

Bye Bye Greenback?

Even under our current fiat money system, the demand for paper currency is determined by the public. Much of this demand has come from abroad during recent years, which amounts to a "free ride" for the Treasury. This will end if foreigners find something more attractive than dollars. The catalyst for this change could be actual counterfeit currency rather than a loss of confidence in the Federal Reserve's restraint in creating money at will.

What is a dollar? Within the lifetimes of many of our readers, a dollar was a specific amount of gold. When he testified to Congress that "Gold is money," J. P. Morgan may have left Rep. Pujo and the members of his committee with the wind whistling between their ears, but Morgan had a point. At the time of his testimony (1912), paper currency and bank deposits were, in fact, IOUs promising to pay gold coin or bullion. The latter was money and everything else payable in dollars was credit in one form or another.

Prior to 1933, the holder of a dollar could claim $\frac{1}{20.67}$ of an ounce of gold. After then, only foreign holders could claim gold, at the rate of $\frac{1}{35}$ ounce per dollar (after 1968, this right was restricted to foreign official holders). But since 1971 the only thing that the holder of a dollar could claim with certainty has been another dollar.

When a dollar claim was convertible into gold, it was only gold coin that was legal tender in all circumstances. Creditors were not obligated to accept paper currency or bank checks in satisfaction of debts (even though they usually did). Today paper currency is "legal tender." Technically, our paper currency represents liabilities of the Federal Reserve banks. Such liabilities transferred among banks (as "Federal funds") also are legal tender. With no more liquid form of dollars than paper currency or deposits at Federal Reserve banks, the dollar today is an IOU nothing.

So What?

The important difference between gold and fiat money is that gold cannot be created "out of thin air." When we were on the gold standard, the amount of gold dollars in circulation and in the vaults of lending institutions in this country was determined by the actions of the public here and

abroad. Newly mined gold or gold received from abroad was brought to the mint or to U.S. banks. Foreigners who received gold from the United States may have presented it to their own mints or banks, or simply held it outside the United States. Gold flows were occasioned by market transactions — international trade, international investment or mining — that involved flows of goods or services. Thus any additions or subtractions from the stock of gold in the United States were fully integrated with the market process.

In contrast, the amount of the most liquid form of fiat money is determined by the actions of a small group of officials, who can create Federal Reserve credit without reference to market transactions. They can add to the supply of purchasing media at will. In this regard there is a great similarity between the actions of the officials and the activities of counterfeiters.

Nevertheless, the public does retain a role in our monetary system. The officials can determine the amount of Federal Reserve credit, but just as it was the public that determined how much of the stock of gold coin and bullion was held by banks and how much was held directly, the public decides how many "IOU

nothings" are in the form of paper currency (and coins), and how many are held as Federal funds by banks.

This is perhaps somewhat difficult for the average person to grasp. It is commonly understood that the Federal Reserve issues U.S. paper currency and that the Mint makes coins, but they only do so in response to public demand. For example, the Mint has manufactured a large stock of Susan B. Anthony dollars, but most of them are in storage as that coin has gained little acceptance with the public. Similarly, the amount of paper currency, and the amount of each denomination thereof, re-

