

THE INTERNATIONAL GOLD STANDARD: A NEW PERSPECTIVE

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I. Introduction

As early as 1923, John Maynard Keynes declared that the choice of an international monetary regime involved an unpleasant dilemma. Keynes argued that "If ... the external price-level lies outside our control, we must submit either to our own internal price-level or to our exchange being pulled about by external influences. If the external price-level is instable, we cannot keep both our own price level and our exchanges stable. And we are compelled to choose ... " choose ..."[1]

The most significant practical implication of Keynes' contention is, of course, that a nation must choose either to maintain "fixed" exchange rates between its own and foreign currencies by participating in the international gold standard or to maintain reasonable stability in domestic levels of prices, output, and employment. Following Keynes, most economists today are inclined to accept the view that the operation of the gold standard tends to be inconsistent with the maintenance of domestic macroeconomic stability. Indeed, this is one of the major considerations that led many economists and informed economic policymakers during the Bretton Woods era to conclude that a regime of fluctuating exchange rates is superior to a fixed exchange-rate system.

In this paper, I shall suggest that the generally accepted explanation of the impact of the international gold standard on the stability of an individual nation's domestic economy rests on an overly aggregative approach to monetary and balance-of-payments theory. This approach tends to obscure rather than elucidate important issues whose understanding is vital in assessing the relative merits of competing international monetary systems. The issues in question include: 1. The type of price variations that are necessary to adjust balance-of-payments disequilibria under the gold standard; 2. The meaning of the terms "inflation" and "deflation" in the context of an "open" national economy; and 3. The international transmission of business cycles or "macroeconomic instability" under fluctuating exchange rates.

In addressing these issues below, I shall attempt to rehabilitate and extend the approach of a number of economists writing in the 1930's who pioneered the development of a micro-oriented "process analysis" of monetary and balance-of-payments phenomena[2]. These writers include the prominent monetary economists, Ralph Hawtrey[3], Friedrich A. Hayek[4], and Lionel (later Lord) Robbins[5], and the less well-known Michael A. Heilperin[6] and F. W. Paish[7].

2. Price Changes and Balance-of-Payments Adjustment under the Gold Standard

The belief that there exists a dilemmatic tradeoff between fixity of exchange rates and stability of domestic economic activity can be traced partly to the conventional explanation of how disequilibria in the balance of payments are normally

adjusted under the gold standard. According to this explanation, the normal operation of the balance-of-payments adjustment mechanism necessarily subjects a participating nation to recurrent bouts of inflation and deflation of its money supply and, therefore, of its price level.

To illustrate this, let us suppose that there occurs a decline in the foreign demand for an important export product of a particular nation. Starting from an initial position of balance-of-payments equilibrium, the immediate effect of the falling off of the nation's exports is a deficit in its external payments and an associated outflow of gold. The loss of gold results in an overall decrease in the national money stock, because, under the gold standard, gold serves both as hand-to-hand currency and as reserves for bank notes and checkable deposits. The contraction in the domestic money supply, ceteris paribus, causes a deflation of the price level in the deficit nation. With domestic prices now lower relative to prices generally prevailing in the rest of the world economy, the nation's exports are stimulated while its imports decline, resulting in the eventual restoration of equilibrium in its balance of payments.

During the course of the equilibration process, however, the required deflation of domestic money and prices may severely depress domestic economic activity, occasioning substantial unemployment of productive resources and losses of real output. This is especially likely to be the outcome in modern economies, characterized, as they are, by prices and wage rates that tend to be "sticky downward."

Now, it is widely admitted that this textbook description of the "price-specie-flow" adjustment mechanism gives a highly oversimplified picture of the balance-of-payments adjustment process under the gold standard and must be considerably augmented to approach a realistic explanation of the process. But what is not generally understood is that it is positively misleading. The source of the problem is the tendency to use the concept of a "national price level" when theorizing about the balance of payments.

As Heilperin points out, such "statistical constructions" seem

"... to provide a comfortable way out of the perplexing multiplicity and heterogeneity presented by the economic world and the processes that are taking place therein ... But the multiplicity does exist and by ignoring it one falls into erroneous or meaningless statements about the world and about economic processes. Averages more often conceal reality than reveal it and have to be used cautiously, even in homogeneous collections; but they are simply without meaning in collections that are not homogeneous. There is no such thing in the real economic world as the 'general price level;' but what exists are prices, and it is the movements of prices and the changes in the structure of money values (including prices, incomes, debts) that are of real interest and of intense importance for the understanding of economic phenomena." [8]

By focusing analysis on national price levels, one is naturally led to conclude that what is required in the case of a deficit (surplus) is a general deflation (inflation) of domestic prices. But this hides the fact that what is really needed to restore balance-of-payments equilibrium, for example, in a deficit situation is a relative decline of particular prices, which hardly qualifies as a "deflation" in the usual sense of the term.

