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THE DOLLAR AS AN INTERNATIONAL CURRENCY

Remarks of

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at the

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## The Dollar as an International Currency\*

The topic that I have been asked to address today is "The Dollar as an International Currency." My discussion of this subject will focus on four main issues. First, a brief clarification of the term "international currency." Second, an analysis of why the dollar is an international currency. Third, a discussion of the costs and benefits flowing from this role. And finally, a few remarks on why there is such strong interest in this subject at the present time.

The term "international currency" can have several meanings. For the sake of clarity let me emphasize that I will use that term to refer to a currency that is widely held outside of its country of issue. Thus my remarks will be primarily concerned with the question of why non-residents of the United States hold dollars. I will not be directly concerned with the related and important questions of whether these dollars are held by official or private parties, or whether they are held in the form of liabilities of institutions inside or outside the United States.

Just why do people residing in one country hold the currency of another country? To answer that question, we must first back up a bit and ask why people hold the currency of their own country. The answer that economists have traditionally given to that question is: because money facilitates the exchange of goods, services, and assets; it serves as a unit of account, a temporary store of purchasing power, and a medium of exchange.

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\*The views I will be expressing are my own and, of course, do not necessarily reflect the views of others in the Federal Reserve System.

Thus residents of the United States hold dollars because they are readily accepted in payment for a vast array of items -- the total "turnover" flow of U.S. output (a number several times larger than the U.S. gross national product), plus all of the assets in the United States. This last factor -- assets, especially financial assets -- deserves special emphasis, because it not only provides a motive for holding dollars, but also a means of doing so, since most "dollars" are held in the form of liquid interest-bearing assets.

Finally, because the dollar is so useful for purchasing things in the United States, and because it is so convenient to hold, residents of other countries are often willing to accept dollars in payment for goods, services, and assets located outside of the United States. Indeed, they have even developed their own dollar financial markets, i.e., the Euro-dollar market. This in turn has led to something of a "feedback effect," making U.S. residents even more willing to hold dollars because they can also be used to purchase items abroad.

The same reasons that explain why residents of the United States hold dollars go a long way toward explaining why non-residents also hold dollars: because they want some store of value that is readily accepted in payment for a very large collection of items.

But why, we might ask, do not non-residents simply hold their own currencies and then exchange them for dollars whenever they want to make payment in dollars? One reason has already been alluded to: because the very large and open dollar financial markets throughout the world make it very convenient to hold dollars. In addition there are two other reasons -- exchange-rate uncertainty and foreign exchange market transaction costs -- each of which I will discuss in turn.

A non-resident of the United States who expects to purchase dollar-denominated goods in the future might prefer to know with relative certainty

the quantity of dollar-denominated goods he has command over. This he can accomplish by holding dollar-denominated liquid assets. If instead, he holds liquid assets denominated in another currency, he is continually faced with the uncertainty of not knowing how many dollars he can purchase with that currency in the future, and, consequently, the quantity of dollar-denominated goods he can purchase.

If, in addition, this non-resident regularly receives dollars in payment, then he would also have a transaction cost incentive to hold dollars, i.e., instead of converting his dollar receipts into another currency and then converting them back again when he wants to make payment in dollars, he can save the transaction cost twice by simply holding the dollars. And of course if his government places additional barriers in the way of exchanging currencies (i.e., if it has exchange controls), then this gives him an even greater incentive to hold dollars.

Finally there is another important consideration that is relevant to the decision of non-residents (or residents) to hold dollars -- the difference between the expected rate of return on dollar-denominated liquid assets and the expected rate of return on liquid assets denominated in other currencies. This relative rate of return involves both the interest rate differential between the United States and other countries (adjusted for differences in risk) and the expected rate of appreciation (or depreciation) of the dollar relative to other currencies.

In this regard it is interesting to note that from one narrow theoretical point of view a higher rate of inflation per se does not necessarily make a currency less desirable as an international currency. This is the case if (a) real interest rates are not affected by the rate of inflation, (b) nominal interest rates adjust to incorporate a full inflation premium, and (c) currencies depreciate or appreciate at a rate just sufficient to offset differences in relative inflation rates.

However, in actual practice these perfect adjustments seldom seem to occur. In particular when a country's rate of inflation increases, its exchange rate seems to depreciate by more than is necessary simply to offset the higher price level. Perhaps this is because an increase in the inflation rate is usually associated with a period of rapid real economic growth, and the latter causes an increase in imports and a deterioration of the trade and current account balances. Or perhaps it is because people tend to form their expectations about the future rate of inflation by extrapolating the rate of increase of the current inflation rate; hence when the inflation rate rises, their expectations of the future inflation rate rise even more.

In addition to affecting the exchange rate, a higher rate of inflation also seems to lower the real rate of interest. One reason for this is probably that higher rates of inflation increase uncertainty about the future price level, thereby increasing the riskiness of investment and lowering the risk-adjusted rate of return. Another reason is that, under current-accounting systems, inflation causes the actual value of capital consumed in production to be understated and hence profits to be overstated. This in turn increases the effective tax rate on real capital income, and decreases the after-tax return on investment.

