

# Russell Research

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## Will the inflation genie be kept in the bottle?

Without question, the current recession will leave a changed economic landscape in its wake. Tectonic shifts in the economy will lead naturally to questions about the rate of inflation investors can expect.

For example, economic observers are reassessing the consumption patterns we can anticipate. As consumers attempt to rebuild their savings, it is almost certain that spending will no longer account for 70 percent of U.S. GDP<sup>1</sup>. Such a shift toward thrift will involve trade-offs that can affect inflation trends in a myriad of ways. For example, greater thrift will affect the trend rate of GDP growth in the coming decade, the degree of financial deleveraging, and government tax revenue. Any of these forms of economic fallout could influence the Federal Reserve's monetary policy choices regarding inflation and could also lead to mistakes in policy. In this article, we distill four arguments that inflation in the future will be substantially higher, and we assess the likelihood that each will hold sway.

**Argument 1:** We are back to the 1970s, as the Fed once again overestimates the trend rate of GDP growth coming out of a calamitous recession, setting the stage for accidental inflation as the Fed tries to stimulate the economy beyond its speed limit

The current recession resembles the 1974–1975 recession in many ways. Both recessions capped the ends of eras. The year 1974 announced the end of the Era of Cheap Energy and the current recession marks the end of the Era of Easy Credit. The end of an economic boom involves substantial adjustment in the economy that tends to lower the trend rate of GDP growth during the long adjustment process. One clear danger, then, is that the Federal Reserve will fail to recognize the decrease in the trend rate of growth and will try to

*After assessing four reasons, either due to monetary policy mistakes or deliberate choice, that underlie expectations for increased inflation we conclude that arguments for higher inflation—above 2 to 3 percent—tend to be hollow when examined closely.*

<sup>1</sup> Source: <http://www.nakedcapitalism.com/2008/10/consumers-new-found-embrace-of-savings.html>

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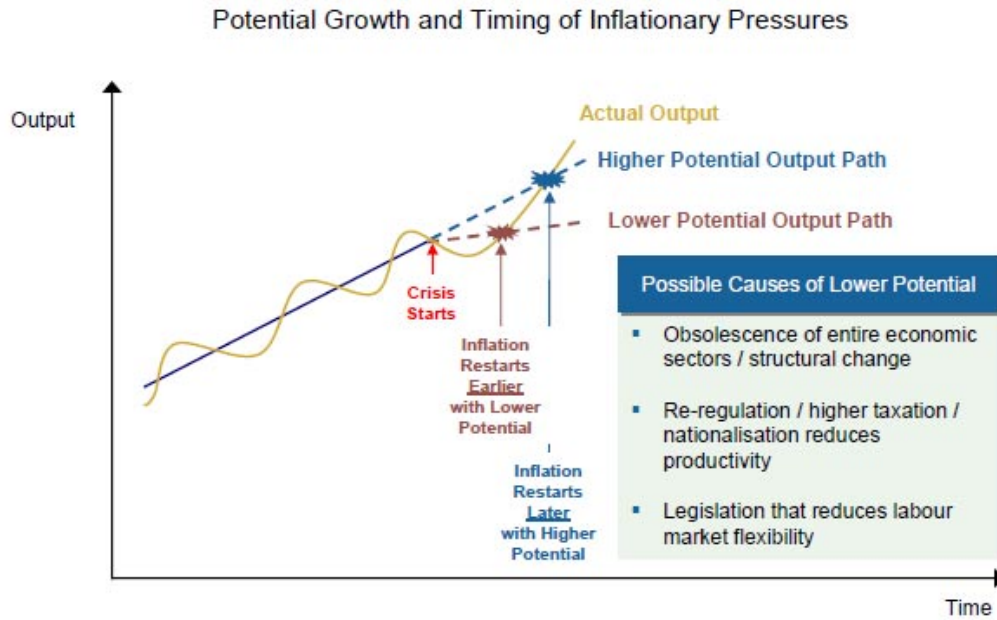
stimulate the economy in an attempt to achieve a growth rate that will prove to be unachievable or unsustainable. Repeated failed attempts to stimulate the economy would end only in higher “accidental” inflation, as in the 1970s.

