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## **ON THE DOLLAR**

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### **Abstract**

This paper reviews the position of the dollar as an international currency. A variety of measures show that in the 1980s the dollar lost a bit of ground to its competitors. Conditions for an international currency, and advantages and disadvantages of having one, are enumerated. The history of the dollar's rise to ascendancy after World War I, and its persistence as an international currency even after the end of the Bretton Woods era, are also discussed.

The American dollar plays two roles. First, it is the currency of the United States. Second, despite some recent loss of position vis-a-vis other major currencies, it remains easily the world's most important vehicle currency, reserve currency, and all-around international currency. At times these two roles can come into conflict, as when American policy-makers see domestic reasons to allow the value of the dollar to fall while the global interest in having a stable numeraire and store of value may dictate keeping its value steady.

We begin by considering the extent to which America's money is still also the world's money, and the extent to which the yen, mark, and other currencies may be gaining on the dollar. We then proceed to consider what conditions determine the use of the dollar as opposed to other currencies. Next we briefly summarize the history of the dollar's role in the twentieth century. We conclude with the issue of reform of the world monetary system.

#### THE POSITION OF THE DOLLAR IN THE CURRENCY STANDINGS

The accompanying tables offer statistics on the relative importance of the major currencies in a number of categories: invoicing foreign trade, denominating international financial flows, pegs for smaller countries' currencies, reserve holdings of central banks, and foreign exchange trading. The dollar is easily the leading currency by all measures, but its relative role clearly declined during

the course of the 1980s. (This pattern continued a trend begun in the 1970s; see Kenen, 1983.) The estimated fraction of trade invoiced in dollars (for overall trade reported by the six largest market economies plus OPEC) declined from 32.8 per cent in 1980 to 25.7 per cent in 1987. (This computation is based on Thomas and Wickens, 1991, p.14. The frequency of dollar-denomination shrank from 83 per cent in the early 1980s to 77 per cent in 1989 in external bank loans, from 63 per cent to 52 per cent in external bond issues, and from 74 per cent to 60 per cent in eurocurrency deposits, as shown in Table 1. Turning from private-sector use of international currencies to public-sector use, the proportion of fixed-rate currencies that pegged to the dollar declined from 54 per cent in 1980 to 43 per cent in 1990 (as shown in Table 2), while the share of central banks' holdings of foreign currency reserves allocated to dollars declined from 69 per cent in 1980 to 60 per cent in 1989 (as shown in Table 3).

Two other currencies are in a close contest for second place after the dollar: the yen has surpassed the mark by some measures, but is still behind by others. The question of fourth place also depends very much on the criterion used. The pound does rather well in foreign exchange trading and external bank loans, the Swiss franc in international bond issues, the French franc and SDR in the number of countries that peg their currency to them, and the ECU in international reserve holdings among European central banks. (If and when Europe's individual central banks disappear into monetary union, their holdings of ECUs will disappear from the table, though

today's holdings by other central banks of marks, francs and pounds will presumably be replaced by holdings of ECUs that are at least as large.)

#### CONDITIONS FOR AN INTERNATIONAL CURRENCY

What are the conditions for a currency to become an international currency? One can think of four major sorts of conditions. (Similar lists are given by Bergsten, 1975, and Tavlas, 1990.)

(1) History. There is much inertia in the system, and for good reason. An individual (exporter, importer, borrower, lender, or currency trader) is more likely to use a given currency in his or her transactions if everyone else is doing so. For this reason, the world's choice of vehicle currency is characterized by multiple stable equilibria. Earlier in the century, the pound remained the world's leading international currency somewhat longer than purely contemporaneous economic factors might have dictated. In the present context, this favors the continued central role of the dollar.

Krugman (1984) showed how there can be multiple equilibria in use of an international currency, developing some informal ideas of earlier authors such as Kindleberger (1981), McKinnon (1979), and Swoboda (1969). Matsuyama, Kiyotaki and Matsui (1991) analyze this problem with the theory of random matching games.

(2) Patterns of trade and finance. The currency of a country that has a large share in international trade and finance has a natural

advantage. By such measures, Japan should clearly be number 2, after the U.S. and before Germany, in light of the large size of the Japanese economy. If the measure of being a vehicle currency is how often it is used in the invoicing and financing of international trade, then other aspects of the pattern of trade may also be relevant.

(3) Financial markets that are not only free of controls, but also deep and well-developed. The large financial marketplaces of New York and London benefit the dollar and pound relative, for example, to the deutschemark.

