THE FLEXIBLE EXCHANGE RATE: GAIN OR LOSS TO THE UNITED STATES?

Speech by Darryl R. Francis, President Federal Reserve Bank of St. Louis to the Twenty-second World Trade Conference International Center of the University of Louisville November 10, 1971

I am pleased to have this opportunity to discuss with you some of the current issues in international trade. I am particularly interested in this topic since the recent decision by President Nixon to suspend dollar convertibility into gold is eliciting high-pitched discussion in the world press and, even more important, this decision has a serious impact on the welfare of all consumers in the world.

Although international trade represents only four or five per cent of the United States Gross National Product, its impact on domestic welfare is much greater, and the settlement of current problems and uncertainties will be felt by all of us for a long time to come. As far as I am concerned, the agreement on an international payments mechanism is of far greater importance than the ten per cent surcharge, and consequently I
will address my remarks to that portion of the new international economic policy.

First, I will discuss the functioning of the international payments system; second, the historical events leading to the current situation; third, the alternative solutions available. Finally, I will indicate my choice of an international payments mechanism.

The Benefits from Trading Internationally.

The United States can produce virtually any commodity and service that it currently consumes. Why, then, do we engage in international trade and incur the risks and crises that have plagued us for the past fifty years? The answer, of course, is that international trade, like domestic trade, is profitable. It is profitable in the sense that it increases the welfare of trading countries.

The reason we buy an imported commodity is simply that we can purchase it cheaper abroad than we can produce it domestically. We pay for our imports by selling goods and services to foreigners who will accept them only if our goods are cheaper than the same goods produced by them. Therefore, the citizens of both trading
countries, given their resources, can consume more goods and services than they could in the absence of such trade.

The reasons for the relative price differentials are varied - it may be productive efficiency or it may be domestic demand conditions. What is important is that the price of the delivered foreign commodity or service is lower than the price of the same commodity produced at home. Therein lies the benefit from international trade. If such benefit does not exist, trade will not take place. Any artificial restrictions which lower this price differential reduce the amount of international trade and therefore the welfare gains that may accrue.

The same reasoning applies to international capital movements. We buy foreign capital goods or foreign securities only if they promise a higher rate of return than domestic ones. In that sense, a given amount of resources increases our income and welfare. The country selling the securities benefits by attracting a scarce resource to facilitate the efficiency of the productive process.
What is important to remember throughout any discussion of international trade is that benefits accrue from our ability to consume more. That is, from imports of goods, services and securities.

The Mechanism of International Payments

Since gains from trade derive from imports, why don't we keep importing as much as possible and forget about exports, reserve balances, and various exchange problems? Like everything else, imports must be paid for, and exports are the ultimate means of payment. But since the barter system is extremely inefficient in individual transactions, we avoid the item by item matching of imports and exports by using the international payments mechanism, just as we avoid the matching of goods and services in domestic transactions with the use of money.

To demonstrate international payments, let's assume that I buy a Japanese radio for $30. I write a check on my bank and send it to the Japanese exporter who deposits the check in his bank and gets Japanese money for it. If the Bank of Tokyo can find an importer who wants $30 to buy
something in the United States, it will sell the draft to him and my $30 finds its way into the account of a U. S. exporter in a U. S. bank. Under these circumstances, an import was offset by an export, the quantity of dollars supplied was equal to the quantity demanded, and the price of the dollar, the exchange rate, remained the same.

But what if the Bank of Tokyo cannot immediately find an importer who wants to buy U. S. goods and services? What can it do with my $30 check? At this point we must specify the international payments mechanism that is used by the United States and Japan. There are three main payments systems that have been used: the gold standard, the dollar or sterling exchange standard, and a flexible exchange standard.

On a true gold standard, the Bank of Tokyo will sell my check to the Japanese Central Bank who, in turn, will buy $30 worth of gold from the U. S. Treasury. Thus, my import of a radio was matched by an export of gold. The exchange rate, which is fixed in terms of gold, does not change.

If we are on a dollar exchange standard, as existed until recently, the price of a dollar is fixed in terms of gold and the prices of all
other currencies are fixed in terms of the dollar. In order for the exchange rate to remain constant, the supply of dollars created by my purchase must be matched by an equivalent quantity demanded. Since central banks are committed to maintenance of a fixed exchange rate, in the absence of private demanders of dollars they must buy and hold the $30, thus increasing their foreign reserves.