Thus, for all of these reasons, an increase in the inflation rate in a given country usually does lower the rate of return on liquid assets denominated in that country's currency, and thus makes it less desirable as an international currency.

To summarize the discussion up to this point, we should expect that a given country's currency will tend to be used as an international currency:

a) to the extent that its flow of goods and services, and especially its stock of financial assets, are large relative to the rest of the world (and, because of the "feedback effect," we should expect the currency of the wealthiest country to enjoy a particular advantage over the others);

- b) to the extent that it allows non-residents to freely purchase its goods, services, and assets; and,
- c) to the extent that the expected rate of return on liquid assets denominated in that currency, adjusted for risk, is higher than in other countries.

These factors help explain why the dollar gradually came to replace the pound sterling as the leading international currency. They also suggest that the dollar will likely remain the leading international currency for some time to come. The main reason for this of course is the very great size of the U.S. economy, which is more than three times as great as that of Japan, the next largest free world economy. Of particular importance is the great breadth, depth, and efficiency of U.S. financial markets, which make it extremely convenient to hold liquid dollar-denominated interest-bearing assets. Second in importance is the almost complete openness of the U.S. economy -- there are very few barriers to prevent non-residents from purchasing dollars or using them to acquire goods, services, and assets in the United States. Related to this factor is the low level of political risk associated with investments in the United States. Few countries in the world have such a deeply ingrained and legally codified respect for property rights, such a long history of political and economic stability, and such security from foreign conquest.

A few numbers may help to illustrate the present importance of the dollar as an international currency: about 4/5 of all official foreign exchange reserves are held in dollars; about 3/4 of Euro-currency assets and liabilities are in dollars; and about 1/2 of world trade is denominated in dollars.

However, over the last few decades the economies of some other major countries have been growing more rapidly than has the U.S. economy, and, much

more recently, some have had more success in the battle against inflation. These two factors might lead one to expect that other currencies might gradually play an increasing role as international currencies. However, it should be noted that few countries seem anxious to have their currencies used for this purpose, and several have taken active steps to discourage non-residents from purchasing their liquid financial assets.

This last point leads me to the second topic in my talk today: the costs and benefits from being an international currency. Why is it that the United States is willing to have its currency used as an international currency, but other countries are not? Is one of us incorrectly calculating the costs and benefits associated with that role?

Let me begin this part of the discussion by emphasizing the fact that the United States enjoys very little "seignorage gain" in the traditional sense in which that term is used, i.e., the gain that accrues to a government when it issues paper money or token coins -- assets that cost only a fraction of their face value to produce, which pay no interest, and which can be exchanged for useful goods and services or other assets. The vast majority of the "dollars" held by non-residents are interest-bearing assets -- they consist of instruments such as U.S. Treasury bills, certificates-of-deposit, and Euro-dollar deposits.

Thus the effect on the United States from the use of the dollar as an international currency is essentially that of a capital inflow. And the classical theory of international factor movements tells us that this confers a net welfare gain on both the United States and the rest of the world. The United States benefits because dollar interest rates are slightly lower than they would be otherwise; the rest of the world benefits because it is able to obtain an asset that offers a higher expected return in terms of yield,

liquidity, safety, and utility than does the closest available substitute. From a more intuitive point of view it seems reasonable that both parties to the transaction should gain, because the transaction is undertaken voluntarily. And, as with any voluntary transaction, both parties must perceive a gain from it, or otherwise at least one of them would not enter into it.

The costs to the United States resulting from the fact that the dollar is used as an international currency are essentially dependence and vulnerability. This is just a special case of the general principle that anyone who engages in a voluntary exchange with someone else sustains the risk that the other party might suddenly decide to stop exchanging. For most transactions, most people have concluded that this risk is well worth bearing, i.e., that it is better to enjoy the gains from trade and incur the risk that the trade may be cut off, rather than to cut off the trade yourself, thereby foregoing the gains from trade and inflicting on yourself now the harm you fear someone else may inflict on you in the future. The only significant exception to this general conclusion involves items of military importance.

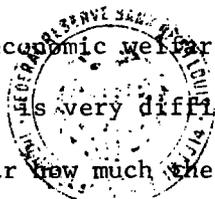
In the case of the dollar being used as an international currency, the United States bears the risk that non-residents may suddenly decide, for whatever reason, to hold fewer dollars than before, i.e., there may be an incipient capital outflow from the United States. If this should occur, it would put upward pressure on dollar interest rates and downward pressure on the foreign exchange value of the dollar. The latter would in turn tend to lower the foreign currency price of U.S. goods, which, over time, would increase the demand for U.S. goods from abroad. The converse side of this risk is that non-residents may suddenly increase their demand for dollars, putting downward pressure on dollar interest rates and upward pressure on the dollar in the foreign exchange market, with the latter causing a reduced demand for U.S. exports.