(4) Confidence in the value of the currency. Even if an international currency were used only as a unit of account, a necessary criterion would be that its value not fluctuate erratically. An international currency is also used as a form in which to hold assets: (i) firms hold working balances of the currencies in which they invoice, (ii) investors hold bonds issued internationally, (iii) central banks hold currency reserves, and (iv) households and small businesses in hyperinflation-prone countries may hold foreign cash.

(Cooper, 1986, p.7-8, conjectured that in 1984, over \$20 billion of U.S. currency was circulating in foreign countries.) Here confidence that the value of the currency will be stable, and particularly that it will not be inflated away in the future, is critical.

The dollar lost 47 per cent of its purchasing power between 1973 and 1990, as compared to a 24 per cent loss during the longer time period 1948-72 (calculated from the CPI, logarithmically). The

monetary authorities in Japan, Germany, and Switzerland, have recently established better track records of price stability than has the United States. The mean and variance of the inflation rate in the United States in the 1980s were both higher than in those three hard-currency countries, though lower than in the United Kingdom, France, Italy, and many other countries. (E.g., Tavlas and Ozeki, 1991.)

Another negative for the dollar is the fact that the United States began to acquire large and growing international debts in the 1980s.

It is sometimes said that net creditor status is a necessary requirement for a country to have an international currency. Even if the Federal Reserve does not succumb to the temptations or pressures to inflate away the U.S. debt, a continuing U.S. current account deficit could induce a further depreciation of the dollar. Such fears work to make dollars unattractive. The loss of key currency status and the loss of international creditor status have sometimes been associated -- along with such non-economic factors as political prestige and military power -- in discussions of the historical decline of great powers.

#### ADVANTAGES OF HAVING AN INTERNATIONAL CURRENCY

One can think of four advantages to a country of having its currency play a large role in the world.

(1) Convenience for the country's residents. It is certainly more convenient for a country's exporters, importers, borrowers and

lenders to be able to deal in its own currency than foreign currencies.

The global use of the dollar, as with the global use of the English language, is a natural advantage that American businessmen tend to take for granted.

(2) More business for the country's banks and other financial institutions. There need be no firm connection between the currency in which banking is conducted and the nationality of the banks (nor between the nationalities of the savers and borrowers and the nationality of the intermediating bank). Nevertheless, it stands to reason that U.S. banks have a comparative advantage at dealing in dollars, British banks at dealing in pounds, etc.

(3) Seignorage. This is perhaps the most important advantage of having other countries hold one's currency. They must give up real goods and services, or ownership of the real capital stock, in order to add to the currency balances that they use. This was the basis of European resentment against the U.S. basic balance deficit in the 1960s, and against the dollar standard to the extent that the European need to acquire dollars was the fundamental origin of the deficit, as will be seen below.

(4) Political power and prestige. Britain's gradual loss of key currency status was simultaneous with its gradual loss of political and military pre-eminence. As with most of the other benefits and conditions mentioned above, causality here flows in both directions. The benefits of "power and prestige" are decidedly nebulous. Nevertheless, the "responsibilities commensurate with Japan's new

status as a great economic power" that many Americans have urged on Japan in the abstract, will -- when realized in the concrete -- increasingly be seen as Japanese gains at U.S. expense.

#### DISADVANTAGES OF HAVING AN INTERNATIONAL CURRENCY

One can think of two disadvantages from the viewpoint of a key-currency country. They explain why Japan and Germany have in the past been reluctant to have their currencies held and used widely.

(1) Larger fluctuations in demand for the currency. It is not automatically clear that having one's currency held by a wide variety of people around the world will result in greater variability of demand. Such instability is probably more likely to follow from the increase in the degree of capital mobility described under condition (3) above, than from key currency status per se. Nevertheless, central banks are particularly concerned that internationalization will make it more difficult to control the money stock. This problem need not arise if they do not intervene in the foreign exchange market; but the central bank may view letting fluctuations in demand for the currency be reflected in the exchange rate as being just as undesirable as letting them be reflected in the money supply.

(2) An increase in the average demand for the currency. This is the other side of seignorage. In the 1960s and 1970s, the Japanese and German governments were particularly worried about the possibility that if assets were made available to foreign residents, an inflow

of capital would cause the currency to appreciate and render exporters uncompetitive on world markets. While Japan has become much more confident about its ability to export (it could hardly think otherwise!), talk of further substantial appreciation is not always welcome.

