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THE EMERGING EXCHANGE-RATE SYSTEM (EARLY 1974)

by

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Division of International Finance
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The Emerging Exchange-Rate System, Early 1974*

Samuel I. Katz**

The year 1973 can be recognized as a watershed in world monetary history. It marked, among other developments, the end of the Bretton Woods era. It demonstrated that the mechanism of a formal par value for each nation's currency, to achieve stability of exchange rates and orderly conditions in exchange markets, was no longer viable. When the dollar was devalued a second time in February 1973 and when other industrial countries responded by floating their currencies, it was evident that the original Bretton Woods arrangements had passed into history.

* This paper is an extended version of a lecture given in the 1973-74 Lecture Series at the Banking Research Center, Graduate School of Management, Northwestern University, Evanston, Illinois on April 17, 1974.

** Adviser, Division of International Finance, Board of Governors of the Federal Reserve System. The analysis and conclusions of this lecture express only the personal opinions of the author and carry no implications as to the views of the Board of Governors or of members of its staff.
To be sure, officials of both the industrial and the less-developed countries reaffirmed the goal of a new world monetary system based on "stable but adjustable" parities in meetings in Washington in March (1973).\(^1\) Once before, in December 1971, they had successfully restored a structure of pegged exchange rates, after four months of generalized floating, the achievement of the Smithsonian Conference in Washington. But the 1971 return to formal parities proved to be temporary.

Prospects in 1973 for a second return to pegged exchange rates were diminished by the sweeping changes in the world economy during the course of the year. The world-wide inflation was given fresh impetus, first, by the spring-time boom in food and primary-product prices and, later in the year, by the unprecedented advances in oil prices. The world oil crisis in particular threatened to set off a scramble among the industrial countries for national economic self-preservation and produced a worsening of relations between the United States and our European trading partners.

\(^1\) The Committee of the Board of Governors on International Monetary Reform concluded at a meeting in Washington on March 26-27, 1973 that "Members of the Committee recognize that exchange rates must be a matter of international concern and consultation and that in the reformed system the exchange rate regime should remain based on stable but adjustable par values." The Ministers of the Group of 24 less-developed countries also agreed in a meeting in Washington on March 24, 1973 that "a system of stable exchange rates based on adjustable par values expressed in SDRs constitutes an essential element of a satisfactory international monetary order." (IMF Survey, April 9, 1973, pp. 100 and 101).
In this rapidly-changing environment, the expectation that the industrial countries could return to a structure of par values could no longer be regarded as realistic. Even ardent supporters of pegged rates were faced with the reality that, in the near term, such a system could no longer function as the basis for the world payments mechanism. The decision by France, the leading defender of fixed exchange rates, to float the franc in January 1974 was evidence of how far the world had drifted from the original Bretton Woods arrangement.

And yet the world's business continued to expand. Government and banking officials responded to exchange-market strains with ad hoc measures. While the changes in exchange-rate practices were diverse in their technical aspects, they had in common one critical element: country after country abandoned the commitment to maintain a parity or fixed value for the currency. These actions produced a system of widespread and largely uncoordinated, though generally managed, floating but also with widespread bloc-tying of rates.

As it turned out, these new arrangements performed reasonably well under the difficult conditions of 1973. Nonetheless, they are regarded as an interim process and not as the permanent basis of a future payments system. For this reason, international reform negotiations are continuing. But there is likely to be an enduring legacy from the monetary developments of 1973: that is, some of the technical measures introduced, and some of the policy actions taken, are likely to be key elements of the future payments system.
Breakdown of the Bretton Woods System

We do not need a lengthy epitaph for the original Bretton Woods exchange-rate arrangements. The original par-value system was intended to achieve a two-fold goal:

a. To facilitate private exchange-market transactions through fixed exchange rates in the short run; and

b. To correct for differential inflation rates and other factors which caused "fundamental disequilibria" in the BOP of individual countries through flexible or adjustable exchange rates in the long run.

There were mechanisms to achieve these goals. To keep market rates fixed, central banks were expected to peg spot exchange rates. Each of them announced formal buying and selling prices, first, within a spread of less than 1% (and much later of 2-1/4%) around a parity or central value. To achieve longer-run flexibility, each Fund member could propose a parity change on its own initiative; and the Fund was obliged to concur if the parity change was required to correct "a fundamental disequilibrium" in the country's BOP (balance of payments).

It appeared, on the surface, that the original system collapsed because central banks could not keep exchange rates fixed in the short-run. Between 1967 and 1973, for example, conditions in exchange markets got so disorderly that on 11 occasions one or more of the G-10 countries had to close them, at least for one day
and sometimes more.\textsuperscript{1} In addition, the volume of official intervention steadily grew. In Germany, for example, the Bundesbank had to purchase $4 billion of dollars in ten days in 1969 (May 1 to 10)\textsuperscript{2} but $2.7 billion in one day alone in 1973 (March 1).\textsuperscript{3}

But these exchange-market crises were only the proximate causes of the system's breakdown. The underlying causes are to be found elsewhere: that is, not in the system's technical deficiencies but in the policies of the major industrial countries. Many of them tolerated large BOP deficits and surpluses too long and, in particular, resisted--and were widely urged to resist--the use of exchange-rate changes to correct them. In several important episodes, they actively defended their parities long after it was evident that a situation of "fundamental disequilibrium" existed.

The causes of these continuing disequilibria were familiar enough. Among the European countries, differential rates of inflation--especially between Germany and its European neighbors--were responsible for, and prompted, changes in the value of the DM vis-a-vis other European countries. Between 1955 and 1969, for

\textsuperscript{1} These episodes are detailed in Appendix I.


\textsuperscript{3} \textit{Monthly Report of the Deutsche Bundesbank}, March 1973, p. 2. There were, in addition, substantial official commitments in the forward market.
example, the average annual changes in the GNP deflator for Germany was 2.9%, compared to 5.0% for France.\(^1\) These intra-European currency strains were relieved, though not without political tensions among trading partners, by the appreciations of the DM in 1961 and in 1969 and by the devaluations of the pound in 1967 and the French franc in 1958 and 1969.

But the inflation factor cannot explain why the United States BOP worsened so markedly. Between 1955 and 1969, in fact, the average annual rise in the GNP deflator was less for the U.S. than for Germany: 2.4% as compared to 2.9% per year for the 15-year period. This was a remarkable performance in domestic stabilization by this country.

