

The Harwood Index of Inflating

The Harwood Index of Inflating continued its downward trend during 1979. This trend has, since 1971, reflected the "validation" of higher and higher price levels in the absence of any links between currency and the monetary commodity, gold. It has not involved a reduction of inflationary purchasing media in use; inflationary purchasing media in use has continued to increase during this period. There is no reason to expect that "price inflation" will abate soon; in fact, continuation of the recent trends would involve continued and accelerating price increases. Restoration of sound money and credit must, at some point, involve withdrawal of inflationary purchasing media. Return to gold convertibility of the dollar would be only a part of this process.

In *Research Reports* for July 2, 1979, we published our estimates of the Harwood Index of Inflating, the first such publication in nearly 4 years. We had suspended our reports on the Harwood Index because of severe doubts concerning the reliability of the monetary and banking data used in compiling the Index. We resumed publication after we became convinced that additional data or refinements of them probably would not alter significantly either the upward trend that began about 1940 and lasted until the early 1970's, or the subsequent downward trend. These trends are evident in Chart 1.

The Harwood Index is the ratio of *total* purchasing media in use to the amount of *noninflationary* purchasing

media. Noninflationary purchasing media is that representing goods offered in the market, including monetary gold when it is continuously offered for redemption of currency. Inflationary purchasing media is that purchasing media created for other purposes, such as the purchase of goods for consumption or investment. The amount of inflationary purchasing media is equal to the difference between total purchasing media in use and noninflationary purchasing media. It may also be calculated as the excess of the investment-type assets of the banking system over the total of saved purchasing media entrusted to the banks.

As we noted last July, the recent downward trend of the Index of Inflating is unlike its predecessors (such as those between 1929 and 1933 or between 1937 and 1940) because the current downward trend is not attributable to inflationary purchasing media being withdrawn from circulation. Inflationary purchasing media has continued to increase (as shown in Chart 2). The decrease in the Index during recent years is attributable to *noninflationary* purchasing media increasing more rapidly than inflationary purchasing media has increased. Noninflationary purchasing media has grown rapidly because, in the absence of a fixed convertibility of currency for gold, successively higher and higher general price levels become "validated," i.e., the existing price level at any one time becomes that at which prices would be maintained in the absence of inflating.

Chart 1
 HARWOOD INDEX OF INFLATING
 Seasonally Adjusted

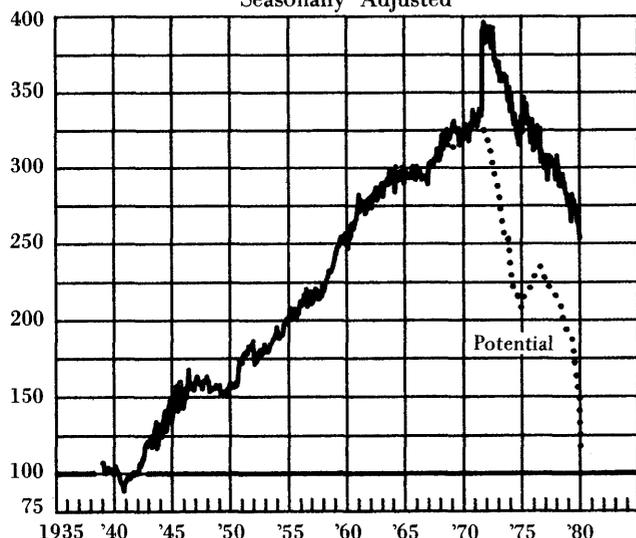
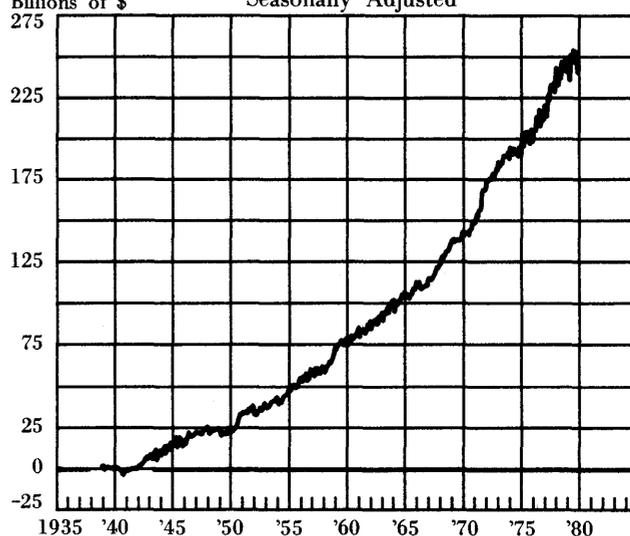


