. Nevertheless, by the end of October the exchange value of the dollar had declined by 17 per cent from its level in December 1977 with almost half of the decline coming in October. Further dramatic action was necessary, the November 1 package was put together, and the dollar recovered from its lows of the end of October.

This recovery would probably not have been achieved if fundamental economic and financial conditions were not already pointing in a favorable direction. In particular, evidence accumulated that moderate economic expansion was likely to continue in other industrial countries and that the U.S. trade balance had been improving during 1978. For the year 1978, the U.S. trade and current account deficits were marginally larger than in 1977, but the deficits in the fourth quarter were substantially lower than for the year 1977. This improvement was in part a consequence of lower U.S. oil imports and a slowdown in the rate of increase in non-oil imports. Most importantly, U.S. non-agricultural exports began to increase vigorously.

As of this writing, setting aside the price and quantity implications of disruptions in the global supply of oil, the prospects for U.S. external accounts in 1979 are encouraging. If reasonable growth in other industrial countries continues, while the rate of U.S. economic expansion moderates, the U.S. trade and current account deficits can be expected to diminish. If as well the U.S. inflation rate is reduced, such developments should contribute to more stable conditions in foreign exchange markets.

III. Current Account Developments in a Global Perspective

From the review of U.S. current account developments presented in the preceding section, two conclusions can be drawn; neither one is particularly startling. First, it is apparent that U.S. current account developments were associated with a large number of disparate influences, no single explanation dominates the story. Indeed, I have not attempted to allocate responsibility for the emerging U.S. current account deficit to specific factors, e.g., declining U.S. relative price competitiveness after 1975, structural changes affecting trade with developing countries, growing U.S. dependence on imported petroleum and petroleum products, faster or too fast growth in the United States, slower or too slow growth in the other industrial countries.[1/] Second, it is, nevertheless, apparent that relative macro-economic developments in the United States and the other industrial countries contributed importantly to the emerging U.S. current account deficit.

In this section, I will develop this second conclusion somewhat more fully. My central point is not merely that macro-economic developments contributed to the emerging U.S. current account deficit, but that perceptions and misperceptions of these developments contributed significantly to the problems associated with that emerging deficit.

Table 3 presents a summary of actual and expected global current account developments for the years 1973-1979. The figures in the table, and especially the forecasts presented for 1976-79, are drawn primarily from various December issues of the OECD's Economic Outlook.[2/]

1/ For a useful analysis along these lines see Robert Z. Lawrence, "An Analysis of the 1977 U.S. Trade Deficit," Brookings Papers on Economic Activity, 1:1978, pp.159-89.

2/ My intention in Table 3, and in Tables 4 and 5 below, is not to focus on the accuracy of OECD forecasts. Rather I have used these forecasts, which are normally prepared in November of the year preceding that for which they are published, as evidence of the general outlook for the year ahead. In the case of Table 3, the figures have been adjusted to permit the presentation of the U.S. current account position including, in all years, net reinvested earnings of incorporated affiliates.

TABLE 3

Global Current Account Developments 1973-1979
(goods, services, private and official transfers; billions of U.S. dollars)