A flexible exchange standard implies that the price of the dollar will be determined by market forces without official intervention. In this instance, the Bank of Tokyo would offer my $30 on the exchange market. If there are buyers of U. S. goods and services at existing prices, the $30 will be purchased by them and the exchange rate will not change. But if these importers view U. S. prices as being too high, they will offer less foreign currency for my $30 check and the transaction will be consummated only at the lower price of the dollar. Thus my import is still paid by an export, but only when accompanied by a change in the exchange rate.

To summarize this illustration, my import of the radio was paid for with either a gold export, a U. S. liability that a foreign central bank is willing to hold, or an export of U. S. goods and services.
It should be clear, however, that an excess of imports over exports can be continued under a gold standard only as long as our gold supply lasts. Similarly, under the dollar exchange standard the excess can continue only as long as foreigners are willing to supply us with goods and services in exchange for dollar accounts in U.S. banks. Since we desire imports, what is there to prevent the United States from exhausting its gold stock or prevent an ever increasing accumulation of dollar balances by foreign central banks? In other words, is there an adjustment mechanism which prevents permanent imbalance in trade and possible breakdown of international economic relations? Let us examine the adjustment process in each of the three payments systems I have outlined.

The gold standard, if permitted to function, would cause an export of gold in our Japanese radio example. A decline in the U.S. gold stock will cause a contraction of money supply in the United States and a decline in nominal income. Exactly the opposite will occur in Japan. With U.S. income declining, and Japanese income rising, our purchases of Japanese goods will decline and our sales to Japan will increase. This would cause an
elimination of any U. S. import surplus.

Similarly, under the dollar exchange standard, the accumulation of dollar balances by foreigners would increase their reserves which, in turn, would lead to an increase in their money supply and income level. The opposite could happen here, and again our balance of payments deficit would be corrected.

The flexible exchange rate, as we have seen, would tend to establish a balance between imports and exports by causing a decline in the price of the dollar in terms of foreign currencies, which would make foreign goods more expensive to us and our commodities cheaper to foreigners. This change in relative prices would discourage our imports and encourage exports.

All three systems of international payments mechanisms facilitate trade, provide adjustments, and have within them necessary means for prevention of trade breakdown. Two of them do it with fixed exchange rates, and one with a flexible rate. Thus, the question arises what are the ultimate differences among them, and why should a person advocate one exchange rate system over another.
The major difference is that within the fixed exchange schemes, both the gold and the dollar exchange standards, the adjustments which are necessary to maintain an equilibrium in the balance of payments take place in the domestic economies in the form of changes in prices, income, and employment levels. In a flexible exchange rate mechanism, the adjustment is in the form of changes of prices and quantities of internationally-traded commodities, and in the welfare aspects generated by the changes of the terms of trade.

The adjustments required by a fixed exchange rate system frequently conflict with domestic goals. Virtually all national governments have adequately demonstrated that they are committed to the achievement of stable conditions in domestic economic activity. In our example, for instance, it is difficult to imagine that, given an import balance, the United States would be willing to permit the indicated contraction of domestic production with its inherent probability of higher unemployment. It is just as difficult to visualize Japan deliberately submitting to inflation because their exports have exceeded their imports.

As a result of the strong desire for economic stability at home, central banks have generally undertaken policies which mitigate the
adjustments necessary to correct a disequilibrium in international trade under a system of fixed exchange rates. Such actions have resulted in the development of persistent and fundamental trade deficits and surpluses. In turn, these surpluses and deficits have produced crises requiring periodic adjustments in the exchange rate, direct controls, and other arbitrary impediments to international trade.

A flexible exchange rate, on the other hand, does not necessarily imply domestic fluctuations in income and employment. It is, therefore, more likely to be permitted to achieve the adjustments necessary for the smooth functioning of international trade. In the choice of different exchange rate systems, it seems to me, the crux of the matter is not the ability of these systems to make necessary adjustments, rather, given the demonstrated political necessity of maintaining full domestic production and employment, it is a matter of which one will be permitted to do so.

Historical Background of the Present Crisis.

I have sketched the various international payments mechanisms and have indicated how equilibrium can be achieved under several exchange
rate standards. I would like to turn now to the specific case of the U. S. balance of payments difficulties and discuss historical events leading to the "international monetary crisis" of 1971. In capsule form, the history of the U.S. balance of payments position is as follows.

From 1790 to 1875, the United States was a net importer of goods, services, and capital. A developing economy provides good investment opportunities and foreign capital flows in. This inflow financed the excess of merchandise imports. As the economy matured and the ratio of capital to other resources began to grow, repayment of foreign loans, and eventually U.S. foreign investment, began to take place. In the United States this change occurred approximately in 1875, and since that time we have been a net exporter of capital and merchandise.