**Diminished productivity gap** - What was not widely recognized in the 1960's was the fundamental change which was taking place between the international competitiveness of the United States and the other industrial countries. By 1960, there had already occurred "what may well prove to be a structural shift, long-term in character and significance, in the international economic position of Western Europe\(^2\) vis-a-vis the United States and the rest of the world.


as well. The resultant BOP surpluses of the Common Market countries, and their massive accruals of official reserves, placed the Bretton Woods arrangements under mounting strains.

What happened was that foreign countries began to catch up with U.S. productivity and found a huge American market for their output. Emminger has put the matter simply: U.S. per capita income in the early 1950's was about three times the per capita income in Europe and even higher in relation to Japan (at existing exchange rates).\(^1\) Such a discrepancy in relative income levels could not be maintained with the expansion of European and Japanese industrial output. In retrospect, it is now evident, the gap in absolute cost levels could not be appreciably reduced by the superior U.S. price performance as measured by the CPI (but not by the export price or unit value indexes) during the 1950's and 1960's. That is, the differential growth in European industrial productivity had by 1960 rendered important elements of the 1949 world exchange-rate structure obsolete and, in some cases, unsustainable.

This discrepancy put the fixed-parity regime between the dollar and the major continental European currencies under great strain throughout the 1960's. By 1970, Japan had also emerged as a major surplus country. But it was not until the original Bretton

Woods arrangements had collapsed in 1971 that the unavoidable changes in the exchange rate structure between the United States and the other industrial countries could be achieved.

Recurring exchange-market crises -- The failure to eliminate these imbalances in cost levels either by domestic or trade-liberalization measures or by equilibrating changes in relative exchange rates brought successive exchange-market crises. There were a series of shocks in international financial markets after 1967 which were remarkable for their variety and their severity. Thus, the longer-run fixity of parities proved to be at the expense of the short-term stability of world financial markets. These markets could not function smoothly from day to day, and exchange rates could not be regarded as stable, if these longer-term disequilibria were not corrected.

The BOP disequilibria were not sustainable. But the adjustments which had to be made were resisted until tensions had culminated in financial crises. This was a process of "adjustment by crisis"¹ and not by orderly means; but it did achieve needed adjustments for currencies other than the dollar without destroying the system. As it turned out, these repeated "speculative disturbances had the short-term effect of keeping exchange markets unsettled ... but had the long-run consequences of forcing ... countries to make adjustments in national policies in the direction of greater financial

stability within each country and a better balance in external payments" 1/ among the industrial countries.

Rapidity of change in 1973 - The broad changes in relative prices and cost levels among the industrial countries came only gradually during the 1960's. Differential movements in these competitive relationships became apparent not from month to month but only over a period of years. What makes the 1973 experience so unique was the rapidity of change: differential rates of inflation and swings in underlying structural factors could be identified within months, not over a period of years or decades. Let us first turn to the question of inflation during 1973--an inflation of unprecedented intensity and scope which helped to destroy any hope for a near-term return to pegged exchange rates.

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1/ Katz, Sterling Speculation, op. cit., p. 3.
Rapidity and scope of economic change during 1973

Inflation was a much more serious source of BOP disturbance in 1973 than it had been during the 1960's. The infection was more virulent and more resistant to domestic stabilization policies. Between 1960 and 1969, the GNP deflator rose in the major OECD countries (excluding the United States) by about 4-5% annually. By late 1973, price rises in excess of 10% became the rule, not the exception.

The GNP deflator was rising early in 1974 in the

<table>
<thead>
<tr>
<th>Country</th>
<th>Deflator</th>
</tr>
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<tbody>
<tr>
<td>United States, around</td>
<td>9-10%</td>
</tr>
<tr>
<td>France, Italy and Germany</td>
<td>11%</td>
</tr>
<tr>
<td>Britain</td>
<td>14.1/2%</td>
</tr>
<tr>
<td>Japan, close to</td>
<td>22%</td>
</tr>
</tbody>
</table>

1973: The unprecedented inflation - This inflation was different from the earlier inflation in three ways. First, it seemed to be resistant to the traditional instruments of monetary and fiscal policy. As a result, all the industrial countries were turning, or had turned, to extraordinary policy instruments: they have been using, or once used and then discarded: freezes on prices or wages or government-devised incomes formulae with a phase 1 and a phase 2 and 3 and on and on!

Second, the inflation was world-wide. Countries not only had to fight domestic sources of inflation but inflation imported from abroad. Everyone blamed the domestic difficulties in large part on "imported inflation." Furthermore, the former "bastions" of price stability--that is, the United States, Germany and Japan--had joined the world inflation race.
Third, the inflation was accelerating everywhere. Professor Fellner (CEA) has reminded us that, in the United States, full employment was associated with a 2% inflation rate in 1965; a 6% rate in 1969; and a 7-9% rate in 1973-74. The abrupt rise in oil prices at end-1973 makes the world price outlook even more bleak than it seemed earlier in the year.

1973: the energy situation - Factors other than differential inflation also affected the BOP of the industrial countries in 1973. The major development was the change in the energy situation. The post-World War II industrial growth of Western Europe and Japan was based on cheap oil. So high priced oil was bound to alter the competitive position of their industry and the standard of living of their people.

How the Japanese and European economic and BOP outlooks have worsened can be summarized in terms of the differences in the reliance of various industrial countries on foreign energy sources. Japan is at the bottom of the energy league, having domestic sources for only 11% of total national energy requirements. (See Table 1.) Furthermore, Japan has the lowest "oil saving capacity"; that is, the ratio of its non-industrial use of energy to total use

of oil in the economy is the lowest among the major industrial countries. (See Table 1.) All the European countries resemble Japan in having to import over 90% of their oil needs. But, because of more ample domestic supplies of other energy products, Britain,\textsuperscript{1/} Germany and the Netherlands have to obtain abroad (and to finance through their balances of payments) less than half their total energy needs. By contrast, U.S. imports of oil and of other energy products are small, and Canada is even more favorably situated.

\textbf{(Insert Table 1)}

Recent energy developments are bound to have both long-term and differential economic effects on the industrial countries. In April, for example, Finance Minister Fukuda said that Japan would have to discard its past policy of fast economic growth and shift to a course of slow but steady expansion.\textsuperscript{2/} Were Japan to continue the fast-growth policy, he added, by 1985 it would be consuming 25% of the world's supply of crude oil, over 50% of the iron ore and all the copper, zinc and non-ferrous materials currently being marketed.

Furthermore, the non-industrial countries are also bound to be materially affected by the energy developments. The energy situation has already set into motion a gradual movement of refining and petro-chemical facilities to the places where the energy and raw

\textsuperscript{1/} Britain's position will be materially altered by 1980 when North Sea Oil flows in volume.