	1973	1974	1975	1976		1977		1978		1979
				Forecast b/	Actual	Forecast b/	Actual	Forecast b/	Actual c/	Forecast b/
United States	6.9	3.9 a/	18.4	11-1/4	4.3	2-3/4	-15.3	-19-1/4	-16.0	-8
Japan	-0.1	-4.7	-0.7	-4-1/2	3.7	0	10.9	10	16.5	12
Germany	4.3	9.8	4.0	2	3.8	5	3.7	3	8.2	2-1/4
Canada	0.1	-1.5	-4.7	-3-3/4	-3.8	-3-1/2	-3.9	-3-3/4	-4.6	-4-1/2
France	-0.7	-6.0	-0.1	-2-1/2	-6.1	-3-3/4	-3.3	-2	2-1/2	2
Italy	-2.7	-8.0	-0.8	1/4	-2.8	1/2	2.3	1-3/4	5-1/2	4-3/4
United Kingdom	-2.6	-8.6	-4.1	-3-1/4	-2.0	-1-1/4	0.5	3-1/2	0.5	1-1/2
Other OECD	4.3	-13.4	-11.8	-11	-16.1	-11-1/2	-22.5	-15-3/4	-11-1/2	-11-1/4
Total OECD	9.5	-28.5	0.2	-11-1/2	-19.0	-11-3/4	-27.6	-22-1/2	1.1	-1-1/4
OPEC	8	59.2	27.2	46-1/2	37	36-1/2	31.5	35	11	7-1/2
Non-oil developing countries	-7	-24.5	-38.5	-21-1/4	-26	-26-1/2	-24	-33-1/2	-34	-38
Other	-3.2	-9.7	-18.5	-13-1/2	-12.7	-14-1/2	-10	-11-1/2	-10-3/4	-9-3/4
Residual d/	-7.3	3.5	29.6	-1/4	20.7	16-1/4	30.1	32-1/2	32-3/4	41-1/2

a/ Excludes special loan-to-grant conversions with India ($2.0 billion) and Vietnam ($0.2 billion).
b/ From Economic Outlook of December of preceding year.
c/ Updated for some countries from national sources.
d/ Minus the sum of current account balances of the four groups of countries.

Sources: OECD, Economic Outlook, various issues, 1975-1978; Department of Commerce, Survey of Current Business, June 1978, Part II.

As can be seen from Table 3, following the sharp rise in the price of imported oil, the OPEC current account surplus in 1974 increased dramatically and the current account positions of almost all other countries and country groupings shown in the table deteriorated more or less markedly. The one exception to this pattern was Germany, where effects of the early application of macro-economic policy restraint, coupled with the aftermath of boom conditions in most of the rest of the world, produced a sharply larger current account surplus in 1974.

The dramatic effects of the 1974-75 recession can be seen in the results for 1975. The OPEC surplus was more than halved. The recession in the industrial countries contributed to a current account position for the OECD countries of about zero and to a sharp rise in the deficit of the non-oil developing countries. As 1975 ended, considerable pessimism was expressed about the possibility of achieving sustained growth in the industrial countries and a more-balanced global pattern of current account positions.

This pessimism is illustrated in Table 4, which presents figures on the actual and, for some years, expected growth of real output in the seven largest industrial countries for the years 1967-1979.[1/] As can be seen from the first column for 1976, although positive real growth was expected by the OECD for 1976, the expected rates of increase were

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1/ Table 4 presents figures for real GNP/GDP. However, when a country's external balance increases in real terms more rapidly than expected, a given level of real GNP can be achieved at a lower than expected level of real domestic demand.

TABLE 4

Growth of Real Output 1967-1979
(percentage change from previous year)

	Average				1976		1977		1978		1979
	1967-1972 a/	1973	1974	1975	Forecast b/	Actual	Forecast b/	Actual	Forecast b/	Actual c/	Forecast b/
United States d/	3.1	5.5	-1.4	-1.3	5-3/4	5.7	4-1/2	4.9	4-1/4	4.0	2
Japan c/ d/	9.3	9.9	-0.3	1.5	4-1/4	6.4	6	5.4	5	5.6	4-3/4
Germany d/	6.2	5.3	0.4	-3.2	3-1/4	5.7	3-1/2	2.6	3-1/4	3.5	4
Canada d/	4.9	6.9	2.8	0.6	4-1/4	4.9	3-1/2	2.7	3-3/4	3.4	4
France e/	5.5	5.4	2.6	-0.1	3	5.6	3	3.0	3-1/4	3	3-1/2
Italy e/	4.8	6.3	3.2	-3.7	1-1/2	5.6	-1/2	1.7	1	2	3-1/2
United Kingdom e/	2.5	5.2	0.1	-1.8	0	2.1	1-1/2	1.6	3	2.9	2-1/4
Memorandum:											
Weighted average excluding U.S. f/	6.3	6.9	1.0	-0.8	3.1	5.4	3.6	3.3	3.6	3.8	3.9

a/ Average annual percentage change in real GNP/GDP.
b/ From Economic Outlook of December of preceding year.
c/ Actual figures are updated from national sources.
d/ Real GNP.
e/ Real GDP.
f/ Weights are 1976 GNP/GDP weights.
Source: OECD, Economic Outlook, various issues, 1975-1978.