Chart 1
Currency in Circulation

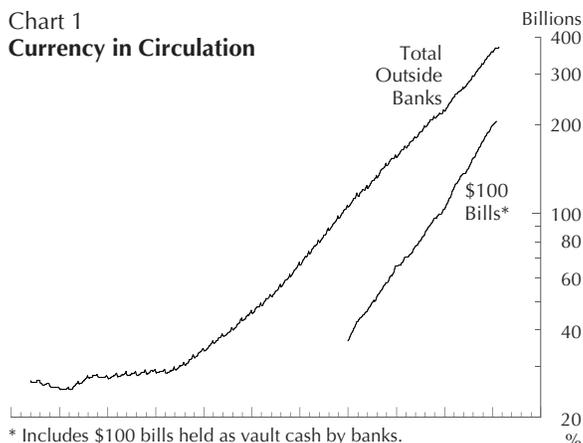


Chart 2
Rates of Increase over 36-Month Spans

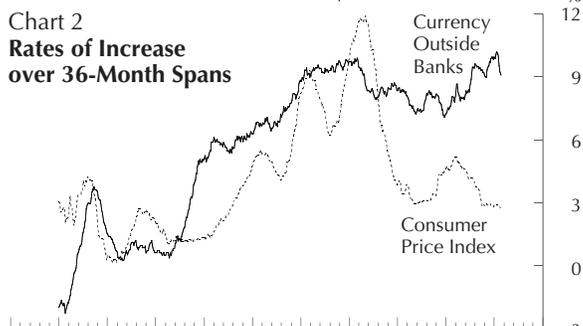
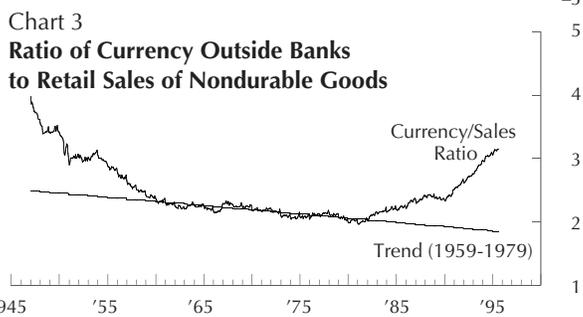


Chart 3
Ratio of Currency Outside Banks to Retail Sales of Nondurable Goods



flects the desire of the public to hold it and not the decisions of officials to issue it.

The Demand for Currency

According to the Treasury, the amount of U.S. currency and coin in circulation as of June 30 was \$418 billion. The amount of coins reported in circulation was about \$22 billion, and the remainder, \$396 billion, was in paper currency, \$238 billion of which, or about 60 percent, was in \$100 bills. After deduction of about \$40 billion held as vault cash by depository institutions as of June 30, and another \$4 billion or so for obsolete currency issues and coins containing precious metals (*i.e.*, items counted as “in circulation” that clearly are not used in day-to-day transactions), the remainder of about \$374 billion is equal to more than \$1,400 for every man, woman, and child in the United States.

This suggests that the members of a stereotypical family of four should have about \$5,600 in currency and coin in their possession (perhaps more, given that intact families typically have above-average incomes and assets). Also, this total should include 33 \$100 bills. No one believes that these calculations are even remotely representative of the behavior of average citizens. Few law-abiding citizens (a category that includes the overwhelming majority) hold that much currency.

Chart 1 shows the total of currency outside banks since 1947 and the total of \$100 bills “in circulation” since 1980. The first total excludes coins, but includes obsolete paper currency outstanding, and the second includes a deduction (based on the ratio of vault cash to currency in circulation — a “rough and ready” procedure) for the C-notes sitting in bank vaults at any given time. Despite the limitations of the data, it is evident that, after a period of little or no growth from the end of World War II through about 1960, the demand for currency has steadily increased.

Fluctuations in the demand for currency are shown in Chart 2, which plots the annualized rate of change in the amount of currency outside banks over 36-month spans as well as the annualized rate of change in the Consumer Price Index, also over 36-month spans. The demand for currency accelerated along with price inflation during the 1960s and 1970s, but it has continued to increase by roughly 9 percent per year, even as price inflation has abated during the past 15 years or so.

However, these data shed no light on the sources of demand for currency. In contrast to vault cash, bank deposits, and other claims payable to specific persons, the amount of currency held by its holder (or “bearer” as it used to say on the currency itself) is known only to that person.

As a result, the distribution of currency holdings can only be guessed at.

Chart 3 shows the ratio of currency in circulation to retail sales of nondurable goods for the years since 1947, together with a trend line calculated for the years 1959-1979 and extrapolated for the periods before and after those dates. This chart may shed some light on recent developments.