At the end of World War II, we emerged as virtually the only industrial country with its productive capacity intact. In spite of the strong postwar domestic demand, our relative prices were still lower than those in the foreign countries and our export balance became very large. This excess of exports over imports was financed by private and government lending and unilateral transfers. After
1950, U. S. private and government capital outflows began to exceed the exports of merchandise and services thus supplying more dollars to the foreign exchange markets than foreign importers were willing to absorb. Since 1950, that is, the U. S. balance of payments on a liquidity basis has been in deficit.

The international payments mechanism, as established by the Bretton Woods agreements of 1944, provided that countries can fix their exchange rates either in terms of gold or in terms of the dollar. As it turned out, the United States established the price of the dollar in terms of gold at $35 per ounce and most other countries defined the prices of their currencies in terms of the dollar. The exchange rates were fixed by foreign central bank intervention in the form of buying dollars when the price of the dollar was falling in terms of foreign currencies and selling when the price of the dollar was rising. It isn't difficult to see that a persistent deficit in the U. S. balance of payments and a fixed dollar exchange rate could coexist only with the accumulation of dollar balances by private foreigners and foreign central banks.
Until the latter half of the 1960's the United States experienced a significantly lower rate of inflation and a lower amplitude of cyclical fluctuations than did other major foreign economies. Therefore, the dollar, as the most stable of all major currencies, was extensively used as an international means of payment. A large portion of the deficit-induced dollar balances were thus held willingly and provided a service as international money.

During the late sixties, however, the U. S. balance on goods and services began to decline while capital outflows remained virtually constant. At the same time, domestic monetary and fiscal policies resulted in large decreases in the purchasing power of the U. S. dollar, both domestically and internationally. Thus, in world trade we had an increasing rate of dollars being supplied and a reduced demand for them, and under these circumstances something had to give.

With these developments in mind, let's analyze our position in the spring of 1971.


1. Expansionary monetary and fiscal policies since 1965 resulted in a rapidly rising price level and growing expectations of inflation.
Attempts to moderate inflationary pressures by restrictive fiscal actions in 1968 and restrictive monetary actions in 1969 were reversed in 1970, eliminating any hope of quickly achieving price level stability.

2. As a result, our imports continued to increase, while our exports began to decline. A deteriorating balance in goods and services, coupled with substantial net investment in other countries and government expenditures abroad, meant an increase in the quantity of dollars supplied without a corresponding increase in demand.

3. The international price of the dollar could remain fixed only through sales of gold to foreigners or through massive accumulation of dollar balances by foreign private individuals and central banks. Our gold supply has dwindled to $10 billion, and we are reluctant to permit its continued depletion. Dollar accumulation by foreigners reached $45 billion by March 31, 1971.

4. Foreign exchange dealers and owners of liquid dollar balances, in anticipation of some kind of a downward readjustment in the value of the dollar, began converting dollar holdings into foreign currencies. This forced foreign central
banks to purchase even larger amounts of dollar claims.

5. With these pressures increasing, and with no hope for redress, Germany, Netherlands, and Belgium announced that they would no longer purchase additional dollars, thus floating their currencies and permitting them to appreciate. Meanwhile, Switzerland and Austria undertook outright revaluation by announcing that their central banks would continue to purchase dollars but only at a lower price.

6. Our deteriorating competitive position and resulting reduction in the export surplus were contributing to unemployment in the United States.

Alternative options available

Given this situation, neither the United States nor the major trading countries which were running sizeable surpluses could continue under the existing fixed exchange rate alignment. It was clear that the U.S. dollar was overvalued with respect to many major currencies and that the existing exchange rate mechanism was prone to the development of persistent balance of payments deficits and surpluses.
Any new system which could remain viable for any length of time would not only have to alleviate the United States deficit but also provide for a payments mechanism which would inhibit the persistence of international disequilibrium.

Three unilateral actions were available to the United States: the establishment of import controls in order to equalize exports and imports, the revaluation of gold with the hope that other countries would permit the exchange depreciation of the dollar, and the suspension of dollar convertibility into gold, thus subjecting the international value of the dollar to market forces.