modest and, for each of the countries, less than the actual 1976 result shown in the second column. Moreover, as shown in Table 5, the actual reduction in the rate of increase of consumer prices in 1976 was greater than was expected in November of 1975, with the important exceptions of Italy and the United Kingdom.

These macro-economic developments contributed to a diverse pattern of current account results in 1976. As has already been detailed, the United States moved more rapidly toward a position of current account deficit than had been anticipated. Meanwhile, Germany experienced a smaller reduction in its current account surplus than had been expected, Japan moved sharply into current account surplus, and the combined current account deficit of the other OECD countries increased.1/

This bring us to the crucial year, 1977. As can be seen from comparing in Table 4 the actual results for 1976 with the OECD's forecast for 1977, the expansion in real output in the major industrial countries was expected to slow in 1977. In the event, except for the United States (and Italy), actual growth in 1977 was less than or equal to the rates forecast in November 1976. Moreover, the shortfall relative to expectations was particularly pronounced for Germany and Japan since the national forecasts for these countries indicated stronger growth in 1977 than was anticipated by the OECD.2/ Both of these countries did better

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1/ Unfortunately, the emergence of a large unexplained world residual in 1975 complicates the task of interpreting global current account developments for that year and subsequent years.

2/ The German forecast for 1977 was for growth in real GNP of 4.5 per cent and a rate of increase of the consumer price index of 4.0 per cent (Sachverständigenrat, Jahresgutachten 1976/77, p.116) compared with OECD forecasts of 3½ per cent and 4 per cent respectively. In January 1977, the Japanese forecast for FY 1977, starting April 1977, was for growth in real GNP of 6.7 per cent ("Economic Outlook for FY 1977", Japanese Economic Planning Agency, January 1977) compared with the actual result of 5.6 per cent.

on the inflation front in 1977 than the OECD expected, while the United States did less well -- see Table 5.

On the external side, it seemed reasonable to expect, as 1977 began, that the U.S. current account position might show a small further shift toward deficit while the current account positions of France, Italy and the United Kingdom would show some improvement. In the event, the improvements for these latter three countries were larger than had been expected, the non-oil developing countries and the group of "other countries" (largely the USSR and Eastern Europe) also had lower combined deficits than were expected, and the Japanese surplus increased dramatically. Many of these adjustments -- with the conspicuous exception of the Japanese surplus -- were in a desirable direction from the perspective of the better functioning of the international adjustment process, a process that had been under considerable strain as 1976 came to an end. However, it was less clear which countries or groups of countries should have the larger deficits. As things turned out, the slack was taken up by the United States and the smaller OECD countries, and the consequences were not entirely salutary from the viewpoint of exchange-rate stability and the smooth functioning of the international financial system. Thus, it appears at a minimum that 1977 was a year in which errors in forecasts cumulated in one direction. These developments suggest, in retrospect, errors in policy or in policy makers' perceptions.

In 1978 real economic expansion picked up somewhat in industrial countries other than the United States, while growth slowed in the United States -- see Table 4. But the pick-up in the other industrial countries

TABLE 5

Consumer Prices 1967-1979
(percentage change from previous years in
private consumption deflators except as noted)

