

**A Few Thoughts on the Employment Numbers**  
**Bernanke Leaps into a Liquidity Trap**  
**How to Spot a Liquidity Trap**  
**Toy Blocks**  
**London, The End Game, and Changes**

**By John Mauldin**

I am in London finishing my new book, *The End Game*, which will be out after the first of the year, as soon as Wiley can make it happen. Working with my co-author, Jonathan Tepper, we are making good progress. We intend to quit (a book like this is never finished) tomorrow afternoon.

I am going to beg off from personally writing a letter this week, but will give you something even better. Dr. Lacy Hunt offers us a few cogent thoughts on the unemployment numbers. The headline establishment survey came in much better than expected, but the household survey was much weaker. In addition, Dr. John Hussman wrote a piece last week that I thought was one of his best, on liquidity traps and quantitative easing, and that's included here, too. We are embarking on a course through uncharted waters. No one (including the Fed) has any idea what the unintended consequences will be.

I remarked a few weeks ago that the Fed is throwing an inflation party and not sure whether anyone will come. Last night at dinner, Albert Edwards of Societe Generale noted that not only do they not know whether anyone will come, they do not know what they will do if they do come, how much they will drink, or when they will leave.

My quick takeaway is the \$600 billion is not all that much, and the buying is concentrated in the middle of the curve, where it is likely to do the least in terms of lowering rates (they are already low!), so also likely to do the least damage. Mohammed El-Erian thinks that if nothing happens the Fed will be forced to continue, which is a dangerous thing. I wonder whether they might just shrug their shoulders and say, "We tried, and now it is up to the fiscal side of the equation." We shall see. It will be important to listen to the speeches of the Fed governors to get some idea.

Before we jump in, let me give you a few thoughts I am picking up in Europe. The yield spreads on Irish and Spanish bonds are blowing out even as we speak, as well as those on the rest of the periphery. While all eyes are on the Fed, the real action may be in Europe. We will visit that thought in the near future. Now, first to Lacy.

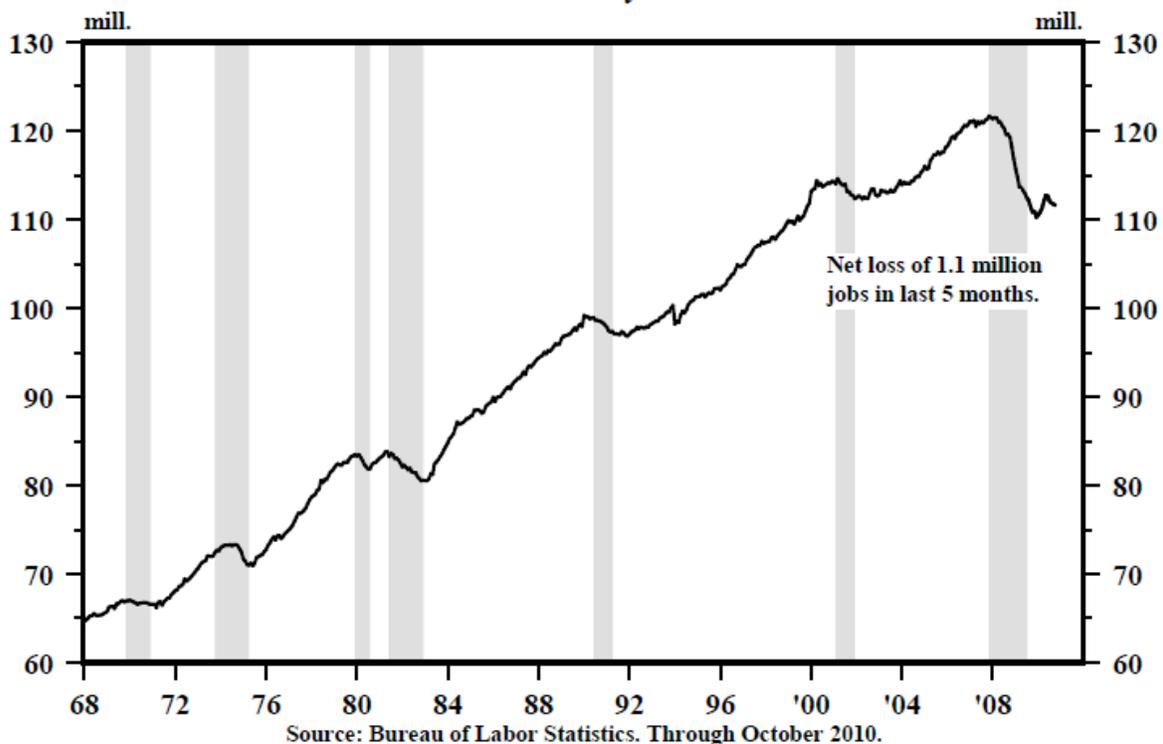
**A Few Thoughts on the Employment Numbers**