As an example, let us suppose that there develops a worldwide decline in the demand for U. S. wheat, precipitating a deficit in the U.S. balance of payments. This development will initiate a fall in specific prices, incomes, and cash balances in the U.S. Certainly the first effects will include a decline in the price of wheat and a contraction of the incomes and cash balances of wheat farmers. And there will later emerge secondary effects on prices and incomes in the farm machinery and other industries that directly supply wheat farmers with capital or consumers' goods. Thus, if, as a result of the decline in their incomes, American wheat farmers substantially reduce their consumption of domestic beer, its price will fall and the incomes and money holdings of workers and stockholders in the domestic beer industry will begin to shrink. Without going into more detail, there will occur tertiary and further effects of the deficit on the domestic economy.

Now, it is this sequential process of declining prices and incomes that serves to provide individuals with the incentives to undertake those actions necessary to adjust the deficit. For example, foreigners will be induced to increase their purchases of wheat, farm equipment, and beer by the lower prices of these goods, thereby expanding U.S. exports. On the other hand, there will occur a shrinkage of U.S. imports as lower incomes and the threat of insufficient money balances stimulate those in American industry experiencing adverse shifts in demand to cut their spending on foreign products. Imports will contract further, as U.S. residents begin to substitute relatively cheaper domestic products for foreign products, e.g., domestic beer for imported brews.

It is important to realize that these equilibrating processes of sequential price and income variations operate without respect to imaginary national borders. The magnitude and even the direction of the change of a particular good's price does not depend, therefore, upon the nation in which the good is offered for sale. In the foregoing example, foreign barley growers, who, let us assume, were favored by the initial shift in demand away from U.S. wheat, may have a sufficiently high "income elasticity of demand" for California wines (and other U.S. products) so that one of the more immediate responses to the balance-of-payments disequilibrium is a rise in the demands for and prices of these goods. Moreover, as these equilibrating processes proceed to work their way throughout the world economy, further redistributions of income and redirections of expenditures occur that may very well cause the prices of many other goods produced in the deficit nation to rise [9].

In general, as Hayek explains:

The important point in all this is that what incomes and what prices will have to be altered in consequence of the initial change will depend on whether and to what extent the value of a particular factor or service, directly or indirectly, depends on the particular change in demand which has occurred, and not whether it is inside or outside the same 'currency area.' We can see this more clearly if we picture the series of successive changes of money incomes, which will follow on the initial shift of demand, as single chains, neglecting for the moment the successive ramifications which will occur at every link. Such a chain may either very soon lead to the other country or first run through a great many links at home. But whether any particular individual in the country will be affected will depend on whether he is a link in that partic-

ular chain, that is whether he has more or less immediately been serving the individuals whose income has first been affected, and not simply on whether he is in the same country or not[10].

Hayek concludes that this disaggregated approach to balance-of-payments analysis reveals "... how superficial and misleading the kind of argument is which runs in terms of the prices and the incomes of the country, as if they would necessarily move in unison or even in the same direction. It will be prices and incomes of particular industries which will be affected and the effects will not be essentially different from those which will follow any shifts of demand between different industries or localities." [11]

In fact, it is the unwarranted concentration upon aggregates and averages in conjunction with a quirk of statistical compilation that has prevented economists from grasping the simple truth that all prices in a given nation need not move in the same direction to equilibrate the balance of payments. As Hayek points out, it is "the purely accidental fact" that price levels are constructed for prices in a national area that leads to the mistaken belief "... that in some sense all prices of a country could be said to move together relatively to prices in other countries." Needless to say, "The fact that the averages of (more or less arbitrarily selected) groups of prices move differently in different countries does of course in no way prove that there is any tendency of the price structure of a country to move as a whole relatively to prices in other countries." [12]

To sum up, the variations of particular prices, incomes, and cash balances that are the essence of the balance-of-payments adjustment mechanism under the gold standard do not constitute a general deflation of money and prices, such as that which accompanied the retirement of the Greenbacks in the U.S. in the 1870's or the collapse of the U.S. banking system in the early 1930's. In fact, the effects on prices and incomes that result from a decline in foreign demand for a domestic product are qualitatively no different from the effects that would be produced by a decline in demand for the same product which originates domestically. Both cases reflect the usual response of the market to diminished relative demand for a particular good on the part of market participants, wherever they reside. To label this market process "deflationary" in the one case and not in the other is confusing and serves no useful purpose.