It should be noted that the marked decrease in the ratio of currency to nondurable goods sales during the years 1947-1959 squares with long-standing AIER findings that the postwar era began with a large “overhang” of idle purchasing media. People hoarded currency because they were distrustful of banks, interest rates were low, and perhaps had accumulated currency in black-markets under price controls and did not want their gains to be detected. AIER also long ago concluded that these hoards of idle purchasing media had largely returned to circulation by the end of the 1950s.

The gradual decrease in the ratio during the 1960s and 1970s would appear to reflect changes in payment practices, such as the increasing use of credit cards to pay for relatively minor purchases. There is every reason to believe that this trend of payment practices has continued during the past 15 years. This is, of course, a vast oversimplification, but the recent increasing trend in the ratio (as well as the continued rapid growth of currency after price inflation abated evident in Chart 2) strongly suggests that much of the demand for currency has not been from U.S. consumers.

Virtually all analysts agree that this has come from abroad. Anecdotal evidence has long shown that U.S. greenbacks have long been used in hand-to-hand payments outside the United States. Such evidence also indicates that this use has accelerated markedly since the collapse of the Soviet Union. For example, some banks have reported shipping pallets of \$100 bills, still in their shrink wrap from the Bureau of Engraving, to Moscow in recent years.

A Free Ride

Some Federal Reserve officials have recently been circulating an estimate that as much as two-thirds of U.S. currency is held outside the country at present. Presumably they have access to more information concerning transfers of currency via banks (*i.e.*, what has been sent and what has been returned) than most analysts, but, to repeat, any estimate of who holds currency will involve a high degree of guesswork. In our calculation of the Harwood Index of Inflation, we have for many years excluded a large portion (currently about \$200 billion) of the currency

component of M1 from our estimate of purchasing media. The two-thirds ratio indicates that about \$250 billion is held outside the country.

When foreigners hold our currency, they are, in effect, making an interest-free loan to the U.S. Treasury. This is because, the Federal Reserve holds Treasury securities to “back” its currency issues, but the interest paid on those securities is returned to the Treasury. This is an even better deal for the United States than the large holdings of dollars by foreign monetary authorities that they hold as reserves. We have to pay interest to them. In both instances, foreign purchases of dollars are a source of financing for our budget and trade deficits.

The “Supernote”

Counterfeiting has never been a serious problem in the United States. Most fakes are relatively crude and easy to detect, and, by monitoring suspicious purchases of inks and equipment and similar vigilance, the Secret Service claims to intercept more than 90 percent of counterfeit currency before anyone attempts to pass it into circulation. Even the amounts that do pass into circulation are viewed as a small-time criminal matter rather than an economic problem. Currency plays a relatively small part in the money and credit structure, and any conceivable amount of counterfeiting is unlikely to have an appreciable effect on macroeconomic variables, such as prices, final sales, etc. (A cynic would say this is because the officials have so flooded the market with fake money already.) The losses attributable to counterfeit currency are limited to its holder at the time it is detected (assuming the holder accepted it in good faith). For the economy as a whole, if a bill is good enough to pass, it might as well be genuine.

Reportedly, there now exist as much as \$3 billion in high-quality counterfeit \$100 bills. These so-called “Supernotes” are believed to be produced in Syria or in the Syrian-controlled parts of Lebanon, using the same intaglio printing process (with sequential serial numbers) as those produced in Washington. These bills have fooled trained experts and they pass through the Federal Reserve’s scanning machines, which typically yield only 1 counterfeit bill out of every 1,000 that they reject, at a higher rate than genuine bills. Relatively few Supernotes are believed to have entered the United States as yet. Many have remained in the Middle East, but most are believed to be in the former Soviet empire. At current exchange rates, there now are thought to be more dollars in circulation than rubles, and Supernotes may constitute 10 to 15 percent of the

\$100 bills (the most popular denomination) now circulating in Russia.

