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FLEXIBLE VS FIXED EXCHANGE RATES AND
INTERNATIONAL MONETARY STABILITY,

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Edward Carr/Franks

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ABSTRACT

It is argued that a flexible exchange rate system will (1) not require deflation to restore equilibrium to the external balance and therefore will not infringe on national autonomy, (2) not impose increased costs on the foreign trade sector, and (3) provide the necessary international monetary restraint. In the first section following, I present arguments to the effect that adjustment under either a flexible or fixed exchange rate system (assuming they are properly functioning) will result in higher unemployment and economic recession (i.e., there's no such thing as a free lunch) and that, as such, flexible rates do not provide for an increase in domestic economic autonomy. In the second section I discuss the various sources of costs in international transactions and whether these costs (and costs in general) have increased relative to those under a fixed rate system. In the third section I discuss the obvious lack of monetary restraint that has prevailed under both systems and conclude that the issue should be not whether a fixed rate system is better than a flexible rate system, but whether it will be possible to impose the domestic monetary restraint necessary to make either system work. I then conclude with a discussion of the possible future role of the International Monetary Fund and/or gold in bringing about the needed restraint.

This paper was prepared for a tutorial in International Economics which I took as a graduate fellow of the Rand Graduate Institute.

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I. INTRODUCTION

In "The Case for Flexible Exchange Rates, 1969," Johnson states that the "fundamental argument for flexible exchange rates is that they would allow countries autonomy with respect to their use of monetary, fiscal, and other policy instruments, consistent with the maintenance of whatever degree of freedom in international transactions they chose to allow their citizens, by automatically ensuring the preservation of external equilibrium."³ He claims that such a system would thus provide an adjustment mechanism that would "not require countries to deflate or inflate their economies beyond politically tolerable limits."

With regard to the increased exchange-rate uncertainty of such a system and its effect on the volume of foreign trade, Johnson states that "traders averse to uncertainty could be able to hedge their transactions through the forward exchange markets." To those who argue that the cost of such hedging would be prohibitive he explains that under a flexible exchange rate system the expectation of a currency movement would be reflected in both the spot and forward markets, and as a result the cost of hedging would be kept within "reasonable bounds."

Concerning the fixed exchange rate system (circa 1969) he complains that it provides no "centralized control of the overall quantity of international money and international monetary conditions." He admits that under a gold standard the necessary international monetary control would (theoretically) be exercised automatically by the available quantity of monetary gold--a quantity that could not be influenced by national governments--by affecting national money supplies through the obligation to

maintain a gold reserve adequate to guarantee convertibility at the fixed exchange rate. He refers, though, to this system as "barbarous" (apparently equating the gold standard with fixed-exchange rates) in that the resulting deflation and economic slowdown caused by outflow of gold to pay off foreign obligations would force an increase in unemployment. He seems to infer then that a fixed rate system monitored by an international organization would not be so "barbarous," although it would still necessarily require periodic deflation to maintain parity and thus a decrease in national autonomy. In any event, it is clear that since the abandonment of the gold standard (which for all intents and purposes occurred with the formation of the two-tier system in 1968) there has been little control over the growth of the international monetary reserves.¹⁹

Thus Johnson appears to be arguing that a flexible exchange rate system will 1) not require deflation to restore equilibrium to the external balance and therefore will not infringe on national autonomy, 2) not impose increased costs on the foreign trade sector, and 3) provide the necessary international monetary restraint. In the first section following, I present arguments to the effect that adjustment under either system (assuming they are properly functioning) will result in higher unemployment and economic recession (i.e., there's no such thing as a free lunch) and that, as such, flexible rates do not provide for an increase in domestic economic autonomy. In the second section I discuss the various sources of costs in international transactions and whether these costs (and costs in general) have increased relative to those under a fixed rate system. In the third section I discuss the obvious lack of monetary restraint that has prevailed under both systems and conclude that the issue should be not whether a fixed rate system is better than a flexible rate system, but whether it will be possible

to impose the domestic monetary restraint necessary to make either system work. I then conclude with a discussion of the possible future role of the International Monetary Fund and/or gold in bringing about the needed restraint.

