

A World of Persistent Inflation

Using monetary policy to boost growth and employment worked. Then people caught on.

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According to scientist and futurist Isaac Asimov, the most important thing that separates humans from other animals is not speech or the use of tools. It is that we are willing to play with fire. We are willing to take something that can cause us great pain, even death, and attempt to harness it.

Inflation is economic fire. It can burn, devastate, and destroy economies. It can lower standards of living, put people out of business, erode retirement funds, and distort the entire price system. Yet in the early 1960s, policy makers resolved to put the flame to use. This changed the world forever—from one where rising prices were about as likely as falling prices to one where prices always rise.

Chart 1 on page 2 illustrates this change. Between 1913 and 1940, inflation was negative in 10 of those years, almost 40 percent of the time. But in the 50 years since 1960—the year that policy makers started using inflation to manage the economy—prices fell only in 2009, in the midst of the Great Recession.

We live in a world of persistent inflation. This is the story of how that world came about.

In 1936, British economist John Maynard Keynes introduced a revolutionary idea with persuasive arguments: The economy could and should be managed by government. According to Keynes, economies lack natural correction mechanisms and require tweaks and controls by the government to maintain high growth rates and full employment. His ideas became the basis for much of the second wave of Franklin Delano Roosevelt's New Deal.

The Depression gave way to World War II. Once the war was won, policy makers grew concerned that millions

of returning soldiers would flood the labor markets. The shift from a war economy to a peace economy also would involve reductions in government spending, shrinking demand. Massive unemployment might resume.

The new policy mind-set was firmly in place that government intervention was necessary to keep the economy running properly. Without aggressive policies, the Depression the U.S. had only recently escaped would be waiting for soldiers when they returned.

To address these concerns, Congress passed the Employment Act of 1946. The law obligated the federal government to use fiscal, monetary, and regulatory policy “to promote maximum

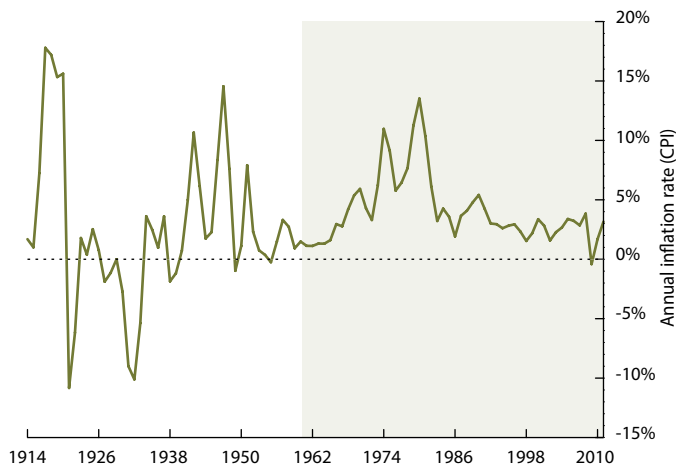
employment, production, and purchasing power.” According to the now-dominant Keynesian theory, this meant fiscal stimulus in slow economies and higher taxes in overheating economies. It also meant consistently low interest rates to ensure adequate investment by firms and purchases of houses by families.

The era of holding the government responsible for the country's economic performance had begun. We had a formula for prosperity. It was invigorating. And it worked pretty well for the next 25 years.

The new science of macroeconomics provided a stream of new insights that seemed to offer expanding possibilities for managing the economy with fiscal and monetary policy. In 1958, a New Zealander at London School of Economics, A.W. Phillips, found a relationship based on 100 years of data that would form the basis for policy in the second half of the 20th century. The Phillips curve was refined by MIT economists and Nobel Prize winners Paul Samuelson and Robert Solow to define the policy trade-offs. Based on scientific analysis of real-world data,

Inflation is economic fire. Yet in the early 1960s, policy makers determined to put the flame to use. This changed the world forever.

