“Growth takes place whenever a challenge evokes a successful response that, in turn, evokes a further and different challenge...a response that had been both an effective answer to the challenge that had called it forth and at the same time a fruitful mother of a new challenge requiring a different response.”

Arnold J. Toynbee

Apologists for monetary policy actions often resort to the straw man of posing a false choice between two alternatives for monetary policy—either that policy is completely effective or totally ineffective. This is not the crux of the debate. First, we should recognize that the breakdown in the credit system has diminished the impact of traditional monetary policy, conducted through open market operations aimed at altering the fed funds rate, to restart economic growth. Second, recent non-traditional monetary policy appears to be effective in the short run but may be counterproductive in the long run.

Problems about the Federal Reserve’s exit strategy are far more complex for private markets than the casual assurances that are given so freely by many popular commentators. First, the impact on market pricing and liquidity will likely be significant in those markets where the magnitude of Fed actions is very large relative to size of the markets—mortgage-backed securities (MBS) and asset-backed securities (ABS), for example are edging back to the narrow spreads that were associated with the excess credit problem in the first place. Second, it is not clear that inflation expectations are remaining stable as TIPS, long-term Treasury and Fed breakeven inflation rates are already moving up as investors are doubting whether the Fed will really be flexible in the opposite (tightening) direction by raising rates quickly if there is a rapid recovery in financial markets or upward shift in projections for future inflation. Third, contrary to policymaker assertions, many investors already doubt whether federal deficit estimates and expectations are anywhere near realistic. This calls into question both temporary and longer-term fiscal policy. Already, private

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* Paper based upon presentation to the San Francisco Association for Business Economics June 3, 2009.
The author would like to thank Kim Whelan and Adam York for their research assistance.
2 International Monetary Fund, Chapter 3, “From Recession to Recovery: How Soon and How Strong?”

This report is available on www.wachovia.com/economics and on Bloomberg at WBEC
deficit estimates are rising in anticipation that administration and Congressional sources will raise their mid-session deficit estimates. Finally, political emphasis on jobs and housing suggest that the political risk for investors is that inflation targets will be sacrificed in favor of goals for the real economy. With the passage of time, we believe the exit from easy monetary policy is becoming more expensive and more fraught with risks for investors.

Credit—Not Housing: A Model of the Breakdown in the Credit Cycle

Long before the collapse in the housing market, the global glut in savings was cited as a possible force that would lead to lower real interest rates. These low real rates were a concern at the time because of the possibility that they would lead to excessive risk taking and indeed, they appear to have done just that. An excess supply of capital, due to the global savings glut, generated an excess demand for goods financed by credit—housing and autos for example, that in turn led to an excess demand for labor in the construction and auto sector. Therefore we do not view the current economic difficulties as originating in a housing crisis but rather a credit crisis driven first by excess global liquidity. In fact, for some time now, many analysts have commented upon the sequence of price bubbles—dot.com and housing being two of the latest examples—that reflect the ongoing excess supply of global liquidity.

Phase I: Breakdown—Collapse in the Credit Market

By early 2005 subprime mortgage delinquency rates had already started to turn upward, and by mid-summer 2005 home price appreciation was peaking on a year-over-year basis (Figure 1). Meanwhile, aggregate consumer and residential loan delinquencies were clearly on the upswing by mid-2006 (Figure 2). Consumer credit risk had been under-priced; in our view, symptomatic of an excess supply of capital that was funneled into excess housing.

Credit deterioration also became apparent by 2006, as the 60-day-plus delinquencies on subprime adjustable rate mortgages for the 2005 ARM vintage had risen above the rates of delinquency of the 2004 vintage (Figure 3). The ultimate breakdown in the private credit system is evident in the collapse of securitization in the second half of 2007 and early 2008 (Figure 4).

Phase II: Adjustment

We would agree with Chairman Bernanke’s assessment that “Conditions in a number of financial markets have improved since earlier this year, likely reflecting both policy actions taken by the Federal Reserve and other agencies as well as the somewhat better economic outlook.” We would suggest that the improvement also reflects the hard efforts of many in the much-maligned private sector as well. As evidence of improvement, there has been a significant narrowing of the TED spread as well as average five-year CDS bank spreads (Figure 5 & Figure 6). The decline in the bank CDS spreads suggests greater confidence in the largest banks. No reliable CDS levels exist for the regional banks.

Credit Further Along the Yield and Credit Curve

Meanwhile, in the critical asset-backed and mortgage-backed markets there has also been marked improvement as spreads have significantly decreased (Figure 7 & Figure 8). For asset-backed (ABS) securities the Fed’s actions through the TALF facility have helped the financing of credit card and auto securities. Despite this success, our concerns remain that the Fed’s position as credit policeman in selected markets and to a varying degree in those markets, is creating distortions in asset pricing and credit availability. In particular, we note that the current 30-year MBS

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spread over the 10-year Treasury is as low as it was in the 2003-2006 period which has been decried as a period of overly easy credit and under-appreciation of risk.

The gains in the Mortgage Bankers Association index for mortgage applications for refinancing have been another benchmark for improvement. This index has risen over the last four months and suggests mortgage credit availability has improved. So far the Federal Reserve has purchased $430 billion of mortgage-backed securities. The spread of Fannie Mae issues over the 10-year Treasury has narrowed to one percent after peaking at 225 basis points in the fourth quarter of last year. This may be too far as this spread is below pre-crisis levels of 150 basis points.

