Study says unexplained jumps or drops in a stock's price bode ill for the long run

October 13 2014, by Ken Mcguffin

What should investors make of sudden jumps or drops in stock prices that occur for no apparent reason? The phenomenon is hardly unusual: focusing on extreme positive and negative price shocks, University of Toronto accounting professors find that about half are unaccompanied by earnings surprises or any other news that would account for them.

The research, in the current issue of the American Accounting Association journal, The Accounting Review, goes on to reveal that the effect of these price shocks is likely to be more than temporary. For stocks that experience big unexplained drops, cumulative returns over the following year are about 6 per cent less than those realized by shares of a control group of firms. And, paradoxically, the results for stocks that enjoy big unexplained jumps are considerably worse—returns about 13 per cent below that of controls.

In the words of the new study, "price shocks are followed by significant and long-lasting abnormal returns [that] are asymmetric—return continuation following extreme negative price shocks and return reversal following extreme positive shocks."

As for "price shocks with news disclosures, compared to those without accompanying news, [they] are followed by weaker downward drifts. This evidence suggests that reduction of information uncertainty weakens disagreement-induced overpricing." Still, even here, the stock returns lag over the course of the following year compared to controls—by about 4 per cent in the case of negative shocks and 7.5 per cent in the case of positive shocks.

In sum, "individuals who chase stocks that have recent large price shocks are likely to suffer substantial losses," concludes the study by Hai Lu, an associate professor of finance, and Kevin Wang, an associate professor of finance, at the University of Toronto's Rotman School of Management and Xiaolu Wang, a doctoral recipient of that school who is now at Iowa State University.

The study is particularly surprising in two ways. As the authors observe, its focus on price shocks that are unaccompanied by news events challenges conventional beliefs that "no-news price shocks have no clear informational content and represent noise to investors. From this perspective, such shocks have no implications for future returns and are, therefore, unimportant… [W]e show that no-news price shocks are important because they are followed by significant and long-lasting negative abnormal returns."

In addition, the paper's findings seem to contravene prior research which suggests that long-term price drifts in the aftermath of earnings surprises tend to be in the same direction as the surprises—upward for positive surprises and downward for negative ones.

What, then, to make of the marked downward drift following positive price shocks? "Our results suggest that sudden price shocks that occur for no apparent reason are a sign of disagreement among investors about an affected company's fundamental value," comments Prof. Lu. "Because of constraints on short-selling, with the great majority of mutual funds shunning it entirely, the pessimism characteristic of shorts tends not to be fully expressed in markets. A positive shock, then, may be a kind of bubble, which, as bubbles tend to do, deflates in the course of time, turning an unexplained jump in price into a long-term investment loss."

The professors gauged short-selling constraints by the number of mutual funds that owned company shares. Since most funds have charters that prohibit short-selling, those with negative opinions of a stock sit on the sidelines, their pessimistic valuations not registered in the stock's price and their absence in large numbers begetting price inflation in the run-up to shocks. Thus, downward post-shock drifts are most pronounced where fund ownership is low. Returns of stocks in the bottom third of mutual-fund ownership lagged those of controls by 12 per cent one year after positive shocks, while those in the top third trailed controls by only 4 per cent. The lag difference was equally striking following negative price shocks—6.9 per cent versus approximately zero.

The paper's findings emerge from an analysis of stock price shocks on the NYSE, AMEX, and NASDAQ over the 27-year period 1980 through 2006.

Prof. Lu and colleagues found, as anticipated, that price shocks were associated with upsurges in unexpected volume of daily trading, which was on average 43 per cent higher during the three-day shock than during the 50-day pre-shock period. Research has equated unexpected volume (as distinct from volume attributable to liquidity factors or to sheer price-change magnitude) with disagreement among investors. Over the course of the year following shocks, unexpected volume receded as investors reached a consensus on the value of firms.

Interestingly, convergence was not principally due to news disclosures over this time. The professors "do not find evidence that the opinion divergence at price shocks is resolved by subsequent news events," a finding consistent with earlier research showing that "the absence of news reports and the passage of time often contain important information, and investors incorporate this information into their valuation gradually."

What accounts for convergence? While conceding that the exact cause is still unclear, the authors surmise that "one possible explanation is that diligent information searches by investors lead to gradual uncertainty resolution. Alternatively, initial investor optimism may fade when patience runs out in the absence of exciting news or a price run-up."

Entitled "Price Shocks, News Disclosures, and Asymmetric Drifts," the study is in the September/October issue of The Accounting Review, a peer-review journal published six times a year by the American Accounting Association, a worldwide organization devoted to excellence in accounting education, research and practice. Other journals published by the AAA and its specialty sections include Accounting Horizons, Issues in Accounting Education, Behavioral Research in Accounting, Journal of Management Accounting Research, Auditing: A Journal of Practice & Theory, and The Journal of the American Taxation Association.

Provided by University of Toronto