\textsuperscript{2/} Reuters, April 23, 1974.
<table>
<thead>
<tr>
<th>Main consuming countries: Degree of national energy self-sufficiency and oil-saving capacity, 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of national self-sufficiency a/ for:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Italy</td>
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<tr>
<td>Belgium</td>
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<tr>
<td>France</td>
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<td>United Kingdom</td>
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<td>Germany</td>
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<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Canada</td>
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<tr>
<td>United States</td>
</tr>
</tbody>
</table>

Source: "The Oil Situation" in OECD Economic Outlook, 14, December 1973, p. 16 All calculations based on 1971 data.

a/ Indigenous supply as a percentage of total primary energy requirements.

b/ The OECD staff calculated this ratio on the basis of Non-industrial use of energy
Total use of oil in the economy

They consider it to be "a very rough relative indicator of how countries rank in this particular aspect, but it can in no way be interpreted as an absolute measure."
materials are located. The oil-exporting countries now want to build up local industries in exchange for oil, not merely to pile up foreign-currency balances in European and American banks. Some of them foresee a major industrial capacity in their area based on plentiful energy—not cheap energy, mind you, but plentiful energy.

1973: the food and raw-materials boom - Even before the oil crisis, there had been a boom early in 1973 in food and raw materials prices. The general world shortages of some basic materials and food reflected temporary supply and abnormal demand factors; but they also pointed to new long-term relationships between supply and demand for many commodities. Professor Boulding has described the transformation in graphic terms: the conversion from a "cowboy economy" in the United States based on a frontier concept of limitless resources to a "spaceship economy" based on widespread conservation measures, like astronauts abroad an orbiting capsule.1/

For decades, specialists have anticipated eventual shortages of domestically-produced fuels and minerals.2/ One U.S. government agency in World War II is reported to have predicted that "the world


2/ See for example the four-volume report of the President's Materials Policy Commission (the so-called Paley Report), 1952.
would face critical shortages by 1970.\footnote{1} Accordingly, the 1973 run-up in prices combined both temporary and speculative elements and long-term changes in demand-supply relationships. By early 1974, the less developed countries were being advised to take control of their primary-product resources and to follow the example of oil in raising prices through cartel-type associations.\footnote{2}

The early-1973 price boom had already set into motion a major structural shift in the terms of exchange between primary and manufactured products. The subsequent rise in oil prices had the effect of ensuring that the shift in 1973 would be of historic proportions.

Recent oil price changes have tended to overshadow earlier changes of prices of many non-oil primary products. But the latter were widespread and substantial during 1973. \textit{The Economist's} Commodity Price Indicator shows, for example, that the index rose only four-fold from 1860 to 1972 but rose by 66\% during 1973 alone. (See Table 2.)

(Insert Table 2)

Furthermore, price movements in the past tended to be gradual from year to year except for the abrupt upward movements linked to war. There is no past peace-time equivalent for the jump


\footnote{2}{\textit{New York Times}, April 11, 1974, pp. 1 and 12.}
TABLE 2

The Economist Commodity Price Indicator
(1845-1850 = 100 yearly averages)

<table>
<thead>
<tr>
<th>Year</th>
<th>1860</th>
<th>1913</th>
<th>1914</th>
<th>1919</th>
<th>1920</th>
<th>1921</th>
<th>1925</th>
<th>1926</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
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<th>1939</th>
<th>1940</th>
<th>1945</th>
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<tr>
<td></td>
<td>124</td>
<td>122</td>
<td>123</td>
<td>302</td>
<td>332</td>
<td>222</td>
<td>204</td>
<td>185</td>
<td>167</td>
<td>140</td>
<td>116</td>
<td>112</td>
<td>116</td>
<td>120</td>
<td>135</td>
<td>175</td>
<td>216</td>
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<td></td>
<td>293</td>
<td>307</td>
<td>453</td>
<td>558</td>
<td>450</td>
<td>421</td>
<td>389</td>
<td></td>
<td></td>
<td>437</td>
<td>475</td>
<td>500</td>
<td>486</td>
<td>562</td>
<td>929</td>
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</tbody>
</table>

Source: The Economist (London), March 2, 1974, p. 86. The index has continuously been composed of "practically the same group of 28 commodities," all of which are "traded on markets for which there are daily spot or future quotations for specified grades and quantities." This excludes "important commodities like crude oil, for which the free market is still small."
in the index between 1972 and 1973. Thus, the index was no higher in
1914 than it had been in 1860. By 1920 it had risen by 170%, mostly
during World War I. Then followed the long downward trend to the
Great Depression bottom of 112 in 1932.

The striking development early in the post-World War II period
was the slow decline in the index from the 1951 high to 1962, and in
particular the sharp year-to-year decline from 1957 to 1958. The
decreases in commodity prices during the 1950s helped to strengthen
Europe's external payments position and were, in my view, a material
factor contributing to the success of the attempt of the major
European countries to make their currencies convertible once again
at the end of 1958. 1/ The deterioration in the terms of trade of
the European countries and Japan which has occurred since 1972, if
it persists, could have equally substantial long-term effects on the
international economic position of some industrial countries.

For 1974 and 1975, the oil-importing countries will find
themselves with unprecedented current-account deficits. After all,
a number of the major oil-exporting countries simply do not have the
capacity to expand imports to absorb their higher receipts. As a
result, the industrial countries and many of the LDCs as well face
substantial financing problems. In addition, an unprecedented volume of short-term funds is accumulating in the hands of the
oil countries--funds capable of being shifted quickly from country to
country, virtually on a demand basis, as though the world needed any
further increase in the stock of internationally mobile capital!

1/ Katz, Sterling Speculation and European Convertibility: 1955-
De facto world monetary reform

All these economic changes occurred within a single twelve-month period. Virtually every important trading country is in a transitional situation and is experiencing extraordinary changes in its BOP position. The combined uncertainties in the world trade and payments outlook are unprecedented.

Such changes were bound to affect international monetary practices profoundly. They have led officials to acquiesce in new exchange-rate policies or to accept the indefinite continuance of what had once been introduced as only a temporary policy measure. Major changes in national policies which were introduced in 1973 (or had been introduced earlier and was confirmed and continued during 1973) include:

a. The former rigidity in exchange rates is gone;

b. The old belief that the United States could not devalue or could not change the exchange rate for the dollar has been dispelled; 1/

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1/ Treasury Secretary Shultz served notice that the United States was terminating its "passive" exchange-rate policy on the occasion of the second devaluation of the dollar in February 1973 in these words: "Other countries may also propose changes in their par values or central rates to the International Monetary Fund. We will support all changes that seem warranted on the basis of current and prospective payments imbalances, but plan to vote against any changes that are inappropriate." ("Statement on Foreign Economic Policy," by Secretary of the Treasury George P. Shultz, February 12, 1973, p. 4.)
c. Major adjustments in relative currency values were made during the year;

c. Countries were willing—even (in a period of inflation) inclined—to allow their currencies to appreciate; and

e. There has been a growing acceptance among Fund members of a continuing role for floating, even if a system of par values were restored.