	Average				1976		1977		1978		1979
	1967-1972 a/	1973 b/	1974 b/	1975 b/	Forecast c/	Actual	Forecast c/	Actual	Forecast c/	Actual d/	Forecast c/
United States	4.3	6.2	11.0	9.1	7	5.3	5-1/4	5.7	5-3/4	6.8	7
Japan d/	5.4	11.8	24.3	11.9	9-3/4 b/	9.3	9-1/2 b/	8.1	6	4.6	4
Germany	3.4	6.9	7.0	6.0	4-3/4 b/	4.5	4	3.8	4	3.9	2-3/4
Canada	3.8	7.6	10.8	10.8	9-1/4	7.4	6-1/2	7.5	6-1/2	7.8	7-1/4
France	5.0	7.3	13.7	11.7	11 b/	9.6 b/	8-3/4	9.5 b/	8-3/4 b/	9.2 b/	9-1/4 b/
Italy	3.8	10.8	19.1	17.0	11-1/2	16.7 b/	20-1/2 b/	17.0 b/	12-3/4 b/	12.1 b/	10-3/4 b/
United Kingdom	5.9	9.2	16.0	24.2	15-1/4	15.4	13	14.7	9	8.0	8-3/4
Memorandum:											
Weighted average excluding U.S. e/	4.6	9.1	15.6	12.2	9.5	9.4	9.2	8.8	7.0	6.6	6.1

a/ Average annual percentage change in consumer price index.
b/ Consumer price index.
c/ From Economic Outlook of December of preceding year.
d/ Actual figures are updated from national sources.
e/ Weights are 1976 GNP/GDP weights.

Source: OECD, Economic Outlook, various issues, 1975-1978.

was in general no faster than had been anticipated by the OECD and in some cases -- e.g., Japan -- was slower than national forecasts suggested would occur.[1/] Inflation increased much more than had been anticipated in the United States and decreased more than had been anticipated in Japan -- see Table 5 -- in large part reflecting the unanticipated appreciation of the yen.[2/] The U.S. current account deficit increased, while the German and Japanese surpluses also increased in large part because of terms-of-trade effects. However, the OPEC surplus did decline dramatically in 1978[3/] and the combined deficit of the other OECD countries was reduced further; both of these developments were encouraging.

IV. Improving the Adjustment Process: Ex Post

The analysis of developments in the international economy during 1977 and 1978 that was presented in the preceding section leaves us with the question of whether the undesirable side effects of the working of the international adjustment process in these years, e.g., the substantial decline in the international exchange value of the U.S. dollar, could have been avoided. A partial answer to this question may be suggested by considering alternative, *ex post*, macro-economic scenarios.

Table 6 presents the results of some *ex post* experiments designed to examine how the U.S. current account position might have

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1/ The Japanese forecast in January 1978 was that real GNP would rise 7 per cent in FY 1978 ("Economic Outlook for FY 1978," Japanese Economic Planning Agency, January 1978).

2/ In Germany, the change in the annual rate of increase of the private consumption deflator was insignificant in 1978, but the increase in the consumer price index was 2.6 per cent in 1978 compared with 3.9 per cent in 1977.

3/ The OECD forecasts for 1978 assumed a 6-1/4 per cent increase in OPEC oil prices in 1978 that did not occur. The forecasts for 1979 assumed increases in OPEC oil prices that are substantially less than now are expected.

developed differently from 1976 to 1978 if the underlying determinants of U.S. international transactions had developed differently. The experiments are designed to be illustrative only. I also want to emphasize that the results are based upon partial equilibrium, *ceteris paribus* experiments. The assumptions used in the experiments are presented in Table 6A. In each case, the effects on U.S. trade flows of the alternative assumptions were calculated, and these effects were translated directly into effects on the U.S. current account position.[1/]

The first experiment assumes that macro-economic policy in the United States would have been directed at achieving a slower rate of expansion in U.S. real GNP over the 1976-78 period than actually occurred. Specifically, it was assumed that the slower growth rate would have resulted in a level of U.S. real GNP about 3 per cent below its actual level in the fourth quarter of 1978. As a consequence, it is estimated that the U.S. current account deficit would have been about $6 billion lower in 1978. However, based on the results for 1977 and 1978 shown in line B1 of Table 6, it is reasonable to conclude that the dollar would have been subjected to considerable downward pressure during much of this period even if the U.S. economy had grown more slowly. Moreover, it is important to recognize that the experiment implicitly

