

## Here's A Surprise From Equity Supplies

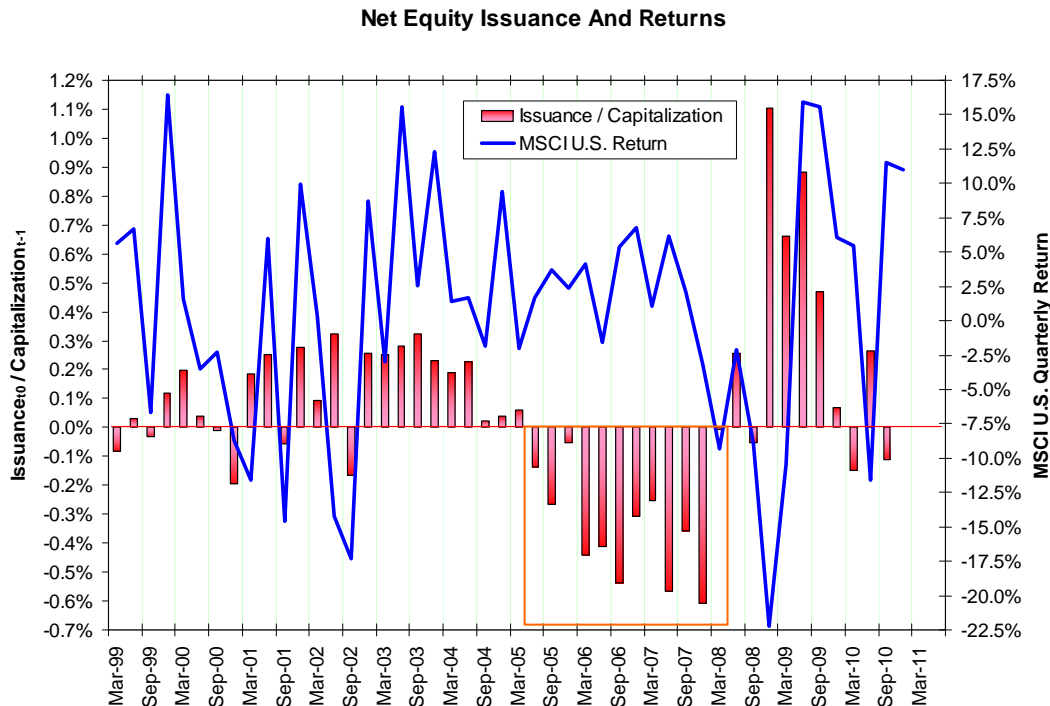
One of the principal differences between stocks and commodities is how they react to higher or lower prices. If we raise the price for a commodity, we should expect new supplies to become economic and demand growth to slow or even turn negative. This is why the long-term inflation-adjusted price trend for nearly all commodity prices is lower; each short-term move higher in price induces long-term changes in the supply/demand balance. In addition, if the price trend of process input was not lower, it would imply users were unable to increase their productivity or would be unable to engage in substitution. Just as the cemeteries are filled with indispensable people, economic history is filled with formerly indispensable commodities. When was the last time you stocked-up at the whale oil two-for-one sale?

For completeness, if we lower the price for a commodity, producers often sell below the marginal cost of production just to make sufficient revenue to cover fixed costs. In the case of state-owned producers, an increasingly common situation, production is viewed as a source of government revenue for operations, for employment and for the occasional questionable bank account located elsewhere.

Stocks are very different. If we raise the price of a stock, the issuing company may be tempted to do a secondary offering at the risk of diluting its existing shareholders, or it may offer its existing shareholders rights, but the supply impact often comes from an unrelated source. Initial public offerings tend to rise during bull markets as private holders seek to sell into rising prices. Bear markets do not induce this behavior. The late stages of a bear market and bull markets often see actual shrinkage in equity supply from share buybacks, mergers & acquisitions and leveraged buyouts.

### Issuance And Shrinkage

Let's examine whether the net issuance or shrinkage in equities as measured by the Federal Reserve in its quarterly Flow of Funds report have any impact on the course of market cycles in stocks.

