Inflation

Inflation is a general rise in prices. The national price level rises for the same reason that prices of particular goods and services rise—namely, that there is more demanded than supplied at a given price. When people have more money, they tend to spend more. Without a corresponding increase in the volume of output, the prices of existing goods and services simply rise because the quantity demanded exceeds the quantity supplied at current prices and either people bid against each other during the shortage or sellers realize the increased demand for their products at existing prices and raise their prices accordingly.

Whatever the money consists of—sea shells, gold, or whatever—more of it in the national economy means higher prices. This relationship between the total amount of money and the general price level has been seen for centuries. When Alexander the Great began spending the captured treasures of the Persians, prices rose in Greece. Similarly, when the Spaniards removed vast amounts of gold from their colonies in the Western Hemisphere, price levels rose not only in Spain, but across Europe, because the Spaniards used much of their wealth to buy imports from other European countries. Sending their gold to those countries to pay for these purchases added to the total money supply across the continent.

None of this is hard to understand. Complications and confusion come in when we start thinking about such mystical and fallacious things as the "intrinsic value" of money or believe that gold somehow "backs up" our money or in some mysterious way gives it value.

For much of history, gold has been used as money by many countries. Sometimes the gold was used directly in coins or (for large purchases) in nuggets, gold bars or other forms. Even more convenient for carrying around were pieces of paper money printed by the government that were redeemable in gold whenever you wanted it redeemed. It was not only more convenient to carry around paper money, it was also safer than carrying

large sums of money as metal that jingled in your pockets or was conspicuous in bags, attracting the attention of criminals.

The big problem with money created by the government is that those who run the government always face the temptation to create more money and spend it. Whether among ancient kings or modern politicians, this has happened again and again over the centuries, leading to inflation and the many economic and social problems that follow from inflation. For this reason, many countries have preferred using gold, silver, or some other material that is inherently limited in supply, as money. It is a way of depriving governments of the power to expand the money supply to inflationary levels.

Gold has long been considered ideal for this purpose, since the supply of gold in the world usually cannot be increased rapidly. When paper money is convertible into gold whenever the individual chooses to do so, then the money is said to be "backed up" by gold. This expression is misleading only if we imagine that the value of the gold is somehow transferred to the paper money, when in fact the real point is that the gold simply limits the amount of paper money that can be issued.

The American dollar was once redeemable in gold on demand, but that was ended back in 1933. Since then, the United States has simply had paper money, limited in supply only by what officials thought they could or could not get away with politically. To give some idea of the cumulative effects of inflation, a one-hundred-dollar bill would buy less in 1998 than a twenty-dollar bill bought in the 1960s. Among other things, this means that people who saved money in the 1960s had four-fifths of its value silently stolen from them over the next three decades. Sobering as such inflation may be in the United States, it pales alongside levels of inflation reached in some other countries. "Double-digit inflation" during a given year in the United States creates political alarms, but various countries in Latin America and Eastern Europe have had periods when the annual rate of inflation was in four digits.

Since money is whatever we accept as money in payment for real goods and services, there are a variety of other things that function in a way very similar to the official money issued by the government. Credit cards, debit cards, and checks are obvious examples. Mere promises may also function as money, serving to acquire real goods and services, when the person who makes the promises is highly trusted. IOUs from reliable merchants were

once passed from hand to hand as money. As noted in Chapter 5, more purchases were made in 2003 by credit cards or debit cards than by cash. What this means is that aggregate demand is created not only by the money issued by the government but also by credits originating in a variety of other sources. What this also means is that a liquidation of credits, for whatever reason, reduces aggregate demand, just as if the official money supply had contracted.

Some banks used to issue their own currency, which had no legal standing, but which was nevertheless widely accepted in payment when the particular bank was regarded as sufficiently reliable and willing to redeem their currency in gold. Back in the 1780s, currency issued by the Bank of North America was more widely accepted than the official government currency of that time. Sometimes money issued by some other country is preferred to money issued by one's own. Beginning in the late tenth century, Chinese money was preferred to Japanese money in Japan. In twentieth century Bolivia, most of the savings accounts were in dollars in 1985, during a period of runaway inflation of the Bolivian peso. In 2007, the ***New York Times*** reported: "South Africa's rand has replaced Zimbabwe's essentially worthless dollar as the currency of choice."