Chart 1: Inflation Bias after 1960



Source: U.S. Bureau of Labor Statistics

it appeared that consumer price inflation and unemployment rates were inversely linked to one another.

In this early form, the Phillips curve told policy makers that there are strict trade-offs between inflation and unemployment from which they could choose. Higher inflation was the price of lower unemployment. Higher unemployment was the price for lower inflation. It was that simple. To fight unemployment, create inflation. Inflation was viewed as a tool, albeit a dangerous one.

In terms of monetary policy, the logic of the early Phillips curve was that an increase in the money supply raises prices. When this happens, decision makers in firms see that they are getting higher prices for their goods, but that wages, and hence their production costs, have not risen. Profit margins swell. In response, businesses expand production and hire additional workers. Unemployment falls. This, in turn, generates increased incomes and demand, leading to additional employment and income.

Of course, the logic only holds if wages aren't going up at the same rate (and time) as the prices of goods. But at the heart of the early Keynesian theory was the notion that wages don't change much.

The Phillips curve relationship worked well when it was first put into use in the 1960s. By engineering increases in the money supply, monetary authorities caused inflation that lowered unemployment and stimulated economic activity. Chart 2 on page 3 shows this. It traces the relationship between unemployment and inflation from 1960 through 1969. All points sit almost perfectly along the Phillips curve. In years when inflation is high, unemployment is low.

Unfortunately, as people spend the additional income generated by more employment, prices rise further. General inflation follows. Policy makers expected a trade-off and accepted moderate inflation of a few percent a year as a price worth paying for low unemployment.

But one of the biggest problems with policy making is that people don't always behave according to plan.

When policy makers cause inflation, for example, wages do not stay the same. Workers eventually notice that their paychecks aren't going as far as they used to, and they ask for raises. If workers anticipate higher prices, they'll demand higher wages in advance of the inflation. If you knew that you were going to face prices 5 percent higher over the next year, wouldn't you ask for a 5 percent raise now?

When wages rise along with inflation, rising prices do not translate into higher profit margins. There is no reason for firms to expand employment. It all unravels.

By the late 1960s, the Phillips curve relationships were starting to break down. By the 1970s, they were gone. (See chart 3 on page 3.) Businesses had adjusted their behavior to accommodate inflation's steady rise. They were much quicker to adjust prices and wages in response to changing conditions. Workers, for their part, demanded cost-of-living raises. Labor contracts had built-in adjustments. Supplier contracts became more flexible. Business decision makers started watching the weekly Federal Reserve money supply numbers to get an early heads-up on future inflation rates.

People's perceptions and inflationary expectations are the dominant factors in determining policy effectiveness. The smarter people get, the worse policy works. Chart 3 shows the result of this interplay between policy and people's expectations throughout the 1970s.

In 1967 and 1968, Nobel Prize winners Edmund Phelps and Milton Friedman each independently explained the role of expectations in the Phillips curve trade-off and the breakdown of the Phillips curve relationship. As shown in Chart 4 on page 5, the researchers argued that in the long run there is no trade-off between unemployment and inflation—the long-run Phillips curve is vertical. Once people learn of inflation and make the appropriate adjustments to their economic lives, increasing inflation does not spur growth.

In the short run, however, there is a trade-off. If people are expecting no inflation and prices start to rise, they will be fooled into believing that the demand for goods has increased. As predicted, profit margins will expand, firms will hire more workers, and unemployment will fall.

Eventually, people will realize that the Fed has just upped the inflation rate, and they'll incorporate that higher rate into their expectations and plans. Effectively, the Phillips curve moves upward. As Chart 5 on page 5 shows, the economy returns to the previous level of unemployment. (This makes the classic Phillips curve seem to disintegrate as it did during the 1970s.) Friedman called the rate of unemployment that we keep coming back to the *natural rate of unemployment*. It is the rate that occurs based on the underlying microeconomics of the economy, when decision makers have full information about what is going on and can make any adjustments they need to make.

