Economic Brief

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Is a New Asset Bubble Emerging in Certain Markets?

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Some economists have argued that recent rallies in certain asset markets —most notably, commodities and emerging market equities — represent the emergence of a new bubble fueled by accommodative monetary policy and carry trade activity. There is evidence, though, that the rallies can be explained by strong economic fundamentals in these markets.

Recently several economists and analysts have cautioned that new asset price bubbles may be emerging in several markets worldwide. These warnings are sparked by the observance of rallies in several asset markets.

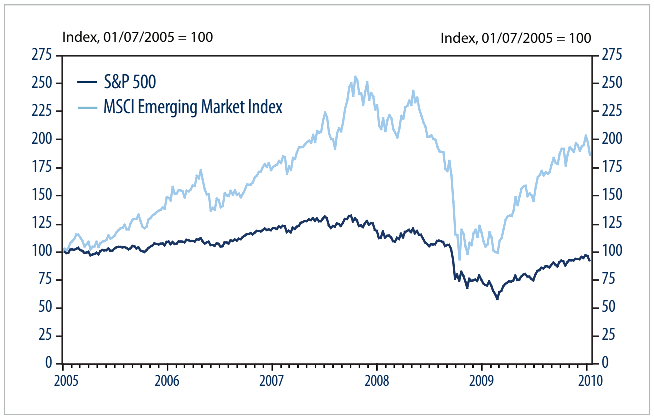
For example, there has been a rally in emerging equity markets and commodities. The MSCI Emerging Market Index, which tracks stock markets in developing economies, nearly doubled in 2009, and the Commodity Research Bureau's Metals Index more than doubled over the same period. These and related indexes can be seen in Figures 1 and 2. (Each series is presented as an index, with the start of 2005 set commonly as the base year to show their relative changes.)

There are some economic factors that may initially appear to have fueled these rallies. Most notably, monetary policy is accommodative in the United States due to both very low interest rates and quantitative easing. This means many developing nations also have pursued easy monetary policies since they officially or unofficially fix their currency to the dollar. Other developed countries, too, currently have easy monetary policies.

Additionally, the U.S. dollar has declined relative to several currencies, as can be seen in Figure 3 (also indexed to show relative change). As described below, some commentators have suggested that expectations of a declining dollar, combined with easy monetary policy, has heightened "carry trade" activity and as a result has contributed to these asset market rallies – and a new bubble. A bubble, in turn, is defined as a run-up in asset prices beyond the level supported by economic fundamentals. The dangerous implication is that an asset bubble will eventually burst, not only harming investors in those markets but also potentially spilling over into another negative shock to the overall economy.

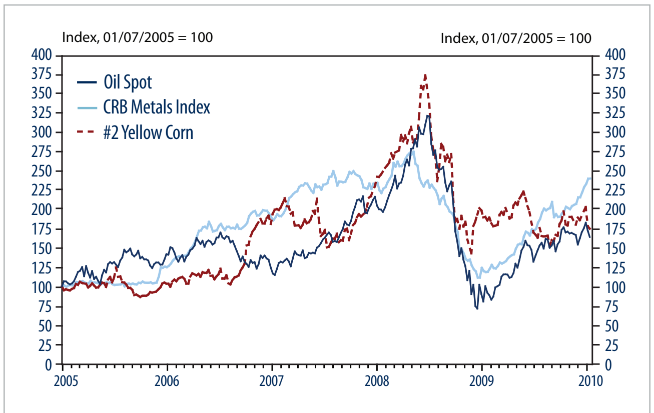
However, factors other than an emerging bubble — for example, improving macroeconomic conditions in line with economic recovery — might explain these asset market rallies. The purpose of this *Economic Brief* is not to provide quantitative evidence disproving the existence of an asset bubble in certain markets, but rather to posit