Gold continues to be preferred to many national currencies, even though gold earns no interest, while money in the bank does. The fluctuating price of gold reflects not only the changing demands for it for making jewelry—the source of about 80 percent of the demand for gold—or in some industrial uses but also, and more fundamentally, these fluctuations reflect the degree of worry about the possibility of inflation that could erode the purchasing power of official currencies. That is why a major political or military crisis can send the price of gold shooting up, as people dump their holdings of the currencies that might be affected and begin bidding against each other to buy gold, as a more reliable way to hold their existing wealth, even if it does not earn any interest or dividends.

During the inflation and economic crisis of 1980 in the United States, the price of gold shot up to $800 an ounce. Conversely, long periods of prosperity with price stability are likely to see the price of gold falling, as people move their wealth out of gold and into other financial assets that earn interest or dividends and can therefore increase their wealth. When the economic crises of the early 1980s passed, and were followed by a long period of steady growth and low inflation, the price of gold fell to about

$250 an ounce by 1999. Still later, after record-breaking federal deficits in the United States and similar problems in a number of European countries in the early years of the twenty-first century, the price of gold soared well over $1,000 an ounce.

The great unspoken fear behind the demand for gold is the fear of inflation. Nor is this fear irrational, given how often governments of all types—from monarchies to democracies to dictatorships—have resorted to inflation, as a means of getting more wealth without having to directly confront the public with higher taxes.

Raising tax rates has always created political dangers to those who hold political power. Political careers can be destroyed when the voting public turns against those who raised their tax rates. Sometimes public reaction to higher taxes can range all the way up to armed revolts, such as those that led to the American war of independence from Britain. In addition to adverse political reactions to higher taxes, there can be adverse economic reactions. As tax rates reach ever higher levels, particular economic activities may be abandoned by those who do not find the net rate of return on these activities, after taxes, to be enough to justify their efforts. Thus many people abandoned agriculture and moved to the cities during the declining era of the Roman Empire, adding to the number of people needing to be taken care of by the government, at the very time when the food supply was declining because of those who had stopped farming.

In order to avoid the political dangers that raising tax rates can create, governments around the world have for thousands of years resorted to inflation instead. As John Maynard Keynes observed:

> There is no record of a prolonged war or a great social upheaval which has not been accompanied by a change in the legal tender, but an almost unbroken chronicle in every country which has a history, back to the earliest dawn of economic record, of a progressive deterioration in the real value of the successive legal tenders which have represented money.

If fighting a major war requires half the country's annual output, then rather than raise tax rates to 50 percent of everyone's earnings in order to pay for it, the government may choose instead to create more money for itself and spend that money buying war materiel. With half the country's

resources being used to produce military equipment and supplies, civilian goods will become more scarce just as money becomes more plentiful. This changed ratio of money to civilian goods will lead to inflation, as more money is bid for fewer goods, and prices rise as a result.

Not all inflation is caused by war, though inflation has often accompanied military conflicts. Even in peacetime, governments have found many things to spend money on, including luxurious living by kings or dictators and numerous showy projects that have been common under both democratic and undemocratic governments. To pay for such things, using the government's power to create more money has often been considered easier and politically safer than raising tax rates. Put differently, inflation is in effect a hidden tax. The money that people have saved is robbed of part of its purchasing power, which is quietly transferred to the government that issues new money.

Inflation is not only a hidden tax, it is also a broad-based tax. A government may announce that it will not raise taxes, or will raise taxes only on "the rich"—however that is defined—but, by creating inflation, it in effect transfers some of the wealth of everyone who has money, which is to say, it siphons off wealth across the whole range of incomes and wealth, from the richest to the poorest. To the extent that the rich have their wealth invested in stocks, real estate or other tangible assets that rise in value along with inflation, they escape some of this de facto taxation, which people in lower income brackets may not be able to escape.

