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FACING THE MUSIC

In the wake of massive monetary and fiscal Covid response programs, **inflation is back**

Harwood Economic Review

AMERICAN INSTITUTE FOR ECONOMIC RESEARCH

A Letter from the Managing Editor

Peter C. Earle

One year ago, in the Summer 2021 issue of the *Harwood Economic Review*, we asked: ***Is Inflation Back?***

At that time the Consumer Price Index (CPI) lingered between 5 and 5.5 percent on a year-over-year basis. Those levels were elevated over recent years, to be sure, but not without precedent in the new millennium. During the summer of 2008 the CPI hovered between 4.9 and 5.6 percent, and periodically throughout 2005 and 2007 readings of over 4 percent were seen. Nevertheless, last summer few took the Fed's assurance that inflation would prove *transitory* seriously.

It's not that outside of periodic spikes there hasn't been inflation. Not at all. But there are considerable blind spots arising from limitations in economic measurement. And the exorbitant privileges associated with the US dollar being the world's reserve currency permit a substantial portion of inflationary effects to be exported. We have seen a disproportionate amount of price increases occur in markets for financial assets. And shrinkflation, where goods and services are subtly reduced in size and/or quality while prices remain the same or increase, accounts for a large portion of price increases as well.

The last two decades have witnessed successive expansionary policy measures. First in anticipation of the Y2K bug, then to soften the blow of the dot-com collapse. Then again, in the aftermath of the 9/11 attacks. Next came several quantitative easing campaigns associated with both the bursting of the housing bubble and the following Great Recession. After that came the institutionalization of inflation with the adoption of a 2-percent target rate, and more recently a deluge of new, even more expansionary programs coupled with massive fiscal stimuli in response to the Covid pandemic.

The CPI (yoy) now stands at 8.3 percent (April 2022), the PCEPI at 6.3 percent (April 2022), and the GDP Price Deflator at 8.1 percent (2Q 2022). After decades of rate cuts, money creation, and Fed balance sheet bloat, inflation is back in its most familiar form. It is time to face the music. Nestlé, the largest food company in the world, raised prices over 5 percent last month. A few weeks earlier multinational consumer products powerhouse Unilever increased prices by over 8 percent. Samsung and other semiconductor chip foundries are projecting 20 percent increases in chip production costs, which will be passed on to consumers. National average gasoline prices hit an all time high of $4.91 per gallon this week. The list grows daily.

In the face of ideologically-driven ignorance and political evasion, what is critically required is sound and penetrating economic research, analysis, and education. And thanks to your valued support AIER is engaged in all of those, bringing our considerable intellectual and institutional resources to bear. This is why we are here.

Peter C. Earle
Managing Editor, *Harwood Economic Review*

Scapegoating Inflation Will Only Make It Worse

Kat Dwyer

Inflation is officially no longer transitory. The Consumer Price Index has hit its highest rate in four decades, running at 7.5 percent year-over-year. The energy index rose 27 percent over the last year, and the food index increased 7 percent. The higher prices are affecting Americans with every purchase they make, and undercutting their wages. Inflation is even challenging Covid as voters' number one issue of concern. And the President's response? Deflection.

In an effort to skirt responsibility for the inflation he once said was both not happening and only transitory, President Biden and his Democratic supporters are crying *Collusion!* It's *big poultry* or *big grocers* or *big oil* that have spontaneously colluded to raise prices on their consumers, motivated purely by greed. And like many policy proposals from the left these days, the Democrats have turned for a solution to a 20th-century relic—specifically, antitrust and price controls.

It's true that four major companies dominate the meatpacking industry for beef, pork, and poultry, but don't be fooled into thinking these companies are colluding with each other to raise prices. A much simpler answer than conspiracy and collusion can be found—all of the inputs to their product have risen in cost, from fertilizer and feed to gasoline and labor. When the cost of a product's inputs increases, so too does the price of the final product.

On the fuel front, the increase in price can be explained by a mismatch of supply and demand. Demand plummeted during Covid lockdowns, supply was diminished, and now with demand for oil surging again worldwide, supply is slow to catch up. The administration's signaling that it wants to phase out fossil fuels doesn't encourage new investment in production either.

It's worth noting that when the price of fuel rises, so does the price of just about everything else. Why is this? Because we are still an economy dependent on fossil fuels to power not only the transport of our goods but also the production of those goods.

Antitrust action to break up the large corporations that provide fuel and food will not lead to lower prices for consumers. These corporations are able to offer lower prices precisely because of their consolidation. As they consolidate and grow larger, they achieve economies of scale by lowering the average cost of each unit they produce. Likewise, increasing the regulatory oversight on corporations increases the cost of doing business, a cost that invariably gets passed on to consumers.

Similarly, price controls would be a devastating blow to consumers. When the price of a good is set artificially low, shortages follow. That's because if a producer cannot make a decent return on their product, they'll stop producing it. And why wouldn't they? That's not greed motivating their actions; that's the bottom line. No producer is going to lose money on each unit sold and stay in business.

So if it isn't corporate greed that's driving inflation, what is?

Inflation has two primary culprits—supply disruptions and reckless monetary policy. Supply-side inflation is the result of bottlenecks slowing the delivery of goods and services. Demand-side inflation derives from expansionary monetary policy, pursued by the Federal Reserve.

An obvious but often unacknowledged contributor to our supply chain woes is the government's response to the pandemic. When businesses were forced to close, supply was decimated. Many businesses never came back. A Federal Reserve study estimates that roughly 200,000 more businesses closed in the first year of the pandemic alone. That number is about one third higher than normal market exit. These closures obviously disrupted the equilibrium between supply and demand. Those who did hang on did so in part by selling off inventory and laying off workers. That means when demand surged once the more draconian government restrictions were lifted, supply had to play catch up.

And once employers were looking to restaff, they learned that, surprisingly, there were fewer people willing to work. There are currently 10.9 million job openings in the US with a labor participation rate of 62.2%. This labor shortage is driven, in part, by federal and state unemployment benefits, on top of other forms of transfer payments like the child tax credit, rental assistance, and direct payments from Presidents Trump and Biden. All of these subsidies create a disincentive to work.

Many who oppose the Biden administration often decry his multi-trillion-dollar spending bills. While it's true that those government dollars are less productive than private dollars and rather than stimulate long-term economic growth, they simply boost short-term consumption, they aren't what's driving inflation. The type of persistent inflation we're witnessing today is, as Milton Friedman famously said, *always and everywhere a monetary phenomenon*. Government subsidies and stimulus spending might goose demand—and when supply is limited that's certainly a problem—but to thwart long-term inflation, we must turn our attention to the Fed's monetary policy.

The Federal Reserve is charged with promoting maximum employment, stable prices, and moderate long-term interest rates and uses monetary policy to achieve these ends. The Fed can boost employment, at least temporarily, by increasing the growth rate of money. It can reduce inflation by reducing the growth rate of money. To ensure that long-term interest rates are not too high, it must prevent money growth from outpacing money demand by too wide a margin on average over time.

It's a careful line to walk for the Fed. Over the last few months, supply constraints and a rise in nominal spending has left too many dollars chasing too few goods. For context, the money supply has increased by an eyewatering 40 percent over the past two years as a result of the Fed's expansionary monetary policy. High inflation is the natural consequence.

The Fed could bring down inflation by cutting the growth rate of money. It can accomplish this by raising the interest it pays banks on reserve balances or drastically reducing the size of its balance sheet to hit a higher federal funds rate target. But politicians are concerned the Fed will take away the *punch bowl* (so to speak) too rapidly, thus slowing economic growth and triggering a recession. This is certainly possible. And it's what we saw with Paul Volcker's scrupulous Fed in the 1980s. The short-term downturn hurt, no doubt, but inflation was thwarted and economic growth rebounded.

One could argue, however, that the growth the Fed's expansionary monetary policies are promoting now is inequitable and further widens the divide between the top and bottom earners in this country. That's because the Fed's asset purchases pump up the stock market at the expense of low-income savers who do not invest in the stock market.

When interest rates are near zero, putting money into a savings account yields virtually no return, incentivizing investment in the stock market. That's part of the reason corporations have seen such large gains in their value over the course of the pandemic. It's government action distorting the market, not corporate collusion, that is leading to the wealth creation so many Democrats decry. The President might not be willing to acknowledge this economic reality for political reasons, but even Federal Reserve Chair Jerome Powell does, indicating the economy no longer needs stimulus and that the Fed should therefore begin to taper its asset purchases and raise interest rates to slow inflation.

And because inflation eats away at workers' wages by making every item they buy with those wages more expensive, reining in this monetary policy would reduce inflation and benefit, not harm, the poorest among us.

Are the threat of antitrust action and the flirtation with price controls cheap throwaway lines recycled from the 20th century meant solely to get the administration through the next news cycle? Or are they serious proposals emerging from the increasingly radical progressive flank of the Democratic Party? For the sake of the economy and your grocery bills, let's hope it's the former. If the administration really wants to tackle inflation, it needs the Fed to rein in its reckless monetary policy.

Is This What Monetary Tightening Looks Like?

James L. Caton

Federal Reserve officials say they are ready to tighten the stance of monetary policy. According to the December Federal Open Market Committee (FOMC) meeting minutes, there was widespread agreement among participants that the federal funds target should increase soon. Participants at the meeting also *began to discuss how balance sheet policy might feature in the Committee's plan for reducing accommodation when warranted, although expectations for timing of the first decline in the balance sheet were diffuse [emphasis mine].* In short, we should expect modest increases in the federal funds target soon, with a reduction of the balance sheet following the increase in rates. The exact timing of balance sheet reduction is yet to be determined.

The shift in tone at the FOMC reflects the responsibility of the committee to maintain the Federal Reserve's dual mandate. The Fed is tasked with promoting price stability and maximum employment. The Federal Reserve's average inflation target is 2 percent. It does not specify an explicit employment target, but economic theory suggests it should try to keep unemployment at its natural rate. The natural rate of unemployment can be thought of as the efficient level of unemployment. It includes structural unemployment—where there is a mismatch between workers' skills and the skills desired by employers—and frictional unemployment—where workers remain unemployed as they search for a job that suits their skills and a wage that matches the value they can provide with that skill set. We do not observe the natural rate of unemployment directly, and it might vary over time, but estimates usually fall between 4 and 5 percent. In what follows, I assume that the natural rate of unemployment is 4.5 percent.

In evaluating whether the Fed should ease, tighten, or maintain the stance of monetary policy, we need to consider the rate of inflation relative to target, and the unemployment rate relative to the natural rate. We also must consider the impact of policy on investor expectations. To evaluate whether the Federal Reserve is meeting its objectives, we can simply take the difference between the observed rates of inflation (π) and unemployment (U), and the desired rates of inflation (π*) and unemployment (U*). We call these the inflation (π-π*) and unemployment (U-U*) gaps.