These changes in national policies add up to a sweeping reform in international monetary practices. Might the world have avoided a breakdown of the original Bretton Woods arrangements if some of them had been introduced not in 1973 but during the 1960's?

In any case, the changes mean that a substantial—though by no means complete—reform of the international monetary system has already been accomplished on a de facto basis.

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\[1/\] Last month, for example, the German Finance Minister said he "would welcome a further increase in the exchange-rate value of the DM" because it would:

- reduce the DM cost of imports;
- cut back the German trade surplus; and
- help stabilize the domestic economy.

(Reuters, March 11, 1974 as quoted in IMF Morning Press, March 19, 1974. He also told a Dutch financial review that a revaluation of the DM and the guilder would be of value in stabilizing prices in the Netherlands.)

Japan offers a second recent example; recently the central bank Governor concluded that, in retrospect, Japan should have revalued the yen and tightened credit in mid-1972 when wholesale prices first began to turn up. (Reuters, February 15, 1974.)
Bolstering the position of the U.S. dollar

A second major effect of world economic developments in 1973 has been, in President Zijlstra's words, to help the dollar "to regain(ing) the position it held in the 1960's."¹ This outcome was a turn-around from the situation in early 1973 when there was general discussion about: (a) the need to devalue the dollar a second time; (b) the unsatisfactory U.S. foreign-trade position; (c) the unwillingness of European central banks to support the dollar; and (d) the excessive foreign dollar overhang.

The United States has been less adversely affected by these international developments than the other major industrial countries. Unlike them, we (a) can eventually meet most of our energy needs at home; (b) can substantially expand our food output and exports²/ and (c) have large financial markets to attract the oil-related capital transfers, either directly or indirectly. We also no longer have an exchange value for the dollar which earlier had placed firms in the United States at a competitive disadvantage as compared to industry abroad.

¹/ Jelle Zijlstra, President of the Netherlands Central Bank and of the BIS, IMF Morning Press, March 15, 1974.

²/ A summary of the output capabilities and the productivity trends in U.S. agriculture is found in "U.S. agriculture: giant unchained," Business In Brief, (Chase Manhattan Bank, December 1973.) In this assessment, it is concluded, "the best evidence suggests that U.S. farms are capable of satisfying any foreseeable increase in the world's effective demand for American food up to, and probably much beyond, the mid-1980's." Shortages of fertilizer supplies associated with the oil crisis may adversely affect agricultural output elsewhere and make the world even more dependent than otherwise on North American food output for the rest of this decade.
Exchange-markets in a period of uncertainty

We come now to the question: how did exchange markets function amid the turbulent economic developments of 1973? There has been a general view, common to opponents as well as advocates of floating rates, that the interim payments arrangements demonstrated an unexpected resilience. The ability of exchange markets to absorb the effects of the changes we have discussed without international financial crisis is surely a substantial achievement. When asked what he considered the most significant accomplishment as Treasury Secretary, Mr. Shultz recently pointed to "the establishment last year of an essentially floating system which worked reasonably well." He added: "When international exchange markets were hit by oil prices, the one crisis you weren't writing about was the crisis in exchange rates."¹

Our interest will be in describing developments in exchange markets under the new institutional arrangements of managed floating during 1973. In this section, we will review market developments and attempt to summarize the evaluation by both private and official participants of their experiences under managed floating; however, we will not ask whether these evaluations were or were not justified.

Major fluctuations in levels of exchange rates - The major variations in the value of the dollar vis-a-vis the major European

currencies are summarized in the chart which shows the high and low spot rate for particular currencies during each calendar month since January 1972. The mean value for each month is also identified by the crossed bar.

(Insert Chart)

The monthly fluctuations during 1973 were much larger than they had been during the post-Smithsonian period of pegged rates during 1972 (with only the Canadian dollar and, at mid-year, the U.K. pound floating). The actual movements in "mean" or "average" rate levels were substantial by post-World War II experience. The mean value vis-a-vis the dollar was 25% higher for the Swiss franc and 24% for the DM in the period March-October 1973 than it had been in 1972. Percent changes for the other currencies shown in Table 3 were:

Guilder, 18%  Italian lira, 1%
French franc, 17%  U.K. pound --
Belgian franc, 16%  Canadian dollar, 1%
Japanese yen, 14%

(Insert Table 3)

The generally gradual character of these changes in relative currency values can be seen in the chart. There were in 1973 intervals of stability in exchange-rate levels interspersed with intervals when rates moved gradually from one level to another in response to structural changes affecting the BOP of the countries concerned. In practice, the de facto floating of 1973 effected small and frequent changes in exchange rates more efficiently than the
Table 3

Daily spot exchange rate for selected countries, January 1972 to January 28, 1974

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean value (in U.S. cents)</td>
<td>Coefficient of variation 1/</td>
<td>Mean value (in U.S. cents)</td>
</tr>
<tr>
<td>Shown on Chart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM</td>
<td>31.3560</td>
<td>0.97</td>
<td>38.9774</td>
</tr>
<tr>
<td>Swiss franc</td>
<td>26.2408</td>
<td>1.49</td>
<td>32.6748</td>
</tr>
<tr>
<td>U.K. pound</td>
<td>249.15</td>
<td>4.33</td>
<td>249.12</td>
</tr>
<tr>
<td>Canadian dollar</td>
<td>100.87</td>
<td>0.94</td>
<td>99.89</td>
</tr>
<tr>
<td>French franc</td>
<td>19.8140</td>
<td>1.10</td>
<td>23.1446</td>
</tr>
<tr>
<td>Japanese yen</td>
<td>0.330034</td>
<td>1.03</td>
<td>0.377734</td>
</tr>
<tr>
<td>Other currencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilder</td>
<td>31.1493</td>
<td>0.96</td>
<td>36.8053</td>
</tr>
<tr>
<td>Belgian franc</td>
<td>2.2727</td>
<td>1.34</td>
<td>2.6456</td>
</tr>
<tr>
<td>Italian lira</td>
<td>0.171282</td>
<td>0.92</td>
<td>0.172842</td>
</tr>
</tbody>
</table>

1/ The standard deviation of daily rates for each month divided by the mean value for the month.
earlier par-value arrangements had been able to do. For they were achieved without major international crises, in contrast to the repeated crises associated with changes in par values under the Bretton Woods system. The absence of abrupt market movements even in October when the effects of the Middle East military hostilities and the subsequent oil embargo had to be absorbed is noteworthy.

