

The Downside of Monetary Easing

Aimed at stimulating the economy, the Federal Reserve’s policy has created unintended hardships for savers and a drag on the economy.

by William F. Ford, PhD, and Polina Vlasenko, PhD, Research Fellow

One of the overlooked consequences of the Federal Reserve’s recent rounds of monetary stimulus is the adverse impact those policies have had on the interest income of savers. The prolonged and abnormally low interest-rate structure put in place by the Fed has made life particularly difficult for retirees and others who depend on conservative interest-sensitive investments. But the negative effects do not stop there. They spillover into the overall performance of the economy.

Our estimates show that these negative effects, resulting from the Fed’s two rounds of quantitative easing (QE1 and QE2), are sizable and may help account for the lack-luster character of the current recovery. The negative effects estimated here should therefore be taken into account when evaluating the *net* potential benefits of any monetary stimulus.

QE1 and QE2, which together pumped about \$2 trillion into the financial system, came about in response to the financial crisis of 2008. To increase liquidity and to keep interest rates from rising, the Fed flooded the financial markets with money by purchasing large quanti-

ties of Treasury and mortgage-backed securities.

Monetary stimulus is supposed to bolster the economy through several channels. There is an interest-rate channel. Low rates are expected

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to spur borrowing and spending. Households tend to borrow to finance big-ticket items like houses, cars, and refrigerators. Businesses finance inventories and investments in plant and equipment. Lower rates may increase the volume of those expenditures by lowering their total cost, driving up economic activity, and lowering unemployment.

There also is an international channel. A widely accepted theory

of short-term exchange rate movements is called covered interest parity—roughly meaning that exchange rates move to equalize interest rates across countries. Abnormally low U.S. interest rates, relative to those

of our trading partners, drive down the value of the dollar, thereby making American-made products cheaper relative to foreign ones. This

leads to a rise in the exports of U.S. goods. At the same time, imports of foreign-made goods, particularly those that compete directly with domestic products, tend to fall or to grow more slowly, also causing U.S. economic activity to rise.

Finally, there is a wealth channel. As the Fed buys long-term bonds, it drives up bond prices and drives down their yields to investors. This induces investors to search for

Table 1: Historic Lows

U.S. Treasury yields one year after the start of business-cycle recovery (percentage points)

	6 mo. T-bill	1 yr T-bill	3 yr T-note	5 yr T-note	10 yr T-note	20 yr T-bond	30 yr T-bond	Average
Average for the past nine recoveries	5.73	5.73	6.35	6.67	6.89	6.97	11.10	7.07
Current recovery	0.19	0.32	1.17	2.00	3.20	3.95	4.13	2.14
Difference	-5.54	-5.41	-5.18	-4.67	-3.69	-3.02	-6.97	-4.93

Source: Federal Reserve.

Inside this report Technological improvements can cost people jobs. In the short run, individuals can suffer considerably. But Research Fellow Lei Chen writes that automation also frees up resources, reduces prices, and helps spawn new industries. In doing so, technological change brings with it the potential for job creation and greater prosperity. See back page.

Also Oil stocks can serve as a hedge against rising prices at the gas pump. See Ask the Expert. Page 3

higher returns elsewhere, usually in equities. Increased demand for equities drives stock prices upward, making stockholders feel richer and inducing them to spend some of their increased wealth. This further stimulates output and employment.

But these are not the only channels and effects of low interest rates. There is a downside.

By lowering interest rates to historically unprecedented levels, the Fed's policy deprives savers of interest income they normally would have earned on the interest-sensitive assets they hold. Thus, there is an income channel that no one is talking about, and its negative impact can be powerful.

Interest-sensitive assets exist in many forms. They include savings accounts, certificates of deposit, and money market funds held in banks and other financial institutions. Short- and long-term Treasury and municipal bonds are also in this category, as are huge investments in interest-sensitive variable annuities, held mainly by retirees.

By our most conservative estimate, at the end of the second quarter of 2010, exactly one year ago and one year after the start of the current recovery, the volume of interest-sensitive assets directly held

by U.S. households amounted to at least \$9.9 trillion.

But the true number may be much higher. Life insurance companies and private pension funds, which provide income to many retirees, also invest some of their portfolios in Treasuries and other bonds. This means that low Treasury yields also affect life insurance and pension fund reserves. Adding those reserves to the pool of assets affected by Treasury yields brings the upper bound of all interest-sensitive assets to \$18.8 trillion.

Life insurance companies and pension funds, however, invest not only in bonds but also in equities and other types of assets. From the available flow-of-funds data, there is no way to determine the precise share of bonds within these portfolios. For purposes of this study, we assumed the share of interest-sensitive investments to be 50 percent, creating a mid-point estimate of \$14.35 trillion for the total assets affected by the abnormally low interest rates engineered by the Fed.