Source: U.S. Department of Commerce and Wachovia

Improvement has also been unmistakable at the long end of the corporate financing markets as both Aaa and Baa Corporate bond spreads (Figure 9) have declined in recent weeks. Moreover, both high-yield debt issuance, shown below in Figure 10, and high-grade issuance, not shown, have picked up this year. Leveraged loan issuance is also up this year.

Source: U.S. Department of Commerce and Wachovia

Finally, financial adjustments have also appeared in improvements within the equity market. As illustrated in Figure 11, we can see the pick-up in initial public offerings. This improvement suggests that at least some investors are willing to take on investment risk even in an uncertain economic recovery.

Source: U.S. Department of Commerce and Wachovia
Phase III: Rebuilding Leading to Problems

In a number of ways the rebuilding of the credit markets is beginning to exhibit problems. First, the yield curve between 30-year and two-year Treasury debt (Figure 12) has steepened significantly. For some analysts, the steepening might be interpreted as driven by the improvement in investor confidence and thereby a decline in the value of the flight-to-safety premium. However, we are concerned that longer-maturity Treasuries may also be affected by the growing perception that “temporary” deficits may be increasingly permanent. Such high and permanent deficits suggest a rise in expected Treasury debt supply in the face of diminished flight-to-safety demand. Moreover, sustained high levels of federal debt issuance may have increased investor fears of monetization through monetary policy.

Ten-year Treasury benchmark yields bottomed on March 18, 2009 and have actually risen since the Federal Reserve announced a program for purchasing Treasury debt. As for inflation expectations, five-year forward TIPS bottomed in January at 50 basis points and have since risen to 1.90 percent. Calculations by the Federal Reserve of its measure of the inflation breakeven rate have risen and, on May 27th were up at 3.124 percent. Along these lines, investor focus has been on the ten year benchmark yield. Yet Federal Reserve purchases of $127 billion have included only $5 billion of 2018/2019 issuance or just four percent of Federal Reserve purchases. In contrast, ten percent of Fed purchases has been in the maturity range of 2020 or later and another $79 billion, or 62 percent, have been in the 2010-2014 maturity range.
Operationally, we believe the Fed had been an effective policeman as Fed purchases have favored the short end of the yield curve relative to the ten year area and, as a result, the yield curve between two- and ten-year maturities has risen.\textsuperscript{8}

Recent Federal Reserve operations have also included purchases of more than $400 billion of mortgage-backed securities with the potential to purchase at total of $1.25 trillion. The outcome of these purchases is that secondary mortgage spreads are now below pre-crisis levels (Figure 13). This brings into question whether the size of Fed purchases in this market is now distorting the market pricing of these instruments.

\textbf{Figure 12} \hspace{1cm} \textbf{Figure 13}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure12.png}
\caption{Steepness of Treasury Curve, 30s and 2s}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure13.png}
\caption{30-Year MBS Current Coupon}
\end{figure}

Source: U.S. Department of Commerce and Wachovia

Implications of recent Fed actions may also be appearing in the decline of the dollar (Figure 14). In an economy with flexible exchange rates and capital mobility, we would expect that an easy monetary policy would lead to a decline in the value of the currency.\textsuperscript{9} This issue is complicated further by the dependence on that global savings glut that we have written about above in this essay. As illustrated in Figure 15, foreign capital inflows have fallen dramatically for privately issued instruments. Treasury debt has found buyers in an era of safety concerns, but how much this demand will be there in the future remains a big question.

\textbf{Figure 14} \hspace{1cm} \textbf{Figure 15}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure14.png}
\caption{U.S. Trade Weighted Dollar Major Index}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure15.png}
\caption{Foreign Private Purchases of U.S. Securities}
\end{figure}

Source: U.S. Department of Commerce and Wachovia

\textsuperscript{8} The role as Federal Reserve as policeman to the credit markets and its possible distortions in market pricing was initially explored in my essay “What Keeps Us Up at Night?” Global Interdependence Center, Banque de France Conference, Paris France, March 25, 2009.

Implications for Investors
For investors, the economic recovery suggests opportunity but in our opinion there are three risks to consider—higher-than-anticipated inflation, rising interest rates and a weaker dollar. What makes investment policy so difficult today is that these are not three independent risks.

Over the last few weeks, we have seen capital markets react to continued credit easing by the Federal Reserve with a steeper yield curve and a declining dollar. Moreover, there is creeping suspicion that public policy is increasingly oriented to restoring the prior expansion conditions of excess consumer demand for durable goods/housing and autos financed by an excess supply of credit at low interest rates. Success in public policy, especially fiscal policy, is defined by jobs and not price stability. Therefore both domestic and foreign investors are concerned that even slightly higher inflation will be accepted by public policy makers in an attempt to provide a few more jobs. Such a tradeoff of inflation for jobs makes good politics but poor investing, in our view. While some commentators assert that the Federal Reserve has both the means and determination to raise interest rates as the economy recovers, we remain skeptical that the Fed will act in time to justify Treasury bond purchases at today’s yields. For an academic to assert that the Federal Reserve will quickly take back its easing is poor assurance for investors with real money at stake, in our opinion. The academic degree of certainty is a luxury few in the real world can afford. We remain bearish on Treasuries. Our basic expectation, as it has been since the beginning of the year, is that inflation will rise and the dollar will decline in value as the economic stimulus programs remain in place just a bit too long to be comfortable for investors.

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