Christina Romer, current chair of the Obama administration’s Council of Economic Advisers (CEA), has proposed that the “Great Inflation” of the 1970s was the result of “a succession of misguided models that gave rise to repeated policy mistakes” (Romer, 2005). In particular, she argues that monetary policymakers were excessively optimistic about the natural rate of unemployment. Legislators also shared this excessive optimism at the time; the Humphrey-Hawkins Full Employment and Balanced Growth Act of 1978 called for the Federal Reserve to aim for 4 percent unemployment. According to Romer, in the 1970s, policymakers assumed that the unemployment rate could be pushed lower without creating additional inflation; furthermore, they doubted that higher unemployment would do much to dampen the rate of inflation below what people had come to expect.

Misperceptions about the potential growth path of the economy compound over time, leading to large disparities between actual and perceived output gaps, as illustrated in Figure 1. For example, if the actual rate of trend output growth has been reduced to 2.2 percent, and a policymaker mistakenly believes it is still 3 percent, then the policymaker believes the economy can safely be stimulated to a substantial degree without risking higher inflation. It is important for policymakers to pay attention, however, to the supply-side effects of the credit crunch and the structural changes that the deep contraction in the economy will likely induce. Reduced investment in productive capacity, shrinkage of economic sectors—such as finance, autos and construction—and greater regulation are examples of economic adjustments and/or disruptions that could lower the rate of potential growth. In this way, the end of the Era of Easy Credit can shift potential output onto a lower trajectory during a lengthy period of economic adjustment.

If the Fed and other central banks overestimate the rate of potential growth, or, similarly, if policymakers’ estimates of the natural rate of unemployment are too low, they likely run the risk of overstimulating the economy and unintentionally generating inflation. Such a policy mistake would only become apparent some time after actual output had risen above potential growth estimates. The opposite scenario, where central banks tighten policy prematurely because they believe the output gap has closed, is also possible. Princeton economist Paul Krugman has argued that Japan’s economy has been plagued by repeated untimely withdrawal of stimulative policy (Krugman, 1999). How should we judge the likelihood that central banks are too optimistic or too pessimistic with regard to potential growth?

Figure 1: What Lower Potential Growth Does to Inflation



Source: PIMCO. Shown for illustrative purposes only.

Reputable and policy-relevant forecasts for the U.S. economy's long-run growth rate are provided by the Congressional Budget Office (CBO), the Federal Reserve, Blue Chip Financial Forecasts (a panel to which Russell is a contributor) and the administration's CEA. We have summarized policymaker forecasts for the potential growth rate, together with the results of the Blue Chip survey of forecasters and Russell Investment's own forecast, in Table 1. Estimates of long-term GDP growth all lie in the 2 to 3 percent range, which contains the average 2.8 percent GDP growth rate between 1990 and 2007. To date, the Obama administration's CEA has been satisfied with the Blue Chip consensus forecasts, so it has matched those forecasts and defended them as a mainstream view. Less-optimistic views come from Russell and the CBO, probably because both forecasts assume a relatively high probability that another recession will take place at some point late in the next decade.

Table 1: Forecasts for Potential Growth

Source	CBO	Federal Reserve	CEA	Blue Chip	Russell Investments	Memo: BEA
Concept	Average GDP growth rate 2016 -2019	Long-run real GDP growth rate	Long-run real GDP growth rate	Average GDP growth rate 2016-20	Average GDP growth rate 2016-20	Historical average growth rate 1990-2007
Forecast	2.30%	2.4% - 3.0%	2.6%	2.6%	2.00%	2.8%