Import controls, whether in the form of high tariffs or of direct or exchange quotas, represent a type of interference with consumer choice. As we have seen earlier, the benefits from international trade are a result of satisfying consumer preference for imported commodities and the consequent reallocation of resources so as to increase the efficiency of the trading economies. Arbitrary intervention with the consumer preference pattern will reduce the total volume of trade and the benefits to be derived from it. The size
of this welfare loss is difficult to measure, but it is of such magnitude that, even under the most trying circumstances, governments which are concerned with the satisfaction of individual citizens' wants have undertaken such measures only as a policy of last resort.

The revaluation of gold, in spite of its current mention as a solution, does not produce the desired effects, particularly when it is unilateral. As we have seen, exchange rates are fixed at their established parities by central bank intervention. Devaluing the dollar in terms of gold does not, by itself, realign exchange rates and therefore does not either improve the United States balance of payments position nor provide a payments mechanism which will preclude persistent deficits or surpluses.

The suspension of dollar convertibility into gold, again, as a unilateral action, does not insure that the dollar will float in response to market forces. We may say that the dollar is floating and we may not intervene in the foreign exchange market, but that does not prevent foreign central banks from interfering and fixing the dollar rate of their currencies at some level desired by them.
It may be asked at this point, why then did the President suspend the conversion of dollars into gold? The answer is to be found in the huge dollar balances accumulated by the central banks of surplus countries. Without convertibility into gold, these balances can only be used to buy U.S. goods and services. Since the accumulation itself is a sign that at current prices foreigners find it unprofitable to import from the United States, the probability that they will continue to support the prevailing price of the dollar is very small. This was already indicated by the revaluation and flotation of the currencies of several countries which took place in May, 1971. In addition, inconvertibility of the dollar into gold, in effect, removed the cornerstone of the Bretton Woods agreements and made some multilateral action imperative.

To sum up, unilateral actions on the part of the United States, as economically powerful as it may be, either do not solve the current international economic problems or are too costly to undertake and to enforce. What is required is a multilateral action of all countries involved to realign the exchange rates and to agree to a pay-
ments system which will provide enough exchange rate flexibility to forestall another crisis such as we face today.

Possible Choices of Payments Mechanisms.

In view of the discussion up to now and in view of the sentiments expressed by international authorities and the world press, we are left with two effective possible payments systems: a multilaterally agreed upon freely fluctuating exchange rate mechanism or a multilaterally established fixed exchange rate system with readjusted par values and with somewhat greater flexibility around par. I should like to discuss these in reverse order.

A fixed exchange rate system will require a negotiated realignment of exchange rates. The events of the past few weeks demonstrate the magnitude of the problem. Surplus countries all appear to acknowledge the necessity of devaluing the dollar. However, when it comes to a true commitment, few countries wish to revalue their currencies to a true market level at which their surpluses and our deficits would be eliminated. In short, a
surplus to them at the expense of a deficit to the United States, is "fair."

Given this attitude, it is difficult to conceive that the governments involved would pursue the domestic policies necessary for a fixed rate system to survive, because fixed rates without balance of payments difficulties require that each country maintain a rate of domestic economic growth approximately equal to that of other countries. Significantly different growth rates would again produce persistent balance of payments surpluses and deficits and would again lead to exchange crises with all the losses of trade that accompany them.

Increased flexibility around par will permit larger deviations from a concerted rate of growth but will not eliminate the possibility of some country being temporarily successful in using foreign trade as a tool of domestic policy. So long as such a possibility exists, some governments will have the incentive to use this politically expedient economic measure at the expense of welfare gains to their consumers.

Thus, even if a "correct" exchange realignment is agreed upon, and United States
balance-of-payments problems are solved, the permanency of such a system is very much in question. Of course, if the established bands around par were very wide, and the par were to change easily and automatically, my objections would be removed. But then, of course, it would not be a fixed rate system.

This leads us to the consideration of the freely fluctuating exchange rate. I believe that such a system would best solve current difficulties and would assure a permanent exchange rate mechanism which should be free of the type of trade slowdowns we are experiencing now. Rates would respond to the forces of demand and supply and accurately reflect the trading positions of all nations. Unwanted accumulations of currencies could not take place; there would be no development of crises with their resultant losses. And, what is more important, all governments could pursue totally independent domestic policies without imposing their excesses upon others.

An inflationary policy, for example, would cause an increase in a country's demand for imports and a decline in its exports. Instead of running an extended deficit and exporting its inflation, it will
find that the international value of its currency has fallen and its import surplus is eliminated. Thus, domestic excesses would have to be paid for at home. I believe that the knowledge of this fact will prevent the use of the international market for domestic goals.

