AIER

05|14 INFLATION REPORT

Can The Fed Tame Inflation?

By Luke F. Delorme, Research Fellow

The Fed has increased the monetary base fourfold, but lenders have not created four times the money in the U.S. economy.

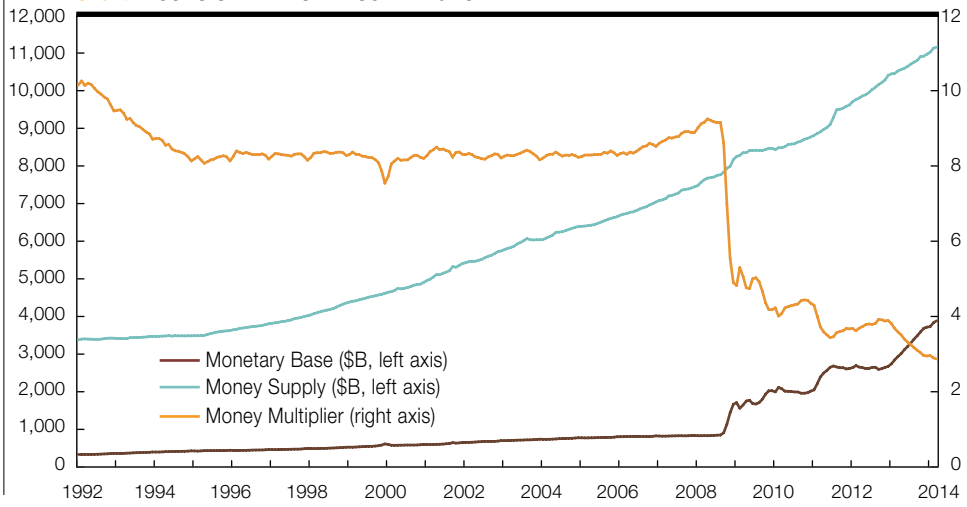
The Federal Reserve's quantitative easing policy ignited inflationary fears, but inflation as measured by the Consumer Price Index has remained low for several years. The QE program began in late 2008 as an attempt to stimulate the economy out of recession. Three rounds of quantitative easing have totaled $3.5 trillion.

QE's goal was to keep short-term interest rates low to stimulate investment demand and reduce unemployment. At the same time, QE was intended to help banks rebuild balance sheets after the financial crisis. Many believe these outcomes have been achieved.

But quantitative easing has encouraged a clear trend in bank and Fed balance sheets. A substantial amount of excess reserves have been accumulating for the last several years. Large banks such as Wells Fargo, JP Morgan Chase, Goldman Sachs, and Bank of America maintain hundreds of billions of dollars at the Fed. In March 2014, reserves totaled $2.7 trillion and accounted for about 19 percent of commercial bank asset-side balance sheets, compared to less than 3 percent before the crisis.

QE has driven the monetary base, the sum of currency in circulation and reserve balances, to nearly $4 trillion. This is more than 400 percent higher than in mid-2008. However, the M2 money supply, the sum of cash, checking accounts, savings accounts, and money market funds, has not increased at nearly the same rate. M2 totals $11.16 trillion, an increase of only 40 percent since mid-2008 (see Chart 1). A measure known as the money multiplier assesses the spurious relationship between the monetary

Chart 1. CONSISTENT MONEY SUPPLY GROWTH



Source: FRB, Haver Analytics.

base and the money supply.

Fed policy can effectively increase the monetary base, but does not necessarily increase money supply at the same rate. Banks, not the Fed, are the fundamental actors that affect money creation in an economy. Inflationary fears are fueled by the risk that these massive quantities of reserves could flow from bank balance sheets into the economy creating an uncontrolled jump in the money supply.

If the historic relationship between the monetary base and monetary supply held, the immense increase in the monetary base should have caused a parallel jump in money supply. This didn't happen. The multiplier has dropped sharply, largely because banks have not loaned out the money, but have held it in reserves.

As the economy improves, the question is whether lending will accelerate beyond the ability of the Fed to control inflation. Fed Chairman Paul Volcker was able to use money supply targeting to curtail inflation in late 1970s. The prime lending rate climbed to over 21 percent at the time, and two recessions followed shortly thereafter. This strategy is now filed under "in case of emergency."

Today, the Fed is developing new strategies to neutralize excess reserves. These new strategies focus on incentivizing banks to maintain balances at the Fed in lieu of lending. The new methods are theoretically sound, but untested in reality.