By Dr. Lacy Hunt, Hoisington Investment Mgt. Co.

The October employment situation was dramatically weaker than the headline 159k increase in the payroll employment measure. The broader household employment fell 330k. The only reason that the unemployment rate held steady is that 254k dropped out of the labor force. The civilian labor force participation rate fell to a new low of 64.5%, indicating that people do not believe that jobs are available, but this serves to hold the unemployment rate down. In addition, the employment-to-population ratio fell to 58.3%, the lowest level in nearly 30 years.

While not actually knowing what happened to the net job change in the non-surveyed small business sector, the Labor Department assumed that 61k jobs were created in that sector. This assumption is not supported by such important private surveys as those from the National Federation of Independent Business or by ADP. Just a month ago the Labor Department had to revise downward the job totals due to a serious overcount of their statistical artifact known as the Birth/Death Model.

## Full Time Employment *monthly*



The most distressing aspect of this report is that the US economy lost another 124K full-time jobs, thus bringing the five-month loss to 1.1 million in this most critical of all employment categories. In an even more significant sign, the level of full-time employment in October was at the same level that was reached originally in December 1999, almost 11 years ago (see attached chart). An economy cannot generate income growth by continuing to substitute part-time work for full-time employment. This loss of full-time jobs goes a long way to explain why real personal income less transfer payments has been unchanged since May.

The weakness in real income is probably lost in an environment in which the Fed is touting the gain in stock prices and consumer wealth resulting from the latest quantitative easing (QE), but QE has unintended negative consequences for real household income. Due to higher prices of energy and food commodities, QE may result in less funds for discretionary spending for consumers whose incomes are stagnant. Also, with five-year yields falling below 1%, rates on CDs and other types of short-term bank deposits will decline, also cutting into household income. At the end of the day these effects will be more powerful than any stock-price boost in consumer spending, which, as always, will be very small and slow to materialize.

To have a broad-based recovery, the manufacturing sector must participate. Contrary to the ISM survey, manufacturing jobs fell 7k, the third consecutive drop, resulting in a net loss over the past three months of 35k.

In summary, the latest economic developments indicate a slight worsening of underlying fundamental conditions.

### **Bernanke Leaps into a Liquidity Trap**

John P. Hussman, Ph.D.  
[www.hussmanfunds.com](http://www.hussmanfunds.com)

"There is the possibility ... that after the rate of interest has fallen to a certain level, liquidity preference is virtually absolute in the sense that almost everyone prefers cash to holding a debt at so low a rate of interest. In this event, the monetary authority would have lost effective control."

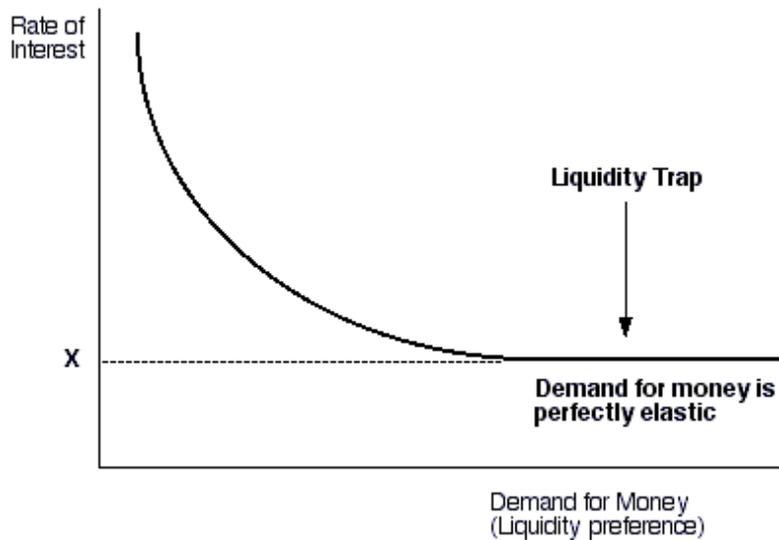
– John Maynard Keynes, *The General Theory*