Table 1 on page 1 shows the difference between Treasury yields on the first anniversary of the nine business-cycle expansions since 1953 and yields in June 2010, the first anniversary of the current recovery's

start. That's around the time the Fed first mentioned the possibility of round two of quantitative easing. Recent yields are lower, by a considerable margin, across all maturities of Treasury bills, notes, and bonds than in prior recoveries.

Table 2 below shows our estimates of the possible losses in spending power, output, and employment generated by the Fed's artificially low interest rates. Even by our most conservative estimate, which only looks at the \$9.9 trillion in assets most directly affected by depressed yields on Treasuries, the losses are impressive. The average yield on Treasuries in June 2010 was 2.14 percent compared to an average of 7.07 percent in the previous nine recoveries, a difference of 4.93 percentage points. The projected annual impact of this loss of interest income on just \$9.9 trillion of rate-sensitive assets translates into \$256 billion of lost consumption, a 1.75 percent loss of GDP, and about 2.4 million fewer jobs. (Our calculations assume that the recipients of interest income face a 25 percent average income tax rate and consume 70 percent of their after-tax income.)

Had these jobs not been lost, the unemployment rate would be 7.5 percent, instead of the current 9.1

Table 2: Lost Opportunities

Estimated annual effect of low yields on savers and the economy.

Measures of total assets sensitive to the Treasury yield curve	Gains resulting from a 1 percentage point increase in yields	Gains resulting from increasing yields by 4.93 percentage points to the average level observed in the nine past recoveries
Lower bound \$9.9 trillion	\$52 billion of consumption 0.35% of GDP 493,000 jobs	\$256 billion of consumption 1.75% of GDP 2.4 million jobs
Midpoint \$14.35 trillion	\$75 billion of consumption 0.51% of GDP 715,000 jobs	\$371 billion of consumption 2.53% of GDP 3.5 million jobs
Upper bound \$18.8 trillion	\$99 billion of consumption 0.67% of GDP 936,000 jobs	\$587 billion of consumption 3.32% of GDP 4.6 million jobs

Notes: The estimates are based on the interest-sensitive assets held by the U.S. personal sector, as of the second quarter of 2010, reported by the Federal Reserve in the *Flow of Funds Accounts of the United States*. The personal sector includes households and nonprofit organizations, nonfarm noncorporate business, and farm business. The lower-bound estimate is the sum of time and savings deposits, money market fund shares, U.S. savings bonds, other Treasury securities, and municipal securities. The upper-bound estimate also includes private life insurance and private pension reserves. The calculations assume that people spend 70 percent of their after-tax income on consumption and face average income tax rate of 25 percent.

percent, and this is the minimal effect we estimate.

It is impossible to know for sure what exactly the interest rates would have been in the absence of quantitative easing. We, therefore, present a way to compute the total effect on the economy of interest rate reduction of *any size*. The first column of Table 2 shows the estimated effect on the economy for *every one percentage point* reduction in interest rates. If the Fed's policy depressed the yields by two percentage points, for example, the effect would be double of that presented in column 1.

As the estimate of the total of affected interest-sensitive assets gets bigger, the negative effects of depressed yields becomes even more striking. Using our mid-point estimate of \$14.35 trillion of interest-sensitive assets, a 4.93 percentage point reduction in interest rates annually cost the economy \$371 billion in spending, 3.5 million jobs, and 2.53 percent of GDP. This is a sizable effect, given that during this time GDP grew by only 2.33 percent and the economy added only 870,000 jobs.

With the additional jobs that might have been created by higher interest income levels, the unemployment rate could fall to 6.8 percent. And output could grow more than twice as fast as it has. The resulting GDP growth rate of 4.86 percent would then be closer to the average second-year growth rate of the past nine recoveries, and the U.S. economy would be well on its way to a vigorous recovery, rather than struggling as it is now.

This midpoint appraisal is our best estimate of the likely effect of the Fed's policy. It may still be on the low side.

The numbers do not account for any so-called multiplier effects. Additional spending by recipients of interest income creates revenues for

businesses, which in turn increases the income of their owners and employees, who themselves spend more. This, in turn, could boost overall spending and employment by more than the gain in interest income alone would suggest. While some such cascade effect exists in the macroeconomy, determining the size of such a multiplier is more problematic and the source of much debate among economists.

What we know for sure is that the U.S. economy's performance remains anemic. The current rate of job creation is not rapid enough to keep up with the increase in the labor force that arises from simple population growth, nor with the need to absorb millions of currently unemployed workers. The housing market has not even begun to recover since the QE initiatives were created. U.S. auto sales and the stock market also remain well below pre-recession levels. And the sharp decline of the U.S. dollar has not created an export boom. But it has put upward pressure on the cost of our food and energy imports.

And tens of millions of U.S. savers, largely the elderly, still are facing strained circumstances created by Fed-driven abnormally low interest rates across the entire Treasury yield curve.