Chart 2
 INFLATIONARY PURCHASING MEDIA IN USE
 Billions of \$
 Seasonally Adjusted



As we also mentioned last July, further creation of inflationary purchasing media and continuation of the downward trend of the Harwood Index at the approximately linear rate that has been observed since 1971 would involve continued and accelerating general price increases, and not a return to some earlier, lower general price level. As long as currency remains inconvertible into gold at a fixed rate, there is no level of prices that is "too high." Thus, the Harwood Index presently is mainly an indication of the extent of the relative pressures toward cyclical economic distortions fostered by excessive monetization of credit.

As Chart 1 shows, the downward trend of the Harwood Index continued through 1979. It is now near the level of about 20 years ago. This suggests that during the 1970's, the economic distortions fostered by inflating have become a relatively smaller portion of economic activity. Perhaps this is attributable to Americans becoming more experienced with depreciating currency and better prepared to anticipate its effects.

Also shown in the chart is the "potential" Harwood Index of Inflating. The potential Index is the Index level that would result from a return to convertibility at the market price of gold and from use of the "profits" from devaluation of the dollar to retire Treasury securities held by the banking system. At the average price of gold for January, \$675 per ounce, this potential Index had decreased to about 115, which is near the level of the early 1940's.

These data suggest that a return to convertibility at the recent dollar price of gold could result in a substantial further reduction in the Harwood Index. Such a reduction would not reflect a withdrawal of purchasing media from circulation but could result from the "transformation" of some purchasing media representing monetized Treasury securities (investment-type assets) into purchasing media representing gold continuously offered for sale. That there is now about \$250 billion of inflationary purchasing media in circulation (we again emphasize that these estimates are based on monetary and banking statistics that, while adequate for rough approximation, may not be accurate) suggests that restoration of full convertibility of the dollar at a price of about \$950 per ounce could bring the Index down to 100.

Restoring Convertibility at \$950

A simple restoration of convertibility at \$950 per ounce, or even at the recent market levels, would involve at least two major economic difficulties. (We shall not discuss the political difficulties here.) First, the amount of Treasury securities held by the Federal Reserve banks is "only" about half, roughly \$125 billion, of the total of inflationary purchasing media in circulation; therefore some gold would have to be substituted for some of the Treasury obligations or other investment-type assets now held by commercial banks. This would necessitate changes in reserve requirements and other aspects of our money and credit system.

Without such changes a massive devaluation of the dollar could simply be a device to continue and prolong inflating, because the monetary authorities could use the "profits" from devaluation as the basis for a further expansion of credit. Such further expansion of credit perforce would be unsound as long as pre-existing inflationary purchasing media remains in circulation. Incidentally, this is why many analysts, particularly Keynesian apologists for inflating, have described the recent surge in the price of gold as "inflationary."

When monetary authorities "write up" their gold

holdings to market value in the absence of convertibility, the "profits" simply become additional debt that can be unsoundly monetized. (Without redeemability, gold certificates issued by the Treasury are simply non-interest bearing debt of the Treasury with no maturity date. Such issues are not otherwise different from any other Treasury obligation.) In other words, a massive devaluation and even a return to convertibility would not be a panacea: additional steps to ensure a return to sound commercial banking would be required.

