

# Money and Inflation

By William F Hummel

Price inflation is commonly thought to be caused by "*too much money chasing too few goods*." The general price level is indeed correlated with the money supply, but *correlation* should not be confused with *causation*. In a modern economy, prices are seldom driven by the money supply. More commonly, the money supply reacts to changes in the general price level.

## Credit Money versus Commodity Money

It's easy to understand how the money supply can drive prices when a commodity like gold is used as money. In the gold rush days, California was basically on a barter system in which gold traded for goods and services. Gold was an asset for the holder and a liability for no one. As more gold was mined by private enterprise, monetary wealth in California increased. Indeed it increased much faster than the available supply of goods and services, so prices in terms of gold naturally rose.

Gold once comprised the *monetary base*, but today it is just another commodity. In a modern fiat money system, the monetary base is created by the central bank. However *base money* is a minor part of the money supply. Most of the money we use is credit issued by private banks in the form of deposits. Bank deposits are accepted as money because of the promise that they can be converted into base money on demand.

A bank loan increases the money supply but does not increase net wealth. The borrower receives a deposit that he can use as money, but he owes the bank that amount. Thus bank money behaves differently from base money. A bank can issue credit up to a prescribed multiple of its own capital. Within that constraint, the growth of bank money depends only on the demand from the public and the willingness of banks to lend. To understand what causes inflation today, we must therefore determine what creates the demand for credit.

## Effects Related to the Price of Credit

The amount of bank money created is a function of many economic variables, including the price of credit which the central bank controls. The central bank can easily increase the price of credit enough to make borrowing unprofitable, stifle growth of the money supply, and even reduce total economic output. That would result in increased unemployment and possibly price deflation.

Conversely the central bank can easily reduce the price of credit, but the results are not symmetric. When the economy is operating well below capacity, cheaper credit will usually increase output without a significant increase in prices up to the

point of nearly full employment. Thereafter the effects of cheap credit will generally lead to higher prices.

### **Demand for Credit and Its Effects**

The demand for credit arises mainly out of the desire to finance (1) new enterprise, (2) consumer spending, or (3) speculative investment. Let's briefly examine how each of these affects the money supply and prices.

(1) A new enterprise or an existing enterprise planning to expand production requires funds well ahead of the expected return from sales. New production is often financed with bank money, and the whole process has little effect on current prices. As the economy grows however, the amount of credit must grow in support. Indeed if credit were curtailed, the economy would stagnate for lack of adequate liquidity.

(2) Money borrowed for consumer purchases implies the availability of existing products whose prices have already been set by the sellers. Such borrowing increases the money supply without affecting those prices. However where supply falls short of demand, prices on consumer goods may rise, at least temporarily. But supply shortages tend to occur in isolated cases and are usually short-lived. They seldom have a lasting effect on the general price level.

(3) Money borrowed for speculative purposes mainly affects asset prices, particularly stocks and real estate. If the borrowing cost is set too low for an extended period, asset prices can become inflated. This creates a money illusion that can lead to a relaxed attitude by consumers toward higher prices, and result in an increase in the general price level.

### **Effects of Government Deficit Spending**

Government deficit spending is normally financed by borrowing from the private sector. On balance, such borrowing and spending has no effect on the amount of base money, though it does increase the net financial wealth of the private sector in the form of Treasury securities. However contrary to conventional wisdom, there is no significant correlation between government deficit spending and price inflation.

If the government were unable to obtain funds through taxes or bond sales, it may resort to printing money to spend. If continued long enough, such spending would end in hyperinflation. This occurs infrequently and mainly as a result of serious corruption, revolution, or war. Hyperinflation is quite different in origin and character from the low level inflation that exists in most fiat money systems today.

## A Case History - Inflation in the 1970s

During the 1970s, the US experienced a significant inflation in which the consumer price index rose at an annualized rate of 7.5%. However M1 rose relative to the real GDP at an annualized rate of about 3%. Clearly something besides an excess of transaction money drove that inflation.

A major factor was the roughly ten-fold increase in the price of oil resulting from two oil embargoes by OPEC. That led to a sharp increase in material costs in several important industries, which had to be passed on as higher consumer prices. However that was not the only important cause of the inflation during the period.

Key industries were dominated by powerful corporations, some of which had the clout to set prices. This in turn enabled strong unions to gain generous wage contracts, sometimes well above the growth in labor productivity. COLAs in the contracts added a positive feedback effect on wage growth. The benefits achieved by unions were mainly in the manufacturing sector, but gradually spread to the service sector.

With labor the main cost in most consumer items, the result was a cost-push inflation that became a serious wage-price spiral. Increasing wages helped enable consumers to absorb the rising prices imposed by producers. However these factors, together with the demands for expanding production, required a larger money supply to support it. As profit-seeking enterprises, banks were more than happy to lend to creditworthy borrowers, and so the money supply grew.

There are numerous forces that apply upward pressure to prices, which are not driven by money supply growth. Global competition now limits the power of many domestic producers to set prices. But less competitive sectors still exist and contribute to a long-term upward bias in prices. As prices rise, the money supply growth must necessarily keep pace.