ECONOMIC RECOVERY

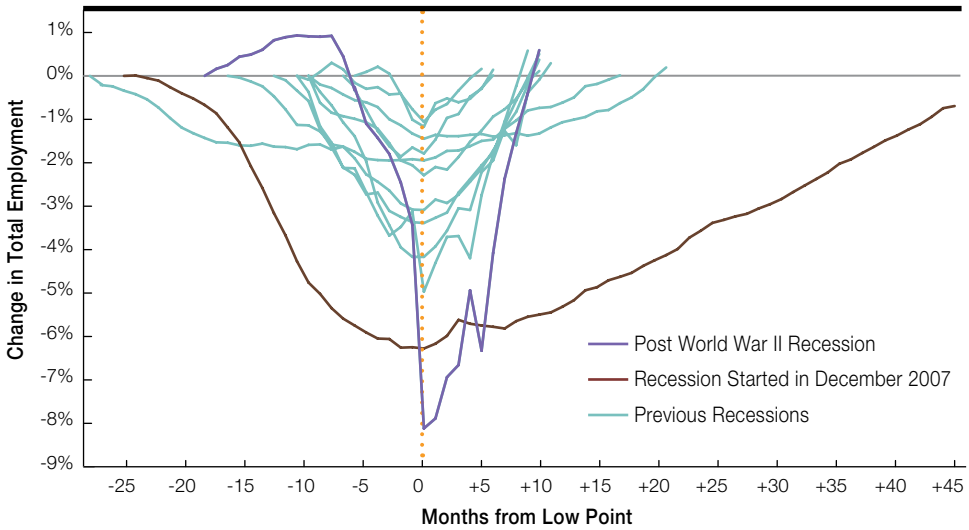
The recent recession was unprecedented. From peak to trough, the recession saw a 6.3 percent drop in total employment and a 5.5 percent decrease in GDP per capita. The GDP downturn was the worst of the last 12 recessions. The decrease in employment was rivaled only by the post-WWII downturn. QE supporters argue that the depth and severity of the downturn warranted extraordinary measures.

Chart 2 shows total employment deviation from peak to trough and back again for the last 12 U.S. recessions. The employment nadir is oriented at time 0 on the horizontal axis. The pattern of historical recessions shows that the length of time from peak to trough is similar to the length of time for employment to return to pre-recession levels. Other metrics that characterize recessions, such as GDP, show the same pattern.

Those that question Fed policy point to the long, slow recovery as evidence of its mismanagement. The recovery took significantly longer to regain its pre-recession levels. But it is unknown how long the recovery would have taken without Fed intervention. The U.S. recovery has been slow, but has been superior to that of Europe, the UK, and Canada. The argument over the central bank's role and involvement in the economy will continue.

The demand for goods, services, and business investment drives the demand for money. The relationship between banks and borrowers—the supply and demand for money—drives inflation. The Fed incentivizes banks with its various tools to influence the supply of money. The debate is about the strength and effectiveness of the Fed's influence.

Chart 2. SLOW JOBS RECOVERY



Source: BLS Current Employment Statistics.

MONTHLY INFLATION MEASURES

Retail and Wholesale

Broad CPI inflation maintained its slow growth in March. CPI services prices have outpaced durable goods and the broader CPI. Over the last 10 years, medical care services

YOUNG AND OLD SHOULDER THE LOAD

	MARCH CHANGE %	YEAR-OVER-YEAR CHANGE %
CPI		
CPI	0.2	1.5
CPI Food	0.4	1.7
CPI Energy	-0.1	0.4
CPI Shelter	0.3	2.7
CPI Core (Less Food & Energy)	0.2	1.7
CPI Services (Less Energy Services)	0.3	2.3
CPI Durable Goods	0.1	-1.2
Medical Care Services	**0.3**	**2.4**
CPI College Tuition and Fees	**0.4**	**3.9**
CPI New and Used Vehicles	0.2	0.0
PPI		
PPI Final Demand	0.5	1.5
Final Demand Foods	1.1	0.8
Final Demand Energy	-1.2	1.2
Final Demand Goods Less Foods & Energy	0.1	1.2
Final Demand Services	0.7	1.5
Final Demand Goods	0.0	1.2
Import Prices		
Import Prices Index	0.6	-0.6
Import Prices Core	0.2	-1.2

Source: Bureau of Labor Statistics, Haver Analytics. Monthly changes are seasonally adjusted for CPI and PPI. Import prices are not seasonally adjusted.

prices jumped 46 percent, college tuition and fees have soared 74 percent, and the broader CPI has increased only 26 percent. In fact, durables prices have decreased by 4 percent over this time frame.

This contrast has critical implications for the American economy. The elderly and others with health issues shoulder a larger share of medical costs through increased out-of-pocket expenses. Recent graduates are increasingly entering the workforce with a sizeable debt load from student loans.

On the other hand, middle-aged households with substantial mortgages may benefit from broader inflation. Yet these people have not been exposed to significant inflation like recent graduates and the elderly. The youngest and the oldest seem to be shouldering inflationary pressures.

Import prices have accelerated over the last three months, indicating rising global prices. Crude oil prices have jumped over 5 percent since January. Oil prices impact production and transportation costs. If import prices continue to rise, domestic companies may find wiggle room to likewise increase prices while remaining competitive.