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1/ Equations for the quantities and prices of U.S. non-agricultural exports and non-oil imports were used in the experiments. These equations are similar in structure to those described by Peter Hooper in "Forecasting U.S. Export and Import Prices and Volumes in a Changing World Economy." *International Finance Discussion Papers* No. 99. Washington: Board of Governors of the Federal Reserve System, December 1976. Estimates were also made of the effects of the alternative assumptions on the quantities of U.S. agricultural exports and oil imports. No changes were made in the recorded results for non-trade current account transactions.

TABLE 6

Hypothetical U.S. Current Account Developments 1976-1978
(billions of U.S. dollars)

		1976	1977	1978
A.	Actual U.S. Current Account Position[a/]	4.3	-15.3	-16.0
B.	Hypothetical Results[b/]			
	1. Slower U.S. growth	5.9	-11.6	-9.6
	2. Lower U.S. inflation	4.2	-15.9	-16.1
	3. Faster foreign growth	4.3	-12.9	-9.9
	4. U.S. dollar constant at level of 1975 -- 1st quarter	1.6	-8.5	-5.0
	5. Slower U.S. growth, lower U.S. inflation, and faster foreign growth	5.8	-9.8	-3.6
	6. Slower U.S. growth, lower U.S. inflation, faster foreign growth and U.S. dollar constant at level of 1975 -- 1st quarter	3.1	-3.0	7.4

a/ See Table 1.
b/ See Table 6A for the assumptions used to generate the hypothetical results. In the experiments, the alternative assumptions affect only U.S. trade flows. These effects are carried through to the U.S. current account position.

TABLE 6A

Assumptions Underlying Hypothetical Results

	1976	1977	1978
1. Growth of U.S. Real GNP[a]			
Actual	5.7	4.9	4.0
Hypothetical	4.7	4.0	3.4
Cumulative difference	-1.0	-1.8	-2.3 (-3.1)[b]
2. U.S. Inflation[c]			
Actual	5.3	5.7	6.8
Hypothetical	5.3	4.4	4.9
Cumulative difference	0.0	-1.1	-2.9 (-3.5)[b]
3. Growth of Real GNP Abroad[d]			
Actual	5.0	2.4	3.2
Hypothetical	5.0	5.0	4.6
Cumulative difference	0.0	2.1	3.6 (3.9)[b]
4. Foreign Exchange Value of the U.S. dollar[e]			
Actual	105.6	103.3	92.2
Hypothetical difference[f]	-10.0	-8.0	3.0 (8.2)

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a/ Growth rates of U.S. real GNP, year over year.
b/ Estimated cumulative percentage difference between hypothetical and actual level in the fourth quarter of 1978.
c/ Rates of increase in the U.S. private consumption deflator.
d/ Weighted average of real GNP/GDP for the other G-10 countries plus Switzerland using 1972-76 global trade of these countries.
e/ See Table 1.
f/ The average foreign exchange value of the U.S. dollar was 95.0 in the first quarter of 1975. The figure is the percentage difference between this value and the average value in the indicated year. The figure in parentheses is the difference in the fourth quarter of 1978.

assumes that other countries would have taken expansionary policy actions during this period to offset the depressing effects on aggregate demand in these countries of reduced exports to the United States. One might argue that contractionary policy actions would have been equally likely as these countries faced weaker current account positions.

The second experiment assumes that the United States might have achieved a lower rate of consumer price inflation over the 1977-78 period -- for example, because of better performance in labor productivity -- without affecting the rate of expansion in U.S. real GNP.[1/] As is shown in line B2 of Table 6, it is estimated that a 3½ per cent lower U.S. consumer price level by the fourth quarter of 1978 would have had a negligible effect on the U.S. current account position during 1977 and 1978 -- positive effects on import and export volumes would have been largely offset during these years of continuous adjustment by lower export prices. Eventually, a 3½ per cent relative reduction in the U.S. price level would be expected to yield a net positive effect on the U.S. current account position of about $2½ billion (at an annual rate) in 1979 and 1980.