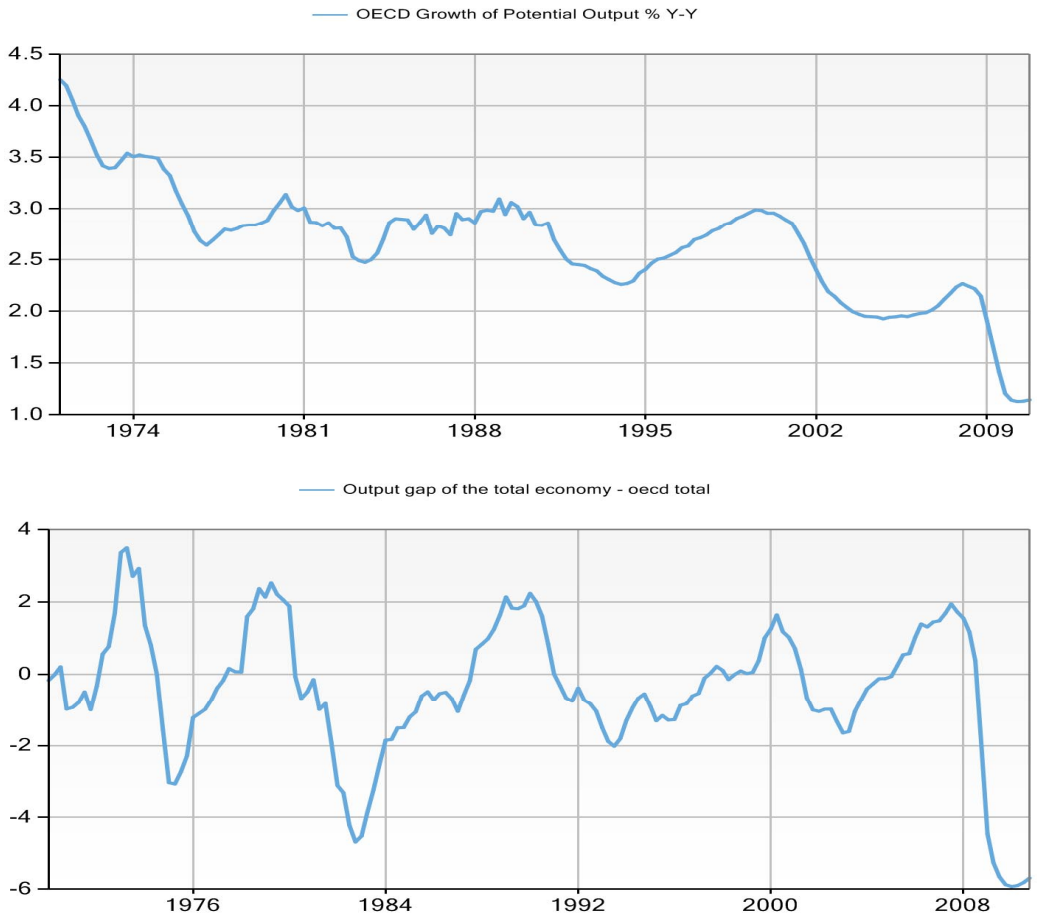
Source: CBO, Fed, CEA, Blue Chip, Russell Investments, BEA

Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

Other international organizations and private-sector institutions are also less sanguine than the CEA. The Organisation for Economic Co-operation and Development (OECD), for example, estimates that potential growth in its member countries before the crisis (prior to 2008) was about 2 percent, but that it will average only 1.7 percent between 2011 and 2017 (OECD, 2009).

In sum, one could argue that the same basic inflation driver from the 1970s could be in place today: room to overestimate the trend rate of growth of the economy following a calamitous recession, which could lead to overly stimulative monetary policy. For this inflation mechanism to become operative, however, the Federal Reserve would need to have failed to learn the lessons of the 1970s and thus to repeat the same mistakes. Given the breadth of understanding among monetary policymakers, and among policymakers more broadly, of what went wrong in the 1970s, it seems a stretch to claim that the mistakes that led to the Great Inflation will be repeated. Much of the arrogance that plagued policymakers in the 1960s and 1970s is gone. Policymakers today are more likely to understand that the economy will find its own equilibrium growth rate, rather than to try to impose a growth rate on the economy.

Figure 1: OECD Potential Growth and Output Gap



Source: Organisation for Economic Co-operation and Development (OECD)  
 Data estimates for OECD Growth of Potential Output covers the period from January 1, 1971 through December 31, 2010. Data estimates for OECD Output gap covers the period from January 1, 1970 through December 31, 2010. Actual results may vary.