II. DEVALUATION VS DEFLATION

In "The Monetary Approach to the Balance of Payments"¹ Johnson argues that a balance-of-payments deficit is a stock-adjustment disequilibrium phenomenon and not a flow equilibrium phenomenon. That is, "inflows or outflows of money are systems of a disequilibrium between desired and actual stocks which are being adjusted by means of an excess of income over expenditure or vice versa, and such differences will gradually disappear as the corresponding money flow brings desired and actual money stock back to equality." Thus he concludes that devaluation is logically equivalent to a contraction of the money supply at an unchanged exchange rate and that such a policy will be effective only if the reduction in real balances through devaluation is not offset by domestic credit creation.^{*} The immediate question must be, "how can flexible rates promote autonomous national policy when devaluations must be accompanied by reduced domestic credit expansion?"

The increase in domestic prices caused by devaluation reduces the real value of the existing money stock, and thus the policy amounts to increasing the nominal amount of money demanded. Both deflation and devaluation reduce "real balance" by creating an excess demand for money; deflation by decreasing the nominal amount supplied, devaluation by increasing the nominal amount demanded. (That is, both policies should result in a decrease in the price of domestic goods relative to foreign goods.) Thus, satiating the excess demand for money caused by a devaluation (via inflationary domestic policy) is identical to not deflating

^{*} Emphasis added.

under a fixed exchange rate system, and therefore precludes any improvement in the balance of payments. This conclusion does not require assumption regarding the extent of unemployment and excess capacity.²⁰ Empirical support for this is provided by Connolly and Taylor²¹ who have shown that the rate of domestic credit expansion has been an important determinant on the degree of improvement of the balance of payments of the devaluing country.

Wilfred Guth⁴ goes even farther with regard to the necessary monetary restraint by stating, on the basis of recent balance-of-payments performances that "devaluations only work in the desired direction if they are underpinned by domestic deflationary measures...." And Kindleberger--in paraphrasing Friedman⁷--admits that "the only way depreciation works is if you can succeed in reducing the cost of domestically produced goods relative to foreign goods. But it is difficult to keep wages, interest rates, and prices in general from rising with a depreciating dollar. Curbing inflation as the dollar falls is possibly only at the expense of higher unemployment."*⁶

In addition, it is unrealistic to presume that world inflation is not a concern to an individual country under a flexible exchange rate system. External inflation must be a concern to any country that doesn't want to see any significant changes in the structure of its economy with regard to the nature of its export industries and the relative prices of goods.

Johnson thus concludes, in contrast to his earlier views, that "contrary to widespread belief, a floating rate system yields little, if any, extra freedom for the independent exercise of national economic policy,

* Emphasis added.

if freedom means freedom from external influences and changes and is defined implicitly to mean independence exercised without cost in the form of disturbance."¹ I can't imagine how else one might define freedom, but it is the lack of this same freedom that is cited in condemning the fixed-rate system.

Any vestige of thought that flexible rates allow more national autonomy than fixed rates can probably be laid to rest by quoting again from Guth,⁴ former executive director of the IMF for Germany. He recommends "closer cooperation between the IMF and commercial banks" so that countries with excessive trade deficits would then "no longer be able to avoid the necessary policy adjustments"* [i.e., deflation] and concludes that "national governments must be prepared to accept member greater IMF authority with all its implications...." He presents this in the context of a floating rate system. Thus the conclusion must be that even if a country devalues rather than deflates, domestic monetary restraint is required if there is to be an improvement in the balance of payments.

An extra degree of freedom has been obtained, though, under the current flexible-rate system, but only in the sense that countries have been able to avoid monetary restraint through competitive devaluation, i.e., the flexible-rate system has bought time for the international monetary system. (In light of this, it is not hard to understand why the Japanese and Germans have been reluctant to inflate to reduce their surplus in view of the U.S.'s inability to exercise the monetary restraint necessary to reduce its deficit.) Trade deficits will continue until the present system is made to function properly, which is unlikely given that practicing the necessary monetary restraint is apparently not politically feasible.

* Emphasis added.

III. EXCHANGE-RATE UNCERTAINTY

Given that a "properly" functioning flexible-rate system provides no increase in domestic economic autonomy, it seems important to determine the extent of any costs incurred by the greater uncertainty in exchange rates experienced under a flexible rate system. There are many sources of such costs.