The third experiment involves the assumption of a faster rate of expansion in other industrial countries over the 1977-78 period. Specifically, it was assumed that the average level of real GNP in the other G-10 countries and Switzerland would have been about 4 per cent

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1/ One should not, indeed cannot, infer anything about any U.S. price-growth trade-off from the assumptions used in this experiment and the first experiment.

higher in the fourth quarter of 1978 than was actually the case.[1/] (See Table 6A.) The estimated effects on the U.S. current account position, shown in line B3 of Table 6, are broadly similar in overall magnitude to those in the first experiment, which assumed slower U.S. growth. Based on these results, it appears reasonable to conclude that the dollar, again, would probably have experienced significant downward pressure in 1977 and 1978 if the only difference in macro-economic developments had been moderately faster growth abroad.

In the fourth experiment, it was assumed that the weighted-average foreign exchange value of the dollar somehow remained unchanged at the level reached in the first quarter of 1975 -- a level that was regarded as dangerously and unrealistically low at the time. The results of the experiment, shown in line B4 of Table 6, suggest that during 1977 and 1978 further downward adjustment in the foreign exchange value of the dollar might have been avoided. However, assuming no change in other macro-economic developments during this period, the foreign exchange value of the dollar would have been some 8 per cent higher than its actual level in the fourth quarter of 1978 -- see Table 6A. This would imply the prospect of a deterioration in the U.S. current account position in 1979 and 1980 instead of the improvement that is now expected. The higher value of the dollar eventually might have added around $8 billion at an annual rate to the U.S. current account deficit in late 1979 and early 1980.

The fifth experiment (line B5 of Table 6) combines the results of the first three experiments. It suggests that with slower U.S. growth, lower

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1/ No attempt was made to allocate such faster growth across countries or to estimate what the effects of such growth on inflation rates might have been.

U.S. inflation, and faster growth abroad over the 1976-78 period, the U.S. current account deficit in 1977 would still have been sizable, but the prospect of improvement in 1978 (if it had been recognized) might have obviated some of the exchange-rate adjustment for the dollar on a weighted-average basis that actually occurred.

The final experiment (line B6 of Table 6) combines the results of the first four experiments -- a different macro-economic balance and a lower dollar throughout the period. The results suggest that in 1978 there might have been some upward pressure on the dollar from the assumed level -- that of the first quarter of 1975 -- because it is estimated that the United States would have had a sizable current account surplus that, in turn, might have exerted adjustment pressures on other country's currencies.

The results of these experiments indicate that the U.S. current account position might have developed differently from 1976 to 1978 if macro-economic conditions had been different and that some, if not all, of the downward pressure on the dollar might have been avoided.

One is left, however, with three difficult questions.

1. Against the background of economic summits and similar gatherings, what process of consultation and coordination might have brought about different macro-economic developments in recent years?

2. If the United States had recorded smaller current account deficits as a result of different policies, which countries would have had the larger deficits or smaller surpluses?

3. Would these developments, in fact, have been acceptable to the countries involved and to the international financial system? Specifically, would Germany and Japan have been content with more real output and, probably more inflation? Would the implied larger current account deficits of some countries, e.g., Italy, the United Kingdom and some of the smaller OECD countries, have been smoothly financed?

V. The Adjustment Process: Implications for the Future

It is easy to accept the proposition that the emergence of large U.S. current account deficits in 1977 and 1978 contributed importantly to the dollar's depreciation in those years. It also is easy to accept the proposition that a further depreciation of the U.S. dollar of the magnitude that was experienced in 1977-78 would be unwelcome to both the United States and other countries. Nor would it be consistent with that elusive concept, stability in the international financial system. Thus, it is easy to accept the proposition that the United States should not run large current account deficits in the future.