#### HISTORY: 1914-1973

The dollar originally emerged as a major international currency at the end of World War I. The United States had for the first time become a net international creditor during the war, and the dollar was the only currency to remain convertible into gold at a fixed price into the 1920s. (See, e.g., Nurkse, 1944, Bergsten, 1975, p.53, and Eichengreen, 1992.) Its use in international trade and finance widened increasingly. The pound retained its dominant position as key currency in the interwar period, in large part due to the inertia in such arrangements that was noted above. As late as 1940, the level of foreign-owned liquid sterling assets was still double the level of foreign-owned liquid dollar assets. By 1945, however, the position of the dollar and pound, as measured by this statistic, had precisely reversed (Aliber, 1966, p.19-20). World War II had completed the dollar's rise to ascendancy.

Though gold was the official international reserve asset of the monetary system that was established in 1944 at Bretton Woods, New Hampshire, the dollar was the true reserve asset of the postwar system.

During the initial period of "dollar shortage," the European and other currencies were not convertible into gold, and so were not prized as the dollar was (Kindleberger, 1950). The Europeans and others measured their economic recovery from the wartime destruction by their progressively greater ability to earn dollars through improving trade balances. By 1958 the balance of payments of the major European countries had improved sufficiently that they were able to restore convertibility (McKinnon, 1979, p.5).

No sooner had the system of fixed-rate convertible currencies come into operation, than it was threatened with eventual collapse.

In 1958, the United States began to run large balance of payments deficits. Although these deficits were nothing other than the counterpart of the European surpluses, they presaged trouble, as Robert Triffin pointed out in his influential book Gold and the Dollar Crisis. The world's demand for international reserves increases gradually in proportion to international income and trade. As the supply of gold was more or less fixed, the dollar would be increasingly used as a supplementary reserve asset by other countries' central banks under the Bretton Woods regime. But there was only one way that other countries could earn dollars: by running balance of payments surpluses with the United States. This led directly to what came to be known as the Triffin dilemma. Either the United States would take measures to limit its balance of payments deficit, or it would allow other countries to continue to accumulate claims against it.

In the former case, the world would be deprived of its necessary

reserves. In the latter case, the ratio of outstanding dollar liabilities to gold held in Fort Knox would rise without limit, provoking at some point a crisis in which private speculators and Charles de Gaulle would lose confidence and present the American authorities with more claims for payment than could be met. (Kenen, 1960, argued that central banks would be reluctant to hold reserves in the form of a currency like the dollar that was expected to lose value.)

In the 1960s, the U.S. government adopted the stop-gap measure of putting controls on capital outflows. Meanwhile economists debated three possible general solutions to the dilemma: raising the price of gold so as to increase the effective supply of reserves, creating a sort of "paper gold" as a new reserve asset, or moving to floating exchange rates so as to reduce countries' demand for international reserves. (McKinnon, 1969, predicted, accurately as it turned out, that a move to floating rates, while it would reduce the official demand from central banks for the dollar as a key currency, would not reduce the private demand for an international currency. He also predicted that the dollar would remain the currency best-suited to such a role.)

But the day of reckoning was in any case accelerated by the expansionary U.S. macroeconomic policies of the Viet Nam War era, and the resulting widening of the deficits. In August 1971 the United States unilaterally devalued the dollar against gold, thereby ending the Bretton Woods era. The attempt to patch up the fixed exchange

rate system in the Smithsonian Agreement lasted only a short time.

By March 1973, all the major industrialized countries had given up the effort to keep their currencies pegged to the dollar.

#### THE DOLLAR IN THE FLOATING-RATE ERA

One might have expected in the post-1973 period a sharp downward shift in the demand for reserves by the major industrialized countries that moved to floating rates. There is indeed some evidence of a downward shift. But the demand for reserves nonetheless remained surprisingly high. [E.g., Heller and Khan (1978). From similar evidence, Frenkel (1980, p.183) drew the observation that "economic behavior seems to be more stable than legal arrangements."] Even though the central banks are willing to tolerate a far higher degree of variability in their exchange rates than before 1973, it takes a much greater amount of intervention to achieve any given effect than in the period when international financial markets were less developed. This may explain the still-high demand to hold reserves.

The fraction of reserves held as dollars began to decline in the late 1970s, starting the trend evident in the Table 3. While it is important not to confuse a change in the use of a currency with a change in its exchange value against foreign currencies, the downward trend of the dollar in the tables is in fact partly a reflection of a decline in its value.

The depreciation of the dollar was concentrated particularly

in two episodes: 1977-78 and 1985-86. In each episode the dollar exchange rate became an issue of conflict between the United States and its trading partners, Europe in particular. American Treasury Secretaries were periodically faulted for a policy of "benign neglect" of the dollar's value.