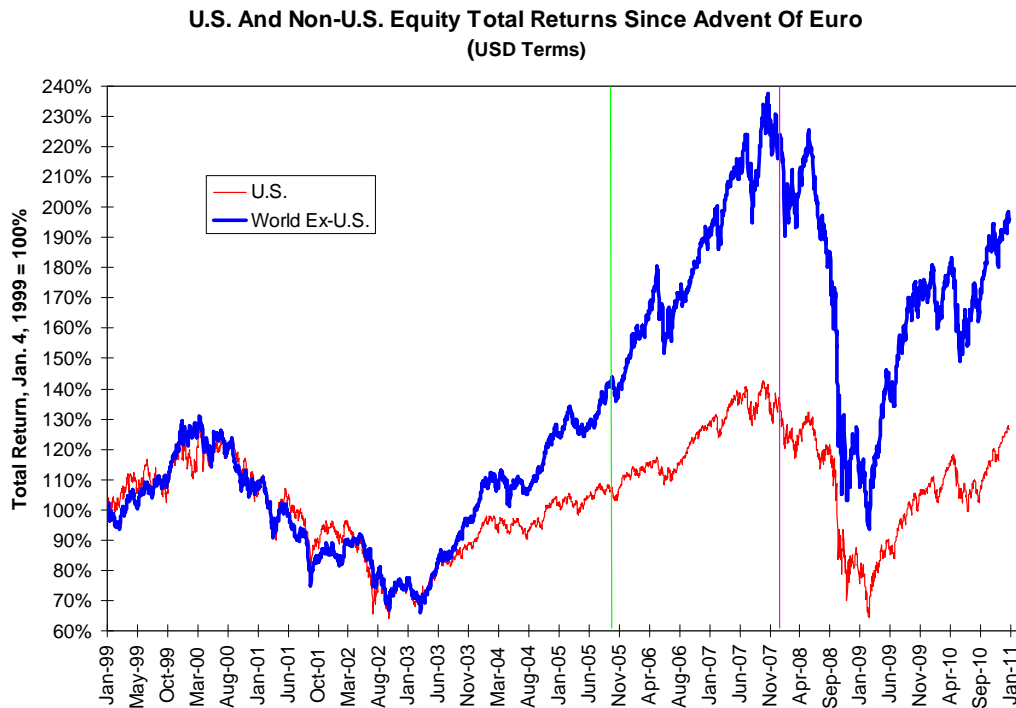


The net change in issuance is displayed as a percentage of the previous quarter's market capitalization. Note the 2005:Q3-2007:Q4 period, highlighted with an orange rectangle, where the U.S. equity supply was shrinking during the mid-decade bull market and credit bubble. Private equity shops were able to get financing to take all manner of firms private, whereupon they would seek to improve their performance by leveraging the acquired firm to the hilt, firing everyone, paying themselves a special dividend and hoping to make a profit by taking the firm public again one day. While America's best-and-brightest were doing this, China started making everything we bought except for toxic mortgages; you are free to sort the rest of the story out for yourself.

Stock market returns were positive in the U.S. during this period; however, they were positive as well for much of the preceding periods and during the 2009:Q2-2010:Q43 period, 2010:Q2 excepted. This hardly suggests a shrinking supply of equity is much of a factor in propelling stock market returns higher; moreover, the two quarters with the highest net issuance, 2008:Q4 and 2009:Q2 saw returns of -22.22 percent and 15.89 percent, respectively. We can deduce changes in net equity supply are irrelevant as determinants of return.