After this point, acceptable propositions become much less easy to formulate. In this paper, I have not tried to assign responsibility for the 1977-78 U.S. current account deficits; nor do I believe that it is either feasible or desirable for a country to direct its macro-economic policy at its current account position either in general or solely for the purpose of avoiding exchange-rate adjustment. The analysis in Sections II and III led to the unsurprising conclusion that the U.S. deficits were related to underlying macro-economic developments in both the United States and the rest of the world. In Section IV, I illustrated how less disruptive results might have been generated. But macro-economic developments would have had to have been substantially different, and as the questions posed at the end of Section IV suggest a recognition that other, more acceptable results were possible in the past it does not ensure that they will be brought about in the future.

In light of the discussion in Section III, it must be admitted that the analysis and forecasting of domestic macro-economic performance are not easy. Forecasts will turn out to be wrong and policy makers will, with the benefit of hindsight, be seen to have made mistakes. In this context, one needs to be extremely modest about the lessons that can be learned from history. Nevertheless, I believe the economic history of the 1970s is not without its lessons for the United States and for the other major industrial countries.

For the United States, two lessons I think are apparent. First, the United States is far less insulated from economic developments in the rest of the world than many thought was the case when this decade began. This lesson involves more than the need for a better appreciation of the vulnerability of the U.S. economy to so-called external shocks -- bad harvests, commodity booms, and increases in oil prices. It involves the need for a better appreciation of the implications for the U.S. economy of macro-economic developments abroad. For example, the United States might have anticipated that German policy would be tilted in 1977 and 1978 toward resisting, indeed reducing, inflation. Even if the German inflation performance was better than expected, U.S. officials should have known that a shortfall in economic growth in Germany was not likely to lead to a major change in German macro-economic policies. In other words, explicit or implicit choices by other countries to achieve more or less real growth or slower or faster inflation constrain the feasible outcomes for the U.S. economy.

Second, it follows from recent experience that unattractive consequences can result for the U.S. economy and for the international financial system from independent, national decisions on macro-economic policies in an increasingly interdependent world economy. The United States can no longer, if it ever could, afford to ignore so-called feedback effects from the rest of the world. Especially in an environment in which exchange rates can and do fluctuate, if the U.S. economy expands significantly more rapidly than the economies of other industrial countries, it appears that the United States becomes not only a "locomotive" but also a "sink" -- attracting the output of other countries, enlarging its trade deficit, and in the extreme case causing an excessive depreciation of the dollar. If exchange rates were not free to fluctuate, the last effect would be removed (by assumption) and the first two effects would be strengthened, relieving some of the pressures on U.S. resources and the U.S. price level.[1/]

With the benefit of hindsight, the U.S. economy probably should not have been allowed to expand as rapidly as it did in 1977-78. That expansion was not primarily based on a judgment about what was good for the world economy; it was based upon a judgment of what was good for the U.S. economy -- a judgment that in retrospect took inadequate account

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1/ These differential effects can be quantified. See, for example, Ernesto Hernández-Catá, Howard Howe, Sung Kwack, Guy Stevens, Richard Berner, and Peter Clark, "Monetary Policy Under Alternative Exchange Rate Regimes: Simulations with a Multi-Country Model." International Finance Discussion Papers No. 130. Washington: Board of Governors of the Federal Reserve System, February 1979. Also published in Managed-Exchange Rate Flexibility: The Recent Experience, Conference Series No. 20. Boston: Federal Reserve Bank of Boston.

of the feedback effects of U.S. policies. My point is not that the new Administration in early 1977 should have eschewed pressuring the other so-called "strong" countries to expand their economies more rapidly -- such a judgment is beyond my competence and, in fact, 1977 current account developments had already largely been determined by policies set in 1976. Rather, greater recognition should have been given to the implications for the U.S. economy and the international economy of what was unfolding. For example: (1) Because of low productivity growth, the reduction in U.S. unemployment was more rapid and more inflationary than expected. (2) Because of slow growth abroad, the increase in the U.S. current account deficit was larger than was expected which, in turn, led to an exchange-rate adjustment of a size that was unanticipated. (3) Because of the exchange-rate adjustment, the overall domestic inflationary consequences of U.S. policies were more severe than had been anticipated.1/