One of the many controversies regarding Keynesian economic theory centers around the idea of a "liquidity trap." Apart from suggesting the potential risk, Keynes himself did not focus much of his analysis on the idea, so much of what passes for debate is based on the ideas of economists other than Keynes, particularly Keynes' contemporary John Hicks. In the Hicksian interpretation of the liquidity trap, monetary policy transmits its effect on the real economy by way of interest rates. In that view, the loss of monetary control occurs because, at some point, a further reduction of interest rates fails to stimulate additional demand for capital investment.

Alternatively, monetary policy might transmit its effect on the real economy by directly altering the quantity of funds available to lend. In that view, a liquidity trap would be characterized by the failure of real investment and output to expand in response to increases in the monetary base (currency and reserves).

In either case, the hallmark of a liquidity trap is that holdings of money become "infinitely elastic." As the monetary base is increased, banks, corporations, and individuals simply choose to hold onto those additional money balances, with no effect on the real economy. The typical

Econ 101 chart of this is drawn in terms of "liquidity preference," that is, desired cash holdings plotted against interest rates. When interest rates are high, people choose to hold less cash because cash doesn't earn interest. As interest rates decline toward zero (and especially if the Fed chooses to *pay* banks interest on cash reserves, which is presently the case), there is no effective difference between holding riskless debt securities (say, Treasury bills) and riskless cash balances, so additional cash balances are simply kept idle.



## Velocity

A related way to think about a liquidity trap is in terms of monetary velocity: nominal GDP divided by the monetary base. (The identity, which is true by definition, is  $M * V = P * Y$  – the monetary base times velocity is equal to the price level times real output).

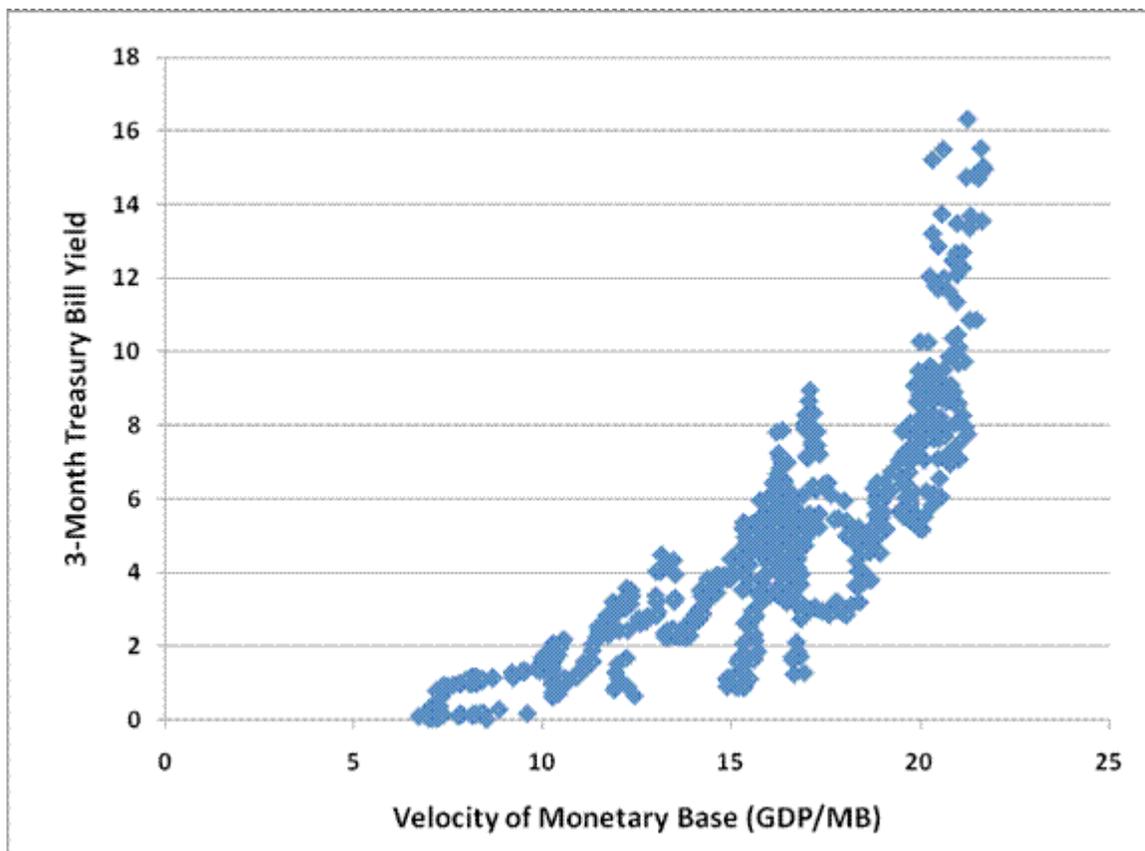
**Velocity is just the dollar value of GDP that the economy produces *per dollar* of monetary base. You can also think of velocity as the number of times that one dollar "turns over" each year to purchase goods and services in the economy.** Rising velocity implies that money is "turning over" more rapidly, so that nominal GDP is increasing faster than the stock of money. If velocity rises, holding the quantity of money *constant*, you'll observe either growth in real output or inflation. Falling velocity implies that a given stock of money is being hoarded, so that nominal GDP is growing slower than the stock of money. If velocity falls, holding the quantity of money *constant*, you'll observe either a decline in real GDP or deflation.

