THE DOLLAR CRISIS--

AN ANALYSIS AND MODEST PROPOSAL

by

Hyman P. Minsky

Professor of Economics

Washington University, St. Louis, Mo.
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The 1978 decline of the dollar marks the fourth dollar crisis in a decade: the first, in 1968, led to the demonitization of gold; the second, in 1971, led to the devaluation; and the third, in 1977, led to the abandonment of the Bretton Woods system of fixed exchange rates for the current regime of dirty floating rates. These currency crises have been followed by varying combinations of inflation, recession and stagnation in the different trading partners: in the United States, both inflation and unemployment have been worse after each of these crises than before. The flexible exchange rate system has not been a smashing success; the world economy has deteriorated, not improved, over the past five years. The world economy performed better when the dollar was strong and exchange rates were fixed.

If the United States is to be anything but a chronically sick giant in the foreseeable future, its economic policies must reflect the constraints imposed by the reserve currency status of the dollar; i.e., by the fact that the dollar is an international as well as a national money. Before effective policy can be adopted, it is necessary for the public and policy makers to understand how financial relations that are due to the reserve currency status of the dollar affect the behavior of the economy. Such an understanding is not now evident. Both domestic and international economic policies are based upon theories which either ignore or poorly specify financial influences upon system behavior. These theories lead to mistakes.
in diagnosis of what is wrong and to prescriptions for policy that tend to make things worse, not better.

In what follows, we will take it for granted that a reserve currency or an international money is necessary for the effective functioning of today's complex international trading, investing, and financing economy. Furthermore, the dollar is the reserve currency and it is assumed that there is no real alternative to using the dollar as the reserve currency in the visible future.

The deterioration of the status of the dollar over the past decade is a signal that something basic is wrong with the American economy. Unfortunately, this signal does not set off market processes that are effective in correcting what is wrong. International trading and financial markets do not constitute a self-equilibrating system. This is so because changes in exchange rates set off movements in output and financial markets which feed back upon and further disequilibrate exchange markets: the market for dollars, unlike the market for peas and pea shooters, has pervasive systemic effects.

The international financial system can produce much stronger signals than it is now sending: these take the form of a financial crisis accompanied by the failure of financial organizations. History suggests that such signals trigger a debt deflation, such as occurred in 1929-33. A debt deflation would substitute the crisis of a world-wide depression for the exchange rate crises and chronic inflation and sluggishness of the past decade.

Policy makers must be aware in 1978 that the bank failures of 1974/75 nearly set off a debt deflation and that the international financial system
is more fragile in 1978 than it was in 1973. It would be more difficult to abort the consequence of a financial crisis now than was true in 1975; even so, the financial crisis of 1974/75 ushered in the most serious recession since World War II.

To understand the current crisis, a "banking" rather than a "trading" view of the United States economy has to be adopted. The theory that now guides policy views every country as if it were a "trading organization"; the theory virtually ignores financial and banking relations.

But, in truth, the dollar, as the preeminent reserve currency, is the unit of denomination of a vast array of international financial contracts. These contracts determine a matrix of commitments to pay dollars that involves a multitude of central banks, governments, business organizations, and persons. This in effect makes the United States the banker for the world economy. To understand how the American economy is affected by its international posture and how policy can affect that posture, it is necessary to treat the American economy as if it was a bank.

A bank is a highly levered organization whose assets are almost exclusively financial. These financial assets consist of loans and various types of securities. The loans set up dated, or contingent, 'cash flows' to the bank, and the securities can be used to generate cash by being sold in markets in which there are always customers ready and able to buy. The debts of a bank are mainly demand and time deposits--including various types of certificates of deposit. The deposits of a bank are of a shorter term than
the assets—potentially, during any short period, the cash flow out of a bank can exceed the cash flow to the bank as stated by the contracts the bank owns. A bank is vulnerable to losing deposits which, for a loss of cash, if carried far enough, will make it impossible for the bank to fulfill its obligations. A bank official, who is responsible for assuring that the bank has sufficient cash, has a number of options, such as selling securities or borrowing (or even borrowing from the Federal Reserve), which he can use to generate a cash flow toward the bank. A bank is viable only as it can "force" a flow of cash in its favor by actions which do not have a serious adverse effect upon its profitability or its survival.