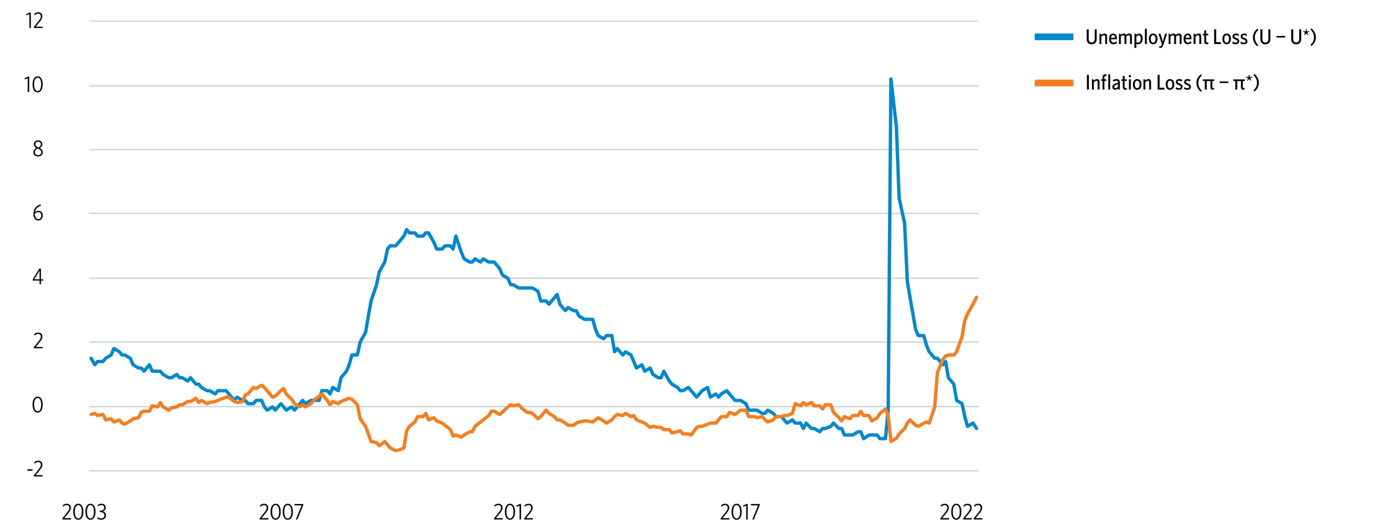
The FOMC should consider both the inflation gap and unemployment gap simultaneously. This is not usually a problem. When the rate of unemployment is over target, the rate of inflation is often under target. In that case, the position of both variables merits a policy of easing. Likewise, if inflation is above target and unemployment is below target, tightening monetary policy is in order. To consider both variables simultaneously, policymakers sum the squares of both gaps to create a *loss function*, which penalizes large gaps. To calculate the loss function (L), I use the formula:

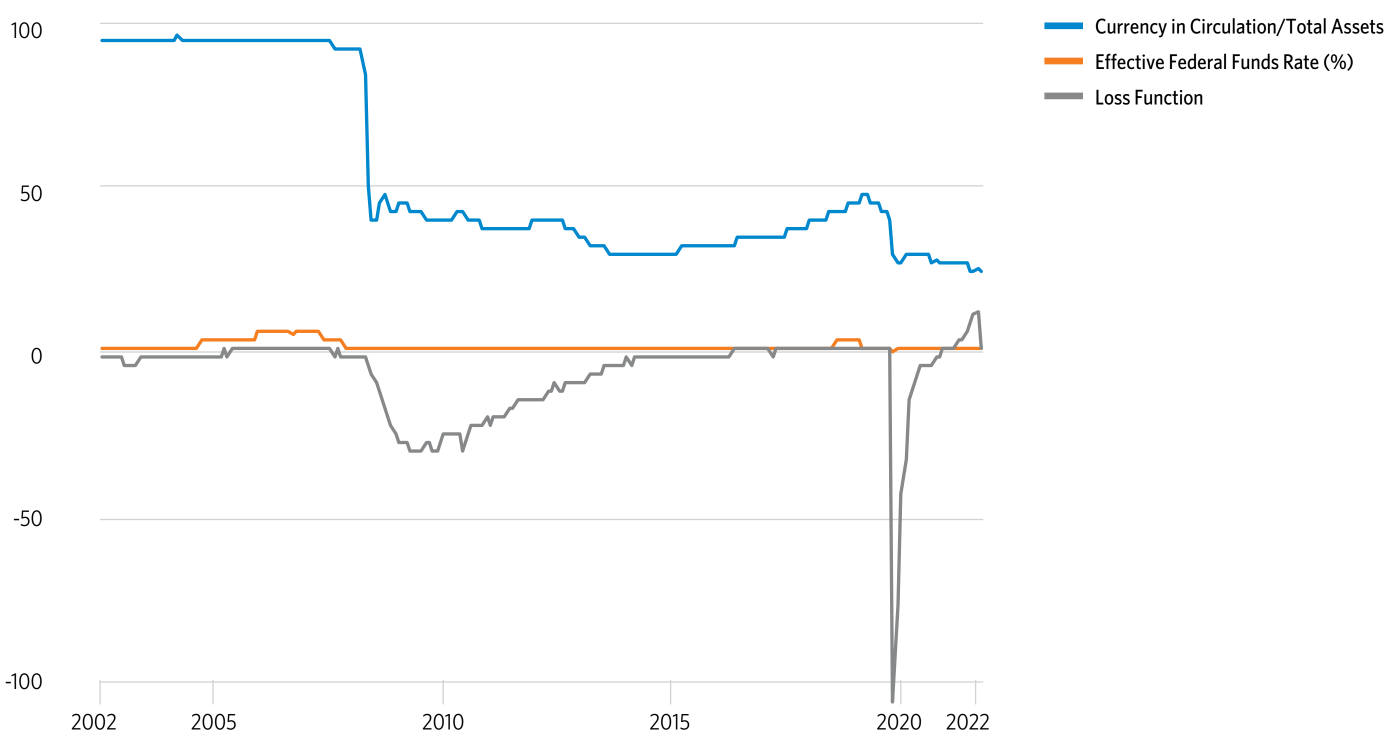
$$L = (\pi_i - \pi_i^*)^2 - (U_i - U_i^*)^2$$

The loss function is indicated by the gray line in the figure to the right. Since August 2020, the official framework no longer takes into account *losses* where the rate of unemployment is below target. Since the Covid-19 lockdowns, however, the unemployment rate has been below target only since November.

When we add investor expectations to our discussion, the problem becomes slightly more complicated. Policymakers want to avoid encouraging unnecessary pessimism among investors. If policymakers observe strong signals of financial contraction, they will likely ease monetary policy in short order. A swift response encourages confidence among investors and prevents a deflationary spiral. Likewise, when the economy shows signs of recovering, policymakers might be slow to begin tightening in order to prevent a sudden decline in investor confidence.

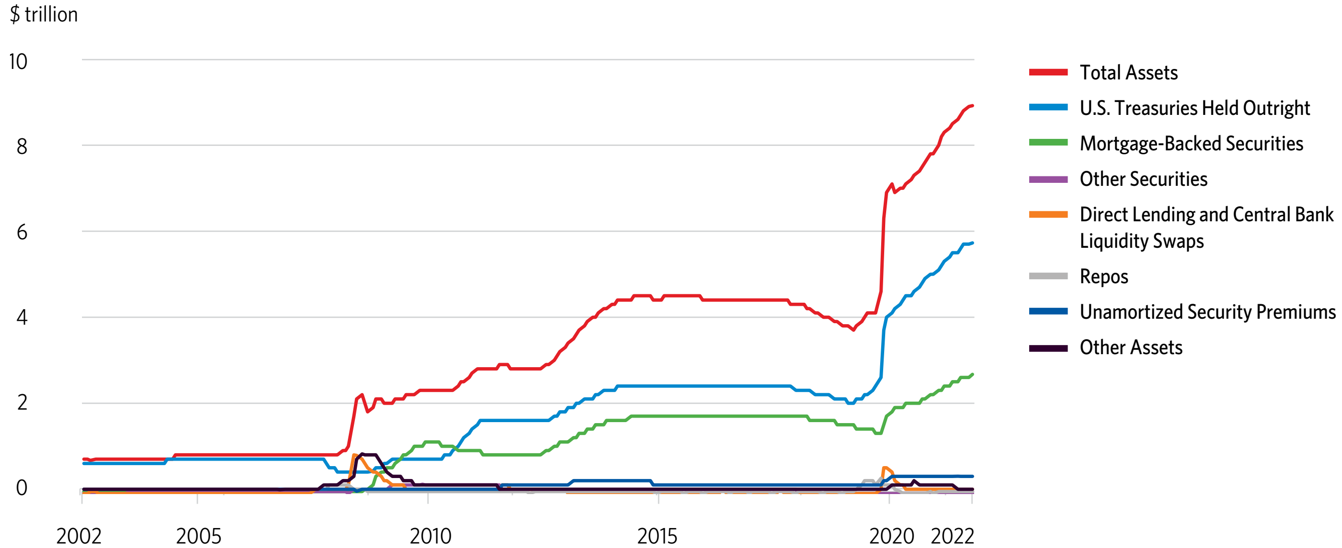
Both unemployment and inflation gaps are now in regions that merit a modest tightening of monetary policy by some combination of rising interest rate targets, a tapering of the rate of growth of currency in circulation, and a shrinking of the Federal Reserve's balance sheet. In particular, inflation has been well above target since April. So far, policy response has been modest, at best. When the inflation rate climbed above 3 percent, the FOMC very quietly increased the rate paid on reserves held at the Fed from 0.10 to 0.15 percent, thereby promoting a slight increase in rates at the bottom end of the yield curve.





Although many believe that the Fed has begun to tighten policy, the truth is that it has engaged in little more than *open mouth operations*. Jerome Powell says that he expects for policy to tighten and inflation hawks, to the extent they still exist in leadership positions at the Fed, have begun to speak openly about the need to increase the federal funds rate target in the very near future. Policymakers are banking on their ability to anchor inflation expectations in the long run. This has allowed the FOMC to indicate future tightening while simultaneously expanding the balance sheet. The crazy thing is that the strategy seems to be working.

Federal Reserve Balance Sheet Assets



Even if monetary policy has been too easy in the short run, investors expect that the Federal Reserve will, in fact, succeed in implementing its long-run inflation target. These expectations are self-feeding. Investors who expect monetary tightening and lower levels of inflation in the near future will refrain from bidding up the price of assets and pushing up short-term interest rates to the full extent that would otherwise be merited by easy policy.

Policymakers, then, are able to continue a policy of easing while talking about future tightening. Interest rates remain near historic lows in spite of rising inflation and in spite of balance sheet expansion that continues at a pace characteristic of post-Covid monetary policy. If the tightening that followed QE3 (2015-2019) is any indication of future tightening, then the Federal Reserve's balance sheet will likely level off at around $9 trillion and remain at that level until rising interest rates force policymakers to reduce interest obligations generated from the liabilities side of the balance sheet. Fed officials are indicating that this interest rate increase will happen soon and that balance sheet reduction will follow. The question is, how long after the Fed increases rates will the balance sheet reduction occur?

The FOMC meeting minutes reflect some hesitancy:

> *Depending on the size of any caps put on the pace of runoff, the balance sheet could potentially shrink faster than last time if the Committee followed its previous approach in phasing out the reinvestment of maturing Treasury securities and principal payments on agency MBS. However, several participants raised concerns about vulnerabilities in the Treasury market and how those vulnerabilities could affect the appropriate pace of balance sheet normalization.*

The FOMC expects to begin shrinking the balance sheet more swiftly than it did following the response to the financial crisis of 2008. Recall that the Fed's final round of quantitative easing wrapped up in October 2014. Then, near the end of 2015, it began raising its Federal Funds Rate target. The size of the balance sheet remained at a record level until the end of 2017—*almost two years after policy rate liftoff*. So, when will the Federal Reserve begin to unwind its balance sheet this time? If the meeting minutes indicate the trajectory of policy, reductions will begin within the next two years..

What Did the Fed Know in the Great Recession?

Thomas L. Hogan

Federal Reserve officials pride themselves on making data-dependent decisions using the most up-to-date information on the state of the economy. Fed Chair Jerome Powell says that the Fed *has gone to great lengths to collect and rigorously analyze the best information to make sound decisions for the public we serve*.

Sound monetary policy decisions, however, require not only recent data on the economy but also predictions about its future direction. As Milton Friedman described, monetary policy works in *long and variable* lags, often of a year or more. To manage the money supply effectively, the Federal Open Market Committee (FOMC) must have accurate predictions of the economy in order to make informed policy decisions.

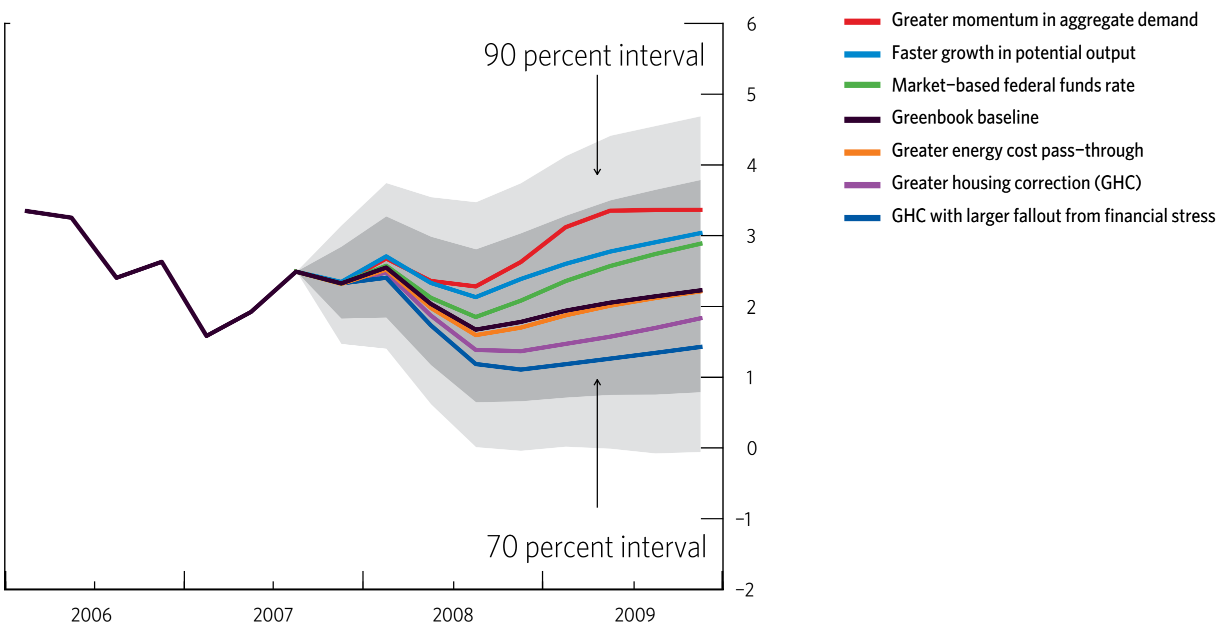
Let's look at the Fed's economic forecasts during the Great Recession of 2007–2009 and consider how they might have affected its monetary policy decisions.