A second difficulty would be that a return to convertibility at the recent price of gold or a higher price such as \$950 per ounce would probably not stop increases in the general price level. If redeemable claims on gold were successfully substituted for all inflationary purchasing media and if sound commercial banking were restored, the Harwood Index would return to 100 and remain near that level. But, at a price of \$950 per ounce, or even substantially less than that, the exchange ratio of gold for other things would be markedly higher than it was during earlier periods when specie and paper currencies were officially interchangeable at a fixed ratio (see *Research Reports* for January 28, 1980).

Such an "overvaluation" of gold almost surely would promote greatly increased world production of gold and also, and perhaps more importantly, it would result in greatly increased holdings of gold by the banking system. If each ounce of gold were convertible into a fixed 950 dollar claims, there would be little incentive to hold gold, except distrust of the banking system and currencies. If convertibility were maintained, such distrust would wane and those who held gold would sell it to the highest bidders, the banks, in order to use the proceeds to bid for other things. This process probably would continue until the exchange ratio of gold for other things had returned to its historic range. Such a process, which often is inaccurately called "gold inflation," reflects changes in the exchange ratio of gold for other things, and it would involve increases in the general price level even under sound commercial banking and no further inflating.

In short, there are no easy solutions to the problem of generally rising prices. What is needed is withdrawal and cancellation of inflationary purchasing media. To date, no one in a position of authority has shown any inclination to do this.

WATCHING THE RIGHT SIGNALS

Various explanations have been offered for the recent surge in interest rates. One is that there is a new perception that the Fed has not practiced the monetary restraint it promised last October. That is a spurious argument. Without asserting there is great economic significance to it, the fact is that the Fed thus far has practiced what it preached last October 6 — it has slowed somewhat the rate of increase in key monetary series.

Domestic monetary conditions have continued to change markedly. In *Research Reports* for February 18, we focused on the chaos in the U.S. bond market during the few weeks preceding that date. Medium-term and long-term Treasury bond yields then were almost 12 percent, and near-term yields were about 13 percent. As of this writing (February 26), Treasury obligations with about a year to maturity are yielding around 14.5 percent, and the yield curve slopes gradually downward from there to about 12.75 percent for 15-year maturities and further downward to roughly 12.5 percent for 25-year maturities. On February

15, the discount rate of the Federal Reserve banks (the interest rate charged by those banks on loans to its member banks) was raised one-percentage point, to 13 percent. In the few days subsequent to the discount rate increase, most major banks raised their "prime rate" from 15.25 percent to 15.75 percent, the earlier peak that prevailed in late November and early December 1979. By early in the week of February 24, the prime rate had been raised by most big banks to a new record, 16.5 percent.

According to news reports, analysts have attributed the latest upward surge in interest rates to: (1) increasing evidence that the economy is performing cyclically much better than was widely expected earlier and therefore cyclical conditions will not tend to put much downward pressure on the rate of general price rises; (2) recent price data revealing high and accelerating double-digit rates of increase; (3) a Federal budget proposal by President Carter that implies more pressure to inflate; (4) the perception among many that a greater emphasis on improving national defense could have an inflationary impact; and (5) the Federal Reserve has not practiced the monetary restraint that it purportedly said it would when the Fed announced its 6 October shift in operating practices.

In our recent assessment of bond market conditions, we considered the first two aforementioned factors. We concluded that (a) indeed, current cyclical economic conditions did not as clearly suggest a peak in interest rates as they did late last year and that (b) after adjustment for the rate of currency depreciation (price increases), interest rates were not "high" and therefore probably would not substantially retard credit demand in the absence of even higher nominal rates.

Points numbered (3) and (4) above — Carter's higher budget and the probability of more defense spending — will in fact foster inflating only if Federal Reserve officials again choose to aid the Treasury finance (through the monetization of Treasury debt) any larger Government deficits resulting therefrom. Such monetization occurs when the Fed creates additional reserves in the process of purchasing Treasury securities or the Fed in some other way provides additional reserves to the private commercial banks that are used at least in part to purchase Treasury securities. In either instance, for points (3) and (4) to have an inflationary impact, the Fed would have to *act* to make it possible.