During one period in 1973, however, shifts in the level of market rates were not gradual: the advances in the values of the DM, the Swiss franc and the French franc after mid-May. (See Chart.) The values of these currencies vis-a-vis the dollar advanced a further 12% from their April daily low to their early July daily high. (See Table 4.) Selling pressures against the dollar at that time "were reflected mostly in an appreciation of the exchange rate of a number of, but not all, European currencies, which floated rather freely against the dollar"; during this period, the Japanese authorities were making substantial official sales of dollars to their foreign exchange market to hold the yen rate steady in a period of accelerating domestic inflation. This episode prompted


2/ The Japanese official dollar sales reduced U.S. liquid liabilities to foreign official agencies. The unwillingness of European institutions to buy dollars being offered in their markets meant a further depreciation of the dollar vis-a-vis their currencies. As a result, the United States reported a surplus in the BOP on an official reserve transactions basis of $500 million for the second quarter (deficit of $10.5 billion in the first quarter), despite the weakness of the dollar in European centers.
the U.S. and European monetary authorities to announce in July a
resumption of official intervention to avoid disorderly conditions
in the exchange market.

(Insert Table 4)

**Substantial variations in day-to-day market quotations** -
The month-to-month fluctuations in daily spot quotations were much
more substantial after March 1973 than they had been in the preceding
13 months of pegged rates. The measures of daily fluctuations of
major industrial currencies are summarized in Table 3. The measure
used is the coefficient of variation—that is, the standard devia-
tion of daily rates within the month divided by the mean for the month.

Two bases of comparison can be suggested. First, the co-
efficients of variation are much larger for the post-March 1973 period
than for 1972 for five European currencies—the DM; Swiss; French
and Belgian francs, and the guilder—which were floating relatively
freely against the dollar in 1973. By contrast, the coefficients
are less in 1973 than in 1972 for the Canadian dollar and, for the
pre-oil crisis period, for the yen.

Secondly, the coefficients of variation can be compared
with the official spread of 4-1/2% within which spot fluctuations
around the central values were authorized under the temporary
regime of central values adopted by the IMF in December 1971. On
this basis, the variations exceeded the Fund standard
Table 4

Changes in daily exchange rates of selected currencies, April to July 1973
(in U.S. cents per currency unit)

<table>
<thead>
<tr>
<th>Currency</th>
<th>April low</th>
<th>July high</th>
<th>Percent change</th>
</tr>
</thead>
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<tr>
<td>D-Mark</td>
<td>35.18</td>
<td>44.20</td>
<td>12.56</td>
</tr>
<tr>
<td>Swiss franc</td>
<td>30.60</td>
<td>37.05</td>
<td>12.11</td>
</tr>
<tr>
<td>French franc</td>
<td>21.97</td>
<td>24.66</td>
<td>11.22</td>
</tr>
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(1) between March-October 1971: by 3% for the DM; 1/ 1.43% for the guilder; and 0.13% for the Swiss franc; and

(2) between November 1973-January 1974: by 1.45% for the French franc and 0.16% for the Belgian franc.

Hence, actual market movements under floating (that is, after March 1973) did not substantially exceed the 4-1/2% trading margins agreed at the IMF in December 1971, if we accept variations from the mean value for the month as an appropriate benchmark. It is noteworthy that the abrupt changes in the BOP of many countries during 1973 could have largely been accommodated within spot margins of 4-1/2%. The experience suggests that acceptance by Fund members of permanent arrangements for wider margins may prove to be a substantial reform in world payments arrangements, not merely a technical change in exchange-market practice. Fluctuations in market quotations during 1973 had the effect both of limiting speculative private capital outflows and of facilitating major adjustment in the BOP of several trading countries.

Private reaction: the concern about day-to-day stability - Earlier commercial and banking interests may have had mixed feelings about the floating of currency values; but, in evidence before the Joint Economic Committee in May 1973, witnesses reported that "many manufacturing firms and financial institutions were adjusting with

1/ The changes in DM value include the 5.5% revaluation of the DM in June 1973.
minimal difficulties to a fluctuating rate regime.  

Many, if not most, of them concluded that de facto floating was the most practical arrangement among the various exchange-rate options available in 1973; they came to this conclusion long before the oil crisis later in the year and the accelerating inflation doomed any chance for a return to pegged rates.

On the other hand, critics of fluctuating rates asserted that central bank intervention was necessary to avoid wild fluctuations in market prices for the major currencies and to help establish a trend.  

Central banks had been responsible for pegging exchange rates under the IMF system, and entrepreneurs and investors had depended upon the central bank's commitment to peg currency values as the basis for judgments about their private foreign-currency strategies.

In that system, commercial banks had played no significant role in determining market rates.  

They maintained balanced

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2/ Report, p. 4.

positions in foreign exchange within specific limits established by bank management. One Swiss banker explained in 1967 that

"The large Swiss banks do not speculate in foreign exchange for their own account ... Generally speaking, positions kept in a given currency, be they long or short, fluctuate within limits deemed very reasonable and which are but a tiny fraction of the turnover done in a single day." 1/

As a result, the banks assume an intermediary role in the market, making prompt sales of currencies bought from customers and prompt purchases of currencies sold to them. Watts, himself a practising banker, wrote in 1970 of the "almost inconsequential" role played by the private professional speculator in foreign currencies. He maintained that a more active role in market speculation would require

"an acceptance in the commercial banking community, which makes and manages the foreign exchange markets, of the view that taking positions in foreign exchange is neither rash nor immoral, but is desirable, and could be done in a professional manner, with controlled levels of risk." 2/

It should be noted that banks in the United States and Britain have

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by tradition been more unwilling to take positions in foreign currencies than have banks in continental European centers.

Under floating rates, the central bank no longer has a formal commitment to stabilize quotations; so there remains the question of whether or not private parties would take speculative positions to dampen the amplitude of exchange-market fluctuations. There is no published information on the extent to which the banks increased their activities in foreign currencies in 1973 and, in particular, the extent they were willing to take positions in them to cushion variations in daily rates.\(^1\)

As it turned out, in any case, the reluctance of private parties—bank and non-bank—to come to the support of a rapidly weakening dollar in mid-1973 induced central banks to resume official intervention. At that time, there appeared a contradiction between the outlook for the BOP of the United States (which was thought to be strengthening) and the market trend for the dollar (which was steadily declining vis-a-vis the European currencies).