**The belief that an increase in the money supply will result in an increase in GDP relies on the assumption that velocity will not decline in proportion to the increase in money. Unfortunately for the proponents of "quantitative easing," this assumption fails spectacularly in the data – both in the U.S. and internationally – particularly at a zero interest rate.**

## How to Spot a Liquidity Trap

The chart below plots the velocity of the U.S. monetary base against interest rates since 1947. Since high money holdings correspond to low velocity, the graph is simply the mirror image of the theoretical chart above.

Few theoretical relationships in economics hold quite this well. Recall that a Keynesian liquidity trap occurs at the point when interest rates become so low that cash balances are passively held regardless of their size. The relationship between interest rates and velocity therefore goes flat at low interest rates, since increases in the money stock simply produce a proportional decline in velocity, without requiring any further decline in yields. Notice the cluster of observations where the interest rate is zero? Those are the most recent data points.

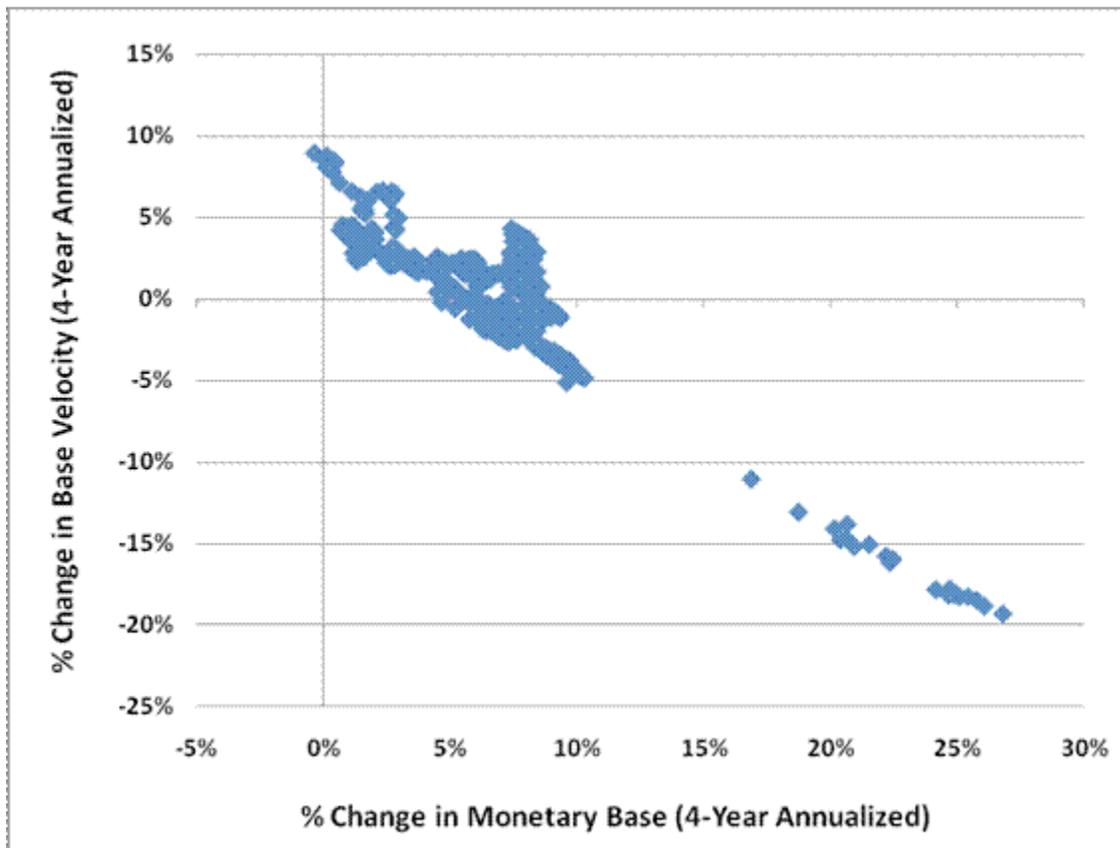


One might argue that while short-term interest rates are essentially zero, long-term interest rates are not, which might leave some room for a "Hicksian" effect from QE – that is, a boost to investment and economic activity in response to a further decline in long-term interest rates. The problem here is that longer-term interest rates, in an expectations sense, are already essentially at zero. The remaining yield on longer-term bonds is a risk premium that is commensurate with U.S. interest-rate volatility (Japanese risk premiums are lower, but they also have nearly zero interest-rate variability). So QE at this point represents little but an effort to drive risk premiums to levels that are inadequate to compensate investors for risk. This is unlikely to go well. Moreover, as noted below, the precise level of long-term interest rates is not the main constraint on borrowing here. The key issues are the rational desire to reduce debt loads, and the inadequacy of profitable investment opportunities in an economy flooded with excess capacity.

One of the most fascinating aspects of the current debate about monetary policy is the belief that changes in the money stock are tightly related either to GDP growth or inflation at all. Look at the historical data and you will find no evidence of it. Over the years, I've repeatedly emphasized that inflation is primarily a reflection of *fiscal* policy – specifically, growth in the outstanding quantity of government liabilities, regardless of their form, in order to finance unproductive spending. Look at the experience of the 1970s (which followed large expansions in transfer payments), as well as every historical hyperinflation, and you'll find massive increases in government spending that were made without regard to productivity (Germany's hyperinflation, for instance, was provoked by continuous wage payments to striking workers).