Before the recession

Most research prior to the Great Recession found the Fed's forecasts to be quite accurate. Research by Christina and David Romer, for example, found that forecasts by the Federal Reserve Board (FRB) staff's economic models outperformed private forecasts and were even better than projections by the individual FOMC members.

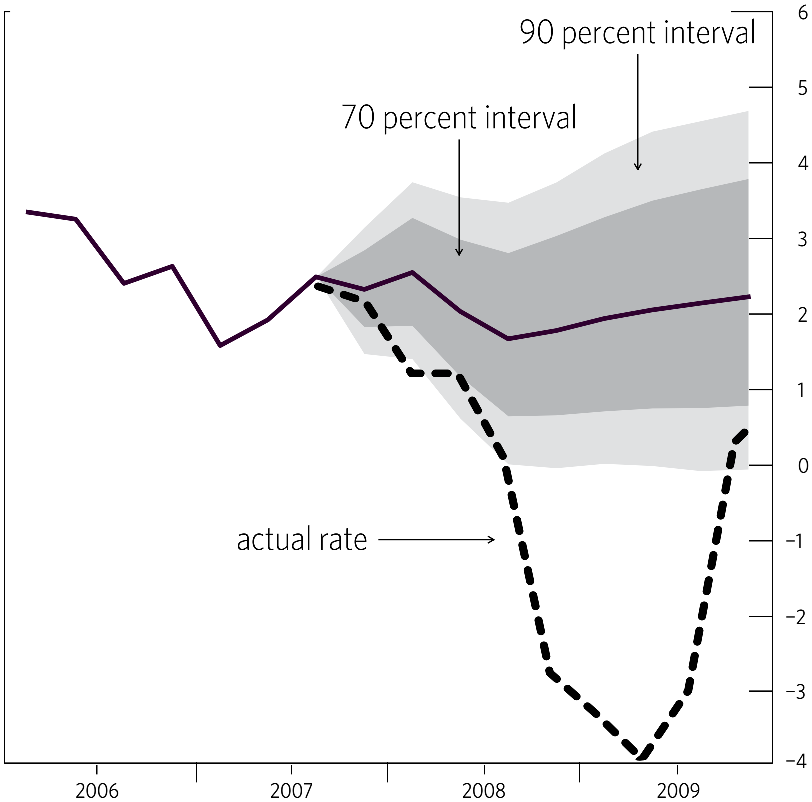
However, recent research including the time period of the Great Recession finds much different results. Figure 1 shows the FRB staff's forecast of GDP growth as of October 2007, just prior to the start of the recession. The black line is the base-case forecast of the four-quarter percentage change in real GDP growth. The colored lines represent alternative scenarios based on different assumptions. The dark and light gray areas respectively represent the 70 percent and 90 percent confidence intervals.

Figure 1
FRB staff GDP growth forecast, October 2007



Source FRB Greenbook (p.I-20)

Figure 2
Actual GDP growth vs. FRB staff forecast, October 2007



Sources Forecast based on FRB Greenbook (p.I-20), actual rates from the Federal Reserve Bank of St. Louis

The FRB staff's base-case forecast was fairly stable around 2 percent GDP growth through the end of 2009. The 90 percent interval barely touched zero in 2008 and 2009, indicating that the FRB staff was almost 90 percent confident there would not be a recession. Obviously, that forecast was very wrong.

Figure 2 shows the FRB staff's base-case forecast in addition to a dashed line representing the actual rates of GDP growth over the period. Clearly the FRB staff forecast was quite different from the actual rates, which were below the FRB's 90 percent confidence interval for most of 2008 and 2009.

During the recession

The FRB staff's forecast errors persisted throughout the recession. Figure 3 shows the FRB staff's forecast from September of 2008. Again, the black line represents the base-case forecast, and the colored lines are alternative scenarios. Though slightly obscured, the light gray area appears to only briefly fall below zero, again indicating that the FRB staff was 90 percent confident we would avoid a recession.

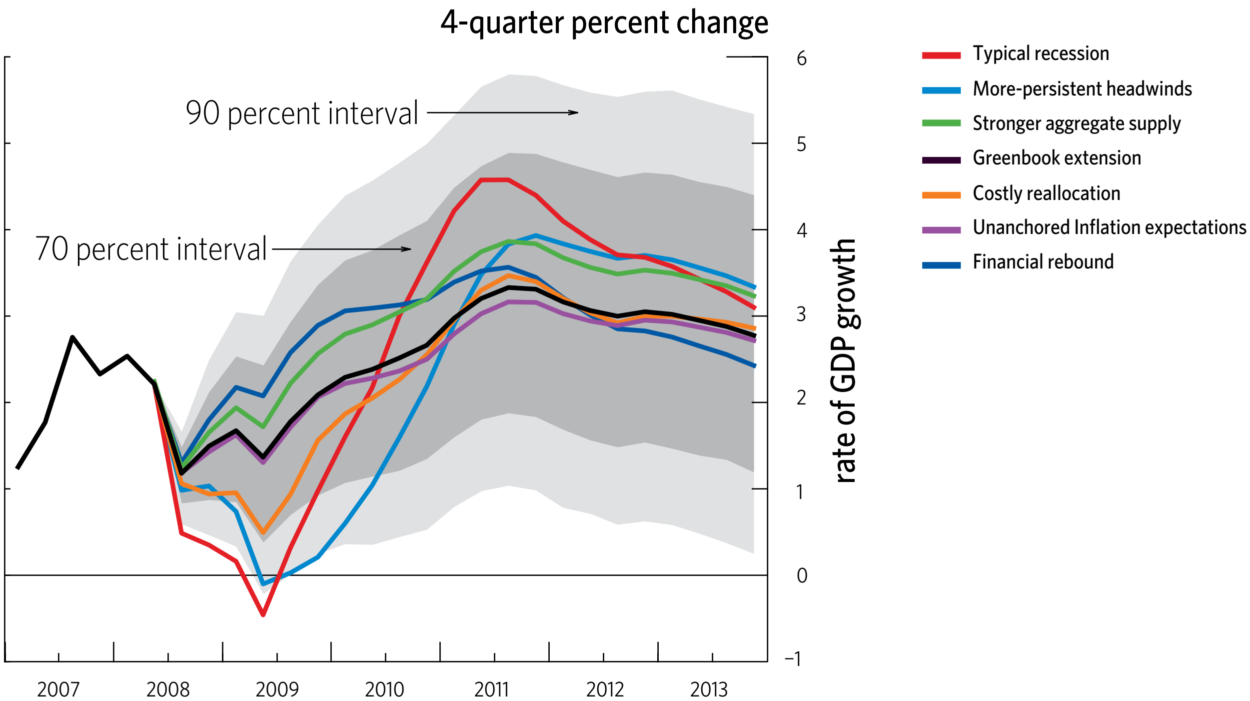
According to data from the National Bureau of Economic Research, the recession officially began in December of 2007. The forecast in Figure 3 is from September of 2008, the tenth month of the recession.

The economy had been in recession for 10 months, and the Fed staff was still predicting there would be no recession!

The FRB staff's overoptimistic forecasts were partly due to overconfidence in the Fed's monetary policy. In early 2008, the FOMC adopted a more expansionary policy by reducing its interest rate target from 4.25 percent in early January to 2.25 percent by late March.

The FRB staff's models predicted that this policy change would be sufficient to avoid a recession. For this reason, the FOMC left its target practically unchanged for the next six months until after the peak of the financial crisis in September 2008.

Figure 3
FRB staff GDP growth forecast, September 2008



Source FRB Greenbook (p.I-26)

Had Fed officials realized the extent of the economic downturn, they almost certainly would have pursued more expansionary monetary policy. In his autobiography, for example, Fed Chair Ben Bernanke said that the decision to leave rates unchanged in September of 2008 *was almost certainly a mistake*.

A quick recovery?

It could be argued that the failure to foresee the downturn of the Great Recession was a one-time event and that Fed economists should not be held at fault. Economic shocks are, by their nature, unpredictable. But even once they recognized the depth of recession, the FRB staff continued to wildly overestimate the future rates of GDP growth.

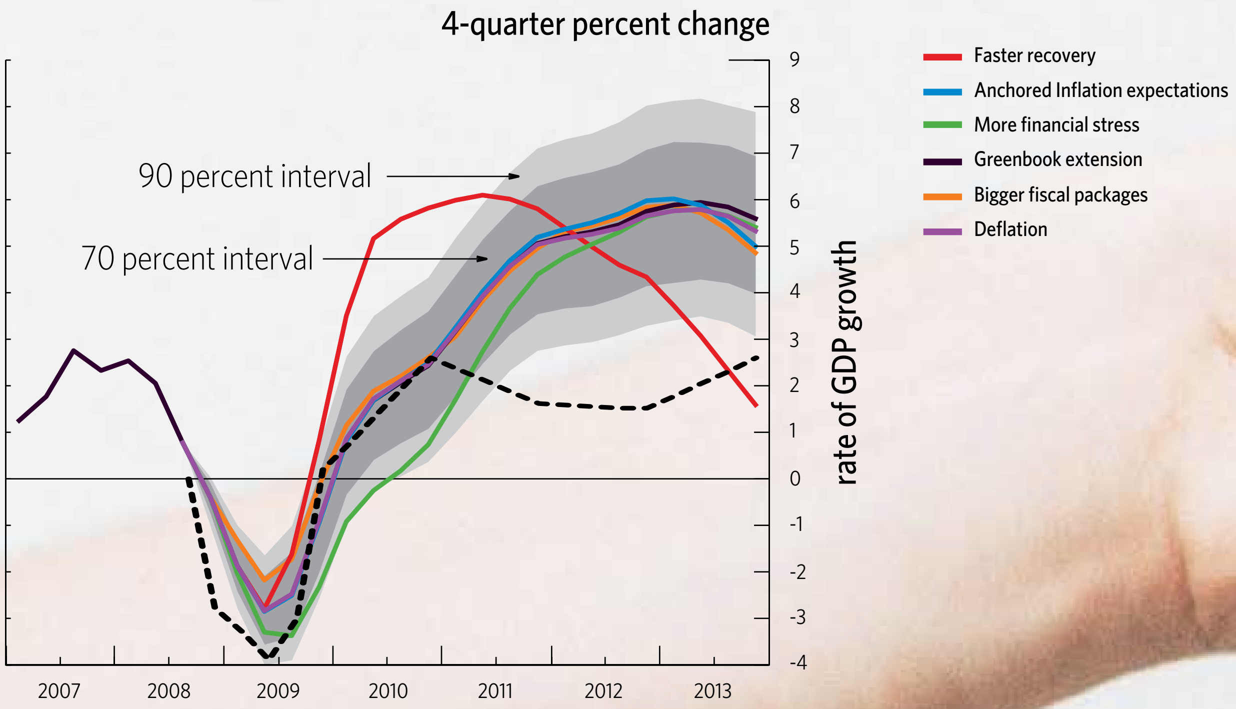
Figure 4 shows the FRB staff's GDP forecast as of December of 2008, which finally shows a major recession in 2008–2009. However, the base-case forecast as well as each of the alternative scenarios all predicted a huge rebound following the recession. Each scenario reaches about 6 percent growth by 2013. That obviously did not happen. The actual rate of real GDP growth in 2013 was just 1.57 percent.