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**Argument 2: A little inflation would complement the private sector's efforts to deleverage and alleviate onerous debt burdens.**

The depth of the current economic downturn and the level of indebtedness of consumers and private corporations has induced mainstream economists, including Harvard's Greg Mankiw and Ken Rogoff, to advocate a higher inflation target, at least for a time. Rogoff's concrete suggestion is for a 6 percent rate of inflation for at least two years, to aid the process of private-sector deleveraging (Bloomberg, 2009). With growing wages and rising prices due to inflation, households and companies would find it easier to service their debt burdens.

Higher inflation could reduce the need for deleveraging, as firms and households would not feel as pressed to rid themselves of debt if the real value of the debt were reduced through inflation. Firms that are currently contemplating issuing equity in order to retire debt might put those plans aside if inflation were to make that debt less burdensome. In this vein, Paul Krugman has suggested that one reason that the U.S. economy boomed following World War II is that enough inflation took place during the 1940s to reduce the real value of corporate debt by half.

Another way of stating this case for moderately higher inflation centers on the idea that a negative real short-term interest rate cannot be engineered by the central bank without some inflation when short-term nominal interest rates have hit zero. Some economists have argued that in a deep recession precipitated by a financial crisis, a significantly negative real short-term interest rate is appropriate. The so-called Taylor rule, a policy for setting the federal funds rate, is one way of discerning how low rates should be. Glenn Rudebusch of the San Francisco Fed uses a Taylor rule based on the gap between the unemployment rate and the natural rate of unemployment to imply a Fed funds rate as low as minus 5.5 percent (Rudebusch, 2009). Clearly, there is no way of implementing such a policy when short-term nominal interest rates cannot be negative. Quantitative easing, as practiced by the world's major central banks, is the logical response to the zero lower bound for policy rates and the disruptions within the banking sector and financial markets. For now, the stated goal of quantitative easing is to stave off the threat of deflation and to bring the rate of inflation back to 2 percent. Announcing a higher target for inflation (say, between 3 and 5 percent) may have the perceived benefits of convincing the public that negative real interest rates will enable the economy to recover more quickly and of building confidence accordingly. This line of argument suggests that the benefits of aiming for higher inflation outweigh the costs. A downside risk is that a higher inflation target could have the adverse effect of immediately being built into long-term nominal interest rates, possibly with a larger inflation risk premium, which could raise real interest expenses across the board and hamper any nascent economic recovery.

Despite the practical complexities of temporarily raising the target rate of inflation, new ways of thinking about how to attack the "misery index"—the sum of the unemployment and inflation rates—will gain favor as the unemployment rate reaches double digits. If people are convinced that the unemployment rate would come down slowly at 2 percent inflation, they might be willing to experiment to see if it would come down more quickly at 3 to 5 percent inflation. Of course, public calls for policy experimentation will not mean much if they do not convince Federal Reserve chairman Ben Bernanke, especially given that President Obama has just announced his intention to reappoint Bernanke in January 2010. We already know a good deal about Bernanke's views on how to respond to a "jobless recovery" from recession, because he was a member of the Fed's Board of Governors in 2003. Then he made clear that his preference was to hold short-term nominal interest rates at near zero for a considerable period, a policy that would achieve a negative real short-term rate as inflation hovered near 2 percent. From what we know, Bernanke has never seen the need to foster negative real rates below minus 2 percent to give the economy room to recover

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from recession. Similarly, Paul Krugman's recommendations to the Bank of Japan in the late 1990s suggested that a 2 to 3 percent inflation rate would be sufficient to combat a deflationary mentality. That is, Krugman advocated drastic action, if necessary, to achieve 2 percent inflation, but not a drastically higher rate of inflation.