In the Friedman-Phelps data-based model, since the effects of policy are temporary, the Fed can only keep unemployment below the natural rate by continually increasing the inflation rate. Ultimately, this will lead to an inflationary crisis. Inflation starts to interfere with the normal functioning of the economy.

Friedman and Phelps also showed that the Phillips curve would move up and down in response to the public's changing inflationary expectations. This dancing curve theory became the new accepted wisdom.

But the inflation experience of the 1970s defied even this revised explanation of the Phillips curve's behavior. Not only did people catch on to what the Fed was trying to accomplish, little of the decade's inflation was the result of Fed design to create employment. It came about in response to other events in the economy.

On August 15, 1971, the U.S. abandoned the gold exchange standard by jettisoning the Bretton Woods Agreement. The dollar depreciated, and oil was priced internationally in dollars. The result was that the real incomes of oil producing nations crashed. In 1973, the Shah of Iran claimed that Middle-Eastern oil producers were paying 300 percent more for U.S. wheat, but had not adjusted oil prices accordingly. On October 16 of that year, OPEC raised the price of oil by 70 percent to \$5.11 a barrel. By 1981, it was nearly \$40 a barrel.

Oil is pervasive in the U.S. economy, and is, for the most part a necessity.

With billions of dollars redirected to oil-related purchases in the U.S. economy, the prices of other goods in the economy would have fallen as demand for them decreased. According to the Phillips curve, the lower prices would have meant higher unemployment. The logic left the Fed with little choice. If the Fed did not increase the money supply to stabilize the prices of non-oil products, the U.S. would have faced economy-wide deflation. Unemployment would soar as profit margins collapsed. Trying desperately to manage the situation, the Fed pumped money into the economy.

Once the oil prices stabilized, the Fed could not remove the additional money from the economy fast enough. The result was higher overall inflation. With the expectations of high inflation built into the economy, this higher inflation no longer produced lower unemployment. Instead, the economy stagnated. *Stagflation* was born.

As inflation accelerated from 3.3 percent in 1971 to 12.3 percent in 1974, the unemployment rate barely budged—it went from 5.9 percent to 5.6 percent. By 1979 inflation hit 13.3 percent, yet the unemployment rate still stood at 5.8 percent. The relationship between unemployment and inflation seemed to have permanently changed.

In 1979, Federal Reserve Chairman Paul Volker dramatically reduced money supply growth to bring inflation under control. It is basic supply and demand.

Lowering supply raises prices, and the price of money is the interest rate.

The policy was so extreme that interest rates rose above 19 percent, plunging the economy into back-to-back recessions in 1980-82. Unfortunately, lowering inflation caused unemployment to rise above 10 percent. Clearly, some parts of the Phillips curve relationship still held.

This experience pushed economists to better understand the Phillips curve. Studies in the 1970s and early 1980s uncovered some details missed in the early work.

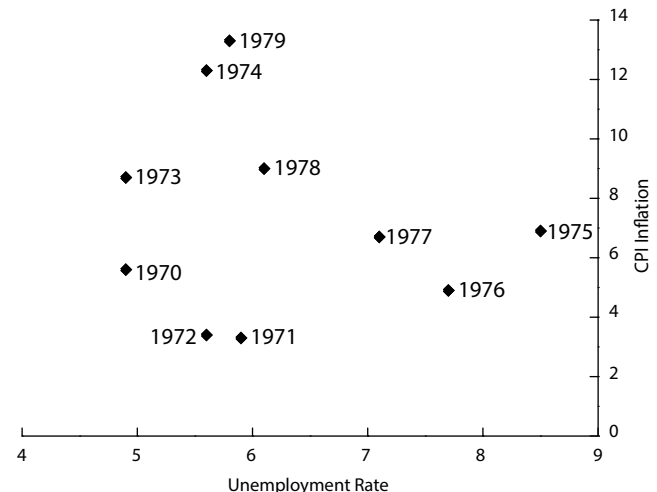
First, researchers Thomas Sargent and Neil Wallace found that inflation caused by monetary expansion can lower unemployment *temporarily* if the inflation is unexpected. If people know what the Fed is doing, then the policy is ineffective. This has become known as the *policy ineffectiveness proposition*, and it's the primary reason the Fed kept its policy decisions secret for so many years.