What is particularly interesting about Figure 4 is the narrowness of the 90 percent confidence interval shown in light gray, which reaches as high as 8 percent in 2012. On the lower end, the 90 percent interval in 2012 appears to be above the post-World War II average of 3.1 percent, meaning that the FRB staff was more than 90 percent confident that GDP growth would exceed 3.1 percent in those years.

Fed economists believed that 8 percent GDP growth in 2012 was more likely than 3 percent! And even 3 percent is almost twice as high as the actual rate of 1.57 percent in that year.

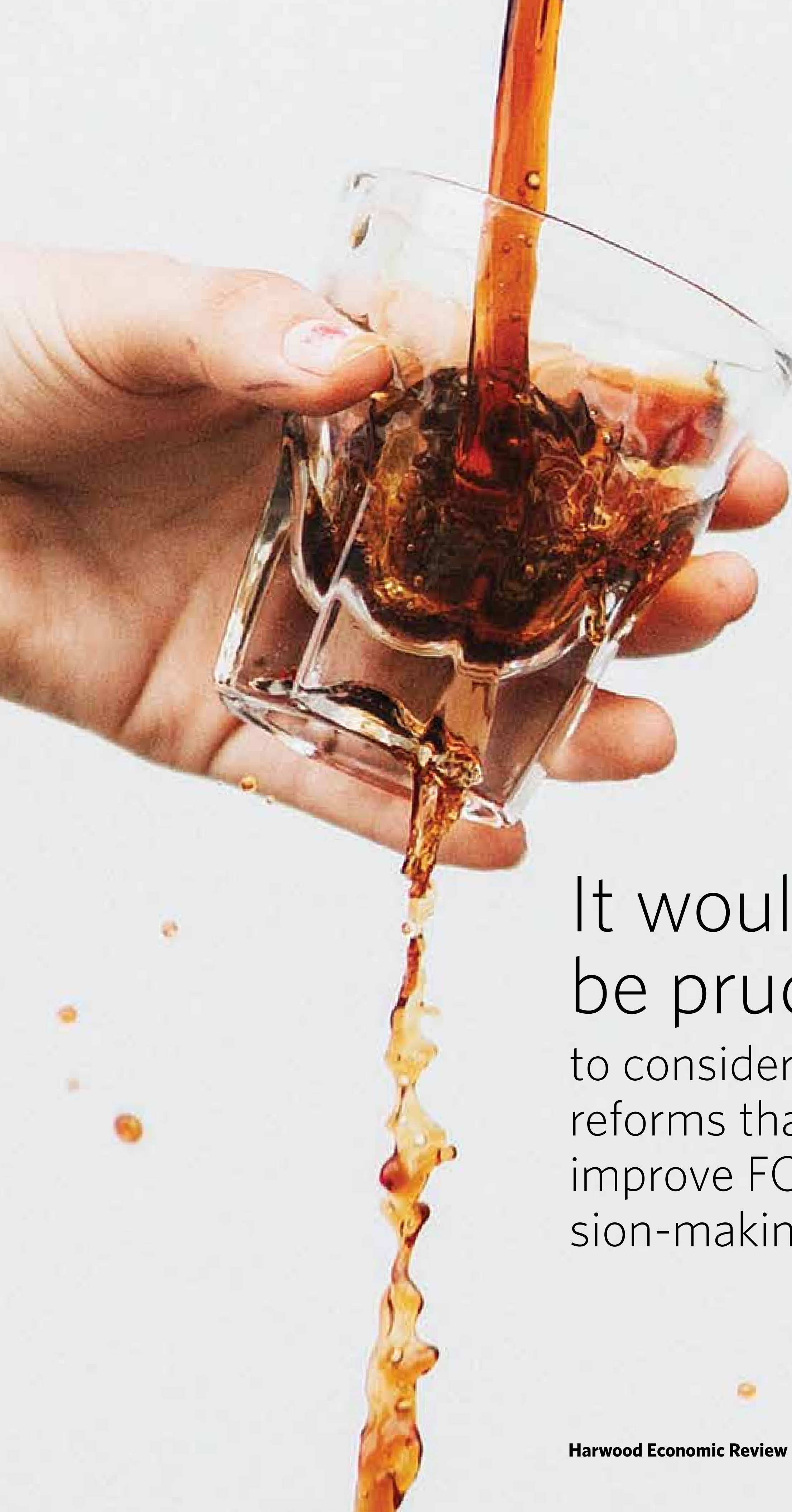
What do these mistaken forecasts tell us about monetary policy? First, Fed economists should revise their forecasting models, particularly the FRB/US model which yielded the predictions above. Second, economists should pay more attention to knowledge problems at the Fed. Models of monetary policy typically assume the Fed has a good understanding of the effects of its policies. Clearly, that was not the case in the Great Recession.

Figure 4.
FRB staff GDP growth forecast, December 2008



Source Forecasts based on FRB Greenbook (p.I-25), actual rates from the Federal Reserve Bank of St. Louis

More fundamentally, the Fed's poor forecasting record should make us skeptical of its ability to effectively manage the money supply in times of economic turmoil.



It would be prudent

to consider structural reforms that might improve FOMC's decision-making process.

Inflation is High
Will Remain Elevated for Years

William J. Luther

As anticipated, the latest data show that prices continued to rise at an incredible pace in December. The Personal Consumption Expenditures Price Index (PCEPI), which is the Federal Reserve's preferred measure of inflation, grew at a continuously compounding annual rate of 5.6 percent from December 2020 to December 2021. Inflation has averaged 3.5 percent since January 2020, just prior to the pandemic.

The Federal Reserve (Fed) is officially committed to a 2 percent average inflation target, as explained in its Statement on Longer-Run Goals and Monetary Policy Strategy. But supply constraints and a surge in nominal spending have pushed prices well above target. In December, the price level was 3 percentage points higher than it would have been had prices merely grown at 2 percent since January 2020.

The Fed reaffirmed its commitment to a 2 percent average inflation target on January 25, 2022. But, so far, it has done little more than say it would tighten monetary policy in the coming months.

Following last week's Federal Open Market Committee (FOMC) meeting, the Fed announced it would leave its federal funds rate target and the interest rate it pays on reserve balances unchanged. It will reduce its monthly asset purchases, but the size of the Fed's balance sheet will continue to grow for now. None of this really amounts to tighter monetary policy, and yet the Fed seems to have convinced markets that it is serious about bringing down inflation.

Figure 1 Personal Consumption Expenditures Price Index (PCEPI) and 2-percent Growth Path

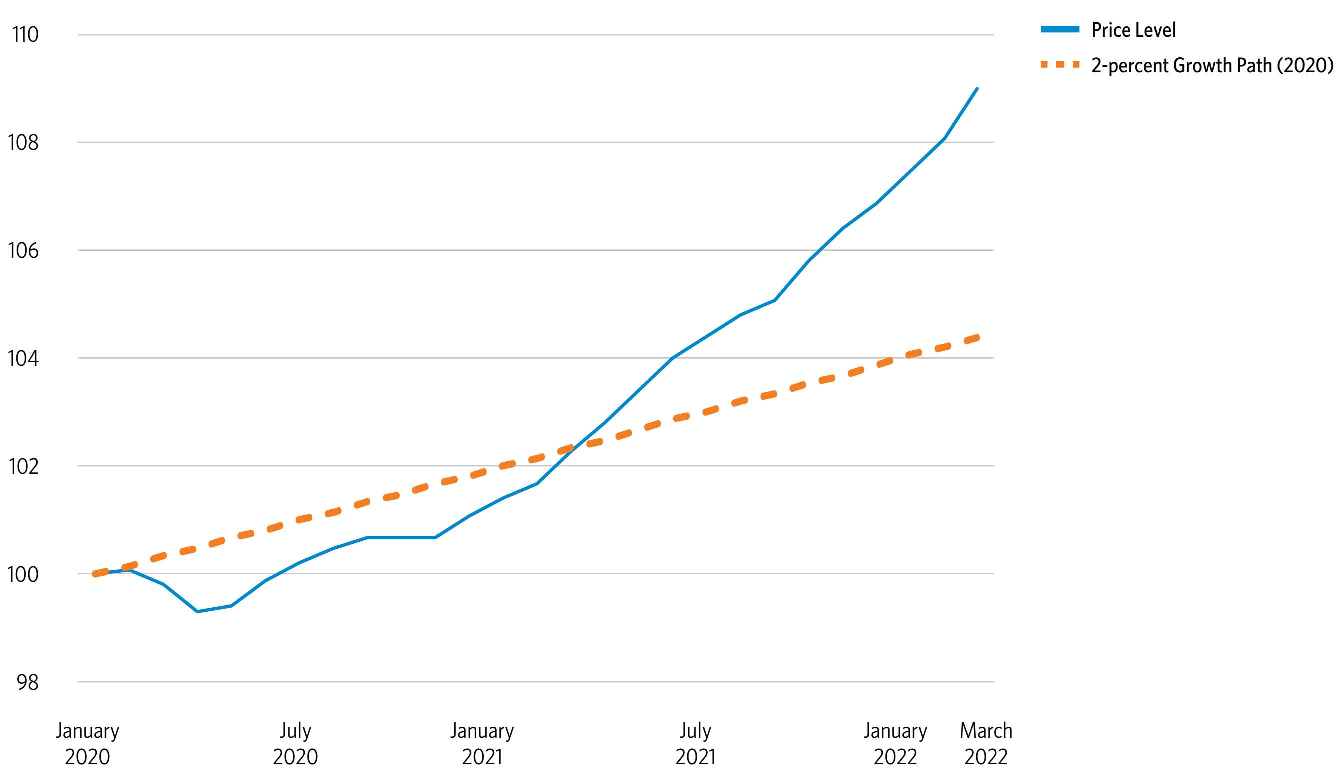
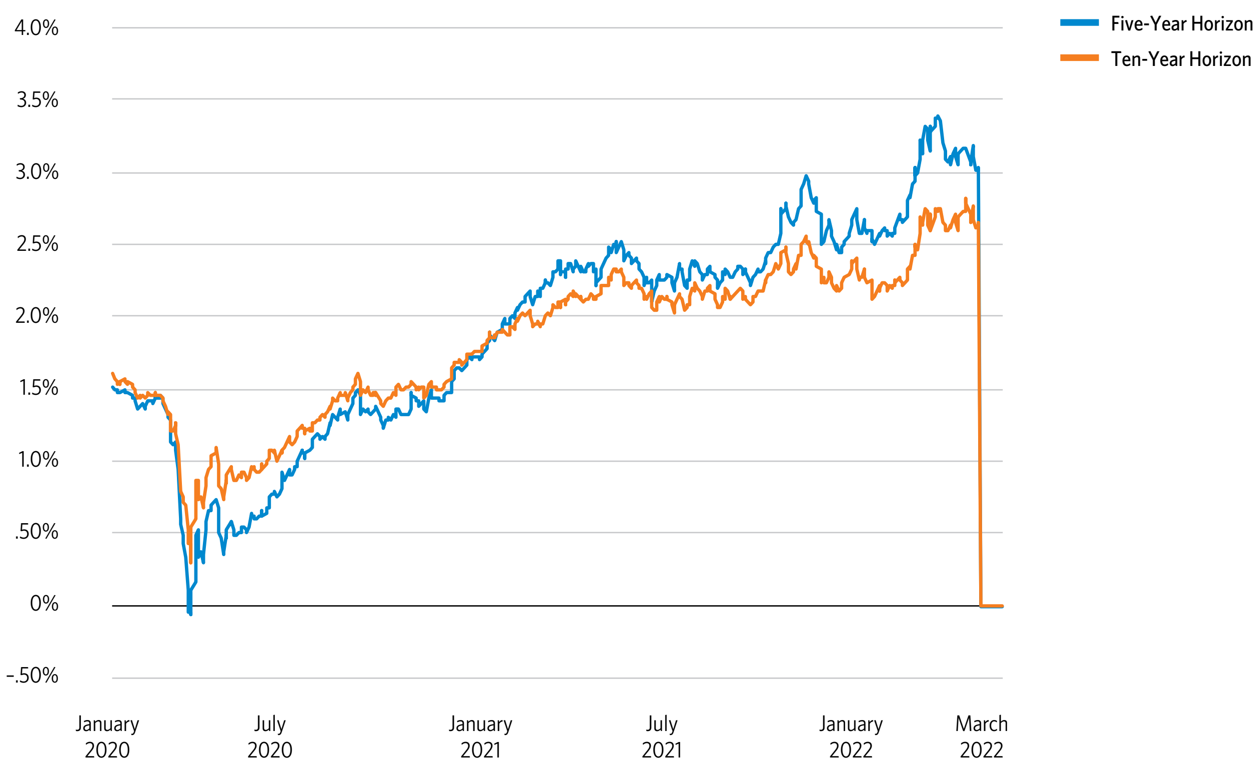


Figure 2 Estimated PCEPI Inflation Expectations



Inflation expectations have gradually declined since mid-November. According to my estimates, bond markets were pricing in nearly 3 percent PCEPI inflation per year over the next five years and 2.6 percent per year over the next ten years. Now, they are pricing in around 2.6 percent inflation per year over the next five years, and 2.2 percent per year over the next ten years.