For the United States these "risk costs" do not appear large. The United States exports only about 7-8 per cent of its gross national product. Hence a change in the exchange rate has only small effects on our levels of prices and output. The staff of the Federal Reserve Board estimates that a 10 per cent appreciation of the dollar against a weighted average of 10 major foreign currencies would lower the U.S. price level over a period of several years by only about 1-1/2 to 2 per cent, and it would have almost no effect on U.S. real GNP. And there is only a very small chance that the dollar would depreciate or appreciate by as much as 10 per cent solely as a result of the fact that it is held by foreigners.

Another related concern is that the dollar holdings of non-residents may be volatile, in the sense that they may go through large swings over short periods of time -- swings that are later reversed. This would presumably be less troublesome for macroeconomic policy than large once-and-for-all capital inflows or outflows, because it would have smaller net effects on the price level and aggregate demand. Nonetheless, it would impose short run adjustment costs, and it might be wise for the United States to cope with such reversible flows -- if they could be recognized as such -- with offsetting intervention in the foreign exchange market.

The costs and benefits discussed thus far have been limited to a narrow economic context, the way economists conventionally analyze the gains from exchange. However, in a broader sense it might be argued that there are additional costs and benefits associated with the dollar being used as an international currency. For example some people claim that this international role for the dollar places restraints on the freedom of U.S. economic policy, and that this in turn reduces economic welfare.

This line of argument is very difficult to analyze, for at least two reasons. First, it is not clear how much the dollar's role as an international



currency constrains U.S. policy, and, **secondly**, it is not clear that, to the extent there is a constraint, it necessarily tends to reduce the economic well-being of the American people.

To take a case in point, last November 1, U.S. domestic economic policy became significantly more restrictive, partly in response to the substantial depreciation of the dollar that took place in the weeks and months before that date. Was this a case of the dollar's international role constraining U.S. policy and reducing economic welfare? I think not. First, it is not clear that the dollar's role as an international currency caused the dollar to fall significantly further and faster than would otherwise have been the case. Second, and more importantly, it is even less clear that the actions taken on November 1 will reduce the welfare of our citizens. Many would argue -- as would I -- that the high rate of inflation in the United States was distorting and debilitating the U.S. economy and seriously reducing its efficiency, and that the sharp depreciation of the dollar that occurred prior to November 1 contributed to modifications in the direction of policies that were in our own best interest.

When all of these cost and benefit considerations are taken into account, it is my judgment that the benefits to the United States and the rest of the world from the use of the dollar as an international currency easily exceed the costs. Thus if the United States were to discourage non-residents from holding dollars, I think both the United States and the rest of the world would be worse off as a result.

On the other other hand I do not think that the United States should artificially encourage non-residents to hold dollars. If an alternative to the dollar should emerge -- either another major currency, the European Currency Unit, or the SDR -- the United States should do nothing to hinder its natural development. As with other international transactions, our guiding principle

in this matter should be to allow individual transactors the maximum freedom to act in their own best interest, free from government encouragement or discouragement.

Similarly, with regard to the recent discussion of a possible IMF substitution account, the United States should carefully evaluate this innovation in the context of the longer-term evolution of the international financial system to ensure that it is compatible with the freedom of all countries to pursue appropriate domestic economic policies and that it does not restrict the free international flow of capital.

Finally, in closing, let me pose the question of why there is so much interest at the present time in the role of the dollar as an international currency. In my judgment this is because many people associated the sharp depreciation of the dollar that occurred from September 1977 through October 1978 with the fact that the dollar is widely held abroad. This, I think, is a misconception.

The staff of the Federal Reserve Board has recently estimated that the gross total of identifiable dollar-denominated assets (not including direct investments and inter-bank accounts) that were owned by foreigners at the end of 1977 amounted to about \$425 billion. This is less than one-tenth of the total stock of liquid dollar-denominated assets that are available for sale against foreign currencies. Indeed, it is not even necessary to hold dollars in order to sell them; dollars can be borrowed, or they can be sold short in the forward exchange market. Thus, even if foreigners held no dollars at all, there would be ample opportunity for both residents and non-residents to sell dollars, should a decline in its value be anticipated.

In my judgment if we are concerned about a potential resumption of the downward movement of the dollar that occurred before last November 1, then we should not focus our attention on any particular class of dollar holders, but instead should concentrate on the reasons why anyone -- resident or non-resident -- should wish to sell dollars. Several factors need to be watched: the sharp widening of the U.S. trade and current account deficits over the last two years and the increase in the U.S. inflation rate relative to other countries -- both of which were mainly due to the more rapid economic expansion in the United States than abroad. In addition market perceptions of the trends in the U.S. economy and its relative vulnerability to external shocks are also factors causing a shift in the willingness of people to hold dollars.

The first two problems have lessened with the slowing of the U.S. economy, and the other factors now appear to be favoring dollar holdings. Thus the pressure for a rising dollar value has replaced the downward pressures of last fall. But rapid movements in either direction are destabilizing to internal and external trade and financial relationships, and therefore I hope we can look forward to a future of greater dollar stability and less concern about the role of the dollar as an international currency, however that role may gradually evolve.

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