In May, one witness told the congressional committee: "everybody

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\(^1\) Fragmentary press information suggest that some banks were taking larger speculative positions in 1973 than heretofore; but it is not clear whether the speculation had the effect of dampening or exacerbating market variations. In March 1974, for example, Bundesbank President Klasen warned German banks that "large open positions" in foreign currencies were "particularly dangerous because economic circumstances were changing so rapidly" (Reuters, March 11, 1974) and the head of the Swiss central bank expressed the view that speculative activities of commercial banks during disturbed periods of wide market movements were not "reasonable or tolerable" nor were they "economically justified." (Reuters, March 21, 1974).
seems to be agreed that the dollar is undervalued at the moment. But in the short run, everyone seems to be pessimistic that for the next 2 or 3 months if anything it will move down even further.\textsuperscript{1/} By early July, exchange-market movements had become "abnormally large and erratic. Spreads between bid and offer quotations widened substantially. The market became very narrow and disorderly."\textsuperscript{2/} These were conditions in which monetary authorities "had previously agreed would in principle justify some official intervention."

The unwillingness of private parties to anticipate the incipient strengthening of the U.S. BOP suggested that, at least in periods of uncertainty, they had a shorter time-horizon in planning their foreign-currency positions under floating rates than they had had under pegged rates. One witness told the committee that, under pegged rates, his firm could review the basic economic facts about a currency "and come to a pretty accurate estimate of where that currency might be headed."\textsuperscript{3/} He added: "we have not been as successful in forecasting the shifts in floating exchange rates precisely because they appear ... to have parted company with economic realities."

\begin{itemize}
    \item \textsuperscript{1/} \textit{Hearings}, pp. 8-9.
    \item \textsuperscript{3/} \textit{Hearings}, p. 4.
\end{itemize}
Thus, the great gain to the entrepreneur of pegged exchange rates would appear to be their predictability over time. This hypothesis seems to affirm Sohmen's point that "what reduces risk is not necessarily the relative constancy of an economic variable but its predictability."\(^1\) That is to say, the entrepreneur could base his foreign-currency decisions on the view that the existing parity would be maintained or, in periods of uncertainty, could take advantage of the high predictability of the direction of parity changes under pegged rates: that is, he could be certain which way the parity would be altered and could undertake protective and hedging adjustments to reduce his risk of financial loss and/or to increase his chance of financial gain on the basis of that certainty.

Alternatively, the absence of support for the depreciating dollar by private participants in mid-1973 was also explained to the congressional committee in institutional terms. One New York banker maintained:

"In a way, the floating mechanism relieves governments and monetary authorities from carrying their full share of the responsibility in making sure that the mechanism works efficiently. It throws most of the responsibility on to the private sector,

including both banks and their customers. I am not convinced that the private sector is able to accept all of this responsibility. The lack of a strong stabilizing force (from government) can lead, as we have seen, to erratic movements in exchange rates and the dominance of psychological and emotional factors." 1/

Official reaction: the concern about relative currency values - Where private parties were concerned about excessive daily rate fluctuations, monetary officials criticized the structure of relative currency values under floating. Many of them were convinced that the relative values for the dollar and the European currencies in mid-1973 were neither sustainable in the long run nor desirable in the short run.

On one side, officials in "strong" countries (such as Germany and Switzerland) found that market forces had pushed spot rates to levels which they thought damaged—and even jeopardized—important export firms. French officials were also concerned about the exchange-rate threat to local export firms. On the other, officials in "weak" countries (such as the United States and Britain) considered their currencies by mid-1973 to be undervalued and to be exacerbating domestic economic disturbances. The experiences in the major industrial countries are briefly reviewed in the next section of this paper.

Currency values under ad hoc floating

Official concerns about the relative values of the leading countries grew out of the international problems created by the low levels of the dollar and the pound between March and July 1973. Concern about relative currency values was common to the major European countries: Germany; France; and Britain.

The German experience - By mid-July the values of the DM and the Swiss franc had appreciated nearly 60% against the dollar as compared to the end-1970 value. In addition, the DM remained the disturbance center of European currency markets. Between June 16 and 28, for example, the European central banks had to make sales of $1.5 billion of DM to keep the Common Market float together. 1/ Thereupon the DM was revalued by a further 5.5 percent.

The revaluation quieted intra-European currency difficulties but the DM continued to appreciate against the dollar. By July 6, exchange market activity in dollars had become disorderly. On that date, the DM was 9.5% above the value on June 29; 30% above that of February (1973); 45.75% above the Smithsonian central rate of December (1971); and 65.5% above its pre-May (1971) parity. 2/

1/ During this period, only the currencies of the countries participating in the float had to be supported. The dollar rate continued to float and was not affected by the revaluation.

2/ Charles A. Coombs, "Treasury and Federal Reserve Foreign Exchange Operations," Federal Reserve Bulletin, September 1973, pp. 627. This (and later) reports are drawn on as the primary source of information about exchange-market developments and official activities in the foreign exchange market.
value of the DM rose "each day to record levels, which market professionals agreed were absurdly high. Nonetheless, efforts of traders to sell dollars against marks and other European currencies intensified, soon reaching panic proportions."

Against this background, U.S. authorities made the decision that the Federal Reserve on July 10 would commence intervention in the New York exchange market, using DM drawn under the swap line with the German Federal Bank. The change in operational strategy was confirmed in a statement on July 18 by Federal Reserve Chairman Burns and Treasury Secretary Shultz announcing that "intervention by the Federal Reserve in the New York exchange market began on July 10" and repeating the policy that "active intervention in the future will take place at whatever times and in whatever amounts are appropriate for maintaining orderly market conditions." The resumption of official intervention was intended to prevent disorderly conditions in the exchange market.

Within Germany, there was also concern about the high value of the DM. There was pessimism in German business circles about the domestic economic outlook because "in past recessions the economy had been greatly helped by high exports but that might not be the case in the future because of the rise in the value of the Mark."  


In addition, businessmen were concerned about the appreciation of the DM vis-a-vis other non-dollar currencies: the fact, for example, that the DM had risen against the dollar almost twice as much as the yen. (See Chart.) There was a growing recognition of the need on competitive grounds, even under floating rates, for a realistic pattern of relative currency values among the major industrial countries.

The French objections - French officials were particularly outspoken about the low market values of the dollar and the pound. Finance Minister Giscard d'Estaing saw in the "psychological disintegration" of the dollar since May (1973) an "utterly irrational" situation "because the psychosis of devaluation fed on itself."¹/ He added: "This 'psychological disintegration' ... gives the American economy now an important commercial advantage." The late President Pompidou referred to the "third devaluation" of the dollar.