This conclusion leads to a consideration of point (5) above, namely, the policy actions of Fed officials since October 6 and their implications. Of the five points raised above, the actual policy of the Fed is the key to the longer-run outlook for inflating and for nominal interest rates.

What Are the Facts?

An often-repeated misconception about the Fed change announced in October is that the Fed had adopted then a new policy of more restraint (actually less ease). No such policy change was made. Indeed, the Fed explicitly stated that the change was "in the method used to conduct monetary policy to support the objective of containing growth in the monetary aggregates over the remainder of this year *within the ranges previously adopted by the Federal Reserve.*" [Our emphasis.] That did not signal change in policy; it was a change in operating procedures. More specifically, the Fed indicated that it would give more attention to controlling reserves of the banking system and less to meeting interest rate targets.

In our analysis of the Fed's October announcement (*Research Reports*, October 15, 1979), we said that the

significance of the change "is that, having drawn full attention to the key monetary series of Federal Reserve Credit, member bank reserves, M1 money stock, etc., the Fed in fact will have to practice less expansion or their failure will be immediately evident..." In our report "Monetary Control?" (*Research Reports*, December 24, 1979), we described the reasons why the two series "Adjusted Federal Reserve Credit" and "Adjusted Monetary Base" are the more useful for judging the monetary practices of the Fed for periods of less than a year or so. These series are shown in Charts 1 and 2. Contrary to much that has been said by analysts, they show that in fact the Fed *has* practiced less ease since October than it did during the half-year or so before then. The new "money stock" measure that most closely approximates purchasing media in use, M1-B, also has increased at a lower rate of growth since October. (M1-B consists of currency and coin outside banks plus commercial bank demand deposits held by the nonbank public excluding those held by foreign banks and official institutions plus other checkable deposits at depository institutions.) From early in 1979 to October 1979, M1-B grew at an annual rate of 10.1 percent, but from October through early February, it grew at a 5.5 percent annual rate. The latter rate is near the midpoint of the 1980 target range for M1-B of from 4 to 6.5 percent, which was announced by the Fed on February 19.

Chart 1 ADJUSTED FEDERAL RESERVE CREDIT¹
AVERAGES OF DAILY FIGURES
SEASONALLY ADJUSTED

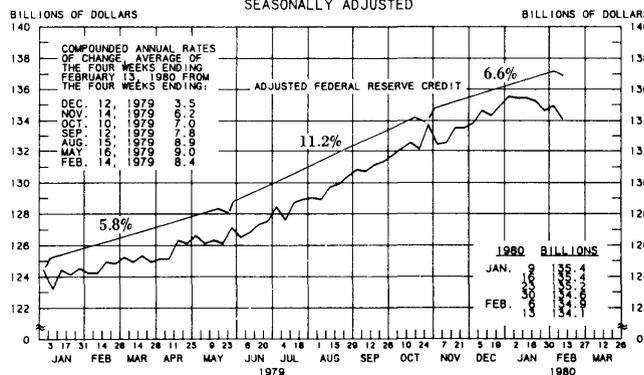
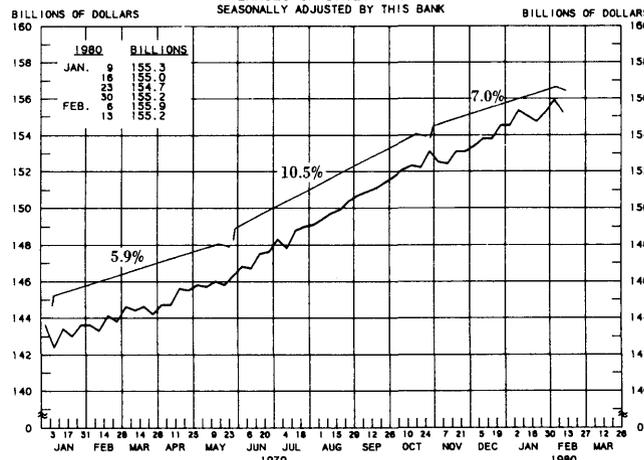