**Argument 3: The Federal Reserve will not be able to unwind its liquidity injections and restore its balance sheet to normal size without creating some inflation along the way. That is, the Fed will not find a clean, inflation-free "exit strategy" from its massive purchases of long-dated Treasury bonds and mortgage-backed securities.**

The Federal Reserve's quantitative easing policy implies that the Fed will inject reserves into the banking system as necessary to achieve its 2 percent inflation target. Roughly half of the expansion in the Fed's balance sheet since third-quarter 2008 has taken the form of lending programs—such as the commercial paper funding facility—that will shrink on their own as the economy improves. The other half consists of outright Fed purchases of long-dated securities, most notably stemming from the Fed's announcement that it will buy \$1.25 trillion in mortgage-backed securities from Fannie Mae and Freddie Mac. In ordinary circumstances, when the Federal Reserve buys long-dated securities, it does not worry about having to realize a capital gain or loss, because it generally holds all long-dated securities to maturity. Any contraction of its balance sheet usually takes place through the sale of short-term Treasury bills. The size of the present purchase of long-dated securities, however, and the need to contract the Fed's balance sheet prior to their maturity, means that this time the Fed has to consider the possibility that it could buy long-dated securities high and later sell low.

The salient point concerning inflation is that in the event of such a realized capital loss on long-dated securities, the monetary base would undergo a permanent one-time increase, based on the difference between the buying and selling prices. Even if this occurs, however, it is not a recipe for ongoing inflation. The Fed would not actually sell the securities all at once, which means the monetary base would undergo a series of smaller permanent increases and measured inflation would increase for a relatively short period of time as a result of this one-time policy decision to purchase long-dated securities.

Taken by itself, a short-lived increase in inflation would not have to be more harmful to the Fed's inflation-fighting credibility than was the increase in price levels that occurred after World War II, when wage and price controls were relaxed. Bond markets recognized that it was a one-time bout of inflation and not the start of a period of ongoing inflation.

The way in which this buy-high, sell-low scenario could harm the Fed's credibility, however, is if market sentiment was that the Fed had found itself involuntarily backed into permanently monetizing a portion of a previous asset purchase. The feeling that the Fed was not in control of its own balance sheet could lead to an increased inflation risk premium in long-term bonds. To prevent the Fed from being forced to monetize a capital loss on its holdings of long-dated bonds, one proposal is for the Fed to issue "Fed bills"—short-term debt, free of default risk. By issuing and rolling over liquidity-absorbing Fed bills, the Fed could hold all of its long-dated securities to maturity, rather than sell at a capital loss. The upshot is that if unwinding its expanded balance sheet presents a challenge in terms of capital losses and a potential loss of credibility, the Fed has options to avoid undesirable fire sales of assets.

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**Argument 4: Overwhelming fiscal obligations of the federal government eventually will lead it to force the Federal Reserve to inflate away debt where it can.**

This last argument concerning the solvency of the federal government is hazy in terms of timing and magnitude. As Laurence Kotlikoff has said, “Countries can go bankrupt, but whether or not they are bankrupt or are going bankrupt cannot be discerned from their debt policies” (Kotlikoff, 2006). (The heated rhetoric in 1987 between John Reed, chairman of Citicorp, and the government of Brazil as to whether Brazil could repay sovereign debt equal to about 25 percent of its GDP, comes to mind.) (Berg, 1987). There is no objective threshold at which one can say whether a government’s debt can be repaid or not. A government’s ability and will to collect taxes are hard to measure.

A key feature is the sheer magnitude of the unfunded liabilities of the U.S. government. Revised estimates of those liabilities have gone in recent years from roughly five times one year’s GDP to about seven times one year’s GDP. These staggering figures mean that prior to the current recession, the scale of the problem facing the federal government was already far beyond what any conceivable inflation tax could solve. In fact, simulations suggest that to bring these programs into actuarial balance through tax increases, the government would need a permanent increase in tax revenues by around 70 percent per year (Fisher, 2009). This would necessitate very large increases in income tax rates. Similarly, cutting discretionary government spending to fully fund entitlement programs appears to be a non-starter, given the sheer size of the reductions that would likely be required. Richard Fisher, the Dallas Fed president, cites calculations that suggest a 97 percent cut in discretionary spending would be needed to close the funding gap in Social Security and Medicare (Fisher, 2009). Consequently, budget consolidation through benefit reductions in Social Security and Medicare is the only avenue to addressing the problem. Generational politics may pit young versus old voters in coming years as these issues are resolved.