### 3. The Meaning of the Terms "Inflation" and "Deflation" in an Open Economy

This brings me to the second issue, regarding the applicability of the terms "inflation" and "deflation" in describing the effects of money flows that normally take place between nations participating in the international gold standard.

Under the gold standard, gold serves in effect as a homogeneous international currency. Each member nation, therefore, does not constitute an independent "currency area" but is merely a constituent of a larger currency area, comprising the nations that employ gold as the general medium of exchange. A most important, although often ignored, implication of this fact is that changes in the quantity of money in a particular nation on the gold standard have no more and no less significance than changes in the quantity of money in a particular state, city, or even household existing within a purely national fiat-currency area.

Barring a change in the world's supply of gold, a long-run net transfer of money from one gold-standard nation to another will occur only in response to a relative change in the aggregate demands for money between the two regions. But the same is true today of a net transfer of dollar balances from one region to another within the U.S. or dollar currency area. In the latter case, we would hardly refer, let us say, to the loss of dollars in New Jersey and the acquisition of these currency units by New York residents as constituting a monetary deflation and inflation respectively. Thus to assert that the fluctuations in national stocks of money under the international gold standard constitute deflation or inflation is to confuse "redistributions of money between areas" that are components of a unified currency area with changes in "the quantity of money in a closed system." [13]

Lord Robbins gives a particularly incisive illustration of this point [14]. He considers a closed economy with a unified monetary system in which a shift in conditions of supply or demand, e.g., a discovery of valuable mineral resources or a changed fashion in tourism, produces an increase in the relative value of product and factor services in a particular area. In these circumstances, it is natural to expect a general rise of prices and incomes in the area. And it would prove "inconvenient and confusing to label this phenomenon "inflationary." "You only have to carry the thing to its limit and consider the rise of prices and the accompanying rise of incomes of a single industry, due to any of the causes I have mentioned, to see how very odd that would be." [15]

But the same reasoning is applicable to the effects of international movements of money under the gold standard. As Robbins explains:

"... exactly the same thing can occur in national areas which are parts of the world economy. If the demand for their product rises in comparison with the demand for the products of other areas, or if the volume of these products forthcoming in markets of elastic demand increases, then, in a regime of fixed exchange rates, the way in which the workers and owners of productive resources situated there can receive the increased share of world production which is awarded to them by the market is just this: that domestic incomes and prices of home products rise pari passu, and the increase of real incomes comes via increased power to buy import goods, goods with import ingredients, or various kinds of foreign services... Movements of this sort therefore can be conceived in a world in which the movements of price levels in the world as a whole are not inflationary." [16]

There is a plausible objection to the foregoing discussion which notes that, in contrast to redistributions of money balances between regions within a national currency area, transshipments of monetary gold reserves between national sovereignties generally involve multiple expansion and contraction of national money stocks. In other words, the nation losing gold experiences a reduction in its money stock that is greater in absolute amount than the gold outflow. Conversely, the money stock of the nation gaining gold expands by a multiple of the gold influx.

While this is certainly an accurate description of the way in which international gold flows affected national money supplies under the "classical" gold standard, it by no means follows that this is an inherent feature of the operation of the gold standard itself. Rather, it is a direct consequence of the fact that,

in the nineteenth century, the banking systems of most nations were organized along the lines of what has been called the "national reserve system." [17]

Under this system, the ultimate cash reserves, gold, for all the nation's banks were centralized in the hands of the central bank. The gold reserves served as immediate backing for central bank note and deposit liabilities, which, in turn, constituted the reserve base for the notes and deposits of the commercial banks. The latter were held, along with central bank notes and gold itself, in the money balances of the public. Since both the central bank and the commercial banks generally held cash reserves against only a fraction of their liabilities, the money and credit structure of each national economy resembled an inverted pyramid, with a relatively narrow base of gold supporting a much larger superstructure of bank notes and deposits convertible into gold. As a result, whenever gold began to leave its vaults to finance a balance-of-payments deficit, the central bank would be compelled to respond by applying measures designed to halt the outflow in order to maintain its accustomed or required ratio of gold reserves to liabilities. It generally accomplished this goal by raising the discount rate and thereby discouraging the discounting and borrowing of the commercial banks. The central bank was thus able to contract its outstanding note and deposit liabilities. This, in turn, placed pressure on the commercial banks to reduce their own note and deposit liabilities, since the supply of reserve assets in the system had fallen. Eventually, the general deflation of money engineered by the central bank would affect domestic prices, causing a cessation and reversal of the deficit and the associated gold outflow.