The dollar is the currency of denomination of many international transactions and much of international indebtedness. One aspect of the reserve currency status of the dollar is the huge amount (variously estimated at $500 to $600 billions) of deposits denominated in dollars at overseas branches of banks chartered in the United States, as well as in banks chartered by other countries. These deposits reflect the interposition of the "bank" guarantee between a borrower, whose liability is an asset of the bank, and a depositer, whose asset is a liability of the bank. Once loans are booked, the borrowers have to "operate" in the economies in which they function to acquire dollars. One aspect of the current crisis is that a significant but not known portion of the assets of the banks holding Eurodollars arose out of the "recycling" of earnings by the oil exporting powers to poorer or less developed countries. At present, some of these poorer countries are not very successful in generating the dollars needed to
meet their obligations. Thus the cash flows to the international banks on account of outstanding assets falling due are less than was anticipated. The inability of the debtor countries to fulfill their obligations means that the effective demand for dollars in the market falls short of the effective demand indicated by bank assets. Part of the current dollar crisis represents the "chickens" of the glib recycling process of 1975 through 1977 coming "home to roost." The Federal Reserve was remiss in not taking effective action after 1975 to prevent the explosive growth of the offshore deposits of American banks. However, this is water over the dam; recriminations and apportionment of blame serve no useful present purpose. It is necessary for policy to take the huge amount of offshore dollar deposits as an initial position and develop ways to minimize their adverse effects.

A banker's problem exists for the banks with offshore deposits: they have to be able to withstand a run of withdrawals from their dollar denominated deposits. This means that these banks individually have to be able to generate a dollar flow in their favor by either selling securities, borrowing, or decreasing their lending. If there is a generalized desire to shift from holding dollar deposits to holding deposits denominated in another currency, then the banks individually will be unable to generate a dollar flow in their favor. In these circumstances, either market processes or Federal Reserve actions must be able to generate a flow of dollars to the set of all international banks which have dollar deposits.

Because the dollar is a reserve currency, the Federal Reserve and the
United States government have to operate under the constraint that any significant outflow of deposits denominated in dollars from banks or any depreciation of the dollar relative to the significant alternative currencies will be met by actions that effectively stop the flow of the depreciation. That is, whereas it is possible for other currencies to be freely fluctuating relative to the dollar and for the Central Banks of these other countries to stand aside while their currency depreciates, the Federal Reserve and the government of the United States do not have this freedom; they must behave as if the United States is on a fixed exchange or gold standard. This is so because, unless the government or the Federal Reserve can sustain the exchange value of the dollar, a run on the various banks that have offshore deposits will occur. Such a run will lead to a collapse of asset values and a rupturing of normal business financing practices as the banks endeavor to raise dollars. The exchange value of the dollar must be maintained, or at least not allowed to depreciate, relative to other currencies, by more than modest interest rate differentials can offset if asset values and thus investment is not to be disrupted.

In order to understand what a country's balance of payments posture must be if it is to function as the center of the world's monetary system, it is helpful to look at the way the Bank of England operated the world's monetary system during its period of greatest ascendancy, the twenty five years just
prior to World War I.\footnote{The basic contours of the British international position in this era can be found in R.S. Sayers, \textit{Bank of England Operations, 1890-1914}. (London: P.S. King \& Sons, Ltd., 1936, XXIV, 142 pages).} This look at the behavior of the Bank of England is important, for it will help us put aside the idea that the balance of payments problem of a reserve currency country can be treated as if the country was only or even primarily a "trading" unit.