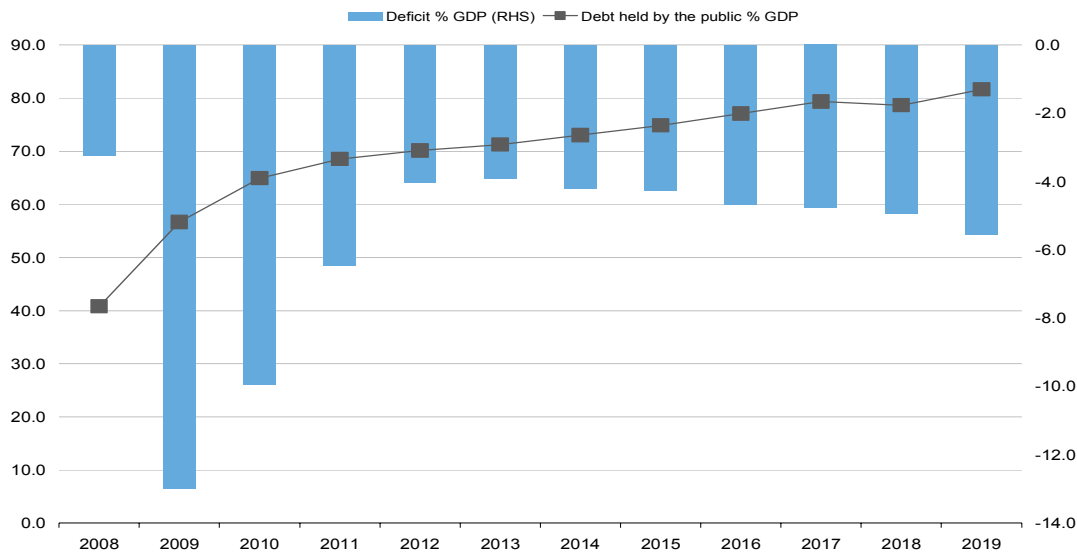
Moreover, as Willem Buiter has noted, future Social Security benefits are pegged to the growth rate of nominal wages, and Medicare represents a promise to provide real medical services in the future; thus, these liabilities are not fixed in nominal terms and cannot be inflated away today (Buiter, 2009a). Yet, if these unfunded liabilities are not addressed, Standard & Poor’s projects that the U.S. government debt rating could be downgraded to non-investment grade within the next 20 years (Kraemer et al, 2005). Since the inflation tax could only nibble at the edges of the government’s unfunded liabilities, the only reason to employ the inflation tax in addressing the problem would be to purposely create a crisis atmosphere in order to bring parties to the bargaining table. This tactic has been observed prior to stabilization programs in other countries, such as Argentina in 1989, where hyperinflation was used to get all parties to acquiesce to broad-based reforms.

A point to remember in any discussion of inflation is that while the real value of government debt is inflated away, so also is the value of many forms of financial wealth. Countries that have experienced runaway inflation equate it to financial ruin; cultural memory is more often that succeeding generations did not inherit wealth than that they did not inherit debt, and in fact high inflation does not present an opportunity societies are eager to undertake.

Nevertheless, even if in our present case the inflation tax in the U.S. cannot be large enough to cover the future costs of Social Security and Medicare, another argument has it that some inflation now could relieve some of the current debt burden, enhance the government’s future borrowing capacity and thereby help spread the cost of the baby boomers’ retirement across time. Given the recession and the government’s stimulus spending, current deficit and debt levels—not just unfunded future liabilities—are alarming. In this fiscal year, the Congressional Budget Office (CBO) expects the federal deficit to reach 13 percent of GDP, a record level for the post–World War II period. The CBO also

projects that, even after the current economic crisis fades away and growth returns to trend, government deficits in the United States will average around 5 percent of GDP between 2011 and 2019. Debt held by the public, a measure of current liabilities but not of unfunded future liabilities, is expected to increase from a level of 40 percent of GDP in 2008 to 70 percent of GDP in 2011, and to over 80 percent by the end of the forecast horizon in 2019. This measure does not include the contingent liabilities resulting from the various bailout guarantees, the assumption of the obligations of Fannie Mae and Freddie Mac, and too-big-to-fail guarantees, which some observers believe would take the debt-to-GDP ratio past the 100 percent mark (Buiter, 2009b).