With regard to contracts, unsettled monetary conditions have contributed to the spread of "hardship clauses" in contracts resulting in the blurring of a contract and a modification of the time-honored principle that a contract establishes immutable rights and obligations between the parties. The fact that IMF member nations will have the right, under the Articles of the soon-to-be-ratified 2nd amendment, to unilaterally change their exchange arrangements will affect not only the drafting of legal instruments but also the development of international and national monetary law.⁵ A related development has been the reinstitution of the gold clause, which was recently restored to legality by the U.S. and a number of countries. This allows the settlement of claims on the basis of a given amount of gold, at the option of the seller, to protect against depreciation. Similar clauses based on "baskets" of currencies (including SDR's) have also been developed. Such "clauses" are sure to increase the costs of international transactions, at least during the initial phase of any floating rate system.

A recent series by the *Wall Street Journal*²³ delineated aspects of how the flexible-rate system is affecting trade and foreign investment. Many U.S. firms that obtained relatively cheap loans in marks or Swiss francs have been forced to refinance at less favorable terms on the

Eurodollar market. Effects on reported earnings of industries that do business abroad have resulted in costly new U.S. accounting rules. Many firms have canceled plans to invest abroad by virtue of the increased difficulty in planning and budgeting. Companies who transact in many foreign currencies have been forced to set up departments to follow the markets. And a major complaint is the increased difficulty of predicting costs and therefore profits, even in the very short term.

Finally, many U.S. companies have been forced to pay in foreign currencies for imports as foreign exporters refuse dollars. As a result these companies have had to buy insurance against the risk of foreign currency appreciation, i.e., they are buying forward contracts.

Of course, for those firms who were already hedging under the fixed rate system, the issue reduces to whether the cost of hedging has been kept within "reasonable bounds" under a flexible exchange rate system. I assume that by "reasonable bounds" Johnson meant costs no greater than those experienced under fixed exchange rates. The interest rate parity theorem relates the forward premium/discount to the money-market rate differential: $(F - S)/S = r_d - r_f$, where F = forward exchange rate, S = the spot exchange rate, r_d = the domestic interest rate and r_f = the foreign interest rate.²⁴ Analyses of the forward exchange market during periods of fixed exchange rates have shown that, although opportunities for profit through arbitrage existed,¹¹ on the average, interest rate parity was the rule.^{16,24,25} For example, for the years 64-70 neither Canada, Germany, Netherlands, United Kingdom, or France showed any systematic deviation from interest rate parity with U.S.¹⁶ Thus, for Johnson's assertion to hold true, it must be demonstrated, assuming the interest rate parity theorem to still be valid, that money-market's differentials have not increased since then.

But Frenkel^{8,22} has demonstrated that during periods of differentially changing inflation rates that the premium/discount of forward exchange contracts is instead a function of the difference between domestic and foreign anticipated rates of inflation (the anticipated inflation rate differential). While his studies were concerned with the German post-WWI hyperinflation (also a period of flexible exchange rates), he maintains that the analysis is also applicable to "less extreme and more typical inflationary processes." As such, it seems reasonable that the analysis would be applicable to forward pricing since the breakdown of Bretton Woods (1971).

Thus the interest rate parity theorem would seem to be valid only in a system where real rates of return between countries are the same, as was observed in the 1960-1970 period of relatively stable exchange and inflation rates.¹⁶ I.e., if $r_i - i_i = r_j - i_j$, where r_i and i_i are the interest rate and inflation rate, respectively, in country 'i', then $\frac{F - S}{S} = r_i - r_j = i_i - i_j$. In this case an interest rate parity theorem would be equivalent to an inflation rate parity theorem. It is assumed here that the expected inflation rate in the short term is the same as current inflation rate (i.e., stable). But when real rates of return diverge as a result of the advent of differential inflation rates, as occurred post-1971,¹⁶ then the pricing of forward contracts becomes a function of the anticipated inflation rate differential. The above relationship no longer holds ($r_i - r_j \neq i_i - i_j$) since r_i and r_j are presumably unchanged (in the short term) while i_i and i_j have changed differentially.