That the most recent estimate over the five-year horizon exceeds that over the ten-year horizon means bond markets expect inflation will decline over time. The FOMC has similarly projected that inflation would decline over the coming years. However, the precise estimates suggest bond markets currently expect inflation will exceed FOMC projections in the near term. The median FOMC member projected inflation would be 2.6 percent for 2022, and then fall to 2.3 percent in 2023.

At this stage, two things seem pretty clear: Inflation is high and will likely remain above target for a few years. My own view is that the FOMC is painting a rather rosy picture, and that market expectations provide a better guide for estimating inflation. Even if I am wrong and the Fed delivers on its projections, inflation will likely exceed 2 percent through 2024.

Note *The charts in this article are taken from the monthly inflation report [link for "monthly inflation report": https://www.getrevue.co/profile/inflationreport] I produce with Florida Atlantic University student Morgan Timmann.*

Death by Inflation or by Interest Rate Hikes?

Daniel Fernández

Inflation is skyrocketing in practically the entire world. Central banks are getting scared and beginning to announce the end of expansionary measures, also known as *tapering*.

Why do central banks find themselves in a dilemma? Why has inflation risen so much? What is a bottleneck? What does *tapering* mean, and how could it affect us? The objective of this article is to answer these, and other, questions.

Inflation Skyrocketing around the World

Central banks have one explicit mandate: to maintain the purchasing power of money. This is the main goal of monetary policy. Another mandate of some central banks is to sustain the level of economic activity (and it could be argued that they all have this as an implicit goal).

In developed countries, central banks' inflation target tends to be 2 percent, and in developing countries, it tends to be 4 percent (while central bankers assert that these targets maintain purchasing power, in reality they denote lost purchasing power). Inflation is clearly higher than the targets in most countries.

Core inflation (which excludes food and energy) is displaying a trend similar to that of general inflation, although core prices are growing somewhat slower than general prices.

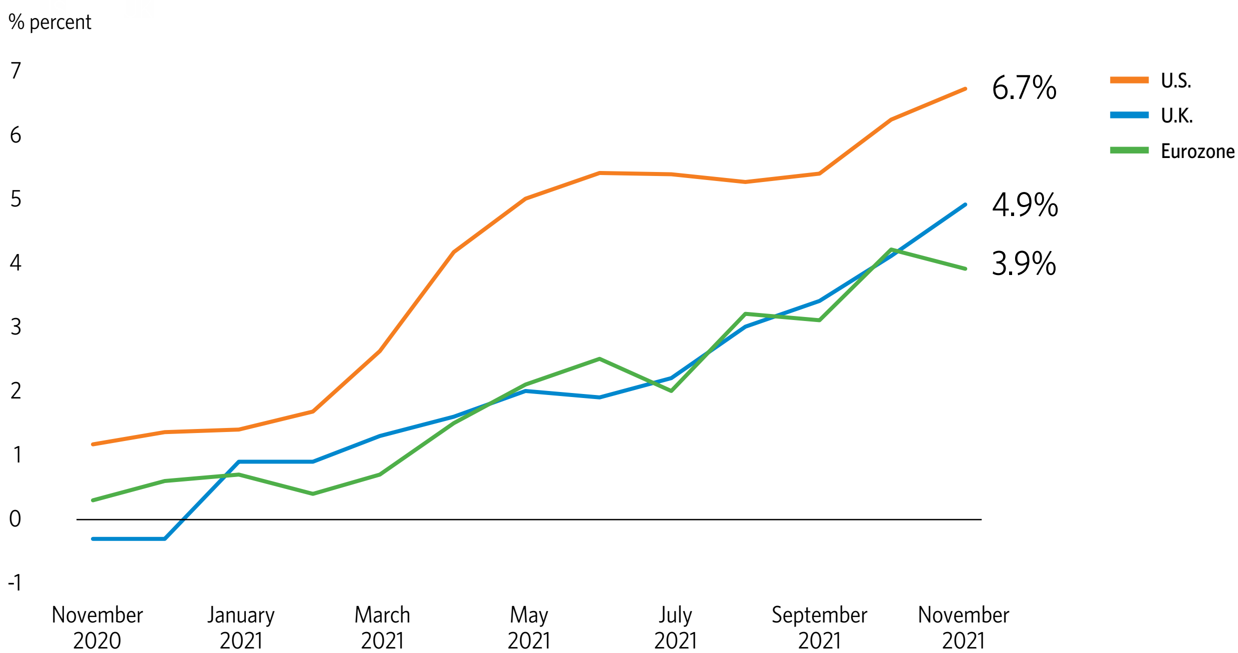
Inflation and Bottlenecks: What Is the Real Cause of Inflation?

Most analysts attribute the inflation to bottlenecks. A bottleneck is what happens when a sector that lacks idle capacity and needs capital investments (including investments in human capital), which take time to bear fruit, has problems increasing production in the face of a sudden rise in demand.

But what has caused the bottlenecks? We see three factors:

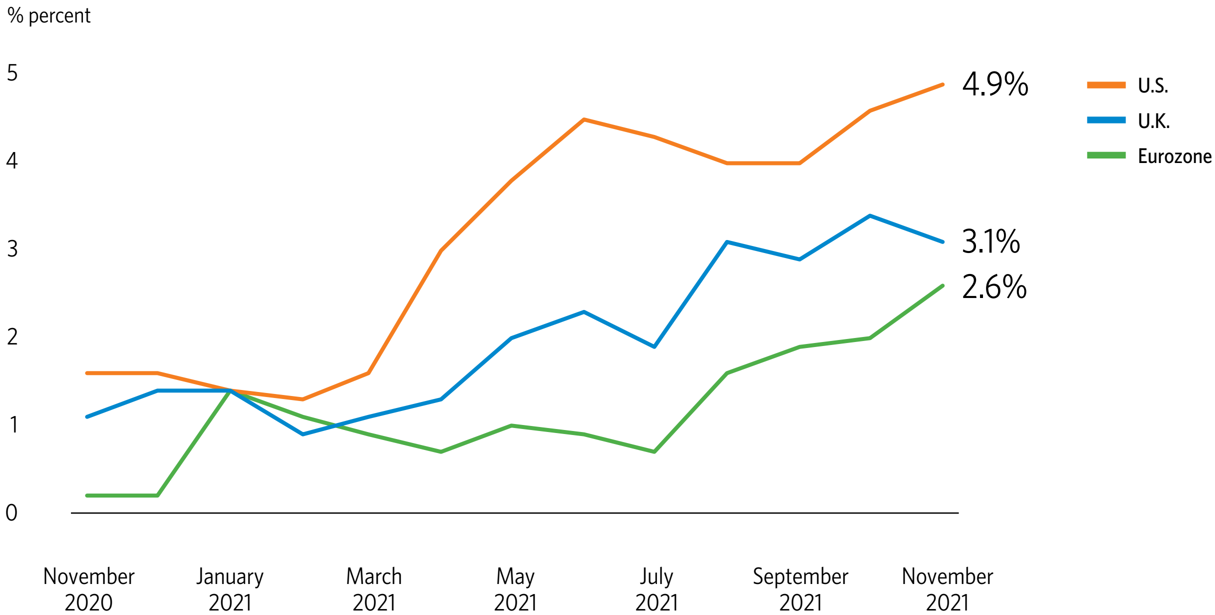
An increase in demand.
A change in the makeup of demand.
Production restrictions resulting from Covid-19.

Figure 1 Inflation Accelerates in Western Economies



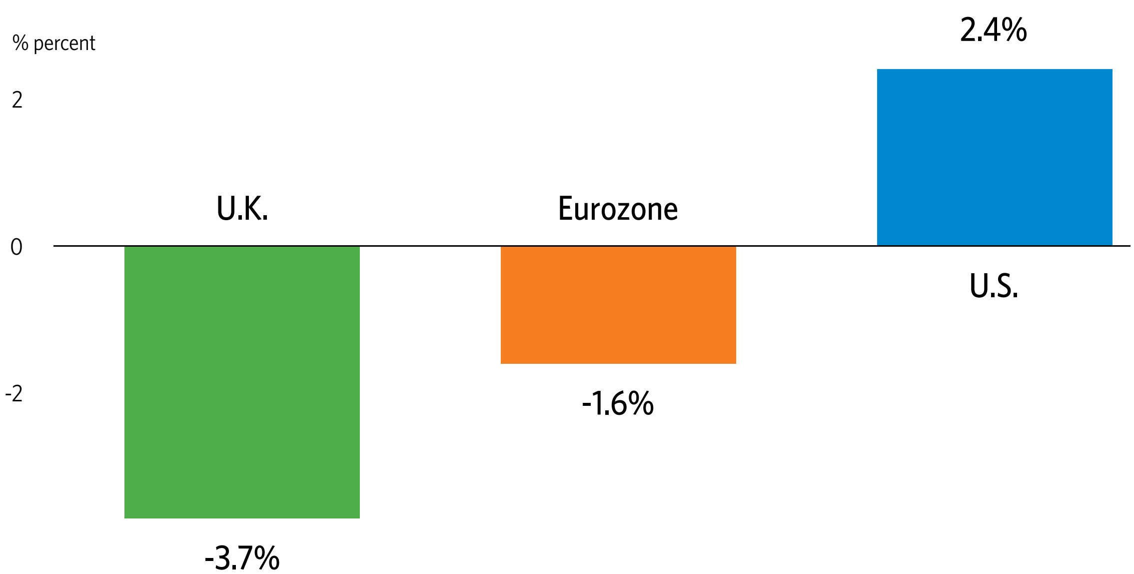
Source Investing; BCE. November data reflect market expectations.

Figure 2 Core Inflation Is Skyrocketing in Western Economies



Source Investing; BCE. November data reflect market expectations.

Figure 3 Economic Growth 2019–21

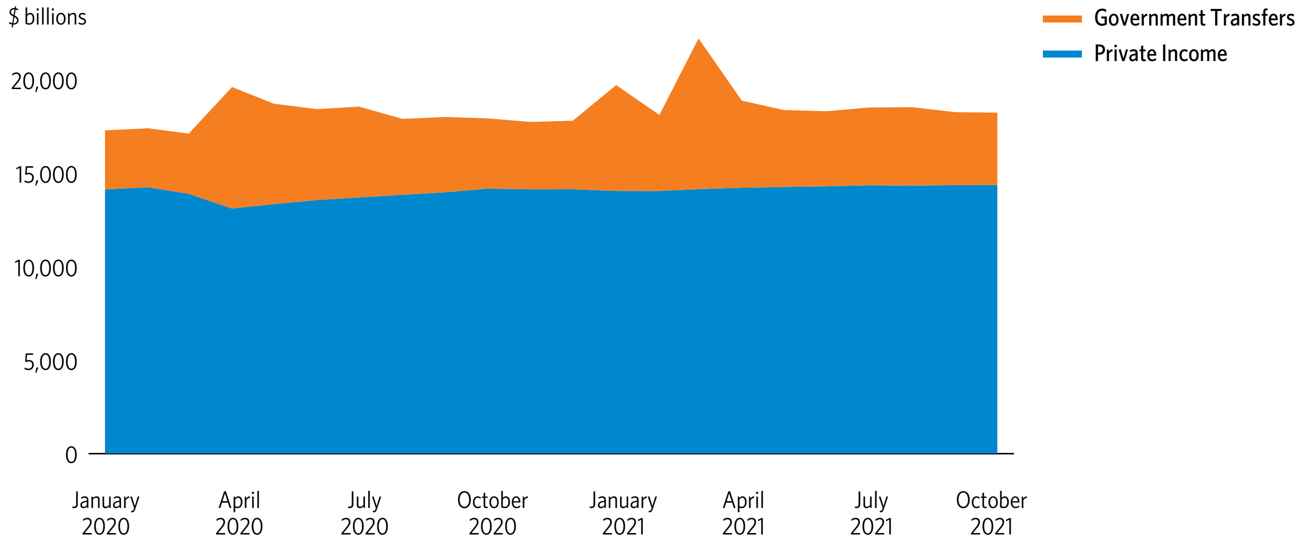


Source Data from the International Monetary Fund. Data have not been annualized.