Although the Supernote constitutes one of the biggest thefts in history, the losses to U.S. citizens would seem to be minuscule (especially in comparison with what they have incurred from official inflating and currency debasement over the years). The genuine threat of the Supernote is that it could precipitate a loss of confidence in the U.S. dollar around the globe.

Banks in Europe, and perhaps elsewhere, now are refusing to accept \$100

bills. The Treasury is belatedly introducing a new design for the C-note, one that will markedly change its appearance from the design in use for over 66 years. Officials deny that this is in response to the Supernote (indeed, they are very coy about the Supernote's very existence — they claim that the new design is to forestall future counterfeiters). Most foreigners who hold greenbacks do so because they have had very poor experience with the currencies of their own country, and they know that changes in the physical appearance of

a currency often has been a harbinger of its accelerating debasement. This has been especially so for Russians during recent years.

The acceptance of the new \$100 bill has yet to be tested. A return of U.S. currency (new or old, genuine or counterfeit) to the United States could further depress the foreign exchange value of the dollar, put upward pressure on interest rates, and exacerbate domestic inflating. Even more ominously, if the greenbacks return, the other foreign dollar holdings might not be far behind.

BUSINESS-CYCLE CONDITIONS

The likelihood of continued expansion diminished this month. Last month it appeared that we were heading out of the woods, as the percentage of leaders expanding increased to 50. This month the percentage decreased to 43, which suggests that the robust growth reported for the third quarter will not be sustained. However, with the cyclical score remaining above 50, the next recession does not appear imminent.

As they have during the past several months, *contracts and orders for plant and equipment* and the *index of 500 common stock prices* again reached new all-time highs and both series are clearly expanding. (These and all other dollar-denominated series are reported in constant dollars.) The *M2 money supply* increased during September and also remains appraised as clearly expanding.

Of the remaining nine leading indicators, the latest base data for seven decreased. Only two of these, the *M1 money supply* and the *3-month percent change in sensitive materials prices*, are clearly contracting as they have decreased for 14 and 10 months, respectively.

The base data for the *ratio of manufacturing and trade sales to inventories* increased during August, as did the series' moving average, but the latter reached its high for this cycle last December. The latest small increase was not sufficient to change our appraisal that the series is probably contracting.

Last month the *3-month percent change in consumer installment debt* was appraised as probably expanding, but the base data for this series have decreased for 4 consecutive months, and the moving average has decreased for 2 months. These downturns were sufficient to render the status of the debt series indeterminate.

Although *new orders for consumer goods* increased in June, July, and August, the series decreased in September, and the 3-month moving average remains below its peak reached in December. The *index of new housing permits* continued to increase during September, but it too remains below its high for the cycle reached last December. The base data for

the *average workweek in manufacturing* decreased to 41.5 hours in October from 41.7 hours in September, but the series' 3-month moving average increased slightly. The 3-month moving average of *initial claims for state unemployment insurance* (inverted) also increased, but the monthly base data decreased in Septem-

ber. None of the changes in these four series was sufficient to clarify their cyclical trends. Thus, five of the 12 leaders are appraised as cyclically indeterminate.

The latest batch of data suggests that we may not be out of the woods yet. Overall, 43 percent (3 out of 7) of the leaders with an apparent cyclical trend are expanding. Last month the percent expanding increased to 50 — the point at which further expansion is statistically just as likely as contraction. This month's weakness, primarily due to the deterioration of consumer installment debt, puts the percent of leaders back in the range where a recession seems more likely to occur than continued expansion.