This contention, though, that forward premiums are determined on the basis of differential inflation expectations, assumes that the forward market is efficient. Given that efficiency can be a function of the

volume of transactions, and that the forward markets are much larger than a few years ago,¹⁰ it is unlikely that efficiency (at a given conf. level) has been maintained throughout the post-71 period. This can be tested by way of a model used by Frenkel⁸ in determining the efficiency of the post-World War I forward exchange market. He defines efficiency in the stock market sense, in that one would expect current prices to reflect all available information and that the residuals from the estimated regression should be serially uncorrelated. His model is:

$$\text{Log } S_t = a + b \text{ Log } F_{t-1} + u$$

where S_t is the current spot exchange rate, F_{t-1} is the one-month forward exchange rate prevailing at the previous month. Efficiency requires that the constant term does not differ significantly from zero, that the slope coefficient does not differ significantly from unity, and that the error term is serially uncorrelated (on the basis of the Durbin-Watson statistic). Thus, this analysis could be done for various periods since 1971 and compared with data on the average volume of transactions for those periods to determine whether efficiency (at various confidence levels) is a function of volume over the volume range available.

Given that the forward market has been efficient (to at least .95) and the existence of differentially changing inflation rates, then forward contract pricing is determined by the anticipated inflation rate differential. Thus, in light of the fact that national inflation rates (and therefore national anticipated inflation rates) are more divergent than ever before⁴ it follows that forward contracts must be more costly than ever before, regardless of the relationship to money-market differential

(i.e., nominal interest rates may or may not be more divergent than they were during fixed exchange rates).

That the flexible rate system incurs greater cost in foreign transactions relative to the fixed rate system is clear, regardless of whether increased inflation rate differentials or inefficiency result in higher forward rates, since the increased exchange rate uncertainty will force more traders to hedge. And in lieu of any long-term forward market, foreign investors will continue to suffer exchange losses on portfolio and direct investments and long-term lending and borrowing. It is argued¹³ that, to the extent that a country's domestic prices diverge from foreign prices, that any losses to foreign long-term investors from exchange depreciation will tend to be balanced by increased earnings and interest rates in terms of domestic currency. But this necessarily assumes a properly functioning system.

It is clear that commercial traders and foreign investors would be in favor of eliminating all exchange risk. Although this could be obtained under a properly functioning gold standard, it is conceivable that foreign exchange rate "certainty" might be offset by the uncertainty that would be created with regard to internal price adjustments necessary to maintain parity. Thus under fixed rates there would presumably be an increased need to hedge on the commodity futures market. Either system, then, involves uncertainty that requires hedging. But, it appears that the existing flexible exchange rate system has, in addition to creating increased exchange rate uncertainty, increased the instability of domestic price levels.¹⁶ (In this case, though, the uncertainty is with regard to changes in the inflation rate rather than changes from inflation to deflation). Thus, under the current system, there is an increased need to hedge on both the commodity and currency forward markets.

IV. INTERNATIONAL MONETARY RESTRAINT

Theoretically, both the fixed and flexible exchange rate systems are viable in the sense that they provide a mechanism for adjustment of the external balance. But, realistically, there is no way in either system to prevent individual nations from inflating (or, as is far less likely, deflating) irresponsibly (to avoid adjustment) and thus seeking to improve their economic position at the expense of other nations. Currently, the problem is not with the flexible exchange rate system per se, but with the domestic economic policies that are pursued. "The efficacy of the freely fluctuating exchange rates can be said to depend fundamentally...upon the successful implementation of monetary and fiscal policies for domestic stabilization purposes."¹³ In the case of an incipient trade deficit, this means that a devaluation must be followed by restraint on the increase of domestic monetary reserves. It is clear that the post-1971 system has not been characterized by such restraint.

This same lack of restraint was responsible for the demise of the Bretton Woods fixed-rate system in that gold movement (let alone reserve currency movement) did little to affect domestic monetary policy.¹⁸ Thus the appropriate conclusion seems to be that the demise of the Bretton Woods fixed rate system and the current turmoil of the flexible rate system are both the result of irresponsible domestic monetary policy in the sense that no nation is willing (for political reasons) to enforce the restraint needed to effect a balance of payments adjustment. The issue is not whether fixed is better than flexible, since they both involve monetary restraint, but whether nations can be induced to pursue the appropriate monetary policy.