Two major criticisms of the freely fluctuating exchange rate are most frequently voiced. First, because of daily or conceivably even hourly fluctuations in the rate, it is contended that the increase in uncertainty will cause a reduction in the volume of trade. Second, it is further contended that the freely fluctuating rate will elicit trade restrictions and unbridled speculation.

There is little doubt that continuous small changes in the exchange rates would induce marginally greater daily risks and therefore somewhat greater costs of international currency convertibility. This is supported by the sparse historical evidence and by the recent behavior of forward rate. The forward rate which, among other things, reflects the insurance premium for delivery of some currency at a specified price at some future date, has increased. Interestingly enough, however, the increases are minimal where the float is "clean" and large where central bank interven-
tion is either present or anticipated. This seems to indicate that the actual flexibility is a small contribu-
tor to increased costs, while intervention, or anticipated official revaluations as exist under a fixed rate, are the real culprit.

Most of our domestic commodity, stock and money markets have hourly fluctuations and the premium associated with frequent changes does not appear to be prohibitive nor does it impair the efficiency of these markets. Here too, large fluctuations in forward prices occur when there are anticipations of some natural disaster or a strike or some institutional interference, events not unlike anticipated changes in the exchange rate.

The question that should be asked is not whether convertibility costs are higher under a flexible exchange rate as compared with the fixed rate, but whether they are higher than the total trade costs of periodic real or anticipated re-valuations of the fixed rate. Since 1944, out of 92 countries which have established parities under the International Monetary Fund, forty-five countries have changed par values seventy-four times. Several of these changes were accompanied by serious international economic disturbances, and most of them by
domestic problems of reallocation of resources. Every sudden official change in the exchange rate causes a movement of resources between export and import competing industries, and each movement implies an increase in structural unemployment. Consequently, the economic costs of a fixed exchange rate system are sizeable. With a flexible rate system, on the other hand, resources move gradually and with a minimum of friction, resulting in lower costs.

Similar remarks can be made about speculation, an activity which stabilizes rather than destabilizes prices. Destabilizing speculation, which everyone fears, occurs as a result of anticipations of forces outside the normal economic realm. With freely fluctuating exchange rates, such forces are much less likely to materialize than with a fixed rate system which experiences periodic crisis.

An interesting observation is that with fixed exchange rates and the associated central bank intervention in exchange markets, a form of speculation is performed by central banks rather than by those individuals who voluntarily bear the risks. Thus, the risk of loss is borne by all taxpayers,
whether they want it or not.

As for the criticism that freely fluctuating exchange rates will elicit trade restrictions greater than under fixed rates, one simply has to look at the situation which existed for the past 27 years. It really all depends on what one means by trade restrictions. It seems to me that arguing that a fluctuating rate will lead to more restrictions is simply saying that where disequilibrium fixed rates can no longer be used to pursue domestic goals, alternative means may take the form of new trade restrictions. In other words, a country, which for purposes of domestic stabilization, maintained an undervalued currency and an export balance under a fixed rate system, will now have to resort to other trade restrictions to achieve the same goal. It is certainly not an inevitable consequence of flexible rates, and in any case, it is only a different manifestation of the same restrictive policy.

The usual example put forward is the economic warfare of the early thirties. At that time there was truly a proliferation of various international trade barriers and for a while the British pound was removed
from its convertibility into gold. What these critics fail to point out is that there was a world-wide depression under way and that the restraints began to multiply in 1929 while the pound was not floated until 1931. A causal relationship is certainly not indicated.

I believe that the freely fluctuating exchange rate is far preferable to a fixed one. Whatever the costs involved, they are less than those imposed by the present system. There is the chance now to establish a mechanism which prohibits the exchange exploitation of one country by another and which therefore has a better chance of long-run survival.

From reading the reports of the present international economic "crisis", one gets an impression that the current decline in global trade is caused by the so-called "floating" of exchange rates. It is our view that nothing can be further from the truth. In the first place, the crisis existed prior to the floating of the rates and secondly, the rates are not being allowed to float freely. The high risks which are instrumental in the decline of trade are not created by the flexibility of the exchange rate, but by the anticipations of a new and unpredictable exchange rate fix.
I do not believe that freely fluctuating exchange rates will be agreed upon immediately. I would rather expect that the first agreement will produce a new exchange rate realignment with wider bands around the par. Then, next inevitable crisis will add to it a crawling peg. From there it is only a small step to the freely fluctuating exchange rate. So, inspite of all the terrible disasters that are predicted for flexibility, I believe that we may yet see an international payments mechanism which will utilize freely fluctuating exchange rates and which will assure maximum of welfare without artificial obstructions.