Chart 2 ADJUSTED MONETARY BASE²
AVERAGES OF DAILY FIGURES
SEASONALLY ADJUSTED BY THIS BANK



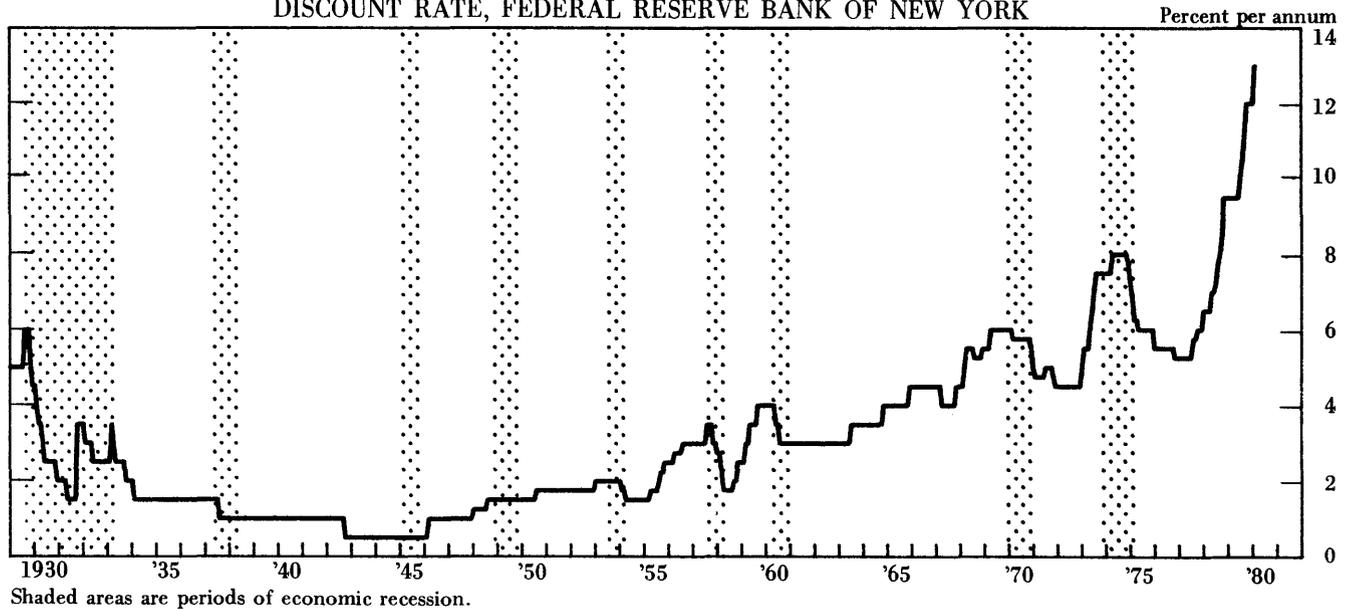
1 FEDERAL RESERVE CREDIT CONSISTS OF FEDERAL RESERVE HOLDINGS OF SECURITIES, LOANS, FLOAT AND OTHER ASSETS. ADJUSTED FEDERAL RESERVE CREDIT IS COMPUTED BY SUBTRACTING TREASURY DEPOSITS AT FEDERAL RESERVE BANKS FROM THIS SERIES AND ADJUSTING THE SERIES FOR RESERVE REQUIREMENT RATIO CHANGES. DATA ARE COMPUTED BY THIS BANK.