Figure 3: CBO Forecast for U.S. Deficit and Debt



Source: Congressional Budget Office

Note: Left scale is for debt/GDP ratio and right scale is for deficit as a percent of GDP

Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

Some observers see inflation as a tempting solution to the challenge of rapidly increasing government debt. Similarly to the highly indebted private sector, the government would find it easier to service nominal debt when wages, profits and hence tax receipts grow faster in an inflationary environment. The history of high-inflation episodes and hyperinflations shows that they almost always coincide with government debt predicaments (Sargent, 1992). Using inflation to ease the debt burden on the government may seem a policy prescription from a bygone era, but even reputable economists with policy experience, such as former CEA chairman Greg Mankiw, are advocating policy actions that would result in modest inflation (Mankiw, 2009): *“I am more comfortable having the Fed commit itself to modest inflation than having the federal government commit itself to a trillion dollars of new spending. The more we can rely on monetary rather than fiscal policy to return the economy to full employment and sustainable growth, the better off future generations of taxpayers will be.”*

Mankiw should have spelled out what he meant by a “modest” rate of inflation, but another way of reading his statement is to say that if the government borrows less today, and if it reduces its current debt burden gradually through moderate inflation, then the government will have more borrowing capacity in the future during the baby boomers’ retirement years.

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Through borrowing, the government could spread the cost of the boomers' retirement across time so that future generations would help pay for it. Inflation could play a role during the boomers' retirement years if cost-of-living adjustments to retirees were held well below inflation. While this would be a way to reduce real spending for Social Security, it would do nothing to alleviate the burden of Medicare.

As Willem Buiter has noted, no government has voluntarily committed to taking the inflation option completely off the table. The United States could do so by retiring its dollar-denominated debt and replacing it with inflation-protected securities or foreign-currency denominated debt (Buiter, 2009a). To some extent, however, the United States and other countries already protect themselves from inflation by having central banks that are independent of the fiscal authorities. In the foregoing discussion of inflation as a policy option, it was assumed that the fiscal authorities could employ inflation if they so chose, but in fact the Federal Reserve would have to agree—or be forced—to go along with any inflationary policy. Based on the discussion above, it appears that the Fed would have many reasons to push back and argue that inflation is not the solution.

## Conclusion

Observers of inflationary episodes around the globe have noted that a single such event tends to destroy the basis for subsequent inflation, because societies discover how corrosive inflation is to a society. The United States had its experience with the “Great Inflation” of the 1970s. Among the arguments in the 1970s in favor of inflation was the claim that a little inflation would help grease the wheels of the labor market as baby boomers and women entered the labor force in greater numbers. Most boomers probably would not say that inflation helped ease their way into careers. On the contrary, they associate inflation with the fact that four recessions took place between 1970 and 1982. For this reason, boomers are unlikely to see inflation as a panacea for their retirement years either.

In looking at today's situation, all of the arguments for higher inflation face counterarguments that are at least as strong, if not stronger. Higher inflation could be either a policy mistake, a way to achieve a negative real short-term interest rate below the level the economy needs, the result of a clumsy exit strategy on the part of the Fed or a penny-wise, pound-foolish attempt to devalue public debt when most of the government's liabilities have not even been funded as debt yet. This is not to say that inflation cannot happen, but it becomes less likely if we debunk the view that inflation is a solution to a problem.

The only significant risk we see regarding inflation—and this is a low-probability tail risk, well into the future—is that the federal government might postpone budget consolidation for too long and find itself in a funding crisis. Hopefully the government has learned the value of acting before financial markets shake it into action.

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