March saw accelerated inflation at the wholesale level. The Producer Price Index (PPI) increased 0.5 percent for February and was up 1.5 percent on a year-over-year basis. The PPI indicates inflation at a more rudimentary level than the CPI and can often provide a short-term warning for increased consumer inflation.

Demand and Supply

As discussed earlier, increased money supply can result in inflation. Average earnings growth remains weak, and employment is slowly increasing. Banks can create money in the economy by lending for cars, houses, college tuition, and business investment. The U.S. economy will only see significant inflation when lending and borrowing surges.

Interest rates are expected to rise as inflation accelerates and the Federal Reserve reacts. Will consumers rush to purchase homes and cars ahead of increasing interest rates? March recorded the strongest monthly auto sales since 2012. Non-revolving credit, which includes auto and student

AUTO SALES IGNITION

	MARCH CHANGE %	YEAR-OVER-YEAR CHANGE %
Demand Measures		
Real Average Hourly Earnings	-0.3	0.5
Real Average Weekly Earnings	0.3	0.5
Total Unemployment	0.0	-0.8
Short Term Unemployment	0.1	-0.3
Long Term Unemployment	-0.1	-0.5
Retail Sales	1.1	3.7
Auto Sales	3.1	9.1
Existing Home Sales[1]	-0.4	-7.1
New Home Sales[1]	-3.3	-1.1
Non-Revolving Consumer Credit[1]	0.2	7.6
Supply Measures		
Industrial Production Index	0.7	3.7
IPI for Manufacturing	0.5	2.8
IPI for Utilities	1.0	4.4
Capacity Utilization	-0.5	1.5

Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Haver Analytics.

SENIOR LOAN OFFICER SURVEY

	2014	2013				2012			
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Commercial & Industrial:									
Lending Standards - Net Tightening for Large Firms[1]	-13.7	-8.3	-18.1	-19.1	-7.4	-7.6	-9.5	-6.9	5.4
Lending Standards - Net Tightening for Small Firms[1]	-4.2	-7.1	-10.0	-23.1	-7.7	-7.6	-4.9	-1.8	1.9
Net Demand for Large Firms[2]	16.4	1.4	15.3	5.9	19.1	-6.2	7.9	31.0	19.6
Net Demand for Small Firms[2]	14.1	0.0	24.3	7.7	15.4	4.5	0.0	21.8	15.1
Mortgage Credit Net Tightening[1]	4.5	-5.9	-5.8	-4.0	-1.0	-1.1	3.2	5.0	-2.6
Mortgage Net Demand[2]	-33.3	-2.3	34.0	26.0	18.1	26.1	44.7	27.8	1.3
Consumer Credit Net Tightening[1]	-7.0	-5.2	-3.6	-7.4	-2.0	-11.1	-10.9	-11.6	-11.6
Consumer Loan Net Demand[2]	8.5	8.7	17.6	10.9	10.9	10.1	18.5	23.3	6.5

[1] Positive values indicate net tightening of standards, negative values indicate net easing of standards.
[2] Positive values indicate stronger demand, negative values indicate weaker demand.
Source: Senior Loan Officer Opinion Survey, FRB, Haver Analytics.

loans, experienced robust gains as well. Contrary to these gains, existing and new home sales fell.

Retail sales figures were strong in March and have risen 3.7 percent on a year-over-year basis. It is now clear that retail sales weakness in December and January was largely a result of uncooperative weather.

Manufacturing and production showed continued strength in March. The industrial production index (IPI) posted an increase of 0.7 percent. The IPI again stands at its all-time highest measure. Increased IPI measures were coupled with increased capacity utilization, which increased to 79.2 percent, the highest level since mid-2008. If production continues to grow and capacity becomes constrained, there could be added demand for business borrowing.

The Senior Loan Officer Survey is a quarterly survey that observes bank lending practices. The most recent results, from January, indicate that banks have eased lending policies for commercial and industrial loans and experienced increased demand for such loans. Increased competition for loans was a primary reason cited for the eased standards. The survey also indicated a modest decrease in demand for mortgages. Although lending standards have somewhat eased across the board, the demand for most loans has only moderately changed.

In general, the supply of available money for lending is ample. Constrained demand for loanable funds has kept inflation low.

FINAL WORD

Thirty years from today, we'll look back and debate whether Federal Reserve intervention after the Great Recession had the desired impact. One thing is certain: The magnitude of the recession was unlike other recent downturns. A debate rages on about whether the Fed is the cause of economic volatility or the answer to it. ■

Special thanks to Bradley Oerth and Andrew Krom for research and writing assistance.

The *Inflation Report* is published by American Institute for Economic Research, a nonprofit, scientific, educational, and charitable organization.

To contact AIER by mail, write to:
American Institute for Economic Research
PO Box 1000
Great Barrington, MA 01230

Find us on:
Facebook
facebook.com/AmericanInstituteForEconomicResearch

Twitter
twitter.com/aier

LinkedIn
linkedin.com/company/american-institute-for-economic-research

For more information or to donate, visit:
www.aier.org