French officials were explicit in the view that the mid-1973 exchange rate for the dollar (4.02 francs to the dollar) had severely hit important sectors of French industry. They held the view, therefore, that as a matter of national interest it was necessary to "do everything to get the U.S. dollar to return within the 4.50-4.70 franc range, since such a level is 'essential' for competitiveness of the French economy."²/


²/ Valery Giscard d'Estaing radio interview, Reuters as reported in International Monetary Fund Morning Press, July 26, 1973
The shift in Britain views - There was a turnaround in British views about the floating pound as a result of economic developments during 1973. The relaxed British approval of floating was replaced by mid-year by a concern about the economic and domestic political costs to Britain of an undervalued pound.

By mid-July, The Times noted that "for the first time since the war, the pound is undervalued ... it is too cheap." 1/ This cheapness was having "a disproportionately damaging effect" on three key elements in the U.K. economy: the higher sterling cost of imports in the balance of payments, the domestic inflation, and current government-labor negotiations on wage restraint. In the view of The Financial Times, the situation was "not only absurd but dangerous ... a devaluation of the size that has now taken place is more likely to have a perverse than a beneficial effect" because the limits on U.K. export sales were being set by "a shortage of productive capacity rather than the level of prices." 2/ Even The Economist pointed out that "a seller's market is a bad time for undercutting on prices because it adds unnecessarily to the cost in terms of resources." 3/

Professional economic opinion also recognized that the weakened pound was exacerbating domestic stabilization difficulties. Nield stressed that "mere floating is no protection against irrational speculative runs" and "sterling is now really in a weaker position than the dollar." If this reality is recognized, he concluded, "the honeymoon of floating will be over."

There was a major turn in British policy on July 27. On that day, the Bank of England raised its minimum lending rate by 2-1/2% to a level of 11-1/2%--the highest since Bank rate was first established in 1797--to strengthen the external value of the pound. In addition, Chancellor of the Exchequer Barber announced a policy of official intervention to defend the exchange market value of the pound; he told Parliament that the authorities "would not hesitate to use Britain's ample reserves if that was necessary to protect the economy from unjustified falls in the exchange rate." The interim float had become a managed one.


Were mid-1973 currency values unrealistic?

The basis for the movement toward a system of managed floating was the general view that the exchange rates at mid-year between the dollar and major continental European currencies were at unrealistic levels. But could they be so regarded? The economist would intuitively have some sympathy for the view, expressed in the Hearings, that "it is pretty clearly agreed, it (the dollar) is undervalued at the moment--by everyone except those who are trading it."\(^1\) We must therefore ask: In what sense could the dollar have been regarded as undervalued?

**Failure to reflect underlying BOP trends** - Three different ways in which the dollar might be thought to be undervalued can be distinguished. The first of them we have already discussed. That is, the quotations for the dollar then in effect could be regarded as inconsistent with a reasonable evaluation of the U.S. BOP position.

There was a general view among private parties and officials alike that the external position of the dollar was strengthening. In fact, it took only limited official market intervention and the report of improved U.S. trade figures shortly thereafter to arrest the depreciation of the dollar.\(^2\) As the chart shows, there was a

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\(^1\) *Hearings, op. cit.*, p. 9.

steady and substantial rise in the value of the dollar in terms of European currencies in July, followed by an interval of stability and then a further improvement during the oil crisis. This experience suggests that the dollar had been "oversold" in the exchange market by early July and underscores the important absence of equilibrating private speculation in circumstances in which it might realistically have been expected.  

Basis for orderly world commercial competition - A currency could be regarded as undervalued by trading partners where the prices of its traded goods were "excessively" attractive to non-residents when translated through the exchange rates. Both foreign and U.S. officials regarded the dollar as undervalued in this sense at its mid-1973 quotation. As we have noted, many British residents had the same view about the then-prevailing market value of the pound.  

A threat to domestic price and employment priorities - A currency could also be thought of as undervalued in a third sense: that is, in having disruptive effects (through the balance of payments)

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1/ Earlier Wallich had argued, as a critic of floating rates, that instead of stabilizing speculation, "it is possible ... that speculation would seek a quick profit from the initial drop in the dollar, instead of a longer run one from its eventual recovery. Then short-run speculation would drive the dollar down farther at first. In any case there is not enough assurance that speculators will not make mistakes to permit basing the world's monetary system upon the stabilizing effects of speculation." (Statement of Professor Henry C. Wallich before the Joint Economic Committee Hearings, "The United States Balance of Payments," Part 3, November 12-15, 1963, p. 597.)
on the domestic economy. Both U.S. and British officials thought
the low values of their currencies exacerbated the local inflation. 1/

At the time, impulses of "imported inflation" were transmitted to
the U.S. domestic economy through: (1) the higher U.S. cost of
imported goods; (2) the higher U.S. prices of domestically-produced
goods which competed with imports; and (3) the higher U.S. prices of
domestic goods in demand in export markets. These influences were
thought to have been particularly severe because of the low value
of the dollar. The Council of Economic Advisers reported to the
Joint Economic Committee in mid-1973 that

"There is no mechanical way to assess the total
contribution of rising international prices
to the U.S. inflation. However, conditions
in the first half of 1973 were such as to
make the influence of these prices quite
powerful." 2/

What basis for an "appropriate" exchange rate? - The
original par-value system was eventually destroyed because the
internationally-agreed structure of pegged rates failed to clear
exchange markets in an orderly fashion. But the experience in mid-1973

1/ For a particular helpful comparison of the international trans-
mission of inflation under fixed and floating exchange rates, see
Gottfried Haberler, "The International Monetary System: Some Recent
Developments and Discussions" in Approaches To Greater Flexibility
of Exchange Rates: The Burgenstock Papers, ed. by G.N. Halm (Princeton:

2/ Press Release, Statement of Herbert Stein, Chairman, et al
before the Joint Economic Committee on August 1, 1973, mimeograph, p. 10.
demonstrated a corollary proposition: that the currency values which may clear currency markets need not automatically be regarded as appropriate either (1) to serve as the basis for orderly commercial competition with trading partners; or (2) to be consistent with domestic employment, growth or current-account targets of the national authorities. The market-determined spot rate at any moment may also fail to reflect the country's underlying international economic strength or weakness. Because of this experience, it was concluded, "no responsible government is prepared to allow the international value of its currency to be determined solely by the untrammeled play of market forces."