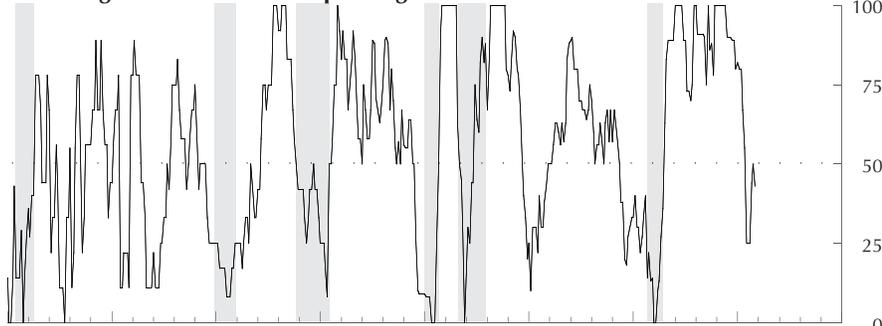
However, at 63, our cyclical score,

Statistical Indicators of Business-Cycle Changes

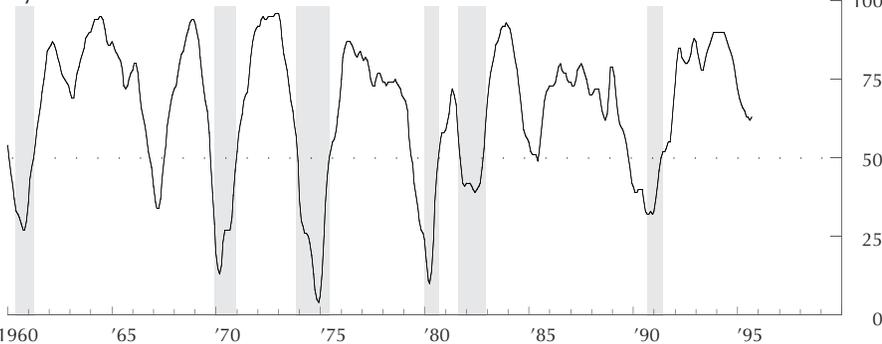
Change in Base Data				Primary Leading Indicators	Cyclical Status		
Jul.	Aug.	Sept.	Oct.		Sept.	Oct.	Nov.
-	-	-		M1 money supply	-	-	-
+	+	+		M2 money supply	?+?	+	+
-	-	-		Change in sensitive materials prices	-	-	-
+	+	-		New orders for consumer goods	?	?	?
-	+	+		Contracts and orders for plant and equipment	+	+	+
+	+	+		Index of new housing permits	?	?	?
-	+			Ratio of manufacturing and trade sales to inventories	?-?	?-?	?-?
-	-	+	-	Vendor performance	-	-	-
+	+	+	+	Index of common stock prices (constant purchasing power)	+	+	+
-	+	+	-	Average workweek in manufacturing	?-?	?	?
+	+	-		Initial claims for unemployment insurance (inverted)	?	?	?
-	-	-		Change in consumer installment debt	+	?+?	?
<i>Percentage expanding cyclically</i>					44	50	43
Primary Roughly Coincident Indicators							
+	+	+	+	Nonagricultural employment	+	+	+
+	+	r+r	-	Index of industrial production	?+?	+	+
r+r	+	+		Personal income in manufacturing	?	?	?
-	+			Manufacturing and trade sales	?	?	+
+	-	+	+	Civilian employment to population ratio	?	?	?
+	+	+		Gross domestic product (quarterly)	+	+	+
<i>Percentage expanding cyclically</i>					100	100	100
Primary Lagging Indicators							
-	+	nc	+	Average duration of unemployment (inverted)	+	+	+
+	+			Manufacturing and trade inventories	+	+	+
+	+	+		Commercial and industrial loans	+	+	+
+	+	+		Ratio of consumer installment debt to personal income	+	+	+
+	-	-		Change in labor cost per unit of output, manufacturing	?+?	?+?	?+?
-	nc	-	+	Composite of short-term interest rates	?-?	-	?-?
<i>Percentage expanding cyclically</i>					83	83	83

Under "Change in Base Data," plus and minus signs indicate increases and decreases from the previous month or quarter and blank spaces indicate data not yet available. Under "Cyclical Status," plus and minus signs indicate expansions or contractions of each series as currently appraised; question marks indicate doubtful status when shown with another sign and indeterminate status when standing alone.