FIGURE 1: STOCK MARKET INDEXES



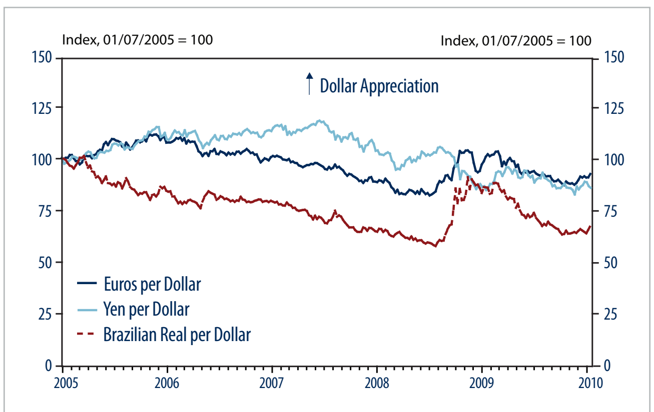
SOURCE: Bloomberg

FIGURE 2: COMMODITY PRICES



SOURCE: Bloomberg & Haver Analytics

FIGURE 3: EXCHANGE RATES



SOURCE: Bloomberg

some factors that could contribute to a fundamentals-based explanation for the recent rally in certain risky asset markets. First, however, we will further flesh out the arguments suggesting that a new bubble has emerged.

ARGUMENTS IN FAVOR OF A NEW BUBBLE

A representative argument for a new bubble was submitted by New York University economist Nouriel Roubini in November 2009.[1] His argument goes as follows: The near zero nominal interest rate in the United States, jointly with the expansion of the Fed's balance sheet, have created resources available to be lent. Some investors have taken advantage of those resources by borrowing in dollars at very low rates and investing in foreign assets, especially in emerging economies and commodities. The expected profits from this investment strategy have been magnified by the expectation of a weaker dollar: Once it comes time to pay off the dollar-denominated loans, the investors can repay them using dollars that are worth relatively less. In turn, this trading strategy – referred to as "shorting" the dollar – has itself contributed to the decline in the value of the dollar since investors must exchange dollars to purchase foreign-denominated assets.

The argument of Roubini and others is that this represents a bubble because the emerging markets and commodities rallies are fueled by easy money and the carry trade, rather than economic fundamentals. Under this view, several likely factors could cause this asset bubble to burst. After appreciating during the height of the financial crisis, the dollar steadily declined for most of 2009 but eventually will likely stabilize at some point. Stabilization of the dollar would reduce returns for investors with short dollar positions. Additionally, economic recovery in the United States will raise expectations of an interest rate increase. This would cause the dollar to appreciate (since higher interest rates raise the expected return of dollar-denominated assets, all else equal), and thus cause significant losses for investors short on the dollar.

Research has shown how a bubble fueled by low interest rates can exist under certain conditions. In a 2008 Chicago Fed working paper, economist Gadi Barlevy presents a model in which speculators rationally purchase assets at a price greater than their fundamental value (the expected dividend at maturity) because they expect to be able to sell the asset later at an even higher price.[2] Creditors have an incentive to fund this trading strategy because they expect to reap some of the reward. But for this to work, the risk-free interest rate (the cost of funds to creditors) can't be too high, or the creditors' expected profit would be reduced. Thus, the author's model implies that the Fed could eliminate the bubble by raising the risk-free interest rate. However, the author also points out that avoiding a bubble using this strategy still may not improve welfare since raising interest rates could be costly to society because of its effects on economic activity.

ALTERNATIVE EXPLANATIONS OF THE RALLY IN ASSET PRICES

Empirically, it is not unusual to observe asset price rallies after a crisis. In a 2009 book, economists Carmen Reinhart of the University of Maryland and Kenneth Rogoff of Harvard University examine financial crises over the past several centuries and demonstrate that equity prices tend to display relatively fast recoveries in the aftermath of a crisis.[3]

Economists seem to agree that there has been an increase in carry trade transactions, but there is not a consensus that this is necessarily creating a bubble. We suggest two fundamentals-based factors that could be at play. We focus on the markets that observers have suggested might be experiencing a bubble: emerging market equities and commodities.