The balance of payments of any country can be broken down into four tiers: (1) current imports and exports of goods and services (including remittances and other invisibles); (2) receipts and expenditures due to income from capital assets owned abroad; (3) long-term private investments and (4) short-term debts or the movement of international reserves (gold) among countries.\footnote{In addition to the four tiers, there is a "policy intrusion" in the form of military expenditures and government investment abroad in the contemporary balance of payments.} In the era of Britain's dominance, Britain normally ran a chronic deficit on the current trade account, but this deficit was more than offset by the inflow of income from investments. Thus, there was a surplus in the British balance when the current and capital income accounts were summed.

In this era, the financing of the capital development of much of the world was by means of long-term debts and equities that were sold in London. This placement activity was so great that the British balance of payments, after long-term capital movements were taken into account, was usually in deficit. This deficit resulted in an increase in the pound balances in
British banks or invested in the London money market by foreign central banks, companies, and individuals.

Whenever such foreign-owned pound balances exceeded the amount the various holders wanted to hold, they would "repatriate" their balances to their home country. This would lead to a decrease in the Bank of England's gold stock. In this epoch, the Bank of England had one primary responsibility—to protect the pound's gold value by assuring that outstanding pounds could be converted into gold. When gold flowed out, the Bank of England raised the discount rate—the interest rate at which it supplied finance to the London money market. This led to a rise in all interest rates in the London money market, including the terms at which offshore governments and business could raise money.

The rise in interest rates would make it more attractive to keep short-term funds in Britain, even as it made it less attractive to float new issues of bonds and stocks in London. Throughout the quarter-century before World War I, these purely financial market transactions were almost always sufficient to reverse an outflow of gold. The Bank of England was able to maintain a strong pound even as it supplied international reserves to the rest of the world. However, the supply of international reserves was mainly caused by the use of the London money market to finance the capital development of much of the world; the deficit was not mainly caused by a trade deficit that was not offset by capital income.

From the above, it is clear that a reserve currency must be strong, even
as the amount outstanding increases as the demand for such funds for international transactions and liquidity increases.

In the years immediately after World War II, the international economy suffered from a dollar shortage. The United States was running a large surplus on its balance of trade plus capital income accounts. United States government loans and grants, together with offshore investments by United States business, were not always sufficiently great to offset the United States surplus on current and capital income accounts. Foreign central banks went through periods in which they had to borrow short and restrict their economy to protect their small margin of international reserves. During this epoch, the United States built up its overseas investments.

The 1964 columns in the attached table illustrate a situation in which the basic balance of payments is strong and the growth of the "world's" liquid assets reflects a banking arrangement. In 1964, the United States ran a surplus on both merchandise and investment income. The basic balance was in surplus by $7.8 billion. Some $3.8 billions were offset by military and other policy-determined spending, so that there was a $4.0 billion surplus before private investment. Some $6.6 billions of private investments took place in 1964; the world's acquisition of short-term dollar balances on a net basis was $2.6 billions. Even as the United States was running a surplus in its basic balance, it was supplying liquid balances to the rest of the world.

As the various economies recovered from World War II, as the United States
U.S. BALANCE OF PAYMENTS
1964 - 1971 - 1977 (First Three Quarters)
Billions of Dollars

<table>
<thead>
<tr>
<th>Tier I</th>
<th>1964</th>
<th>1971</th>
<th>1977 (3 Quarters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise</td>
<td>25.5</td>
<td>43.3</td>
<td>91.9</td>
</tr>
<tr>
<td>Expend.</td>
<td>18.7</td>
<td>45.6</td>
<td>113.3</td>
</tr>
<tr>
<td>Balance</td>
<td>+6.8</td>
<td>-2.3</td>
<td>-21.4</td>
</tr>
<tr>
<td>Net Travel, Transportation</td>
<td></td>
<td>+.2</td>
<td>+1.7</td>
</tr>
<tr>
<td>and Services</td>
<td>-.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remittances, Pensions and</td>
<td>-2.8</td>
<td>-3.7</td>
<td>-3.7</td>
</tr>
<tr>
<td>Other Unilateral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Trade Balance</td>
<td>+3.9</td>
<td>-5.8</td>
<td>-23.4</td>
</tr>
</tbody>
</table>

| Tier II                      |            |            |                   |
| Investment Income            | 5.4        | 9.5        | 19.2              |
| Expend.                      | -1.5       | 4.9        | 10.3              |
| Balance                      | +4.6       |            | +8.9              |
| Basic Balance: Trade and     | +7.8       | -1.2       | -14.5             |
| Investment Income            |            |            |                   |