This "secondary" and artificial monetary contraction, piled on top of the natural monetary effect of the original gold outflow, was only necessary, because, under the national reserve system, the central bank generally held a small gold reserve relative to the total stock of bank liabilities convertible on demand into gold. Obviously, no such secondary deflation would need occur in a system where the money supply consisted solely of full-bodied gold coin and notes and demand deposits backed 100 percent by gold. Nor would it be likely to take place in a competitive free banking system where there existed no political lender of last resort. In this case the strivings for profit amidst the rivalry of competitor banks would lead each bank to identify and maintain the minimum stock of reserves sufficient to meet temporary disequilibria in the regional balance of payments without having to resort to drastic alterations of its supply of notes and deposits to the public [18].

To conclude this section, the international gold standard is not necessarily incompatible with domestic macroeconomic stability. The flows of gold that regularly occur through a nation's balance of payments are not exogenous causes of inflation or deflation. They are rather an endogenous response to relative shifts in the aggregate demands for money between different nations within the gold-standard currency area and are therefore explicable on the same principles as intranational flows of fiat currency.

This is not to deny that a system-wide variation in the value of money could develop in which every member nation was compelled to participate. In the most likely case, inflation or deflation would occur when the augmentation of the world's monetary gold stock during a given period exceeded or fell short of the increase in world output in the same period. In the long run, however, such overall movements in world prices tend to be self-reversing since gold production is directly related to the purchasing power of money [19].

#### 4. Fluctuating Exchange Rates and the Autonomy of National Monetary Policy.

This brings us to the final objection to the international gold standard on the grounds of its alleged incompatibility with domestic macroeconomic stability. Granted that the "normal" operation of the gold standard secures tolerable long-run price stability in the world economy, is it not still the case that it facilitates the domestic importation of random shocks or monetary policy errors originating abroad? For example, a rise in prices generated by an abnormally expansionary monetary policy in a large nation will result in a balance-of-payments surplus and influx of gold for a nation pursuing a relatively noninflationary monetary policy. If it strictly adheres to the gold standard, the latter nation will be denied recourse to an "autonomous" or "independent" monetary policy designed to dampen the inflationary impact on domestic prices. Conversely, a contraction of economic activity abroad will generate a balance-of-payments deficit and loss of gold reserves for the nation in question, due to a falling off of demand for its products on depressed world markets. The resulting contraction of its money stock will create excess supply in the domestic goods' market, thus depressing domestic prices, employment, and real income.

All this, it is generally held, can be avoided at very little cost by the simple instrumentality of a freely-floating national fiat currency. Under this monetary regime, when expansionary pressure is exerted on a nation from abroad, the exchange rate will simply float upward, obviating the need for balance-of-payments adjustment via inflation of domestic money and prices. Contrariwise, foreign depressions will be stopped dead at the nation's borders by a painless depreciation of the exchange rate, which substitutes for the grinding shrinkage of money, prices, and economic activity imposed by the gold standard [20].

While this argument is very plausible, it is open to challenge on the grounds that it ignores the effects of inflation and deflation on relative prices. It is true that some advocates of floating exchange rates have recognized this issue and attempted to deal with it.

For instance, Gottfried Haberler has admitted that "... floating does not provide complete protection from recession abroad, because it shields a country only from purely monetary disturbances from abroad, which can be defined as foreign-induced changes in the money supply. But floating does not protect a country from real disturbances. And the effects of recessions are not purely monetary in nature. Nonmonetary (real) aspects of recessions are their differential impact on different commodities and industries (for example, on raw materials versus manufactured) goods and, often overlapping, export versus import goods..." [21]

The foregoing is a significant qualification, which opens the door for the development of a much more fundamental criticism of the case for fluctuating exchange rates.