The negative impacts on output and employment caused by quantitative easing through the interest income effects shown here are large. In fact, they may outweigh the expected, but hard-to-document, positive effects of the QE program.

The implications of this go beyond the current recovery. When evaluating the feasibility of any future monetary easing, the adverse effect on interest incomes always should be taken into account, along with the hoped-for positive effects championed by the proponents of quantitative easing.

ASK THE EXPERT Hedging Gas Prices

With gasoline prices topping \$4 a gallon earlier this year, it's no surprise that people are worried about them. Gasoline and fuel costs represent about 5 percent of consumer costs as given by the Consumer Price Index. In fact, a March survey by the Consumer Federation of America found that 90 percent of respondents said they were concerned about gasoline prices. This is the highest level of concern they have measured in the six years they have been running the opinion poll.

Even though gas prices are starting to ease a bit, people are still looking for some way to protect themselves against higher costs.

One approach is to hedge against gasoline price inflation. By buying stock in the seller of your gasoline, you can be on the receiving end of some of the profits made at your expense. It's like getting a rebate.

Over the last five years, gasoline prices have risen roughly 25 percent. Just as an example, let's look at the stock price of Exxon Mobil Corporation, the world's largest publicly traded international oil and gas company. Over the same period, it rose a little over 30 percent. That would have been more than enough to offset rising gas prices.

Better yet, this analysis only looks at the stock price. As with other oil companies, Exxon Mobil has a long history of paying dividends, running at about 2 percent per year. You might even turn a profit on the deal.

—Steven R. Cunningham is AIER's director of research and education.

To submit questions for future columns, e-mail asktheexpert@aier.org. For guidance on specific situations, consult your lawyer or financial advisor.

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Technology Can Help Drive Job Growth

Short-term displacement causes pain. But in the long run, innovation spurs prosperity.

by **Lei Chen, PhD, Research Fellow**

There is a common concern about machines replacing human beings in production so that workers permanently lose their jobs. At first glance, this concern seems reasonable. Jobs are lost to automation, and, in the short run, the human costs can be considerable.

However, firms make this kind of substitution only when it increases productivity, and in the long run, higher productivity improves the standard of living for everyone.

The total number of jobs potentially available is not fixed, but grows in the long term. While jobs have been lost to automation, new jobs have also been created, more than offsetting the losses.

Technology is often the driver of productivity growth. About 50 years ago, for example, when the term “information technology” first appeared in a published article, there were very few people working in this field. Today, there are more than 3 million workers in the U.S. alone employed in this prosperous industry.

There are plenty of other examples of technological improvements that have displaced workers in existing industries, but the mechanism is always the same. The change leads to improved living standards for those with jobs, while bringing with it the potential for job creation.

When industries adopt improved technologies, firms can produce more at a lower cost. Profits rise. More firms are attracted to enter the industry, creating new jobs. This helps workers.

In addition, the supply of products in the market increases. Eventually, prices fall, helping consumers. The average household

is better off because people need fewer labor hours to earn enough to provide for themselves. Consumers also have more choices about what to buy as competition prompts firms to develop better products, further improving living standards.

Beyond that, when technology helps reduce labor inputs, some labor is freed to work in less developed industries and increased profits make more money available for research and development. This helps spur a cycle of higher produc-

The total number of jobs that are potentially available to human beings is not fixed. New jobs are being created constantly.

tivity, new industries, increased job creation, and lower prices.

The problem is in the transition. It takes time for displaced workers to search for jobs that best suit their tastes and skills. Because the economy is always changing, some of this frictional unemployment is inevitable. Rapid technological change can sometimes lead to substantial displacement of workers.

There are means to help people find their ways in the changing job market. Education and training programs can develop new skills. And the technological advance of the Internet has improved communication between firms seeking workers and job candidates seeking employment.

Workers in this country are also not facing a threat from population growth any more than they are facing permanent difficulties created by technology. To be sure, rapid growth of population may depress economic prosperity by stretching natural resources and diluting the capital stock.

But a moderate and steady growth of population such as the U.S. experiences contributes to the growth of productivity. In general, if there are more people, then there are more scientists, inventors, and engineers who make technological improvement possible.

The past two decades have seen rapid growth in technological innovation. As a result, from 1990 to 2010, manufacturing productivity in the U.S. more than doubled. In the meantime, per capita income in the U.S. (measured in today’s dollar) grew from \$33,462 in 1990 to \$42,057 in 2010, a 25.7 percent increase.

An economy can’t sustain that kind of per capita gain with persistently high rates of unemployment.

Because of the recent recession, the growth rate of American manufacturing productivity became negative in 2008 and 2009. This is the first time this has happened in the last two decades. But in 2010, there was a spark in the growth of manufacturing productivity. It is too early to tell yet if this spark represents new hope that the displacement experienced by so many American workers is coming to an end.

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Price of gold, June 30, 2011, London PM fix.