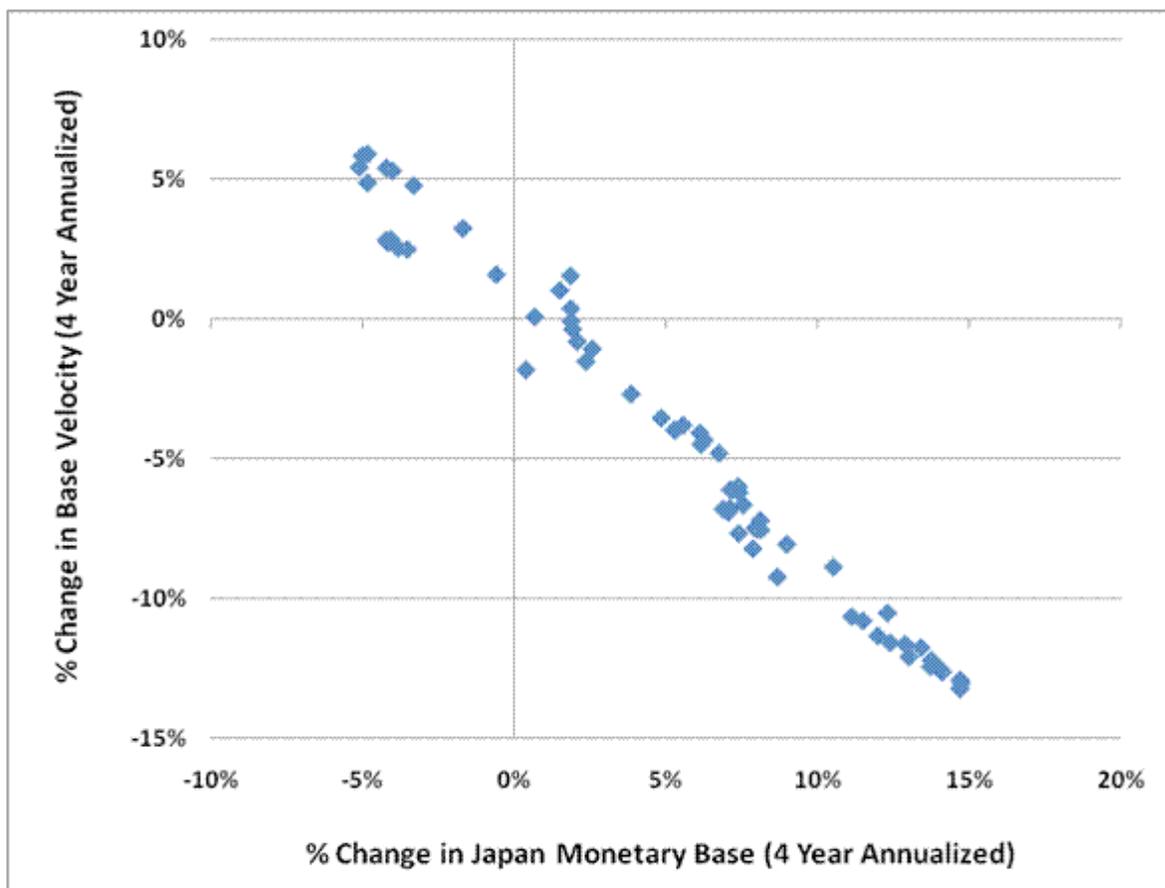
Likewise, real economic growth has no observable correlation with growth in the monetary base (the correlation is actually slightly negative but insignificant). Rather, economic growth is the result of hundreds of millions of individual decision-makers, each acting in their best interests to shift their consumption plans, saving, and investment in response to desirable opportunities that they face. Their behavior cannot simply be induced by changes in the money supply or in interest rates, absent those desirable opportunities.

You can see why monetary-base manipulations have so little effect on GDP by examining U.S. data since 1947. *Expand the quantity of base money, and it turns out that velocity falls in nearly direct proportion.* The cluster of points at the bottom right reflect the most recent data.



[Geek's Note: The slope of the relationship plotted above is approximately -1, while the Y intercept is just over 6%, which makes sense, and reflects the long-term growth of nominal GDP, virtually independent of variations in the monetary base. For example, 6% growth in nominal GDP is consistent with 0% M and 6% V, 5% M and 1% V, 10% M and -4% V, etc. There is somewhat more scatter in 3-year, 2-year and 1-year charts, but it is *random* scatter. If expansions in base money were correlated with predictably higher GDP growth, and contractions in base money were correlated with predictably lower GDP growth, the slope of the line would be flatter and the fit would still be reasonably good. We don't observe this.]

Just to drive the point home, the chart below presents the same historical relationship in *Japanese* data over the past two decades. One wonders why anyone expects quantitative easing in the U.S. to be any less futile than it was in Japan.



**Simply put, monetary policy is far less effective in affecting real (or even nominal) economic activity than investors seem to believe. The main effect of a change in the monetary base is to change monetary velocity and short-term interest rates. Once short-term interest rates drop to zero, further expansions in base money simply induce a proportional collapse in velocity.**

I should emphasize that the Federal Reserve does have an *essential* role in providing liquidity during periods of crisis, such as bank runs, when people are rapidly converting bank deposits

into currency. Undoubtedly, we would have preferred the Fed to have provided that liquidity in recent years through open-market operations using Treasury securities, rather than outright purchases of the debt securities of insolvent financial institutions, which the public is now on the hook to make whole. The Fed should not be in the insolvency bailout game. Outside of open-market operations using Treasuries, Fed loans during a crisis should be exactly that, loans – and preferably following Bagehot's Rule ("lend freely but at a high rate of interest"). Moreover, those loans must be senior to any obligation to bank bondholders – the public's claim should precede private claims. In any event, when liquidity constraints are truly binding, the Fed has an essential function in the economy.