This development was begun by Heilperin in the 1930's. He argued that complete insulation from the destabilizing effects of foreign monetary policies can never be successfully achieved as long as the nation's residents are free to carry on any international economic relations at all. Fluctuating exchange rates cannot insure internal stability -- although they may indeed stabilize some arbitrarily-

selected price index -- because a country's internal "price structure" or actual pattern of relative prices is primarily determined by world market forces.

According to Heilperin:

The very fact of international trade ought to convey a warning to advocates of a choice (between internal and external stability)! Fluctuating exchanges must affect the formation of prices within any one country, and do so to an increasing degree as foreign trade plays a more important part in the economy of a country. Countries which are working with imported raw materials could hardly maintain stable internal prices when exchanges of the countries from which they import raw materials fall or rise. If advocates of internal stability, as opposed to international stability, would state their case in terms of the structure of prices and not in terms of average price levels, they would see at once that their case is very weak, unless of course, they go on to condemn the whole of foreign trade as a disturbing factor and proceed to advocate a policy of autarchy[22].

On this basis, Heilperin objects to the view that "... economic disturbances and fluctuations are an imported evil, against which a country can insulate itself through fluctuating exchange. The main body of the theory of business cycles is worked out on the assumption of a closed economy. International relations spread and synchronize economic fluctuations..."[23]

As a proponent of the "Austrian" or "monetary overinvestment" theory of the business cycle developed by Ludwig von Mises and Hayek, Heilperin emphasizes the key role of relative changes between the prices of capital goods and the prices of consumers' goods, which are wrought by monetary inflation, in precipitating business fluctuations[24]. But a system of fluctuating exchange rates does not interfere with the international transmission of changes in relative prices; it merely neutralizes the external forces acting upon a given nation's absolute level of prices. Indeed, the free-market proponents of freely-floating exchange rates tirelessly proclaim that one of the greatest virtues of their scheme is that it does not preclude the international changes in relative prices which are needed to induce a rearrangement of productive activities according to the ever-changing dictates of comparative advantage.

This is precisely the reason why fluctuating exchange rates cannot successfully insulate a nation from macroeconomic fluctuations generated abroad. Although Heilperin himself never extended his analysis this far, this point can be illustrated by using the Austrian business-cycle theory to develop a model sequence of the effects that follow from the initiation of a purely national inflation in a world of fluctuating exchange rates.

When the monetary authorities of a foreign nation of significant size inflate their national fiat money stock, typically via the expansion of bank loans to business borrowers in their own nation, the prices of capital or "higher-order" goods are bid up -- not just in the inflating nation but throughout the world economy, since commodity markets are internationally integrated. The increase of capital goods' prices relative to consumer goods' prices signals business firms in the relevant industries in all nations to expand the output of capital goods and contract the output of consumer goods. The stimulus to capital goods' production

will continue until the inflation is brought to a halt. At that time, a reverse movement of inflation-distorted relative prices occurs and businessmen finally realize that many of the long-term investments made in the capital goods industries during the inflationary boom are unprofitable and must be liquidated. The revelation of these malinvestments and misallocations of productive factors coincides with the onset of a worldwide recession or depression.

Internationally-integrated capital markets provide a further mechanism for transmitting the business cycle from country to country. Thus the impulse to (artificially) lowered interest rates on the money and capital markets of the country experiencing bank credit expansion will swiftly spread throughout the world economy, as domestic and foreign investors are induced by the developing interest-rate differential to shift their funds to higher yielding investments abroad. In addition, foreign business firms will find it profitable to expand their sales of their securities in that market where security prices have begun to rise above world levels due to declining interest rates, while restricting their borrowings and security offerings on their respective domestic credit markets. Such equilibrating shifts in the supply of and demand for savings between national capital markets (actually submarkets) insure that a strictly national bank credit inflation will tend to uniformly drive down interest rates throughout the world economy. This fall in interest rates will give further impetus to the worldwide boom in capital goods' prices and production described above, since lower interest rates promote an increase in the capital values of long-lived plant and equipment. On the other hand, when the inflating nation calls a halt to further bank credit creation, an impulse to rising interest rates travels throughout international capital markets, precipitating a world-embracing collapse of the capital values of investment goods and the onset of recession.

As long as it engages in international trade, therefore, a country may undergo a boom-and-bust cycle with a perfectly "stable" national price level, protected by floating exchange rates, when there occur reversible relative-price and interest-rate changes in world commodity and capital markets, which are the result of an inflationary boom engineered by foreign monetary authorities. The alleged benefits of a system of fluctuating exchange rates, purchased at the substantial cost of the demolition of an international money, thus turn out to be only a mirage of macroeconomic theorizing.