In the modern era of paper money, increasing the money supply is a relatively simple matter of turning on the printing presses. However, long before there were printing presses, governments were able to create more money by the simple process of reducing the amount of gold or silver in coins of a given denomination. Thus a French franc or a British pound might begin by containing a certain amount of precious metal, but coins later issued by the French or British government would contain less and less of those metals, enabling these governments to issue more money from a given supply of gold and silver. Since the new coins had the same legal value as the old, the purchasing power of them all declined as coins became more abundant.

More sophisticated methods of increasing the quantity of money have been used in countries with government-controlled central banks, but the net result is still the same: An increase in the amount of money, without a

corresponding increase in the supply of real goods, means that prices rise—which is to say, inflation. Conversely, when output increased during Britain's industrial revolution in the nineteenth century, the country's prices declined because its money supply did not increase correspondingly.

Doubling the money supply while the amount of goods remains the same may more than double the price level, as the speed with which the money circulates increases when people lose confidence in its retaining its value. During the drastic decline in the value of the Russian ruble in 1998, a Moscow correspondent reported: "Many are hurrying to spend their shrinking rubles as fast as possible while the currency still has some value."

Something very similar happened in Russia during the First World War and in the years immediately after the revolutions of 1917. By 1921, the amount of currency issued by the Russian government was hundreds of times greater than the currency in circulation on the eve of the war in 1913—and the price level rose to ***thousands*** of times higher than in 1913. When the money circulates faster, the effect on prices is the same as if there were more money in circulation. When both things happen on a large scale simultaneously, the result is runaway inflation. During the last, crisis-ridden year of the Soviet Union in 1991, the value of the ruble fell so low that Russians used it for wallpaper and toilet paper, both of which were in short supply.

Perhaps the most famous inflation of the twentieth century occurred in Germany during the 1920s, when 40 marks were worth one dollar in July 1920 but it took more than 4 trillion marks to be worth one dollar by November 1923. People discovered that their life's savings were not enough to buy a pack of cigarettes. The German government had, in effect, stolen virtually everything they owned by the simple process of keeping more than 1,700 printing presses running day and night, printing money. Some have blamed the economic chaos and bitter disillusionment of this era for setting the stage for the rise of Adolf Hitler and the Nazis. During this runaway inflation, Hitler coined the telling phrase, "starving billionaires," for there were Germans with a billion marks that would not buy enough food to feed themselves.

The rate of inflation is often measured by changes in the consumer price index. Like other indexes, the consumer price index is only an approximation because the prices of different things change differently. For example, when consumer prices in the United States rose over the previous

12 months by 3.4 percent in March 2006, these changes ranged from a rise of 17.3 percent for energy to 4.1 percent for medical care and an actual decline of 1.2 percent in the prices of apparel.

While the effects of deflation are more obvious than the effects of inflation—since less money means fewer purchases, and therefore lower production of new goods, with correspondingly less demand for labor—the effects of inflation can likewise bring an economy to a halt. Runaway inflation means that producers find it risky to produce, when the price at which they can sell their output may not represent as much purchasing power as the money they spent producing that output. When inflation in Latin America peaked at about 600 percent per year in 1990, real output in Latin America fell absolutely that same year. But, after several subsequent years of no inflation, real output hit a robust growth rate of 6 percent per year.

Deflation

While inflation has been a problem that is centuries old, at particular times and places deflation has also created problems, some of them devastating.

From 1873 through 1896, price levels declined by 22 percent in Britain, and 32 percent in the United States. These and other industrial nations were on the gold standard and output was growing faster than the world's gold supply. While the prices of current output and inputs were declining, debts specified in money terms remained the same—in effect, making mortgages and other debts more of a burden in real purchasing power terms than when these debts were incurred. This problem for debtors became a problem for creditors as well when the debtors could no longer pay and simply defaulted. Farmers were especially hard hit by declining price levels because agricultural produce declined especially sharply in price, while the things that farmers bought did not decline as much, and mortgages and other farm debts required the same amounts of money as before.

An even more disastrous deflation occurred in twentieth-century America. As noted at the beginning of Chapter 15, the money supply in the United States declined by one-third from 1929 to 1933, making it impossible for Americans to buy as many goods and services as before ***at the old prices***. Prices did come down—the Sears catalog for 1931 had many prices that were lower than they had been a decade earlier—but some prices could not change because there were legal contracts involved.