Chart 2: Classic Phillips Curve Relationship, 1960-1969



Source: U.S. Bureau of Labor Statistics

Chart 3: The Phillips Curve Breaks Down, 1970-79



Source: U.S. Bureau of Labor Statistics

Deficits, Accommodation, and Inflation

By creating money, the Fed can reduce the impact of government debt.

Inflation helps the economy absorb large federal deficits. The U.S. federal deficit for fiscal year 2012 was \$1.1 trillion. This means that the government spent more than \$1 trillion in excess of the taxes it collected. The government pays for this shortfall by issuing debt.

If the federal government simply borrowed all of this money from U.S. citizens, then almost certainly this additional demand for credit would raise U.S. interest rates. The high rates would not help the recovery.

That's not what's happening: Right now, interest rates are at historic lows.

Federal Reserve policy makers have recourse to a mechanism that reduces the impact of the debt the government incurs. The Fed can avoid increases in interest rates by creating money to buy the new debt with new dollars. When this happens, the supply of credit keeps up with demand. Interest rates remain unchanged or are lowered. Income taxes do not have to be raised, and the public can remain undisturbed, at least for a while. This process is referred to as *central bank accommodation*. However, as the new dollars created by the Fed flood into the economy, there is a major side effect: inflation.

Inflation is also a tax. An increase in the money supply causes prices to rise and reduces every citizen's buying power. If the Fed finances only part of the debt through money creation, then the remaining lenders will be repaid in cheaper dollars. Whether the Fed creates all the money to buy up debt or forces other lenders to be paid back in cheaper dollars, the government wins.

Inflation does not need to be very high to substantially reduce the value of outstanding debt. Coming out of World War II, the U.S. federal debt was about 120 percent of GDP. From 1947 to 1980, the average annual inflation rate was about 4 percent. By the end of 1980, prices were four times as high as they were in 1947, wiping out three-quarters of the value of the war debt. During the same period, the economy grew at a substantial rate. Real GDP more than tripled. Even though new debt was added after

the war, growth combined with inflation reduced total federal debt to about 30 percent of GDP by the end of 1980.

This is not to say that the Fed had an objective of wiping out the value of federal debt. In the post-WWII period up to 1979, the Fed interpreted its mandate to mean that it should maintain low interest rates. To accomplish this, it simply introduced enough new money into bank reserves to keep the level of available credit high enough to prevent interest rates from rising. To the extent that Treasury debt funding needs would have raised interest rates, the Fed stepped in to buy a substantial amount of the securities—with inflationary implications.

A side benefit was that low interest rates kept the federal government's interest payments low. And interest paid to the Fed for the bonds it held was returned to the Treasury as Fed profits.

More specifically, for the first five years after World War II the Fed maintained a 2.5 percent ceiling on the interest rates on long-term Treasury bonds. In the 1960s, Congress chose to use debt to finance the unpopular Vietnam War rather than ask the public to pay higher taxes. In the 1970s, the expansion of social programs under the War on Poverty led to more debt finance. The federal government's increased demand for credit put upward pressure on interest rates.

The Fed, targeting low rates, injected money into the economy by buying however many bonds it took from day-to-day to keep interest rates steady and low.

Something similar is happening today. In recent years, the Fed has been purchasing various securities such as Treasury securities, agency securities, and mortgage-backed securities. This is a response to the financial crisis and its aftermath. In trying to stimulate the economy through the purchases, the Fed is keeping interest rates low and fostering inflation. This effectively helps the federal government finance the deficits, reducing the need for Congress to raise taxes or cut spending.