ENDNOTES

- [1] J. M. Keynes. A Tract on Monetary Reform. London, 1923, 154-55.
- [2] For an overview of the development of monetary process analysis through the 1930's, see Arthur W. Marget, The Theory of Prices: A Re-Examination of the Central Problems of Monetary Theory. Vol. 2. New York: Augustus M. Kelley Publishers, 1966, 346-403. For a recent study that focuses exclusively on the Swedish school's contributions, see Bjorn A. Hansson, The Stockholm School and the Development of Dynamic Method. London: Croom Helm Ltd., 1982.
- [3] Hawtrey, R. G. Currency and Credit. New York: Longmans, Green and Co., 1919; and idem, "The Gold Standard and the Balance of Payments." The Economic Journal, 36 (March 1926), 50-68.
- [4] Hayek, F. A. Monetary Nationalism and International Stability. New York: Augustus M. Kelley Publishers, 1971.

- [5] Robbins, Lionel. Economic Planning and International Order. New York: The Macmillan Company, 1937; and idem, Money, Trade and International Relations. New York: St. Martin's Press, 1971.
- [6] Heilperin, Michael A. International Monetary Economics. London: Longmans, Green and Co., 1939; and idem, Aspects of the Pathology of Money: Monetary Essays from Four Decades. London: Michael Joseph Limited, 1968.
- [7] Paish, F. W. "Banking Policy and the Balance of Payments." Economica, 3 (November 1936), 404-422, rep. in Howard S. Ellis and Lloyd A. Metzler, Readings in the Theory of International Trade. Homewood, Ill.: Richard D. Irwin, 1950, 35-55. (All references will be to the reprint.)
- [8] Heilperin. International Monetary Economics, p. 13.
- [9] On the conditions under which this would occur, see Paish, "Banking Policy," pp. 45-48.
- [10] Hayek, Monetary Nationalism, pp. 21-22.
- [11] Ibid., p. 23.
- [12] Ibid., p. 45.
- [13] Ibid., p. 24.
- [14] Lord Robbins, "Inflation: An International Problem" in Randall Hinshaw, ed., Inflation as a Global Problem. Baltimore: Johns Hopkins University Press, 1972, 16-17.
- [15] Robbins, "Inflation," p. 16.
- [16] Ibid., pp. 16-17.
- [17] For a description of the operation of the international gold standard in a world of national reserve banking systems, see Hayek, Monetary Nationalism, pp. 25-32. Also see Joseph T. Salerno, "The 100 Percent Gold Standard: A Proposal for Monetary Reform." in Richard H. Fink, ed., Supply-Side Economics: A Critical Appraisal. Frederick, MD.: University Publications of America, Inc., 1982, 481-82.
- [18] For a modern explication of free banking theory, including a discussion of the market forces that determine the individual bank's optimal reserve position, see Lawrence H. White, Free Banking in Britain: Theory, Experience, and Debate, 1800-1845. New York: Cambridge University Press, 1984, especially chapters 1 and 5.
- [19] Theoretical elaborations of this point are provided by Milton Friedman, "Commodity-Reserve Currency" in idem., Essays in Positive Economics, Chicago: The University of Chicago Press, 1953, 206-208; and Joseph T. Salerno, "Gold Standards: True and False," The Cato Journal, 3, (Spring 1983), 251-55. An empirical illustration can be found in Michael David Bordo, "The Classical Gold Standard: Some Lessons for Today." Review of the Federal Reserve Bank of St. Louis, 63, (May 1981), 2-17.

- [20] See the classic article, Milton Friedman, "The Case for Flexible Exchange Rates." in Friedman, Positive Economics, pp. 157-203.
- [21] Gottfried Haberler, "The International Monetary System after Jamaica and Manila." in William Fellner, Contemporary Economic Problems 1977. Washington, DC.: American Enterprise Institute for Public Policy Research, 1977, 273.
- [22] Heilperin, International Monetary Economics, 12.
- [23] Heilperin, Pathology of Money, p. 71.
- [24] For a sympathetic discussion of the Austrian theory of the business cycle, see Heilperin, Pathology of Money, 153-62. A detailed explication and critique of the theory can be found in Gottfried Haberler, Prosperity and Depression: A Theoretical Analysis of Cyclical Movements. New York: Atheneum, 1963, 33-72.