Mortgages on homes, farms, stores, and office buildings all specified monthly mortgage payments in specific money amounts. These terms might have been quite reasonable and easy to meet when the total amount of money in the economy was substantially larger, but now it was the same as if these payments had been arbitrarily raised—as in fact they were raised in real purchasing power terms. Many home-owners, farmers and businesses simply could not pay after the national money supply contracted—and therefore they lost the places that housed them. People with leases faced

very similar problems, as it became increasingly difficult to come up with the money to pay the rent. The vast amounts of goods and services purchased on credit by businesses and individuals alike produced debts that were now harder to pay off than when the credit was extended in an economy with a larger money supply.

Those whose wages and salaries were specified in contracts—ranging from unionized workers to professional baseball players—were now legally entitled to more real purchasing power than when these contracts were originally signed. So were government employees, whose salary scales were fixed by law. But, while deflation benefitted members of these particular groups ***if they kept their jobs***, the difficulty of paying them meant that many would lose their jobs. Similarly, banks that owned the mortgages which many people were struggling to pay were benefitted by receiving mortgage payments worth more purchasing power than before—***if they received the payments at all***. But so many people were unable to pay their debts that many banks began to fail. More than 9,000 banks suspended operations over a four year period from 1930 through 1933. Other creditors likewise lost money when debtors simply could not pay them.

Just as inflation tends to be made worse by the fact that people spend a depreciating currency faster than usual, in order to buy something with it before it loses still more value, so a deflation tends to be made worse by the fact that people hold on to money longer, especially during a depression, with widespread unemployment making everyone's job or business insecure. Not only was there less money in circulation during the downturn in the economy from 1929 to 1932, what money there was circulated more slowly, which further reduced demand for goods and services. That in turn reduced demand for the labor to produce them, creating mass unemployment.

Theoretically, the government could have increased the money supply to bring the price level back up to where it had been before. The Federal Reserve System had been set up, nearly 20 years earlier during the Woodrow Wilson administration, to deal with changes in the nation's money supply. President Wilson explained that the Federal Reserve "provides a currency which expands as it is needed and contracts when it is not needed" and that "the power to direct this system of credits is put into the hands of a public board of disinterested officers of the Government itself" to avoid control by bankers or other special interests. However, what

a government can do theoretically is not necessarily the same as what it is likely to do politically or what its leaders understand intellectually. Moreover, the fact that government officials have no personal ***financial*** interest in the decisions they make does not mean that they are "disinterested" as regards the ***political*** interests involved in their decisions.

Even if Federal Reserve officials were unaffected by either financial or political interests, that does not mean that their decisions are necessarily competent—and, unlike people whose decisions are subject to correction by the market, government decision-makers face no such automatic correction. Looking back on the Great Depression of the 1930s, both conservative and liberal economists have seen the Federal Reserve System's monetary policies during that period as confused and counterproductive. Milton Friedman called the people who ran the Federal Reserve System in those years "inept" and John Kenneth Galbraith called them a group with "startling incompetence." For example, the Federal Reserve raised the interest rate in 1931, as the downturn in the economy was nearing the bottom, with businesses failing and banks collapsing by the thousands all across the country, along with massive unemployment. Today, any student in Economics 1 who answered an exam question by saying that the way to get out of a depression is to raise the interest rate would be risking a zero for that answer, since higher interest rates reduce the amount of credit, and therefore further reduce aggregate demand at a time when more demand is required to restore the economy.

Nor were the presidents who were in office during the Great Depression any more economically sophisticated. Both Republican President Herbert Hoover and his Democratic successor, Franklin D. Roosevelt, thought that wage rates should not be reduced, so this way of adjusting to deflation was discouraged by the federal government—for both humanitarian and political reasons. The theory was that maintaining wage rates in money terms meant maintaining purchasing power, so as to prevent further declines in sales, output and employment. Unfortunately, this policy works only so long as people keep their jobs—and higher wage rates under given conditions, especially deflation, mean lower employment. Therefore higher real wage rates per hour did not translate into higher aggregate earnings for labor, and so provided no basis for the higher aggregate demand that both presidents expected.

