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Federal Reserve Bank of Cleveland

On the Origin and Evolution of the Word *Inflation*

by Michael F. Bryan

Inflation is the process of making addition to currencies not based on a commensurate increase in the production of goods.

—*Federal Reserve Bulletin* (1919)

Most prominent among these inflationary forces were a drop in the exchange rate of the dollar, a considerable increase in labor costs, and severe weather.

—*Federal Reserve Bulletin* (1978)

For many years, the word *inflation* was not a statement about prices but a condition of paper money—a specific description of a monetary policy. Today, *inflation* is synonymous with a rise in prices, and its connection to money is often overlooked.

Consider the opening quotations, taken from *Federal Reserve Bulletins* spanning a period of almost 60 years. The first defines inflation as a condition of the currency, while the latter makes no reference to money. Indeed, it would seem that in 1978, inflation was about many things other than excessive money growth.

This *Economic Commentary* considers the origin and uses of the word *inflation* and argues that its definition was a casualty in the theoretical battle over the connection between money growth and the general price level. What was once a word that described a monetary cause now describes a price outcome. This shift in meaning has complicated the position of anti-inflation advocates. As a condition of the money stock, an inflating currency has but one origin—the central bank—and one solution—a less expansive money growth rate. But as a condition of the price level, which may have originated from a variety of things (including a depreciating dollar, rising labor costs, bad weather, or a number of factors other than "too much money"), the solution to—and the prudence of—eliminating inflation is much less clear.

Today, we commonly hear about different kinds of inflation. Indeed, the word *inflation* is often used synonymously with "price increase." But there is also a different, more specific, definition of inflation—a rise in the general price level caused by an imbalance between the quantity of money and trade needs. This "inflation" has but one origin—the central bank. It is the latter definition that drives many of those advocating an anti-inflation policy for the Federal Reserve, and that more closely conforms with the word's original meaning.

Value, Money, and Currency

I smiled at myself at the sight of all this money. "Oh, drug," said I, aloud, "What art thou good for? Thou art not worth to me, no not the taking off the ground. One of these knives is worth all this heap."

—Daniel Defoe (1719)
Robinson Crusoe

The classical economists, by which I refer to the generation writing around the time that Adam Smith's *The Wealth of Nations* was published in 1776, were very exact in defining economic terms, because they were constructing a language on which an emerging science was being built. Among their first contributions was to make explicit the distinction between "real" and "nominal" prices.

A good's real price, or *value,* was defined as the effort required to produce it, while its nominal, or *money,* price was said to be its cost in money alone (fixed in terms of gold or some other precious metal). According to this view, the value of goods is anchored by the laws of nature—the effort of labor—but their nominal price fluctuates with the availability of the precious metal, and the laws of the sovereign, that define a nation's money.

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The real price of everything…is the toil and trouble of acquiring it. The same real price is always of the same value; but on account of the variations in the value of gold and silver, the same nominal price is sometimes of very different values.

—Adam Smith (1776)[1]

Although the classical economists supposed that fluctuations in the money price of goods can have temporarily disruptive influences on the economy (such as producing capricious redistributions of wealth between parties bound by contracts with fixed money prices), in the end, these changes merely serve to alter the scale by which value is measured. They do not alter values or have any long-term consequences. The idea that changes in the quantity of money affect only the money price of goods, not their value, was championed by many of the early classical economists, most notably David Hume. The theory was more rigorously developed in the early twentieth century by American economist Irving Fisher, and has come to be known as the "quantity theory of money."

If the history of commercial banking belongs to the Italians and of central banking to the British, that of paper money issued by a government belongs indubitably to the Americans.

—John Kenneth Galbraith (1975)

To these early economists, the word *money* almost always referred to a metallic coin.[2] But the first generation of economists following Adam Smith in the nineteenth century was very interested in paper money, since this form of payment had become popular in the burgeoning American colonies.[3] The colonies offered a large variety of paper currencies, virtually all of which were conspicuous by their "overproduction" and their subsequent rapid loss of purchasing power.

The Continental Congress issued a paper note to help finance the American Revolution, and these "bills of credit" became a circulating medium.[4] In 1775, Congress issued $6 million of the new currency and urged the states to impose taxes for its ultimate redemption. The taxes were never raised, however, and larger continental issues were authorized. By the end of 1779, Congress had expanded the number of continental bills of credit more than 40-fold, and, to make matters worse, the states had issued their own paper monies in a similar magnitude.[5] In 1781, a dollar in paper was worth less than two cents in gold coin.[6]

By the early nineteenth century, economists were careful to distinguish among three sources of a change in the "cost" of goods—changes in *value,* referring to the real resource cost of a good, changes in *money prices,* caused largely by fluctuations in the metallic content of money, and *depreciation of the currency,* caused by a change in the quantity of currency relative to the metal that constitutes a nation's money. The latter distinction would become a focal point in American political economy.