Benign neglect was also the policy in the period of dollar appreciation from 1980 to February 1985. The pattern of high real interest rates, capital inflow, and dollar appreciation was largely the unintended side-effect of U.S. government borrowing. Nevertheless, the first Reagan Administration stood by the desirability of what others called an overvaluation or misalignment, on the grounds that the outcome of the free market must be the best.

(Among the many papers and monographs on this episode are Branson and Love, 1988, Dornbusch, 1986, Frankel 1985, Frenkel and Goldstein, 1988, Krugman, 1985, and Sachs, 1985.)

A strong dollar has advantages for other countries -- improved prospects for their firms that export to the United States or that compete with imports -- as well as disadvantages -- an adverse shift in their terms of trade, higher prices for imported inputs like oil that (in the short run) have their prices set in dollars, upward pressure on wages. A weak dollar has the corresponding disadvantages and advantages. It is evident that the point of view in Europe that disparages both upswings and downswings has as its objective a stable dollar. Beyond the usual costs that are claimed from a volatile exchange rate, variability in the dollar as the world's key currency

has been blamed for: a ratcheting up of the level of protectionist barriers (as the United States erects import barriers when the dollar is strong, and trading partners do the same when it is weak), variability in the world price level (as countries intervene to stabilize the exchange rate and suffer consequent movements in their money supplies), and an inflationary bias (the result of the absence of a world nominal anchor to take the place of gold, the pound or the dollar).

The charge that the United States has neglected its social responsibility to supply the world with the "public good" of a stable international money, which underlies such complaints, points up the conflict inherent in the dual role of the dollar as America's currency and the world's currency. The charge also, in part, provided a rationale for the birth of the ECU in 1979 as a rival currency.

Proposals for reform of the world monetary system have less need to address the issue of supplying adequate international reserves than they did before exchange rates began to float and the system had evinced the inflationary tendencies of the 1970s and 1980s. Proposals such as Williamson (1983) are not primarily concerned with liquidity, and aim rather to reduce the excessive volatility and misalignments that the authors perceive in the exchange value of the dollar against the yen and deutschmark. Proposals such as McKinnon (1984) aim in addition to supply a nominal anchor for world monetary policy. (Discussions of such proposals include Dornbusch (1989), Dornbusch and Frankel (1988), and Frenkel and Goldstein (1988).

Feldstein (1989) argues against attempting to stabilize the exchange rate.)

In 1985, the second Reagan Administration reversed the position of the first, and made the exchange value of the dollar a policy target.

At the Plaza Agreement of September 1985, the shared goal was to engineer the dollar's continued depreciation. At the Louvre Agreement of February 1987 the European and Japanese goal was to arrest the dollar's two-year path of depreciation, in return for more expansionary policies that would help accomplish the U.S. goal of reducing its trade deficit even without further depreciation. In the subsequent years, American Treasury Secretaries continued to seek expansionary policies from their trading partners, and sometimes to threaten a renewed depreciation of the dollar as the alternative. (On dollar policy-making in the 1980s, see Destler and Henning, 1989, and Frankel, 1990.) But as Japan grows in financial power and Europe's attention is devoted increasingly to important internal issues -- not least the movement toward a common currency that would to some degree supplant the dollar -- it becomes less credible for the United States to hold the dollar's international-currency role as a hostage for use in bargaining with its partners.

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**TABLE 2****Use of Major Currencies as Exchange Rate Pegs for Smaller Countries**

	Total pegged	Percent of Countries Pegged To:						
		US\$ DM	Fr Franc Peg*	SDR	Pound	Other Peseta		
1975	80	57.5	16.2	12.5	8.8	1.3	0	3.7
1979	74	56.7	18.9	18.9	1.4	1.4	0	2.7
1980	72	54.2	19.4	20.8	1.4	1.4	0	2.8
1981	72	52.8	19.4	20.8	1.4	1.4	0	4.2
1982	71	53.5	18.3	21.1	1.4	1.4	0	4.2
1983	64	51.6	20.3	20.3	1.6	1.6	0	4.7
1984	63	54.0	20.6	17.5	1.6	1.6	0	4.8
1985	62	50.0	22.6	19.4	1.6	1.6	0	4.8
1986	61	52.5	23.0	16.4	0	0	0	8.2
1987	65	58.5	21.5	12.3	0	0	0	7.7
1988	63	57.1	22.2	12.7	0	0	0	7.9
1989	58	55.2	24.1	12.1	0	0	0	8.6
1990	51	43.1	24.1	10.3	0	0	1.7	8.6

\* Australian dollar, Indonesian rupiah, and South African rand

Source: International Financial Statistics 1983, 1986, 1988, 1991.

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