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NOISE, NOT KNOWLEDGE, DRIVES THE STOCK MARKET

FAYETTEVILLE, Ark. – “Noise traders” – investors who act on feelings rather than facts – fuel stock market volatility but increase profit potential for more informed knowledge traders, according to University of Arkansas researcher Wayne Lee.

Lee holds the Alice L. Walton Chair in Finance and is finance department chairman in the Walton College of Business Administration. He conducted his study along with Christine Jiang of Kent State University and Daniel Indro of Penn State. He presented their findings recently at the annual meeting of the Financial Management Association International.

Noise traders are individual investors who run the gamut from day traders – who try to “beat the odds” by trading on margins – to individuals with a small stock holdings trading online for a few dollars per transaction to executives who contact their brokers frequently to make major shifts in their portfolio. Although they may feel fully informed because they subscribe to an advisory service or follow the stock market, noise traders actually base their trading on sentiment rather than careful research.

The researchers found that noise traders actually make it possible to profit from knowledge trading. Because their misperceptions increase price uncertainty, noise traders crowd out risk-averse informed investors. Consequently, the larger the proportion of noise trading, the higher will be the expected return for knowledgeable investors, according to Lee.
“In a perfectly informed market — where everyone trades based on knowledge – there is a paradox,” Lee explained. “If the market is fully informed, there is no advantage to acquiring additional knowledge. In fact, acquiring knowledge has a cost that would be impossible to recover in a fully informed market.”

But, in reality, there is an advantage to acquiring knowledge in the current market. The market is not fully informed because many participants are noise traders. It is these uninformed traders that allow knowledge-based traders to recover the cost of acquiring knowledge and make a profit.

Noise traders base investments on sentiment – how they feel about a company or if they are bullish or bearish about the market, for example. Lee found that most conventional methods for calculating market volatility do not take noise traders into account.

“An accurate volatility estimate is important in determining the prices of many financial instruments including options,” Lee explained. “It is also crucial in mapping out portfolio strategies over time, since diversification decisions hinge on risk. Leaving sentiment out is likely to lead to inaccurate forecasts of asset prices and suboptimal portfolio decisions.”

Lee also points to research indicating that noise trading diminishes with income and noise traders tend to be from low-income households. A high participation of noise traders in an equity market results in lower participation by knowledge traders and negative future returns.

Noise traders tend to overreact to good and bad news and adjust their holdings of risky assets based on changes in their bullish or bearish sentiments. This misperception causes asset prices to be either too high or too low.

“Moreover, noise traders usually have poor market timing (buy high and sell low) due to their inclination to transact together with other noise traders,” said Lee. “Their capital losses from poor market timing are larger the greater their misperceptions.”

The researchers looked at three market indices – the Dow Jones Industrial Average (DJIA), Standard and Poor’s 500 (S&P) and NASDAQ – for a period from January 6, 1973, through October 6, 1995. DJIA and S&P are “blue chip stocks” with a high level of institutional investment, while NASDAQ is predominantly small-capitalization stocks.

They found that the direction of change in sentiment from pessimistic (bearish) to optimistic (bullish) matters more than the magnitude of that change. For both DJIA and S&P, investors becoming more bullish decrease volatility. However, for NASDAQ, increases in both bullish and
bearish sentiments are important. This supports their theory that noise trader risk is more important in markets where institutional holdings are relatively low.

“Individual investors are not only the primary readers of independent investment advisory newsletters, but also the predominant shareholders of small capitalization stocks,” Lee said. “Sentiment and noise trading should affect the volatility of the NASDAQ most.”

However, he points out that they found a positive relation between shifts in sentiment and excess returns across all three indices. This indicates that sentiment is not an individual investor phenomenon that affects only small capitalization stocks.