■ Inflation of the Currency

The era between the mid-1830s and the Civil War—a period economists refer to as the "free banking era"—saw a proliferation of banks. Along with these institutions came "bank notes," a private paper currency redeemable for a specific amount of metal. That is, if the issuing bank had it. At times, banks did not have enough gold or silver to satisfy all of their claims. Bank notes, like the public notes that preceded them, also tended to depreciate. It is during this period that the word *inflation* begins to emerge in the literature, not in reference to something that happens to prices, but as something that happens to a paper currency.[7]

The astonishing proportion between the amount of paper circulation representing money, and the amount of specie actually in the Banks, during the past few years, has been a matter of serious concern… [This] inflation of the currency makes prices rise.[8]

—From the Bee (1855)[9]

During the Civil War, both the federal and the confederate governments issued paper currency to help finance expenditures. The federal government authorized the issue of $450 million of a paper money called "Greenbacks," and at war's end, President Johnson authorized the Treasury to repay these notes with gold. This reduced the outstanding Greenbacks by about 20 percent and had the predictable effect of propping up the "value" of Greenback dollars, or driving down the Greenback price of goods.

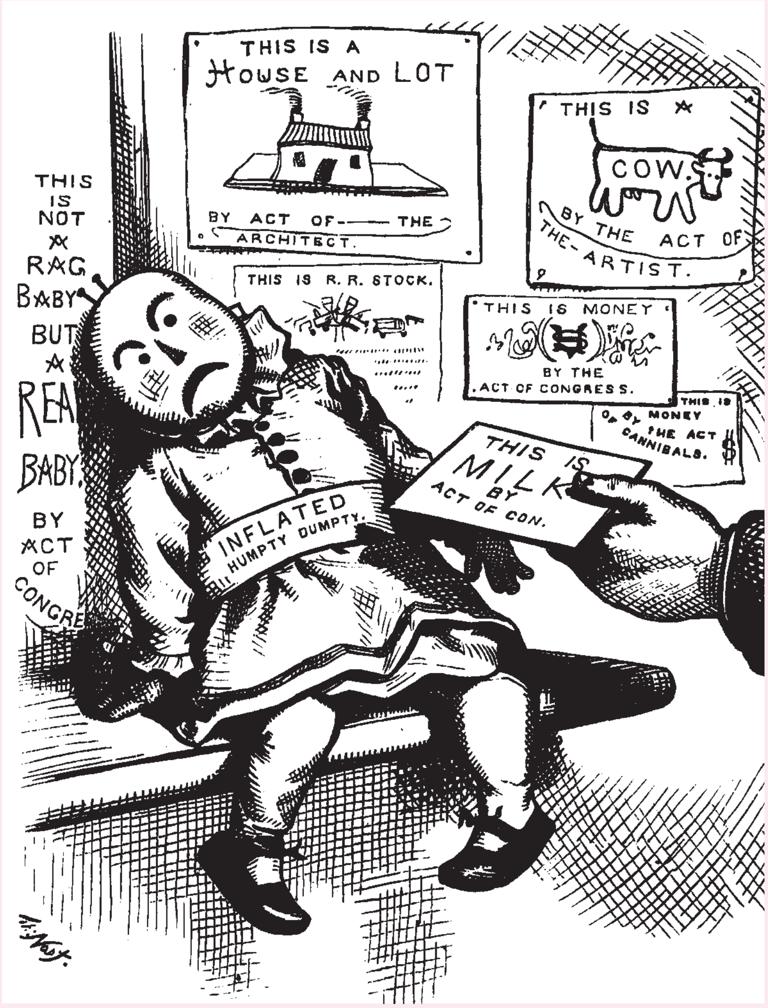
Restoring the purchasing power of Greenbacks worked in favor of creditors, since it meant they would be repaid in a currency that had greater purchasing power than would otherwise have been the case. But of course, what worked to the advantage of creditors worked to the disadvantage of debtors, who found their dollar liabilities rising in value. Debtor groups, predominantly farmers, advocated "inflating the Greenback" as a means of easing the debt burdens of borrowers and perhaps helping to redistribute income from the eastern to the western constituencies. In the election of 1868, the Democratic party endorsed the "Ohio Idea," which proposed that war debts be repaid with Greenbacks unless otherwise stipulated.[10] These predominantly western Democrats became known as "Inflationists."