Joseph A. Schumpeter, a leading economist of that era, saw resistance to downward adjustments in money wages as making the Great Depression worse. Writing in 1931, he said:

> The depression has not been brought about by the rate of wages, but having been brought about by other factors, is much intensified by this factor.

It was apparently not necessary to be an economist, however, to understand what both Presidents Hoover and Roosevelt did not understand. Columnist Walter Lippmann, writing in 1934, said, “in a depression men cannot sell their goods or their service at pre-depression prices. If they insist on pre-depression prices for goods, they do not sell them. If they insist on pre-depression wages, they become unemployed.” The millions of unemployed—many in desperate economic circumstances—were not the ones demanding pre-depression wages. It was politicians who were trying to keep wages at pre-depression levels.

Both the Hoover administration and the subsequent Roosevelt administration applied the same reasoning—or lack of reasoning—to agriculture that they had applied to labor: The prices of farm products were to be kept up in order to maintain the purchasing power of farmers. President Hoover decided that the federal government should “give indirect support to prices which had seriously declined” in agriculture. President Roosevelt later institutionalized this policy in agricultural price support programs which led to mass destructions of food at a time of widespread hunger. In short, misconceptions of economics were bipartisan. Nor were misconceptions of economics confined to the United States. Writing in 1931, John Maynard Keynes said of the British government’s monetary policies that the arguments being made for those policies “could not survive ten minutes’ rational discussion.”

Monetary policy is just one of many areas in which it is not enough that the government ***could*** do things to make a situation better. What matters is what government is in fact ***likely*** to do, which can in many cases make the situation worse.

It is not only during national and international catastrophes, such as the Great Depression of the 1930s, that deflation can become a serious problem. During the heyday of the gold standard in the nineteenth and early

twentieth centuries, whenever the production of goods and services grew faster than the gold supply, prices tended to decline, just as prices tend to rise when the money supply grows faster than the supply of the things that money buys. The average price level in the United States, for example, was lower at the end of the nineteenth century than at the beginning. As in other cases of deflation— that is, an increase in the purchasing power of money —this made mortgages, leases, contracts, and other legal obligations payable in money grow in real value. In short, debtors in effect owed more —in real purchasing power—than they had agreed to pay when they took on these obligations.

So long as everyone's income remains the same, the real value of that income rises with the value of their legal obligations, making these obligations no harder to meet. However, deflation—like inflation—tends to affect different segments of the population differently. In the United States, as already noted, the prices of what farmers sold tended to fall faster than the prices of what they bought:

> The price of wheat, which had hovered around a dollar a bushel for decades, closed out 1892 under ninety cents, 1893 around seventy-five cents, 1894 barely sixty cents. In the dead of the winter of 1895-1896, the price went below fifty cents a bushel.

Meanwhile, farmers' mortgage payments remained where they had always been in money terms—and therefore were growing in real terms during deflation. Moreover, payments on these mortgages now had to be paid out of farm incomes that were half or less of what they had been when these mortgages were taken out. This was the background for William Jennings Bryan's campaign for the presidency in 1896, based on a demand to end the gold standard, and was climaxed by his dramatic speech saying "you shall not crucify mankind upon a cross of gold." At a time when more people lived in the country than in the cities and towns, he was narrowly defeated by William McKinley. What really eased the political pressures to end the gold standard was the discovery of new gold deposits in South Africa, Australia, and Alaska. These discoveries led to rising prices for the first time in twenty years, including the prices of farm produce, which rose especially rapidly.

With the deflationary dangers of the gold standard now past, not only was the political polarization over the issue eased in the United States, more countries around the world went onto the gold standard at the end of the nineteenth century and the beginning of the twentieth century. However, the gold standard does not prevent either inflation or deflation, though it restricts the ability of politicians to manipulate the money supply and thereby keeps both inflation and deflation within narrower limits. Just as the growth of output faster than the growth of the gold supply has caused a general fall in the average price level, so discoveries of large gold deposits—as in nineteenth century California, South Africa, and the Yukon—caused prices to rise to inflationary levels.