The change from a nominally fixed system to a nominally flexible system (1973) was made not because the latter system was perceived to be superior, but because the doubling of world liquidity¹⁹ (mainly in the form of Eurodollars) in the previous three years had resulted in a de facto flexible rate system anyway. Countries were no longer willing and/or able to intervene in the foreign exchange market to maintain parity. The world was forced into a flexible rate system because of irresponsible monetary policy, so it is not surprising that a lack of restraint still prevails as indicated by continued inability to bring about a balance of payments adjustment.

This, then, accounts for the efforts by the International Monetary Fund to increase (as indicated by the provisions of the second amendment now under consideration for ratification) its authority in the management of the international monetary system.¹⁵ Whether the IMF will be able to effectively impose restraint on national central banks any better than the gold standard is unclear. What is clear is that virtues of increased national autonomy have given way to the virtues of increased international economic order. But, if the member countries are willing to ascribe to the IMF the powers necessary to effect the monetary restraint necessary to make either system work, then why not simply agree to observe a gold standard (whether under a fixed or flexible system). Perhaps the apparent preference for the IMF is due to the fact that restraint is politically more tenable when it can be blamed on someone else (IMF) rather than on a lump of metal.

V. THE FUTURE ROLE OF THE IMF/GOLD

It appears that the current turmoil is leading to an international monetary system in which the expanded IMF role will perhaps involve the enforcement of a gold standard, or at least a system in which gold is the primary reserve asset. This may seem to contradict apparent IMF policy regarding gold, especially in light of former Secretary of the Treasury Simon's prognostication (after the IMF's Sequoia meeting in August, 1975) that gold would be phased out of the monetary system. But a closer look reveals otherwise. It was agreed (1) gold was to be mobilized, i.e., to be used in transaction between central banks at market related prices, (2) the central banks would be able to buy as well as sell gold at market prices, and (3) that gold held by the IMF should be returned to the contributing countries at the price at which they had paid in. The only concession granted to the anti-gold forces (Simon, et al.) was that this should not occur for two years.^{14,5}

The response to this agreement in Europe was that gold would be restored as the primary reserve asset. *The Economist* commented that "The Americans believe gold is being phased out of the monetary system..., but they may have been taken for a ride."¹² Former Secretary of the Treasury Henry Fowler expressed extreme opposition to the agreement, commenting that the combination of abolishing the official price and allowing central banks to buy at the market could result in making gold again the principal component of monetary reserve.¹⁴ Fritz Machlup denounced it as inconsistent with "the principles of [monetary] reform that had been hammered out in arduous discussions over a period of 12 years."¹²

Machlup had ridiculed efforts to have the book value of gold (resulting from the two-tier system, i.e., the official price) revalued in order to increase international reserves, using words like "claptrap, naive, gimmickry, fairytale, imbecile, useless, and Rube Goldberg" to present his arguments.⁹ He apparently (or purposely) missed the point by assuming throughout that there would be no change in the two-tier system, i.e., that central banks would still not be able to buy and sell gold in the market. Obviously a revaluation under these conditions would be meaningless and was not intended by revaluation advocates.

The U.S.'s apparent aversion to gold is probably, in part, attributable to the fact that it interferes with the dollar and/or SDR's (given that the U.S. is the only country with veto power over SDR allocations) role as the main international reserve assets and thus detracts from potential U.S. influence. The European pro-gold stance is understandable, given that they perceived the U.S.'s enthusiasm for the SDR as inspired by the hope the SDR might reduce some of the demand for the conversion of U.S. dollars into gold¹⁵ and thus allow the U.S. to continue its inflationary policies. Solomon concludes that "despite the lip service paid to the SDR as the principal reserve asset of the future, there persists...a desire to preserve a significant role for gold...[due to]...a fear that international cooperation may some day flounder and the IMF become unworkable."¹²

Clearly, it is the lack of domestic monetary restraint, and not flexible (or fixed) exchange rates per se, that is responsible for the international monetary morass. Such restraint will apparently have to be imposed by either the IMF, or gold, or both, if the free world is to avoid further and greater economic crises.

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