Increases in Demand

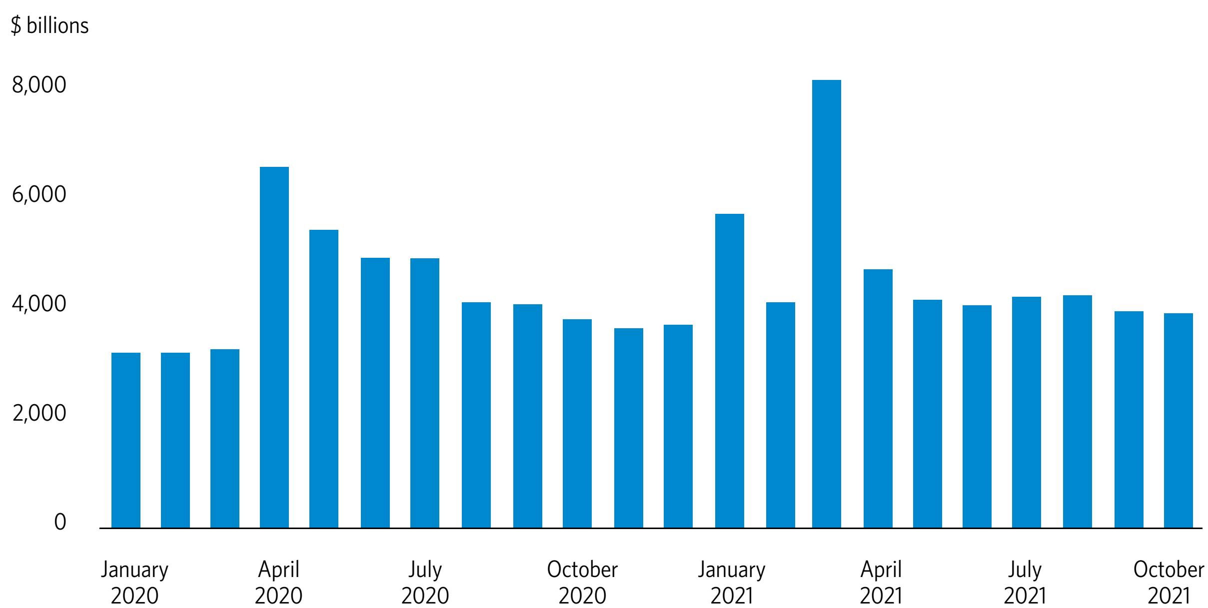
Many analysts consider the increase in demand to be a signal of economic recovery and of the global economy's dynamism. A person's ability to demand goods is usually predicated on their previous ability to sell or produce something of value (as Say's law asserts). However, because of the pandemic, economic growth has been minimal or negative from 2019 to 2021 (for the economies analyzed). Accordingly, this enormous increase in demand cannot be an indicator of prosperity.

Figure 4 Private Income and Government Transfers in the U.S.



Source Data from the St. Louis Fed.

Figure 5 U.S. Government Transfers

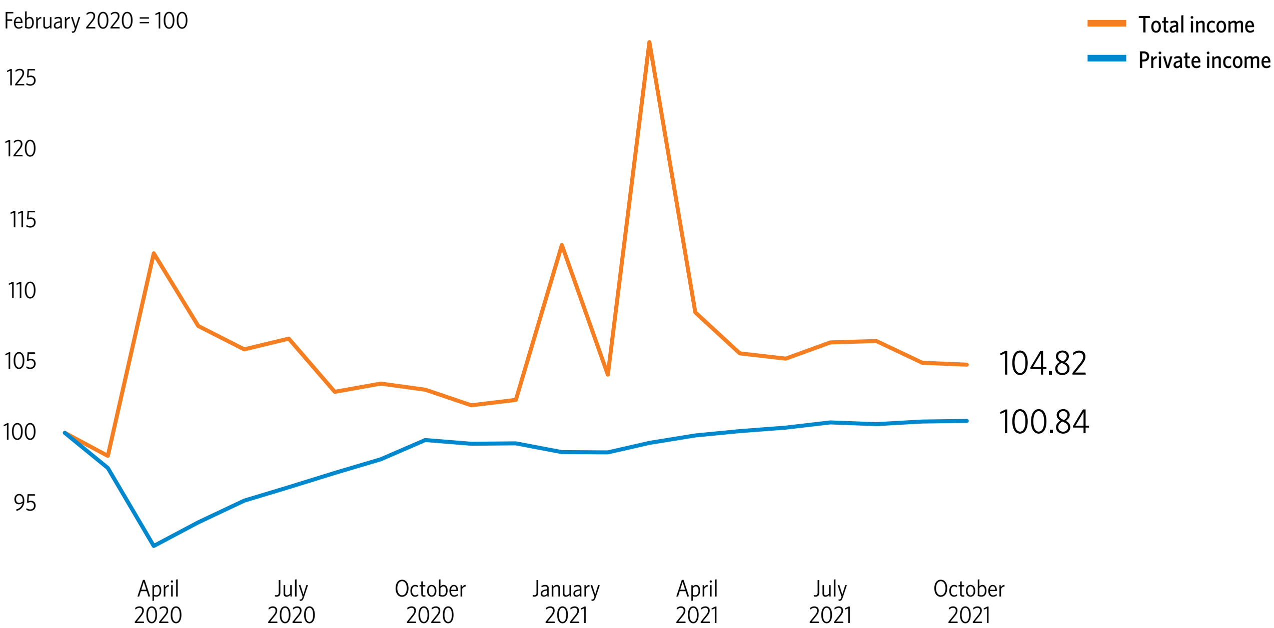


Source Data from St. Louis Fed.

In fact, in the US, the country with the best economic performance, private income did not rise to its prepandemic level until May 2021 and it is currently almost as low as that in February 2020. What has increased significantly—and thus increased demand and caused bottlenecks—is government transfers.

Total income (which includes government transfers) is now almost 5 percent higher than in February 2020 and was almost 30 percent higher than that baseline in March 2021 (which saw the second large transfer under the Biden administration). In other words, US citizens do have a greater capacity to demand goods and services, but that capacity is simply a byproduct of the government's issuance of stimulus checks.

Figure 6 Total Versus Private Income in the U.S.



Source Data from the St. Louis Fed.

In Europe, in many cases, governments have transferred money to companies to avoid layoffs. However, the effect is similar because the money then went to citizens, who then used a portion of it to increase their demand for goods and services.

Changes in the Composition of Demand

Unsurprisingly, the composition of household spending has changed drastically as a result of pandemic restrictions. Two obvious examples are the positive effect of school closures on demand for computers and the negative effect of travel restrictions on demand for airline tickets.

Another reason that the composition of demand has changed is that the recipients of government transfers have changed their spending pattern.

The changes in composition of demand have led to large expansions in some durable goods industries (for example, technology) and contractions in other industries such as leisure and other services. Still, suppliers have been unable to fully adapt to the changes.

Covid-19 Restrictions

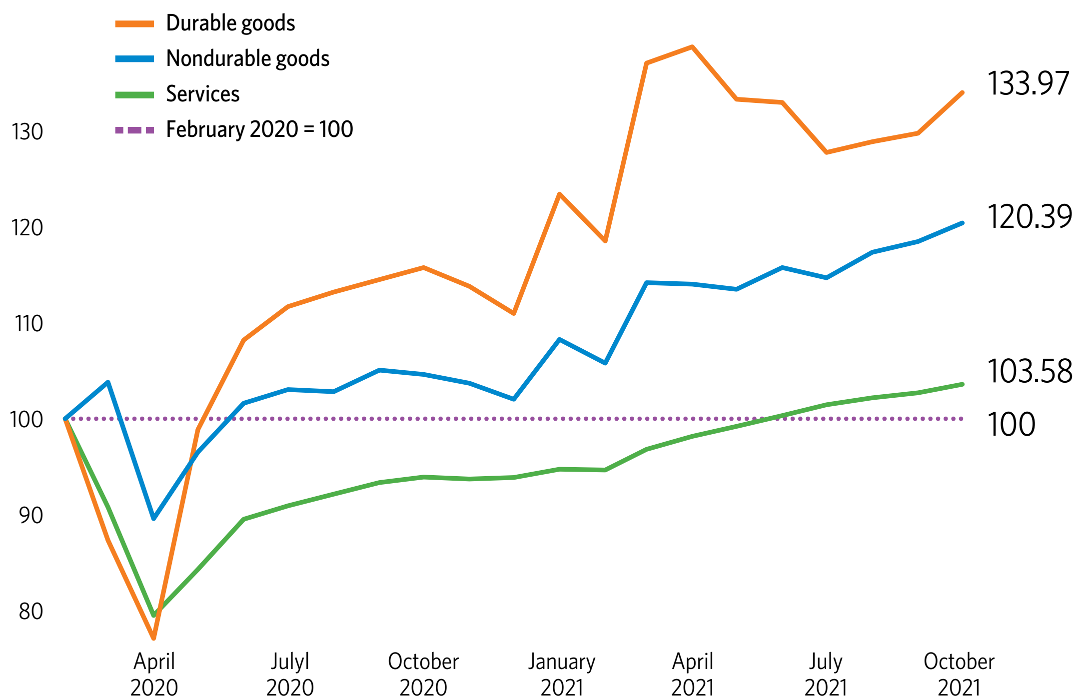
The deterioration in supply chains worldwide has been enormous in 2021. It is being blamed for inflation. Covid-19 restrictions at ports are one cause of the deterioration. Additionally, in the US, the government's indiscriminate issuance of stimulus checks (under both the Trump and Biden administrations) has made it increasingly difficult to find people to work at ports and in land transportation. For details, see this fantastic article by Olav Dirmaat. https://trends.ufm.edu/articulo/contenedores-inicio-crisis-generalizada/

The restrictions and stimulus checks have made it difficult for suppliers to keep up with demand. Furthermore, because the prices of goods are rising faster than those of services, profit margins are narrowing, in turn discouraging production in some areas and contributing to stagflation.

Central Banks' Responsibility

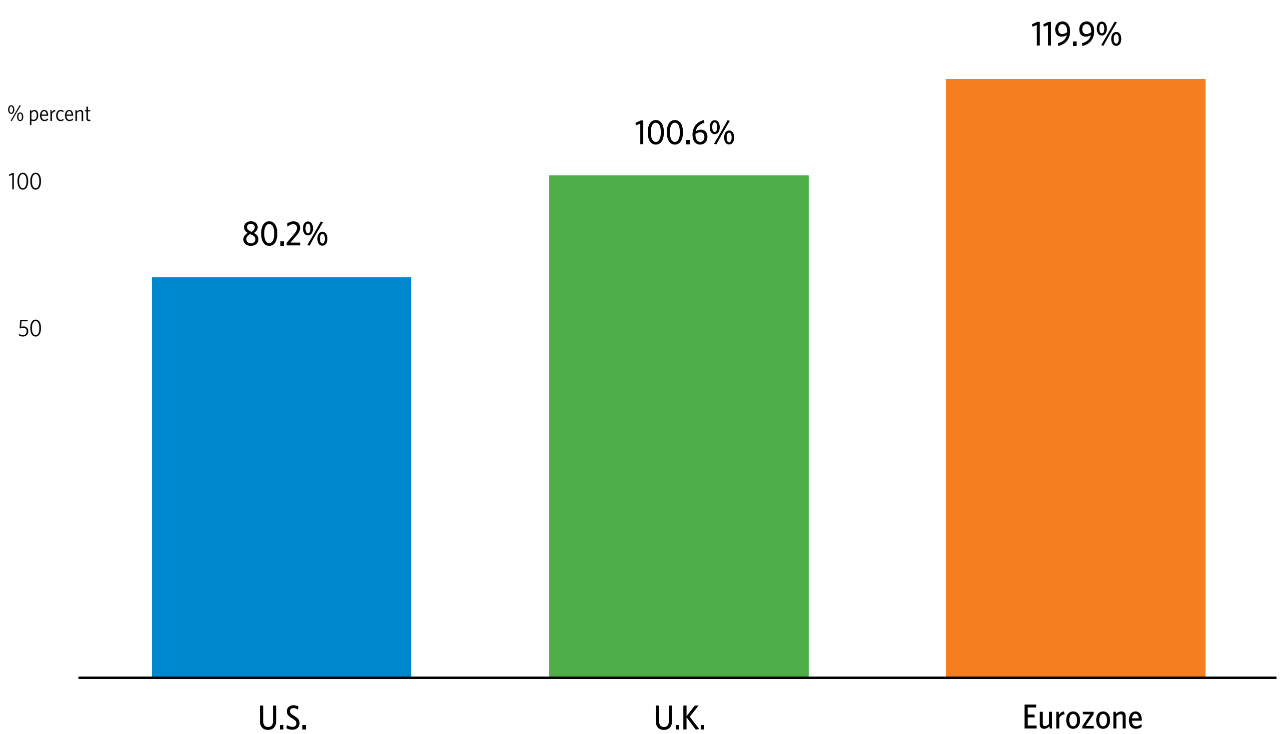
Thus, government policies are to blame for the bottlenecks, as they contributed to the excess demand, the change in the composition of demand, and the dearth of dynamism on the supply side. But are central banks to blame, too?