At present, however, the governors of the Fed are creating massive distortions in the financial markets with little hope of improving real economic growth or employment. There is no question that the Fed has the ability to affect the supply of base money, and can affect the level of long-term interest rates, given a sufficient volume of intervention. The real issue is that neither of these factors is currently imposing a binding constraint on economic growth, so there is no benefit in relaxing them further. The Fed is pushing on a string.

## Toy Blocks

Certain economic equations and regularities make it tempting to assume that there are simple cause-effect relationships that would allow a policy maker to directly manipulate prices and output. While the Fed *can* control the monetary base, the behavior of prices and output is based on a whole range of factors outside of the Fed's control. Except at the shortest maturities, interest rates are also a function of factors well beyond monetary policy.

Analysts and even policy makers often ignore equilibrium, preferring to think only in terms of demand, or only in terms of supply. For example, it is widely believed that lower real interest rates will result in higher economic growth. But in fact, the historical correlation between real interest rates and GDP growth has been *positive* – on balance, higher real interest rates are associated with *higher* economic growth over the following year. This is because higher rates reflect strong demand for loans and an abundance of desirable investment projects. Of course, nobody would propose a policy of raising real interest rates to stimulate economic activity, because they would recognize that higher real interest rates were an *effect* of strong loan demand, and could not be used to *cause* it. Yet despite the fact that loan demand is weak at present, due to the lack of desirable investment projects and the desire to reduce debt loads (which has in turn contributed to keeping interest rates low), the Fed seems to believe that it can eliminate these problems simply by depressing interest rates further. Memo to Ben Bernanke: Loan demand is inelastic here, and for good reason. Whatever happened to thinking in terms of equilibrium?

Neither economic growth nor the demand for loans is a simple function of interest rates. If consumers wish to reduce their debt, and companies do not have a desirable menu of potential investments, there is little benefit in reducing interest rates by another percentage point, because the precise cost of borrowing is not the issue. The current thinking by the FOMC seems to treat individual economic actors as little, unthinking toy blocks that can be moved into the desired positions at will. Instead, our policy makers should be carefully examining the constraints and

interests that are important to people, and act in a way that responsibly addresses those constraints.

A good example of this "toy block" thinking is the notion of forcing individuals to spend more and save less by increasing people's expectations about inflation (which would drive real interest rates to negative levels). As I noted last week, if one examines economic history, one quickly discovers that just as lower nominal interest rates are associated with lower *monetary* velocity, negative real interest rates are associated with lower velocity of *commodities* (hoarding). Look at the price of gold since 1975. When real interest rates have been negative (even simply measured as the 3-month Treasury bill yield minus trailing annual CPI inflation), gold prices have appreciated at a 20.7% annual rate. In contrast, when real interest rates have been positive, gold has appreciated at just 2.1% annually. The tendency toward commodity hoarding is particularly strong when economic conditions are very weak and desirable options for real investment are not available. When real interest rates have been negative and the Purchasing Managers Index has been below 50, the XAU gold index has appreciated at an 85.7% annual rate, compared with a rate of just 0.1% when neither has been true. Despite these tendencies, investors should be aware that the volatility of gold stocks can often be intolerable, so finer methods of analysis are also essential.

Quantitative easing promises to have little effect except to provoke commodity hoarding, a decline in bond yields to levels that reflect nothing but risk premiums for maturity risk, and an expansion in stock valuations to levels that have rarely been sustained for long (the current Shiller P/E of 22 for the S&P 500 has typically been followed by 5- to 10-year total returns below 5% annually). The Fed is not helping the economy, it is encouraging a bubble in risky assets, and an increasingly unstable one at that. The Fed has now placed itself in the position where small changes in its announced policy could have disastrous effects on a whole range of financial markets. This is not sound economic thinking but misguided tinkering with the stability of the economy.