Policy Intrusion

| Net Military Transactions   | -2.1       | -2.9       | +1.4              |
| U.S. Government Investment  | -1.7       | -1.9       | -2.9              |
| Abroad                       |            |            |                   |
| Basic Balance and "Policy:   | +4.0       | -6.0       | -16.0             |
### U.S. Balance of Payments

1964 - 1971 - 1977 (First Three Quarters)

**Billions of Dollars**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Private Investment (Net) Abroad</td>
<td>-6.6</td>
<td></td>
<td></td>
<td>-9.8</td>
<td></td>
<td></td>
<td>-10.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tier IV**

<table>
<thead>
<tr>
<th>Foreign Acquisition of Short-term Dollar Balances and Gold from U.S. Stockpile</th>
<th>1964</th>
<th>1971</th>
<th>1977 (3 Quarters)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2.6</td>
<td>-15.8</td>
<td>-26.2</td>
</tr>
</tbody>
</table>

engaged in adventures like Vietnam, and as United States corporations invested abroad in the process of becoming multinational, the "dollar shortage" gave way by the late 1960's to a large scale buildup of short-term dollar balances in excess of desired balances for trade and liquidity. It was at this time that De Gaulle accused the United States of exporting inflation to Europe and of financing a takeover of European business by borrowing from Europe in the form of dollar balances.

The devaluation of 1971 was the culmination of a period in which the growth in overseas holdings of short-term dollar balances exceeded the amount desired for transactions and liquidity. As is evident from the attached table, by 1971 the current balance, the Tier I accounts, were in a substantial deficit which investment income was not quite able to offset: There was a minor Basic Balance deficit of $1.2 billions. To this minor basic deficit policy intruded a further $4.8 billions of overseas expenditures. Whereas the basic balance in 1964 could finance some $3.8 billions of policy-determined expenditures abroad, the basic balance by 1971 was no longer able to afford such expenditures. In 1971, net private foreign investment was 9.8 billions. The foreign acquisition of dollar balances amounted to $15.8 billions.

The build-up of dollar balances in excess of desired balances, as illustrated by the 1971 data, led to market pressures on the value of the dollar that first forced the United States off of the gold standard, then caused a devaluation, and finally led to the adopting of the current system of flexible exchanges. The explosion of oil prices in 1973 lit a time bomb
that went off in 1977, when a $40 billion oil bill and $27 billion deficit on trade account triggered the current crisis.

The data for the first three quarters of 1977 stands in sharp contrast to that for 1964. In 1977, the current trade and remittance balance was $23.4 billions in deficit for three quarters, which dwarfed the investment income of $8.9 billions. As a result, the basic balance on trade and investment account was $14.5 billions in deficit. As a result of the end of the Vietnam War and the disillusionment with foreign aid, the net military spending and government "investment" abroad items fell to $1.5 billions in the first three quarters of 1977; before net United States investment abroad, the deficit stood at $16.0 billions. Adding the $10.2 billions of private net investment abroad leaves us the $26.2 billion addition to the world's supply of short-term dollar balances.

In 1977, the dollar balances of private parties and central banks grew faster than their felt need for such deposits at current interest rates. An attempt to decrease holdings of dollars leads to a decline in the dollar on the exchanges, and of course any such decline in the dollar on the exchanges further decreases the felt need to hold dollars. Thus, the decline in the dollar reflects portfolio adjustments in the light of the recent past, present, and expected near future balance of payments position of the dollar. Only indirectly and peripherally does it reflect differences in prospective inflation rates or in monetary growth. Furthermore, because of the critical role of United States oil imports in "setting up" the basic Balance of Payments
position of the United States, the current decline in the dollar only marginally reflects the somewhat sluggish expansion of the German and Japanese economy. The predicament of the American dollar is mainly caused by the American economy, and can only be alleviated by measures which affect the United States economy.