Figure 7 Composition of Consumer Demand in the U.S.



Source Data from the St. Louis Fed.

Figure 8 Percentage of Debt Issued in 2020 Purchased by Central Banks



Source Data from St. Louis Fed, BCE, International Monetary Fund, and Bank of England.

Because of the pandemic, governments have spent vast amounts of resources they lack. One way to gain control over resources is to turn to debt markets. However, governments have rarely chosen this option. Instead, they have financed spending with central bank loans. In 2020, the Fed purchased 80 percent of new US debt; the Bank of England, 100 percent of new debt in the United Kingdom; and the European Central Bank, 120 percent of new debt in the eurozone.

This is the main reason interest rates on public debt have remained low. Some central banks even bought more debt than their countries' governments needed to fill the huge budget gaps in 2020. This has not changed in 2021. The consequence of the low cost of financing is inflation.

In sum, central banks have given resources they did not have to governments, governments have given these resources to citizens (unlike in 2008–13), and this is generating bottlenecks throughout the economy.

The Central Banks Are Scared: Will They Roll Back the Stimulus?

The acceleration of inflation is putting central banks in a difficult position. Their mandate is to stabilize prices, therefore, it would seem they should be doing something to avoid this price acceleration. But, as we have seen, a large part of the blame for the acceleration lies with the central banks.

The world's major central banks have announced the coming of much-vaunted tapering—that is, a restrictive monetary policy of ceasing to purchase bonds from governments and private companies, and also possibly increasing interest rates.

However, central banks will face two significant problems when they try to taper.

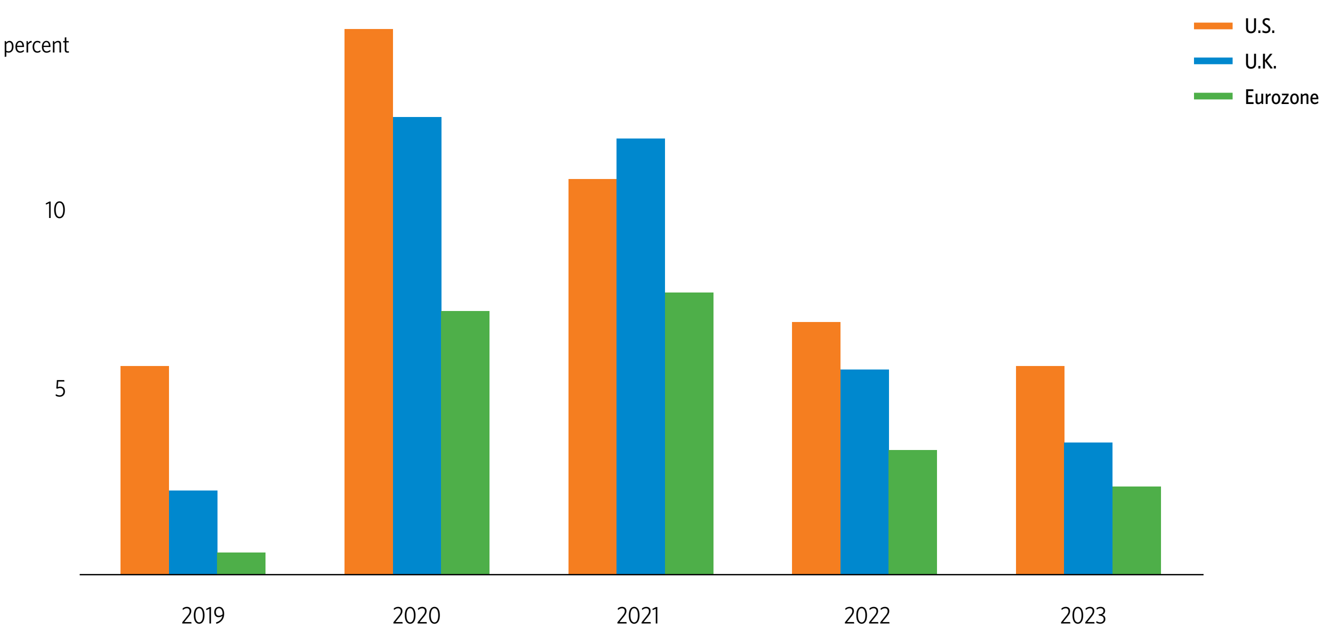
1 Runaway public deficit

First, not only are governments hyper-indebted because of their irresponsible spending in 2020 and 2021, but it will take them years to reduce the deficit to that of 2019.

But public deficit projections are constantly revised, almost always upward, so governments will almost certainly end up spending more than estimated. The public deficit in the US will be 2.2 percent higher in 2021 than the International Monetary Fund estimated at the end of 2020, and the deficit will be 2.7 percent higher than estimated in both the eurozone and the UK. Politicians promised to stop spending in 2021 what they overspent in 2020, but breaking their promises is easier than cutting expenditures.

If central banks stopped buying public debt, they would force governments to decrease spending. This, in turn, would slow the economy in the short term. Central banks and governments want to avoid this outcome at all costs.

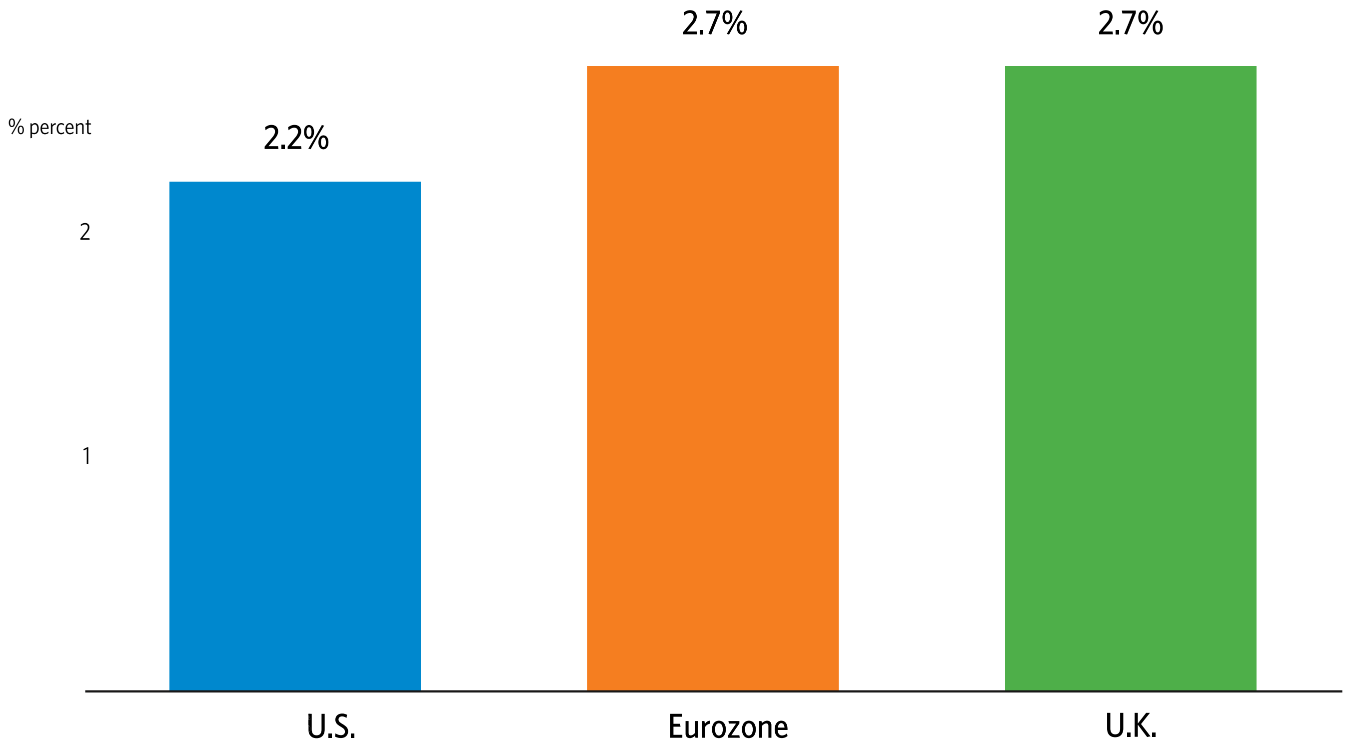
Figure 9 Public Deficit Will Take Years to Return to 2019 Levels



Source International Monetary Fund.

Figure 10 Increase in Public Deficit Projections in 2021

October 2020 versus October 2021



Source International Monetary Fund.

2 Zombie companies
As discussed in another article, https://trends.ufm.edu/en/article/covid-19-economic-zombification/ extremely low interest rates have generated a wave of unsustainable private corporate borrowing and created zombie companies. An increase in interest rates would bankrupt these zombie companies and trigger massive layoffs. Central banks and governments want to avoid this outcome.

Central Banks' Dilemma: Death by Inflation or Tapering?
High inflation helps erode the value of debt not indexed to price indices. This helps the hyper-indebted governments and zombie companies. The problem is that debtors have been accumulating debt faster than inflation has grown in recent years, so real debt has continued to increase.

We need to return to more sustainable levels of debt. It seems there are two options for pursuing this goal.

1 Allow inflation to continue increasing
This option is very dangerous, but it seems the more plausible one. For months, central banks have been preparing us for this option without giving much detail (for example, they have been talking about a 2 percent inflation target in the long term, not every year). The president of the Fed has suggested we should stop using the term *transitory* when discussing inflation.

An increase in inflation is dangerous because it causes the demand for currency to fall, which gives rise to accelerating prices.

2 Make monetary policy restrictive, and let companies and some governments go bankrupt

This second option is less plausible but would probably be the healthier one.

Higher interest rates and restrictive monetary policy would bring down the entire part of the economy that is generating less value, which would free up resources to realize new ideas and embark on new business projects. These policies would also lead some governments to go bankrupt, which would be traumatic but could establish a principle of discipline for other governments and the bankrupt governments themselves to follow in the future.

In other words, the healthiest thing is to be disciplined. Unfortunately, financial discipline is a principle forgotten almost completely in the public sector and nearly forgotten in a private sector too accustomed to cheap debt.

Conclusion

Being a central banker at the beginning of 2022 is one of the most difficult and least satisfying jobs in the world. Central banks are going to receive fierce (and well-deserved) criticism, whatever they do.

If they protect the value of the currency, they will create an economic crisis, and if they try to avoid the economic crisis, they will destroy the value of the currency

Pick your poison inflation or bankruptcy.

Ernest Hemingway was a European correspondent for the *Toronto Daily Star* after World War I. The following is an excerpt from an account he wrote of a trip to Kehl, Germany as the pace of the Weimar inflation began to quicken. (Note: we are not predicting a US hyperinflation; it is unlikely and unnecessarily extreme as a cautionary tale. As many nations have discovered, a *mere* 10–20 percent annual rate of inflation is sufficient to inflict serious, lasting economic damage.)

There were no marks to be had in Strasburg, the mounting exchange had cleaned the bankers out days ago, so we changed some French money in the railway station at Kehl. For 10 francs I received 670 marks. Ten francs amounted to about 90 cents in Canadian money. That 90 cents lasted Mrs Hemingway and me for a day of heavy spending and at the end of the day we had 120 marks left!

Our first purchase was from a fruit stand beside the main street of Kehl where an old woman was selling apples, peaches and plums. We picked out five very good-looking apples and gave the old woman a 50 mark note. She gave us back 38 marks in change. A very nice-looking, white-bearded old gentleman saw us buy the apples and raised his hat.