## **Implications for Policy**

In 1978, MIT economist Nathaniel Mass developed a framework for the liquidity trap based on microeconomic theory – rational decisions made at the level of individual consumers and firms. The economic dynamics resulting from the model he suggested seem strikingly familiar in the context of the recent economic downturn. They offer a useful way to think about the current economic environment and appropriate policy responses that might be taken.

"The theory revolves around a set of forces that for a period of time promote cumulative expansion of capital formation, but eventually lead to overexpansion of capital production capacity and then into a situation where excess capacity strongly counteracts expansionary monetary policies.

"The capital boom followed by depression runs much longer than the usual short-term business cycle, and is powerfully driven by capital investment interactions. *The weak impact of monetary stimulus on real activity arises because additional money has little force in stimulating*

*additional capital investment during a period of general overcapacity. Instead, money is withheld in idle balances when profitable investment opportunities are scarce."*

In one illustration of the model, Mass introduces a monetary stimulus much like what Alan Greenspan engineered following the 2000-2002 recession (which was also preceded by an unusually large buildup of excess capacity, leading to an investment-led downturn). Though Greenspan's easy-money policy didn't prompt a great deal of business investment, it did help to fuel the expansion in another form of investment, specifically housing. Mass describes the resulting economic dynamics:

"Following the monetary intervention, relatively easy money provides a greater incentive to order capital... But now the overcapacity that characterizes the peak in the production of capital goods reaches an even higher level than without the stimulus. This overcapacity eventually makes further investment even less attractive and causes the decline in capital output to proceed from a higher peak and at a faster pace. Due to persistent excess capital which cannot be reduced as fast as labor can be cut back to alleviate excess production, unemployment actually remains higher on the average following the drop in production."

In what reads today as a further warning against Bernanke-style quantitative easing, Mass observed:

"Even aggressive monetary intervention can do little to correct excess capital... Once excess capacity develops, the forces that previously led to aggressive expansion are almost played out. Efforts to prolong high investment can produce even more excess capital and lead to a more pronounced readjustment later."

Mass concluded his 1978 paper with an observation from economist Robert Gordon:

"Why was the recovery of the 1930's so slow and halting in the United States, and why did it stop so far short of full employment? We have seen that the trouble lay primarily in the lack of inducement to invest. Even with abnormally low interest rates, the economy was unable to generate a volume of investment high enough to raise aggregate demand to the full employment level."

I've generally been critical of Keynes' willingness to advocate government spending regardless of its quality, which focused too little on the long-term effects of diverting private resources to potentially unproductive uses. His remark that "In the long-run we are all dead" was a reflection of this indifference. Still, I do believe that fiscal responses *can* be useful in a protracted economic downturn, and can include projects such as public infrastructure, incentives for research and development, and investment incentives in sectors that are not burdened with overcapacity. Additional deficit spending is harmful when it fails to produce a stream of future output sufficient to service the debt, so the expected *productivity* of these projects is the essential consideration. Given present economic conditions, it appears clear that Keynes was right about the dangers of easy monetary policy when an economic downturn results from overcapacity. As I noted last week in [The Recklessness of Quantitative Easing](#), better options are available on the fiscal menu.

## London, The End Game, and Changes

As noted above, I am in London working with Jonathan Tepper on finishing *The End Game*. One never really finishes a book like this, as there are always things you come across that should be added. So sometime this weekend we will just quit. Editor Debra Englander will finally get another book out of me, having been patient for years.

I think it is a good book, but eventually the only opinions that will count will be yours and those of the rest of my closest friends. We have had a lot of feedback from reviewers, which has really helped. Martin Barnes of Bank Credit Analyst was particularly vicious, but he really made us do a lot more homework and think through some of our points.

I lost about a half day today with some kind of bug that kept me down. Guess that steak tartare was not a good idea. But I will work through the evening and get back on schedule.

There are changes coming in my business, beyond just our new web sites, which should be ready any day. We will also be adding new services and personnel to serve you better and to give me even more time to focus on research and writing, which is where my real added value is. I am excited about getting this book done and getting back to my “regular” routines. This has been an 800-pound gorilla, and I will be glad to kick it out of the room.

It is time to hit the send button and get back to editing the last few chapters. Have a great weekend! I know I will when I get back to Texas. It is #2 daughter Melissa’s birthday, and the party is always good.

Your impatient to get things changing analyst,

John Mauldin