—Steven R. Cunningham, PhD, Director of Research and Education

Second, researchers like MIT’s Stanley Fischer found that policy can be effective in lowering unemployment if workers are trapped by wage contracts that do not allow them to demand higher wages. Eventually, of course, contracts will be renegotiated, which means that the effects of policy are still only temporary.

By 1980, many people believed that the patchwork that the Phillips curve had become was nonsense. At the very least, nearly every economist believed that there was no long-term Phillips curve trade-off between unemployment and inflation. The Phillips curve looked like a losing game. At best, economies could trade short-term unemployment reductions for longer-term inflation.

Congress apparently didn’t get the news. Following the inflationary experience of the 1970s, Congress established the dual mandate of the Federal Reserve, directing the Fed to follow policies that promote both full employment and price stability. Given the realities of the Phillips curve, this has left the Fed in a constant struggle between the longer-term goal of price stability and short-term economic stimulus programs. QE1, QE2, and QE3, and the twist programs, for example, are all stimulative responses to the economic meltdown of 2008-09 and the slow recovery that has followed.

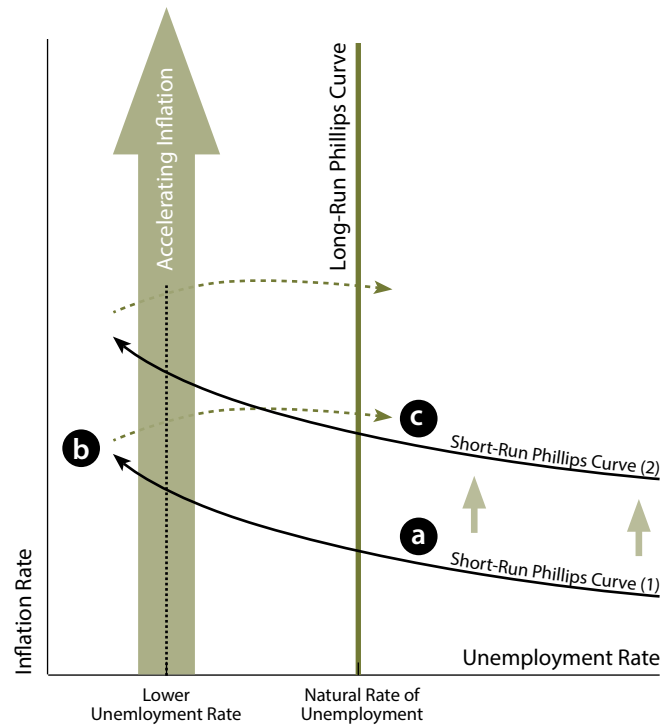
None of this should suggest that the Fed is not aware of the limitations of policy; nor is the Fed cavalier about longer-term inflation effects. More at point is that the Fed is constantly put in impossible situations. Here’s the latest one.

Massive deficit spending by Congress has left the country with a national debt of about \$16 trillion, roughly 100 percent of GDP. This requires enormous funding through Treasury bills and bonds. If the rapidly expanding debt were to reach the market directly, the increase in demand for credit would likely cause substantial increases in interest rates. Higher interest rates would choke off growth in interest-sensitive areas of the economy like the housing market, business investment in plant and equipment, and purchases of long-lasting goods like cars and major appliances. If sales in these areas fell, employment in those sectors would also fall, raising the unemployment rate.

In an effort to keep the recovery on track, the Fed has been continually expanding the money supply by purchasing Treasury bonds and bills in the open market. In short, Congress’s unwillingness to address the debt/deficits problem forces the Fed to choose between higher (short-term) unemployment and future inflation.