One possible explanation is that prices of equities and commodities have been on a transition to a new equilibrium. The recovery in growth rates of emerging markets may warrant higher stock prices than the stock prices observed at the beginning of 2008. In addition, the recovery observed in developed countries could have boosted the demand for commodities, and thus their price. The introduction of uncertainty about the long-term consequences of the financial crisis, and the possibility that investors have been learning that the long-term consequences are not going to be as bad as initially forecasted, could explain why the adjustment to an equilibrium with high stock prices has been gradual instead of characterized by a sharp upward correction in prices. A decline in uncertainty and thus of risk compensation would work in a similar way – that is, it would generate an upward adjustment in asset prices.

It may be the case that investors have been learning that the crisis did not generate major structural problems in emerging economies. Such economies were resilient to the world's financial problems at first, but eventually they experienced contractions at the end of 2008 and the beginning of 2009. In part, the contractions were explained by declines in commodity prices and the reversal of capital inflows. A 2009 International Monetary Fund study mentions that the historically low current account and fiscal deficits and the high reserve levels in emerging market countries offered some protection against financial stress in advanced economies and limited the impact on the "real economy" (for example, reserves can be used to buffer the effects from a drop in capital inflows or to pay back sovereign debt and avoid a default).[4] It has been mentioned that reforms in the financial system in East Asian countries have also helped to reduce financial vulnerabilities. This apparent resilience of emerging market economies could explain the reversal in capital outflows and the fast recovery in equity values compared to what has been observed in developed countries.

Related to the previous point, the quantitative contribution that carry-trade transactions played in explaining the inflows of resources toward commodity and equity markets in emerging countries is not clear. The appreciation of the dollar and the decline in Treasury rates observed at the end of 2008 indicated a strong preference toward more cautious investment strategies. Thus, investors that purchased U.S. assets in the midst of the crisis last year and decided to unwind their positions in the last months did not need to engage in carry-trade transactions to finance the purchases of foreign assets since they were already in dollars due to the "flight to safety." Additionally, despite the slight appreciation of the dollar over the last roughly two months, commodity and emerging market prices have not collapsed.

POLICY IMPLICATIONS OF BUBBLE CONJECTURES

There is intense debate within the economics profession about whether it is typically possible to know in real time, outside of lucky guesses, when asset prices have outstripped fundamentals. The argument against the ability to identify bubbles in real time is that if any information existed on which to gauge that the asset price run-up is not justified, markets would quickly uncover the information and it would, in fact, temper the asset's price. This does not mean that asset prices cannot become overvalued – simply that it will be quite hard to judge when a bubble has emerged and how large it is.

Furthermore, even if economists and policymakers were quite confident of the emergence of an asset bubble, it is unclear what would be the optimal policy response. One possibility would be to use monetary policy, but the effectiveness of using such a blunt instrument is unclear, as the paper by Barlevy discusses. A potential alternative is that banking supervision and regulation policy could be used to combat bubbles, as has been argued recently by Federal Reserve Chairman Ben Bernanke.[5] Whether policymakers should respond to seemingly non-fundamental rallies in asset markets – and if so, how – remains an important area of economic research. ▪

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ENDNOTES

[1] Roubini, Nouriel. "Mother of All Carry Trades Faces an Inevitable Bust." *Financial Times*, November 1, 2009.

[2] Barlevy, Gadi."A Leverage-based Model of Speculative Bubbles." Federal Reserve Bank of Chicago Working Paper No. 2008-01, January 3, 2008.

[3] Reinhart, Carmen M., and Kenneth S. Rogoff. *This Time is Different: Eight Centuries of Financial Folly*. Princeton, N.J.: Princeton University Press, 2009.

[4] International Monetary Fund. "World Economic Outlook." April 2009.

[5] Bernanke, Ben S. "Monetary Policy and the Housing Bubble." Speech at the Annual Meeting of the American Economic Association, January 3, 2010, Atlanta, Georgia.

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