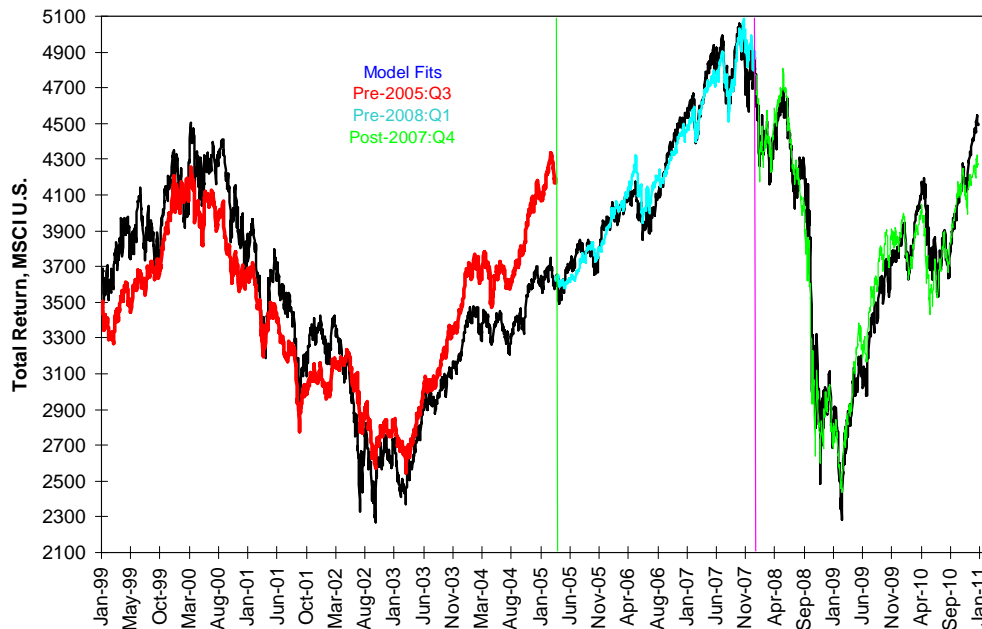
### Global Normalization

Now let's add another layer to the argument: Equity shrinkage in the U.S. cannot account for American performance vis-à-vis performance in the world ex-U.S. If we overlay the MSCI indices for the U.S. and World Ex-U.S., both re-indexed to the January 4, 1999 advent of the euro, we see how the world outside of the U.S. outperformed enormously during the 2005:Q3-2007:Q4 period, marked by the green and magenta lines.



We can now split the data sample into three parts, and regress U.S. performance on non-U.S. performance; the fitted values of the model are shown in red, turquoise and green lines against the MSCI total return index shown in black.

**MSCI U.S. Total Returns As A Function of  
MSCI World Ex-U.S. Total Returns**



If the quality of fit for the second two periods looks better than that for the first, your eyes are not deceiving you; it is. The standard error of estimate for the first period was 265.2; it dropped to 86.2 during the second period and rose to 116.9 in the third period, which given the massive moves during the 2008-2009 collapse and rebound is unsurprising. In statistical terms, the probabilities U.S. and non-U.S. returns were equivalent were 70 percent in the first period, 36.5 percent in the second period and 92.2 percent in the third period. The probabilities the variances were equal were zero percent in the first period, 10.6 percent in the second period and 0.8 percent in the third period.

What is the economic interpretation of this? The equity shrinkage era, the second period, saw the greatest underperformance but the most similar variance. Investors were unable to meet their return goals in the U.S., but the equity shrinkage pushed the risk of the U.S. up toward non-U.S. levels. There are two views of equity investment, one as a return vehicle bought for the dividend stream and capital appreciation and another for corporate control. The private equity boom of the second period pushed equity ownership in the U.S. toward the model of pricing for corporate control. That is, of course, far riskier than pricing a stock for income and capital appreciation, and those who held stock for a quick flip were burned very badly during the subsequent bear market. Worse, the exit strategy for private equity disappeared; they are still waiting to sell IPOs on their holdings.

Public ownership, the whole concept behind selling shares to investors, allows entrepreneurs to raise capital and distribute their risk to others. Privatization does the opposite; it concentrates risk in the hands of a few and creates a forward supply of equity to be sold at a later date. As distribution of risk is a social good – think of how we have mandated ownership of health insurance for this reason – concentration of risk and return must be a negative to society. Concentrations of ownership are common in feudal societies, none of which have been able to compete with capitalist societies for wealth creation and political stability.

A return to a bull market with equity shrinkage is a return to this concentration of risk and to the creation of a new class of too-big-to-fail players. While investors' instincts are to cheer rising prices, they should be fearful instead of the effects of risk concentration and of the supply of equity to be issued at a later date. A bull market for the wrong reasons never ends well; how often do we wish to endure this lesson?