Despite the election of Republican candidate Ulysses S. Grant to the presidency, Inflationist sentiment carried considerable influence in Congress. The movement was given further support by the Supreme Court decision of 1870, which reversed an earlier ruling and declared that the issuance of paper money as "legal tender" was constitutional. In 1874, Congress passed the "Inflation Bill," which provided for the additional issuance of $14 million in Greenbacks. President Grant vetoed the measure and resumed bond redemption in terms of coin.

The idea that the government can "create value" by issuing a paper money and merely stating that it is of value is in direct conflict with the quantity theory of money—and it was a subject of considerable scorn (as the Thomas Nast cartoon reprinted on page 3 so perfectly illustrates).

■ Price Inflation

The term *inflation* was initially used to describe a change in the proportion of currency in circulation relative to the amount of precious metal that constituted a nation's money. By the late nineteenth century, however, the distinction between "currency" and "money" was becoming blurred.



Milk tickets for babies, in place of milk

Illustration by Thomas Nast for David A. Wells, *Robinson Crusoe's Money; or the Remarkable Financial Fortunes and Misfortunes of a Remote Island Community,* New York: Harper and Brothers, 1876, p. 97.

It has been rather the fashion with political economists to refuse the name Money to any medium of exchange which is not "a material recompense or equivalent." …For myself, I can see no valid objection to the scientific acceptance of the popular term, Paper Money. The presence of the word paper so far qualifies and explains the word money, as to show that a material recompense or equivalent is not meant.

—Francis A. Walker (1883)

At the turn of the century, economists tended to refer to *any* circulating medium as money, and any change in the circulating medium relative to trade needs as an inflation of money. But this shift in meaning introduced another problem. Although it is easy to determine the amount of currency relative to the stock of a precious metal, how does one know when the amount of the circulating medium exceeds "trade needs"?

Many current controversies about inflation are due not to conflicting ideas but to conflicting uses of the same word. When a nation has too much money, it is said to have inflation: that is about as near as we can come to an accepted definition of the term. As to what constitutes having too much money, there is not agreement … If we use the term inflation to denote any increase in the volume of money that is accompanied by a rise in the general price-level, we confine ourselves to a definite and logical use of the term, and one that directs attention at once to the practical monetary problem with which business is to-day chiefly concerned.

—William Trufant Foster and Waddill Catchings (1923)

Economists appear to have reached a definitional crossroads during the first several decades of the twentieth century. Presumably, because they could be certain of the "excessiveness" of the circulating medium only by its effect on the price level, the notions of an inflated currency and prices became inextricably linked.

Consider the following quotations, from works published by the same economist at two different times during this period:

…inflation occurs when, ***at a given price level,*** *a country's circulating media—cash and deposit currency—increase* relatively *to trade needs.* (Emphasis in original.)

—Edwin Walter Kemmerer (1918)

Inflation exists in a country whenever the supply of money and of [circulating] bank deposits…increases, relatively to the demand for media of exchange, in such a way ***as to bring about a rise in the general price level.*** (Emphasis added.)

—Edwin Walter Kemmerer (1934)

In the earlier definition, inflation is something that happens to the circulating media at a given price level; in the later definition, an inflating currency is defined to exist when it produces a rise in the general price level, as suggested by the quantity theory. What originally described a monetary cause came to describe a price effect.

To the quantity theorists, this shift in emphasis may have had little direct consequence, since it is unlikely they could have seen an important distinction between these two ideas. Of course, increasing the quantity of currency relative to "trade needs" could have but one effect—to make prices rise. And a rising price level could have but one origin—an increase in the quantity of money relative to its demand!

Still, some economists attempted to maintain the distinction between a rise in the price level that originated from the "creation" of additional currency relative to trade, and one that resulted from a decrease in trade for a given supply of money. It was the former, not the latter, that caused problems for economies whose trade was conducted via paper money.

Just as we can increase the size of a balloon either by pumping in more air, or by decreasing the outside pressures, …we can increase prices either by pumping more dollars into the monetary circulation, or by decreasing the pressure of the work that money has to perform. It seems best, however, not to extend the term inflation to cover failures to reduce the money in circulation when prices begin to rise. Such an extension of the use of the term would be at variance with its derivation, and would, moreover, leave the term less definitely applicable to the actual, current monetary problems of the world.