2 THE ADJUSTED MONETARY BASE CONSISTS OF: (1) MEMBER BANK RESERVES AT THE FEDERAL RESERVE BANKS; (2) CURRENCY IN CIRCULATION (CURRENCY HELD BY THE PUBLIC AND IN THE VAULTS OF COMMERCIAL BANKS); AND (3) AN ADJUSTMENT FOR RESERVE REQUIREMENT RATIO CHANGES. THE MAJOR SOURCE OF THE ADJUSTED MONETARY BASE IS FEDERAL RESERVE CREDIT. DATA ARE COMPUTED BY THIS BANK. A DETAILED DESCRIPTION OF THE ADJUSTED MONETARY BASE IS AVAILABLE FROM THIS BANK.

LATEST DATA PLOTTED WEEK ENDING: FEBRUARY 13, 1980

Source: Federal Reserve Bank of St. Louis.

Chart 3
DISCOUNT RATE, FEDERAL RESERVE BANK OF NEW YORK



We stress that, in pointing out the Fed's practice of less ease since October, we are not endorsing its actions as the most appropriate for the restoration of sound monetary conditions. Our other report in this issue clearly demonstrates that monetary expansion has been highly excessive, which suggests that a policy of no-growth, or even contraction, in the monetary aggregates is in order. But the immediate implementation of a no-growth policy probably would precipitate a major economic contraction that in turn would generate enormous political pressure for the Fed to inflate once again. In light of that possibility, for the Fed to slowly reduce the rate of monetary expansion over a period of, say, 5 to 10 years until there is no more inflating may be an acceptable path to reach that goal. At the least, this policy would be immeasurably more beneficial than a policy of promoting accelerating inflating, which the Fed has followed for more than 4 decades.

The historical record suggests there is little chance that the Fed in practice will persevere in the pursuit of slowly retarding inflating until it is stopped. From time to time in the past, the Fed has practiced less ease for a short period, only to foresake that practice for even more inflating than earlier. For example, the recent lower rates of growth in some key monetary series are similar to those achieved for some months late in 1978 and early 1979. Thus, the slowing since October is in no way adequate evidence that the Fed has "changed its spots"; nevertheless, since October the Fed has done what it said it would do — slow the rate of growth of the monetary aggregates.

Monitoring those series almost surely will be more useful for assessing the outlook for monetary developments than focusing on the many other tools of the Fed, such as discount rate changes. When the most recent discount rate increase is placed in its historical perspective, as in Chart 3, that increase seems not to have much long-term significance. There were many other such record highs that later proved to be mere steps in the upward progression.

A Caution Concerning F.R.C.

The difference of trends since late January 1980 in the Adjusted Federal Reserve Credit and Adjusted Monetary

Base series merits some comment. We discussed in "Monetary Control?" the reasons for the credit series usually being a more useful indicator of Fed policy than the base series. The reason is that the Fed has more direct control over the components of Adjusted Federal Reserve Credit than of Adjusted Monetary Base. In addition to Adjusted Federal Reserve Credit, Adjusted Monetary Base comprises SDRs held by Federal Reserve banks, Treasury currency outstanding, Treasury cash holdings, deposits with the Federal Reserve other than Treasury deposits and member bank reserves, and other Federal Reserve liabilities and capital accounts.

During the week ended January 30, SDRs held by Federal Reserve banks increased \$1 billion, to \$2.8 billion. That \$1 billion increase was reflected in the monetary base but not Federal Reserve credit, and it accounts for most of the difference between the \$0.6 billion decrease in Adjusted Federal Reserve Credit and the \$0.5 billion increase in Adjusted Monetary Base during that week.

In this instance, the Adjusted Monetary Base is more useful for the purpose of assessing Federal Reserve monetary actions than is Adjusted Federal Reserve Credit, because the monetization of SDRs would surely have been known by Fed officials before it occurred (since the Fed and Treasury cooperate on such things) and the Fed thus probably took whatever offsetting action it deemed appropriate by altering Federal Reserve credit. Possibilities of such differences dictate that not one but a number of key monetary series be continually studied for clues about the Fed's monetary actions.

PRICE OF GOLD

	1979		1980
	Mar. 1	Feb. 21	Feb. 28
Final fixing in London	\$248.80	\$665.00	\$646.00

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