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## STRATEGIES; At Least One Kind of Shock Is Good for Some Stocks

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I PREDICT that within a few years, Morningstar, the mutual fund rating service, will face a typesetting challenge. I base my forecast on a new study that, if it becomes as widely accepted as I believe it will be, may persuade Morningstar to add a third dimension to its famous "style box," transforming it into a "style cube."

Morningstar's style box, which looks like an enclosed tick-tack-toe grid, is used to classify equity mutual funds along two axes -- market capitalization (small, medium or large) and valuation (value, blend and growth). It is based on research assessing the performance of stocks according to where they fall along these two dimensions, which are referred to as styles.

The new study, however, by Lubos Pastor of the University of Chicago and Robert Stambaugh of the Wharton School of the University of Pennsylvania, has discovered the basis for a new investing style that may be just as important as the current two. Note carefully, however, that you should not criticize Morningstar for not yet incorporating the discovery. Only in mid-July did this study even begin circulating among academics (<http://finance.wharton.upenn.edu/stambaugh/liquidity.pdf>).

The study focused on the stock market's overall liquidity. That focus might seem odd, because liquidity is usually defined at the level of individual stocks, generally referring to the ability to trade large quantities of that stock quickly, at low cost, without moving its price. But Professor Pastor and Professor Stambaugh were able to demonstrate that certain stocks were much more sensitive than others to changes in the market's overall liquidity.

The phenomenon is well illustrated by what happens during so-called liquidity shocks -- events like the 1987 market crash or the 1998 tumble of Long Term Capital Management. Liquidity shrinks sharply during these events, and not just for individual companies but for the market as a whole. In the wake of liquidity shocks, some stocks plummet while others barely budge.

It turns out that, over the long term, the stocks that are most vulnerable to liquidity shocks outperform those that are least vulnerable to them. From the beginning of 1966 to the end of 1999, the professors found, the most vulnerable stocks outperformed the most immune ones by an annual average of 7.5 percent. Moreover, this performance difference could not be shown in Morningstar's existing style box; it held up regardless of whether a stock was small or large cap, growth or value.

Economics 101 helps us to understand this liquidity-related style: To induce investors to own stocks that plummet during liquidity shocks, they must be rewarded with higher long-term returns. Otherwise, they would prefer stocks that are less vulnerable.

Though the two professors found that no single historical characteristic was a perfect predictor of how a stock would react to liquidity shocks, one of the useful indicators was how it reacts to large "buy" or "sell" orders. They found that if a stock tended to reverse direction the day after such orders, then more often than not it was sensitive to liquidity shocks. In contrast, a stock was relatively immune to liquidity shocks if it was less subject to such daily reversals.

But be careful not to confuse a stock's vulnerability to liquidity shocks with its volatility -- a measure of the fluctuation in its price. Such vulnerability is but one of many causes of volatility. In fact, many stocks are relatively immune to liquidity shocks but nonetheless quite volatile.

We can hope that over the next several years, Wall Street's research departments will start reporting stocks' sensitivity to liquidity shocks. If such data is made widely available, individual investors will be able to increase their long-term returns simply by filling their portfolios with the stocks that are most sensitive. But even if liquidity data is not so widely disseminated, the study shows clearly that Wall Street professionals need to add this variable to their analytical models.

As usual, however, there is no free lunch. Without a willingness to hold such stocks through liquidity shocks, during which there will be huge short-term casualties, investors will not be able to realize the stocks' long-term potential.