Market Jitters

BY HELEN FESSENDEN

An axiom for stock investors is to overcome emotional swings — whether panic or euphoria — and focus on the long term. Research has shown that sticking to steady, long-term bets will tend to bring higher yields than following the herd in and out of the market. Or, as Warren Buffett has put it, "Ignore the chatter, keep your costs minimal, and invest in stocks as you would a farm."

For some people, however, this advice is hard to follow in practice, especially in times of extraordinary tumult, such as the 2008 financial crisis. But who is most likely to sell off stocks when markets hit turbulence? Researchers at the University of Michigan, Ohio State University, and the Internal Revenue Service (IRS) try to answer this question in a recent National Bureau of Economic Research paper that analyzes millions of tax returns from 2008 and 2009. Notably, they find that certain investors were indeed more likely to shed stocks during the crisis than others — those who were very high income and those who were over 60.

"Who Sold During the Crash of 2008-9? Evidence from Tax-Return Data on Daily Sales of Stock."
Jeffrey Hoopes, Patrick Langetieg, Stefan Nagel, Daniel Reck, Joel Slemrod, Bryan Stuart.
National Bureau of Economic Research Working Paper No. 22209, April 2016.

To select their sample, the authors analyze millions of anonymized tax returns from 2008 and 2009 and match them with IRS information on asset sales and demographic profiles. The transactions came to about $6.8 trillion in stock sold during those two years. The authors then group the taxpayers according to adjusted gross income (averaged from 2000-2007, before the effects of the crisis and the stock sell-off skewed incomes) to separate the very high earners from the merely affluent and the middle class.

The researchers also employ a well-known metric, the VIX index, to measure market volatility. The VIX, which is based on data from options contracts, is widely viewed as a reliable leading indicator of turbulence. As a case in point, the VIX was stable through mid-2008 but then spiked in September and October, when Lehman Brothers collapsed, Congress took up TARP legislation, and the Fed took extraordinary measures to stabilize the economy. It rose from 0.23 on Sept. 8 to 0.8 on Oct. 27, peaked at 0.81 on Nov. 20, and only then started to decline. As it happens, between those dates, the Dow Jones Industrial Average fell from 11,510 to its lowest close of the year, 7,552.

So how did stock sales match up with the market gyrations? The authors find that for each 10.5 percentage point increase in the VIX in 2008-2009, sales volume among the top 0.1 percent of earners was 3.3 percent higher than that of the bottom 75 percent on a day-to-day basis. This effect was even more pronounced over a 10-day lag, at 3.8 percent. In the 10 days following the collapse of Lehman Brothers on Sept. 15, 2008, this came to about $1.7 billion in gross stock sales. The study also finds this effect for the high-income groups below the 99.9th percentile, but at steadily weakening levels.

In short, the higher your income, the more likely you were to shed stocks. But what about age? There, too, the researchers find a relationship: Older investors were more sensitive than younger ones to volatility. With each 10.5 percentage point increase in the VIX, subjects over 60 were 3.14 percent more likely to sell than those under 40, although the effect dropped slightly over a 10-day lag to 3.04 percent. But notably, other demographic factors, such as sex, marital status, or geographic location, played no role. The specific sectors of the stocks also didn't matter.

The authors are careful to note that this study looks just at gross, rather than net, sales. Because IRS returns show only the value of stocks a taxpayer sold rather than those bought and sold, the authors could use only the former. But they believe this omission is unlikely to make a difference in their findings because other research has shown a strong correlation between the gross and net sales. According to most of those estimates, each $1 in gross sales translates into roughly $0.33 in net sales.

The authors make clear their findings don't explain the motivations for selling; they just point to who is doing the selling. But they offer several suggestions to frame further research. One is that wealthier investors may track the market more closely and be more sensitive to swings; this group also may believe it has deeper knowledge of investing and therefore will try to outperform the market. For their part, older investors near or in retirement may well be more risk-averse, and selling stock is one way for them to reallocate their assets to more stable investments. Finally, the authors note that other studies have suggested younger and less wealthy investors are less likely to shed stocks that have accumulated losses, known as the "disposition effect." Whatever the case, this study opens up an avenue for future research by emphasizing just how varied investor behavior really is and how different classes of investors react to market stress. **EF**