It was mentioned earlier that a fall in the dollar has pervasive effects. First of all, it has a direct impact on those banks, both United States and foreign, which have money market liabilities and deposits in dollars that are owned by governments, businesses and individuals whose operations make them indifferent to the currency in which their assets are denominated. These banks are vulnerable to a run as these units seek to denominate their assets in other currencies. Even if holders tend to roll over maturing dollar assets, these holders will, in the margins, hold larger portions of new accruals of short-term funds in currencies other than dollars. Because of this pressure on banks, a "reluctance to lend" can easily become apparent. This directly affects the value of assets and the behavior of the world economy.

In addition to the increase in the vulnerability of banks due to the depreciation of the dollar, a fall in the dollar affects domestic output and inflation in the following ways:

1) It makes the incomes of the citizens of the countries whose currencies are appreciating higher when measured in dollars.

2) It lowers the price of United States commodities in the rest of the world.
3) It makes foreign commodities more expensive in the United States. Even though item 3 above has been masked to date by the continued denomination of oil in dollars—a situation which is subject to change—the effects of a rapidly depreciating currency are highly inflationary. In a world with pervasive international financial interrelations and relatively unobstructed trade flows, the path for a reserve currency country largely runs from exchange rate changes to domestic inflation. It is not an "accident" that the United States—inflation has been much worse since 1968, when gold was demonitized, than prior to 1968. At current exchange rates, the price of beef is much cheaper in the United States than in either Japan or Germany, and this margin increases every time the dollar falls. A freeing of trade in beef—which is taking place because of the price differentials—will tend to pull the United States price of beef to the German and Japanese levels, causing visible inflation in the United States. Similarly, once the OPEC countries stop denoting oil in dollars, every fall in the dollar will be immediately translated into a rise in the price level.

Once the nature of the problem is understood—that the United States economy must be considered as a bank that has for a time lost its ability to force a cash flow in its favor—the contours of a policy to resolve the problem become evident. The four points of a meaningful program are:

1) a serious attack in the energy problem, recognizing that the energy problem is a balance of payments problem and not a question of the world running out of oil. However, because any energy program that is effective will not
immediately turn the balance of payments around,

2) the United States Treasury must sell long-term (ten to twenty years) United States Government Bonds denominated in Swiss Francs, German Marks, Japanese Yen, British Pounds, Dutch Guilders and other strong currencies. These bonds should be issued with the cooperation of, but not necessarily to, foreign central banks. The amount of such bonds sold each year should cover the basic balance of payments deficit of the year. The United States Treasury should undertake to fund its basic deficit in long-term bonds each year. As a result of these first two items in the program, the United States will no be generating a supply of dollar deposits because the weakness of its basic merchandise and services trading accounts more than offsets its investment income. In terms of the table, $14.5 to $16.0 billions of such bonds should be issued to fund the basic deficit of the United States in the first three quarters of 1977.

3) Because the first two items will lead to a "balanced" two-tier balance of payments and because a net issuance of long-term private and government issues will still take place in the New York market, the United States can expect to run a deficit in the three-tier balance of payments. In order to prevent this from leading to a surplus of dollar denominated short-term balances which will depreciate the dollar, the United States should undertake to sell gold at the market price in order to keep short-term dollar balances scarce.
4) Any such program will take time to become effective. The Federal Reserve should use its classical weapon of interest rate policy to raise the market interest rates by about 100 Basis points—1%—over their present levels. Perhaps we can say that a 10% prime rate will draw "gold" from the "gnomes."

The reason for the first policy measure is self evident. The present and prospective oil import bill leads to a nut in the United States balance of merchandise trade that is too large to offset by other exports and investment income except in years when the United States economy is depressed or when world agricultural prices are very high. Supply expansion possibilities are of limited use because of the capital intensity of most alternatives. It seems clear that almost all supply expansion alternatives are so capital intensive and risky that they will not be undertaken as unsubsidized private ventures even if oil prices are significantly higher than at present.