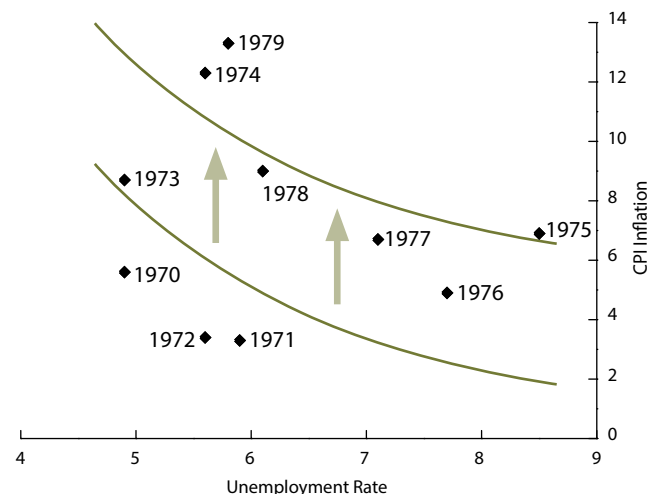
When pushed to the wall by circumstances or by Congress’s poor fiscal choices, the Fed feels a statutory and moral obligation to do whatever it can. And it has only one tool—inflation driven by monetary policy. We shouldn’t be surprised that when we force the Fed to act, inflation is the result. Central bank discretionary policy is playing with fire.

Chart 4: An Endless Inflationary Spiral



The economy starts on the short-run Phillips curve (1) at point **a** with no inflation and with the public not expecting any. Unemployment is at the natural rate. The Fed increases the money supply, inflating the economy. The additional money leads to more transactions, driving up prices. Firms hire more workers in response to expanding profit margins. The unemployment rate falls to point **b**. People slowly demand higher wages to deal with the higher prices. Inflation continues to rise. Profit margins fall, and firms begin to reduce employment. The economy moves to point **c**, back to the higher, natural rate of unemployment, at a higher level of inflation. Now the economy is operating on short-run Phillips curve (2). In order to continue reducing the unemployment rate, the Fed would repeatedly have to increase the money supply growth rate, driving inflation ever higher.

Chart 5: The Phillips Curve Shifts, 1970-79



Source: U.S. Bureau of Labor Statistics

➤ The Joy of (Planned) Giving ■

“We make a living by what we get, but we make a life by what we give.”
— Sir Winston Churchill

In addition to helping a charity to fulfill its mission, planned giving can garner significant tangible benefits for donors, including:

- Federal and state income tax deductions
- Capital gain tax savings on gifts of appreciated assets
- Annual income for life or for a designated term.
- Flexibility. Gifts of cash, securities, or other property including buildings and land are possible.
- Reduced probate costs and estate taxes
- Expert investment management

Donations can take many forms.

A **pooled income fund (PIF)** is a trust maintained by the sponsoring charity. A PIF operates very much like a mutual fund. The donor contributes property. The donated assets are sold and the proceeds are reinvested in income-generating securities. Neither the trust nor the donor incur taxable long-term gains on such sales, so the full market value of the donor's contribution works to generate income.

A **charitable remainder unitrust (CRUT)** is similar to a PIF. It can be established with donations of cash, securities, or other property. The donor receives an income tax deduction based on the present value of the assets and pays no capital gains tax. The full market value of the property is available for reinvestment within the CRUT. Donors may add funds to their CRUT at any time. When the CRUT term ends, the principal passes to the charity.

A **charitable lead trust (CLT)** can be used to transfer assets at a significantly reduced tax liability. Though it can be a powerful tool in gift and estate tax planning, a CLT is a complex arrangement that requires careful consideration. A CLT distributes periodic income to the charity. At the end of the trust term, the remainder is returned to the donor or passed onto heirs.

AIER encourages readers who have philanthropic intentions to contact their favorite charitable institution regarding possible donation to a planned giving program. For more information on AIER's own programs, call (413) 528-1216, ext. 3153 or e-mail pgo@aier.org. Potential donors can also run financial simulations at

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