—William Trufant Foster and Waddill Catchings (1923)[11]

Linking *inflation* to the price level proved to be another important turning point for the word. With the publication of John Maynard Keynes' *General Theory* in 1936, an assault on the quantity theory of money commenced, and it dominated macroeconomic thought for the next 40 years. By appealing to the belief that resources could be regularly and persistently underemployed—an idea given support by the worldwide depression of the time—Keynesian theory challenged the necessary connection between the quantity of money and the general price level. Moreover, it suggested that aggregate price increases could originate from factors other than money.

In addition to separating the price level from the money stock, the Keynesian revolution in economics appears to have separated the word *inflation* from a condition of money and redefined it as a description of prices. In this way, inflation became synonymous with *any* price increase. Indeed, Keynes spoke about different "types" of inflation, including income, profit, commodity, and capital inflation. Today, little distinction is made between a price increase and inflation, and we commonly hear reports of energy inflation, medical care inflation, and even wage inflation. Some go so far as to argue that the monetary definition forces the word to take on too specific a meaning:

Even if we agree that an inflationary situation is to be taken to imply something about prices, precise definitions vary … Part of the difficulty here is that definitions of the more popular variety such as "too much money chasing too few goods," not only purport to define inflation, but also imply something more about particular inflationary processes.

—R. J. Ball (1964)

■ Conclusion

"That's a great deal to make one word mean," Alice said in a thoughtful tone. "When I make a word do a lot of work like that," said Humpty Dumpty, "I always pay it extra."

—Lewis Carroll (1872)
Through the Looking Glass

Inflation, a term that first referred to a condition of the currency and later to a condition of money, is now commonly used to describe prices. This shift in meaning seems to have originated in an unfortunate—but perhaps inevitable—sequence of events. By referring to inflation as a condition of "too much money," economists were forced to struggle with the operational issue of "how much is too much?" The quantity theory offered a clear answer to that question: Too much money is an increase in the money stock that is accompanied by a rise in the general price level. In other words, an inflated money supply will reveal itself through its effect on the price level. When Keynesian economic theory challenged the direct link between money and the price level, inflation lost its association with money and came to be chiefly understood as a condition of prices.

Without being tied to the money supply, any price increase seems to have an equal claim to the word *inflation*. Indeed, today we regularly read reports of a seemingly endless variety of "inflations." When the word is used as a description of the price level, an anti-inflation policy can easily be characterized as being against any price increase, including higher wages! This is simply not the case. An anti-inflation strategy is concerned with a particular type of price increase—a rise in the general price level stemming from excessive money creation. When viewed in this light—the light provided by the word's original meaning—a zero-inflation objective for the central bank becomes a much more sensible goal.

Footnotes

1. The idea that value is fixed by labor effort, called the "labor theory of value," is now generally discredited by economists. Still, we make clear distinctions between a good's real cost and its money cost.

2. Western economists of the time were certainly aware of paper money. Chinese notes called "chao" were known to have been used as early as the ninth century (they were also said to have depreciated rapidly in value).

3. A common lament in the New World was that paper money was necessary because of a lack of metallic coins.

4. Some historians note that the decision to issue continental currency was made in the conventions that occurred prior to the establishment of the Continental Congress.

5. See Charles J. Bullock, *Essays on the Monetary History of the United States*, New York: Macmillan, 1990, pp. 64–5.

6. The French also issued a paper money—"assignats"—around the time of their Revolution, with a similar result: They, too, rapidly lost their purchasing power. The French experience with paper money gave rise to the saying, "After the paper money machine comes the guillotine."

7. Bank notes were taxed out of existence by an act of Congress in 1865.

8. This is the earliest reference to *inflation* in the Federal Reserve Bank of Cleveland's library. *The Oxford English Dictionary* shows the earliest reference to be from D.D. Barnard (1838): "The property pledge can have no tendency whatever to prevent an inflation of the currency."

9. *Gold and the Currency: Specie Better than Small Bills*, Boston: Evans and Plumber, 1855.

10. However, "sound money man" Horatio Seymour, the reluctant Democratic candidate for the presidency in 1868, is said to have indicated that if elected, he would not support the plan.

11. Similar in spirit are the following:

… we must distinguish between inflation and the rise in prices. The one is not necessarily synonymous with the other … An alteration in the general price level accordingly means a change in the relation between goods on the one hand and money on the other. Obviously, however, such a change in the relation may be ascribable, in its origin, to either of the two elements, the goods or the money.

—Edwin R.A. Seligman (1921)

Either the rise in prices might be due to the scarcity of goods or it might be due to the superabundance of money, but as a matter of actual historical fact it is, so far as I know, universally true … that it is the change in the money that makes the changes in the value of the money, and not changes in the goods.

—Irving Fisher (1923)

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