For the other major industrial countries, I think there are also two lessons that can be drawn from the economic history of the 1970s. First, if it is accepted that the costs to the U.S. economy of the United States acting as if it has a closed economy when, in fact, the U.S. economy is increasingly open have increased dramatically, then other countries need to adjust their policy perspectives accordingly especially if the U.S. policy perspective changes. Second, if the

1/ One consensus estimate is that a 10 per cent real depreciation of the dollar (on the weighted-average basis used in this paper) will raise the consumer price index 1½ to 1-3/4 per cent within 2-3 years. See Peter Hooper and Barbara Lowrey, "Impact of the Dollar Depreciation on the U.S. Price Level: An analytical Survey of Empirical Estimates," International Finance Discussion Papers No. 128. Washington: Board of Governors of the Federal Reserve System, January 1979.

major industrial countries fail to do so, the consequences for the international financial system, as well as for the individual, major, industrial countries themselves, can be adverse. We have observed these consequences in terms of bloated current account surpluses and deficits, unwelcome exchange-rate adjustments, and increased trade restrictions.

Again with the benefit of hindsight, Germany and Japan probably should not have been as resigned to the slowdowns in real economic expansion in 1977 as they were, nor, perhaps, should they have been as self-satisfied about their improved inflation performances as they were. This is not to say that these countries should have adopted more expansionary policies merely to keep in step with inflationary tendencies in the rest of the world. Rather these countries might have recognized sooner the global economic implications of their policy choices. Indeed, one might reasonably argue that such a recognition did take place later in 1977 and in 1978 even as the corresponding lessons were being learned in the United States. Partly as a consequence of this recognition, for the immediate future, it appears likely that the U.S. current account deficit will moderate. It also appears likely that such a decline can be absorbed without too much difficulty through changes in the current account positions of other countries.

For the longer term, the outlook is less clear. Some general observations may be in order. The United States must bring down its inflation rate without expecting other countries to accept higher inflation rates. In the United States, increased official and private awareness of the interaction of domestic and foreign macro-economic developments is desirable, and the same holds for a number of other countries.

I do not think one can say with any precision what a "sustainable" U.S. current account position might be, or what U.S. current account position would prove to be compatible with a stable foreign exchange value for the U.S. dollar. I would be prepared to argue, however, that the sustainability of a U.S. current account position is directly related to the sustainability of the macro-economic conditions in the United States and the rest of the world that give rise to that position. If reasonable stability in macro-economic conditions is not expected, it is unlikely that stability in exchange market conditions will be achieved. Moreover, it is reasonable, I believe, to expect that stable, global macro-economic conditions for, say, 1980 and 1981 as viewed from 1979 will differ from stable, global macro-economic conditions for 1980 and 1981 as viewed from 1980 or 1981. Thus, frequent reevaluation of policies will be needed.

In light of the likelihood that growth rates for real output in the other major foreign industrial countries are likely to be closer to U.S. growth rates than they were in the 1960s and early 1970s, and in light of the apparent fact that some of the advanced developing countries will play an increasing role in the world economy, structural adjustments probably will be necessary for both the United States and the other industrial countries. In more technical terms, the observed elasticity of demand for U.S. imports with respect to U.S. income will have to be close to the observed elasticity of demand for U.S. exports with respect to income in the other industrial countries if the favorable near-term outlook for the U.S. current account balance is to continue.[1/] An alternative outcome would be for the United States to try to achieve a lower rate of real economic growth; however, such an outcome might well prove to be incompatible with overall macro-economic stability in the United States or the world economy.

1/ For some empirical evidence on this point see Peter Hooper, "The Stability of Income and Price Elasticities in U.S. Trade, 1957-1977." International Finance Discussion Papers No. 119. Washington: Board of Governors of the Federal Reserve System, June 1978.