Percentage of AIER Leaders Expanding



Cyclical Score of AIER Leaders



which is designed to reduce the incidence of false signals, remains above the critical level of 50. The current level is slightly below the score of 64 reported last month. If the leading series continue to weaken during the next few months, the cyclical score could decrease to less than 50, but unless it falls below that level with the percentage of leaders expanding remaining below 50, we cannot confidently assert that the next recession is imminent.

With the exception of the *index of industrial production*, all of the primary roughly coincident indicators increased this month. *Nonagricultural employment*, *manufacturing and trade sales*, which was appraised as indeterminate last month, and *gross domestic product (GDP)* all rose to new all-time highs this month — all three are clearly expanding. The production index for August was revised upward to a new all-time high, but it decreased during September. This decrease was insufficient to warrant a downgrade in our appraisal of the series' cyclical status. GDP increased at an annual rate of 4.2 percent in the third quarter, according to the advance estimate. The chain-weighted index of GDP, soon to become the principal measure of aggregate economic activity, increased at a slower annual rate of 3 percent. Both estimates are above the average rate of growth during the current expansion and, given the recent weakness among the leading indicators, appear unlikely to be sustained.

The base data for *personal income in manufacturing* and the *ratio of civilian employment to population* increased, as

did their moving averages, but these increases were insufficient to offset previous declines in the series. Both remain appraised as cyclically indeterminate. Overall, 100 percent (4 out of 4) of the coinciders with an apparent cyclical trend are expanding.

Among the primary lagging indicators, *manufacturing and trade inventories*, *commercial and industrial loans*, and the *ratio of consumer installment debt to personal income* reached new highs this month. All three series are clearly expanding. As discussed in the November 6, 1995 *Research Reports*, despite the high level of consumer borrowing relative to income, the available data provide no clear indications that consumers have overextended themselves as yet.

The *average duration of unemployment* (inverted) increased this month to 16.25 weeks. Although the series is 3 months from its most recent peak, it remains appraised as clearly expanding. The *composite of short-term interest rates* also increased, from 5.74 percent in September to 5.76 percent in October. Based on the historical performance of this series, this

small increase was enough to raise some doubt concerning its cyclical status. It now is judged to be probably contracting rather than clearly contracting.

The *change in manufacturers' labor cost per unit of output* decreased, but not enough to warrant a new appraisal for the series. Overall, 83 percent (5 out of 6) of the laggers with an apparent cyclical trend are expanding. This is unchanged from last month.

A Closer Look at the Leaders

In an effort to anticipate the next recession, we closely monitor our two aggregate measures of the leading indicators: the percentage of leaders expanding and the cyclical score. As shown in the adjacent charts, there have been several periods when the percent of leaders decreased below 50 only to recover, without the onset of a recession. However, all these "false signals" of recession were associated with periods of economic growth at rates below the long-term trend. According to the National Bureau of Economic Research, such slowdowns, often referred to as "growth cycles," occurred in 1962-64, 1966-67, and most recently in 1984-86. Prior to the 1962-64 and 1966-67 slowdowns, and midway through the 1984-86 slowdown, the percentage of leaders expanding fell below 50.

The cyclical score, on the other hand, did not signal recession in 1962-64, but it did briefly dip below 50 in 1966-67 and 1984-86. Our present situation, with the cyclical score above 50 but the percentage of leaders expanding at or below 50 since June, thus would seem to suggest that, at a minimum, another "growth cycle" lies ahead. We are, to repeat, waiting to see what will happen to the cyclical score before concluding that the next recession is imminent. But it is important to remember that every business cycle is different. The past performance of these series may be useful guides, but they are not infallible and require judgment to interpret. It is not yet clear if the weakness in the percentage expanding is only a signal of an economic slowdown or an actual contraction, but the cyclical score should help make that clearer during the months ahead.

PRICE OF GOLD

	1993	1994	— 1995 —	
	Nov. 18	Nov. 17	Nov. 9	Nov. 16
Final fixing in London	\$376.75	\$386.75	\$385.00	\$385.20

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