The United States bill for imported oil will be reduced to manageable proportions if the United States moves partially, even if not wholly, to the energy/GNP ratio of Sweden or West Germany. Which specific techniques are used to force or induce energy conservation is really a second order question. I believe that a simple program of well-head taxes and import duties at about 50% of the current barrel price of oil along with the deregulating of oil would be a giant step towards the oil conservation we need. Significantly decreasing the oil import bill is what is needed; it matters little how this is done.

The second measure—the funding of what is called the two-tier balance
of payments deficit into long-term bonds denominated in the various strong currencies—is a more novel proposal than oil conservation. Even if Draconian oil conservation measures are adopted, there will still be a sizeable deficit in the balance of merchandise trade for several years because substantial oil imports will be needed. A substantial amount of dollars will be thrown onto the international exchange markets each year until oil conservation takes hold. These dollars have to be "sterilized" and long-term borrowing in offshore currencies is an apt way to do this.

U.S. Treasury bonds of 10 to 20 year duration that are denominated in offshore currencies are "hostages" that the United States Treasury offers to the lenders: a hostage for the policy objective of sustaining, if not gradually increasing, the exchange rate of the dollar against these principal currencies. This is so because the dollar value of this debt moves with the exchange rate; every time the dollar depreciates, the dollar debt increases, whereas an appreciation of the dollar decreases the dollar debt.

The positive symbolic effect of the United States issuing securities denominated in other currencies should not be underestimated. A substantial amount of long-term debt that is denominated in some other currency is a strong commitment not to have your currency depreciate: in fact, the issuance of debt denominated in principal trading partners' currency is a commitment to behave as if the gold standard still ruled.

The sale—and purchase—of gold to decrease or increase the rest of the world's claims against dollars is mainly a measure to soak up some of the
deficit that will result from United States net investment abroad. If
gold is not sold, then the long-term bond issues would have to be larger than
if gold is sold. Perhaps the best way to view gold sales is as a substitute
for the issuance of some long-term Treasury bonds denominated in offshore
currencies: a substitution that can be easily turned on and off.

The discount rate should henceforth be used as a control variable in the
interest rate structure. A rise in interest rates, for balance of payments
purposes, would draw various types of deposits from abroad, which will
strengthen the position of banks with dollar denominated assets.

The key to the dollar's stability in the near terms depends upon the
course of the two tier balance of payments and the willingness of the Treasury
to sell substantial amounts of bonds denominated in offshore currencies.
The aim of these sales is not to temporarily shore up the dollar, but rather
to generate a cash flow situation that is compatible with the stability of
the dollar.

A paradox is imbedded in the above proposals. Once it is evident that the
United States is adopting a strongly conservationist energy program and that
the United States Treasury will issue whatever amount of long-term securities
that is needed to absorb the deficit on merchandise and investment income
account, it will be unnecessary to issue any substantial amount. This is so
because there is a vast overhang of funds available for investment in United
States common stocks, long-term bonds and businesses in the offshore deposits.
Once the international banking and financial community becomes convinced
that the United States understands and accepts its reserve currency responsibilities and thus will tailor its policies so that the dollar does not depreciate relative to the principal currencies of the world, a huge movement of funds from the rest of the world to the United States will take place. Once the dollar stops depreciating, it will soon tend to appreciate!

Because of the movement of offshore funds to the United States, a strong stock and bond market will follow the stabilization of the dollar. Such a strong market will do wonders for the United States investment climate. If we have the good sense to persevere in oil conservation in the face of prosperity, a capital investment boom of quite unprecedented scale will ensue. Perpetual prosperity is unattainable in a world with capitalist financial institutions, but national economic policies which conserve oil and maintain the exchange value of the dollar will lead to an extended period of relatively tranquil prosperity, such as characterized the 1950's and the first part of the 1960's.