Concluding observations

The mid-1973 experience with undervalued rates for the dollar and the pound convinced private parties as well as government officials of the need for central-bank intervention as an integral part of the emerging exchange-rate mechanism. It made clear that the future payments system would have to combine elements both of exchange-market flexibility and of official intervention.

But the experience did not demonstrate how, in practical terms, the two elements were to be reconciled. Accordingly, proposals for the reform of the exchange-rate mechanism differ mainly in the ways market flexibility and official intervention are to be balanced. Some official spokesmen have emphasized the need for "stable but adjustable parities" as the center-piece of the system; but they have come to accord to exchange-market processes a much more significant role in determining relative currency values than they had been prepared to do only a few years ago. On the other side, academic proponents of a system of flexible exchange rates have come to accept the reality of official intervention on a continuing basis. For example, Haberler recently wrote: "Experience also shows that managed floating, if the management is moderate and avoids rigid pegging of a particular rate, does not make floating ineffective." 1/

How the future exchange-rate mechanism will combine the two elements remains undetermined at this point. In particular, there is no agreement on the extent to which the national monetary authorities ought to be expected--or committed--to "smooth" or "manage" or "peg" daily market rates. At the recent international reform meetings in Washington in late March, special attention was devoted to the question of "guidelines" for floating--that is, to a discussion of the set of principles to govern the intervention policies of central banks in the foreign-exchange market. Because of the focus at the meeting on the problems associated with floating, some observers were led to conclude that a return to a payments system of pegged exchange rates or par values was unlikely. 1/

Reform as an evolutionary process - The need for guidelines for a period of ad hoc or of managed floats reemphasizes once again the international character of national exchange-rate decisions in a rapidly-integrating global economy. Officials in trading countries continue to seek international mechanisms to ensure that their national interests are not harmed by the use of exchange-rate policy by their trading partners. To this end, agreed codes of behavior or guidelines have to be drawn up and procedures for multilateral consultations established. But the creation of effective

multilateral surveillance procedures may be no less complicated a process under floating exchange rates than it was under pegged ones.

For this reason, the fact that the day-to-day needs of world commerce and finance are being effectively met under current ad hoc currency arrangements is fortunate. For it relieves us of a time-constraint to complete the reform negotiations expeditiously.

It may turn out, in fact, that agreement on the main elements of a new payments system can be reached only after extended experimentation. Already, there is evidence that the reform of the world payments system may be an evolutionary enterprise, extending over many years, and not an abrupt wholesale overhaul of the payments mechanism in a single step. In that case, changes in practices and in surveillance procedures are likely to be introduced only gradually and confirmed only after extended experience: the mechanisms of the new system might continue to evolve for a great many years.

Domestic stabilization, the key to effective world monetary reform - Finally, the resilience of exchange markets in 1973 with ad hoc floating ought not make us complacent about the stability of current exchange-rate arrangements. The trading countries are gradually adjusting their BOPS to the world economic changes of 1973, but aggregate current-account deficits of the non-oil countries remain large. They have not worked out agreed procedures for distributing these deficits in an orderly fashion. In addition, massive BOP financing problems lie ahead as we look beyond 1974.
Nonetheless, the urgent current problem remains the world-wide inflation. It has indefinitely postponed a return to a system of "stable but adjustable" par values. Can conditions in exchange markets continue to be orderly if the domestic economies of so many countries remain badly out of balance? Only by finding ways to bring our domestic economies into better balance can we hope for progress toward a stable world monetary order.
Appendix I

Chronology of Foreign Exchange Market Disturbances, 1967 to 1973

1967:

Nov. 20  London exchange market closed by a special bank holiday following announcement of devaluation of the pound on Saturday, November 18.

1968:

March 15  London gold market closed by a special bank holiday in advance of meeting on Saturday, March 16 of representatives of the central banks active in the Gold Pool in Washington.

May 20  As a result of strikes throughout French economy, the Paris exchange market was closed for all practical purposes.

Nov. 20-22  Exchange trading effectively suspended in Germany, London and in several other major European centers, while Finance Ministers and Central Bank Governors of the Group of Ten nations met in emergency session in Bonn. Trading resumed on November 25.

1969:

Sept. 25-29  The German authorities suspend official exchange dealings until after the election on September 28. The central bank reentered the market on Monday morning but was flooded with $245 million in the first hour and a half of trading. At that point, the DM was permitted to float temporarily--by suspension of intervention at the ceiling. The DM was revalued on October 24 at a higher parity.

1970:

May 31  The Canadian authorities no longer prepared to defend parity limits, setting the rate for the currency free to find its own level.

1971:

May 5-10  After buying $1 billion on May 3 and 4 and a further $1 billion in the first 40 minutes on May 5, the trading limits for the DM were temporarily suspended. The central banks of the Netherlands, Switzerland, Belgium, and Austria also closed official support of the U.S. dollar. Over the weekend, the Swiss franc
and Austrian schilling were revalued and the DM and Dutch guilder continued to float upward (with the official parity unchanged). Frankfurt exchange market reopened on May 10.

Aug. 15

U.S. announce temporary suspension of convertibility of dollar into gold and other reserve assets.

Aug. 16-20

The major European exchange markets were closed for a week and reopened on Monday, August 23, on an uncoordinated basis after failure of attempts to develop some joint policy response to U.S. economic measures.

Dec. 20

Most European exchange markets were officially closed on Monday, following agreement on December 18 of the Group of Ten Countries on adjustments in the exchange-rate structure of these countries, but reopened the next day.

1972:

June 23

The U.K. authorities announced their decision to float the pound and, shortly thereafter, the European currency markets were then closed down until the Community finance ministers could agree at a meeting in Luxembourg on Monday (June 26) the following Monday to defend (with exceptions) their Smithsonian parities and the Common Market band.

1973:

Jan. 22

To control capital outflows, the Italian authorities introduced a dual exchange market in which the rate applicable for capital transactions was allowed to float.

Jan. 23

Partly in response to extraordinary capital inflows from Italy, the Swiss authorities decide not to take up intervention purchases in the dollar market.

Feb. 12-13

Official exchange market dealings were suspended in Germany on Monday, February 12, and European and Japanese exchange markets were closed on Monday and Tuesday. On Monday evening, U.S. Treasury Secretary Shultz announced a 10% devaluation of the dollar.

March 1-17

All major European exchanges closed on March 1 and a series of emergency meetings convened to resolve the crisis. The markets were then officially reopened on March 19.
# The Emerging Exchange-Rate System (Early 1974)

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<tr>
<td>1967 to 1973</td>
<td></td>
</tr>
</tbody>
</table>