'Pardon me, sir,' he said, rather timidly, in German, 'how much were the apples?' I counted the change and told him 12 marks. He smiled and shook his head. 'I can't pay it. It is too much.' . . . I wish I had offered him some. Twelve marks, on that day, amounted to a little under 2 cents.

With marks at 800 to the dollar, or 8 to a cent, we priced articles in the windows of the different Kehl shops ... Kehl's best hotel, which is a very well turned-out place, served a five-course table d'hôte meal for 120 marks, which amounts to 15 cents in our money. The same meal could not be duplicated in Strasburg, three miles away, for a dollar.

Because of the customs regulations, which are very strict on persons returning from Germany, the French cannot come over to Kehl and buy up all the cheap goods they would like to. But they can come over and eat. It is a sight every afternoon to see the mob that storms the German pastry shops and tea places . . . In a pastry shop we visited . . . [the] proprietor and his helper were surly and didn't seem particularly happy when all the cakes were sold. The mark was falling faster than they could bake . . .

As the last of the afternoon tea-ers and pastry-eaters went Strasburg-wards across the bridge the first of the exchange pirates coming over to raid Kehl for cheap dinners began to arrive.

Published on September 19, 1922, Hemingway cites a mark-to-dollar rate of 800-to-1. Twelve months later, the exchange rate had risen to nearly 250 million marks per US dollar.

—PCE

Why You Should Include Charity In Your Will

Andrew Palmer

There is a common misconception that only the rich need to make a will. That is not true. A will eases the pain of your passing on those you leave behind, and without a will, regardless of your personal wishes, state laws will determine the transfer of your estate.

There is an even bigger misconception that only the super-rich leave money to charity when they die. That's also not true. The fact is that most gifts by will, (bequests) are made by everyday people who want to have a lasting, positive impact on their community.

Without this type of generosity, many charitable institutions couldn't continue their missions into the future. Non-profits need our support to do their good work.

Here are four reasons why you should include a charity in your will:

A Gift By Will Is Easy To Make
A bequest is one of the easiest charitable gifts to make. It is simple to implement, and easy to change should you ever need to. You can give specific property or designate a dollar amount or a percentage of your estate. You can also designate a non-profit as a beneficiary of your retirement plan or life insurance policy.

A Gift By Will Does Not Alter Your Current Lifestyle
Making a bequest is a way of demonstrating your commitment to the future of the institution you love that doesn't affect your current asset balance or cash flow. There are no substantial costs, and the gift can easily be modified to address your changing needs.

A Gift By Will Can Change Lives
Non-profits improve our lives every day through their dedicated work, community, and stability. A bequest can help your best-loved charity further its mission and values. It can continue making a difference for generations to come.

A Gift By Will Creates A Lasting Legacy
Including a non-profit in your will is a great way to bring dignity, meaning, and purpose to a life well-lived. You can demonstrate your commitment to the future of the institution you love, and better yet, a bequest can allow you to give to an institution that you may have always wanted to support, but were unable to during your lifetime. Creating a legacy with your gift ensures that you, and your values, will live on.

You don't have to be wealthy to make a difference. Whoever you are, whatever your situation, you can help make a better world by including a charity in your will.

SEE PAGE 27 TO GIVE TO AIER

AIER events

Leave Me Alone and I'll Make You Rich: How the Bourgeois Deal Enriched the World with Art Carden

June 14
Fishers, IN

Join AIER's Bastiat Society program in Indianapolis for an in-person event with Art Carden, Professor of Economics at Samford University's Brock School of Business. It's the Greatest Story Never Told: the world today has a lot more people earning a lot more income and living a lot longer. Why did it happen? It's not because some people exploited other people. Rather, it's because of economic liberty and social dignity for innovators and entrepreneurs.

The Brilliance of Friedrich Hayek with Donald Boudreaux

June 23
Arlington, VA

Join AIER's Bastiat Society program in Washington, DC for an in-person event with Donald Boudreaux, Senior Fellow at AIER. Professor Donald Boudreaux is perhaps the leading academic expert on the writings of Hayek and authored the book *The Essential Hayek* in 2015 to provide the public with a clear and concise compilation of Hayek's most important ideas on economics and politics. Professor Boudreaux will draw upon his book to discuss Hayek's philosophical ideas and how they should be applied in addressing today's economic problems.

Teach the Teachers: Fundamentals of Environmental Economics with Phil Magness

July 13
St. Charles, MO

AIER & FTE's Teach the Teachers Program will host *Fundamentals of Environmental Economics* with Phil Magness, AIER Director of Research and Education. This seminar is designed to familiarize middle and high school teachers and curriculum specialists with a non-biased approach that introduces the basics of environmental economics and provides effective simulations to introduce the concepts into the classroom.

AIER's Inaugural Harwood Prize for Intellectual Courage

September 6
Dallas, TX

Join AIER to celebrate Stanford professor John Ioannidis, the first winner of our *Harwood Prize for Intellectual Courage*. The prize is given to an intellectual leader in any field of study or profession who exercises unusual courage in standing up for what is true under difficult circumstances—risking even reputational and professional stability—in order to make a difference for the good of society. Join us for a dinner and reception to honor one of the top free thinkers of our time.

Planned Giving

Each one of us already has a default estate plan—one dictated to us by the government. The government doesn't know who we are; it cares nothing for our achievements, our principles and beliefs, our ethics, or our commitment to our families. In this plan, hard-earned assets can be unnecessarily taxed and heirs can be left with little or nothing.

The only way to make sure that your estate plan reflects your wishes is to design it yourself with competent counsel. Will your legacy be subsumed by faceless bureaucrats as a windfall profit for government programs that you may believe are antithetical to prosperity and justice? Or will it be a responsible transfer of values held dear by the one who earned the money? Make sure that you are the author of your own personal estate plan.

By making a planned gift to AIER—whether it be through your will, charitable trust, or another giving vehicle—you are making an incredible commitment to true freedom, sound money, and private governance. You not only secure your legacy as a champion of free markets, but you ensure that AIER will continue to fight for the principles you hold dear for generations to come.

We are forever grateful for AIER's planned giving supporters who help to ensure that people around the world will always have access to sound economic research, robust education in free market concepts, and practical training from AIER.

Here are some ideas on how to include AIER in your estate plans:

Your Will

If you already have a will, you can generally amend it to create a bequest for AIER and other charities. If you have elected a living trust rather than a will, you can also include AIER and other charities as trust beneficiaries, similar to creating bequests under a will.

Your Retirement Accounts

Retirement accounts—such as an IRA, 401(k), and others—that are left to heirs are double-taxed because (often but not always) they are subject to the estate tax and heirs are also subject to ordinary income tax on what's left. Retirement accounts left to a non-profit like AIER are not taxed at all.

Your Life Insurance

One of the easiest ways to leave AIER in your estate plans is to simply name AIER as a beneficiary of a life insurance plan. Life insurance proceeds, other than when given to a spouse or to a tax-exempt entity like AIER, are generally subject to the estate tax. Therefore, life insurance policies that are no longer needed for financial security are a good choice for enhancing your philanthropic legacy.

Other Giving Vehicles

Several less common giving vehicles are typically used in complex estates, but might be worth consideration. We recommend you speak with your attorney or financial advisor regarding: Charitable Gift Annuities, Charitable Remainder Trusts, and Charitable Lead Trusts.

To get started

please contact us at 888-528-1216

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I followed Colonel Harwood for many years and one thing that came through in all of his writing was that he was a great patriot and a strong believer in an honest currency. Having been in the investment business for 48 years, I think Colonel Harwood's teaching is needed even more now than it has ever been. He had a great impact on my thinking.

—**Arnold Van Den Berg**, Longtime AIER Donor

AIER donors understand the importance of AIER's mission and want others to understand too.

For nearly a century, the American Institute for Economic Research has educated Americans on the value of personal freedom, free enterprise, property rights, and sound money. Eschewing dogmatic assertions and party politics alike, AIER seeks to scientifically understand and demonstrate the importance of these principles to advance peace, prosperity, and human progress. We support the research of numerous leading economists and share their findings with policymakers, professionals, educators, and the general public through publications, in-person programs, and online outreach that are each tailored to the needs of these audiences. By strategically articulating and promoting the principles of pure freedom, AIER helps to build the intellectual basis for, and popular consensus around, the expansion of individual rights and market freedom and against the increasing demands for government intervention, central planning, and collectivist policies.

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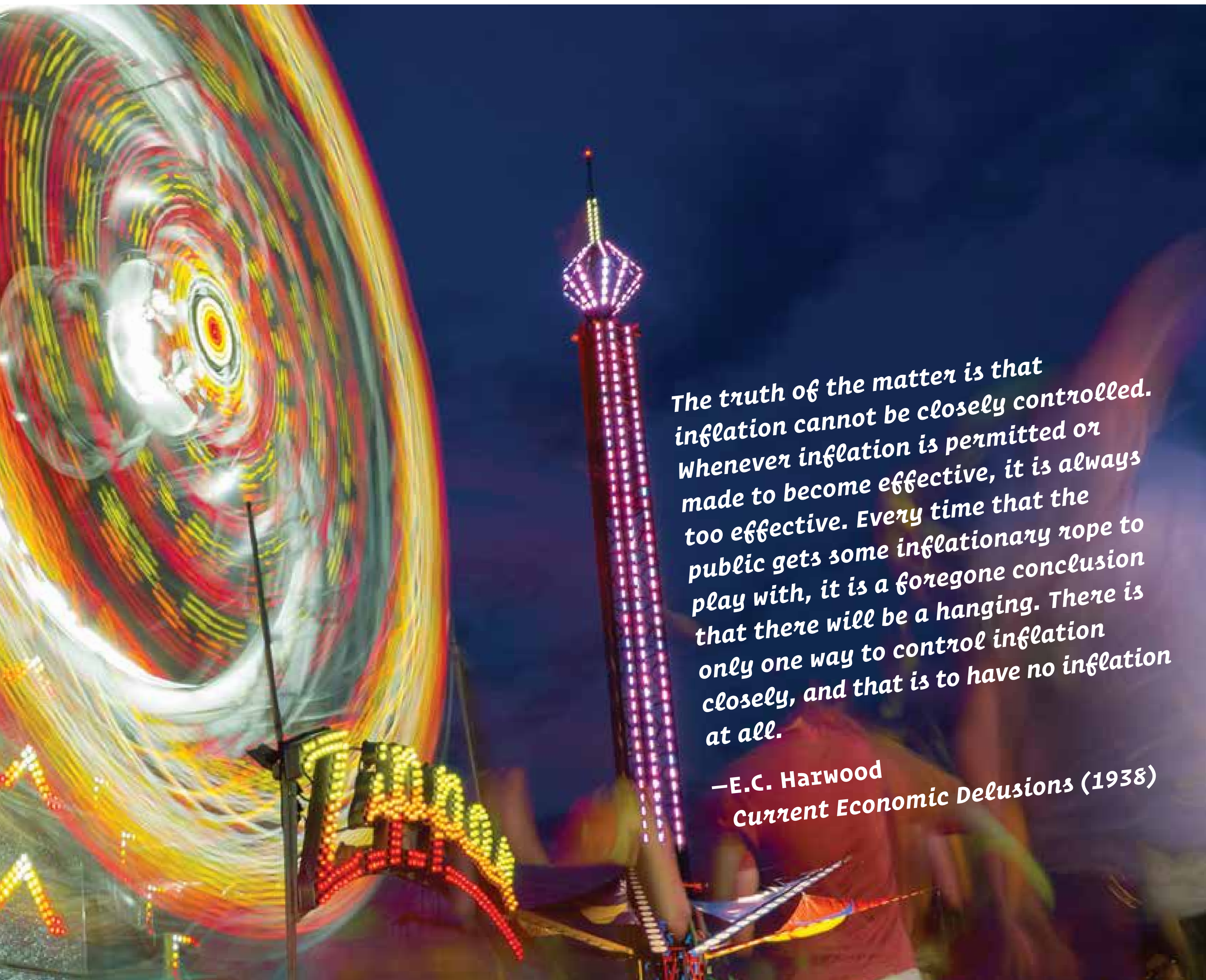

The truth of the matter is that inflation cannot be closely controlled. Whenever inflation is permitted or made to become effective, it is always too effective. Every time that the public gets some inflationary rope to play with, it is a foregone conclusion that there will be a hanging. There is only one way to control inflation closely, and that is to have no inflation at all.

—E.C. Harwood
***Current Economic Delusions* (1938)**