## An AI-driven stock market bubble is here. Panic selling is next



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SPECIAL TO THE GLOBE AND MAIL PUBLISHED AUGUST 1, 2023 UPDATED AUGUST 2, 2023

"What the wise do at the beginning, fools do in the end," according to a quote from the Oracle of Omaha, Warren Buffett.

And who seem to be the fools?

A recent paper by researchers at Harvard University and the Shanghai Stock Exchange found that retail investors are those fools. Examining the Chinese market bubble of 2015, the researchers show that the "number of new retail investors entering the market during the bubble peak was 7,100 per cent larger than the number of entering during the pre-bubble period."

As famed economist Charles Kindleberger, who researched and published extensively on the topic of bubbles, explained, a typical bubble starts with good fundamental news. But prices then decouple from fundamentals and a bubble follows, driven by speculative trading by new entrants into the market who fear missing out. Eventually, it all ends in panic selling.

In Prof. Kindleberger's words, "A follow-the-leader process develops as households see that others are profiting from speculative purchases. There is nothing as disturbing to one's well-being and judgement as to see a friend get rich."

This bring me to artificial intelligence. Interest in AI is exploding in Google searches. There are four times as many searches for AI as for "recession," and more than 20 times as many as searches for "bear market." A recession and a bear market seem to have fallen off the radar of investors these days.

This can explain the renewed investor interest in the stock market, especially in the seven largest U.S. tech stocks. Between the October, 2022, low of the S&P 500 Index, and the end of June, the index gained 24 per cent. But if you excluded the seven largest tech stocks, which were up more than 55 per cent, the S&P 500 was mostly flat.

Tech companies have been booming based on optimism and related euphoria that global productivity will soar with new technologies such as AI, and the belief that inflation and interest rates are heading down. These developments are the "good fundamental news" Prof. Kindleberger talked about.

But now, this rush to AI-related stocks has started to benefit stocks in general and the mood on the Street. That has led to a total about-face in CNN's investor fear and greed index, which currently sits at 80, a level indicating extreme greed.

Nobel Prize winning experimental economist Vernon Smith has demonstrated via experiments that investors are normally overconfident momentum traders who chase winners and avoid losers. According to his experiments, this process eventually leads to bubbles and market crashes.

Currently, large-cap U.S. tech stocks are trading at extremely high valuations.

Extreme optimism is also apparent in the appreciation of house prices, which in the United States has surpassed income growth for the first time since the Great Recession of 2008-09. No need to mention Canada, where the growth in house prices has steadily exceeded income growth since 2000.

Finally, and most worrisome of all, is that while historically the Nasdaq 100 Index and the combined G3 central bank balance sheet (the U.S. Federal Reserve, the European Central Bank and the Bank of Japan) have been highly correlated, moving up and down in sync, in the past 12 months, the correlation has reversed.

The combined G3 central bank balance sheet has moved down sharply (indicating reduced central bank liquidity injection into the system), but the Nasdaq 100 has moved up. This means one of two things: Either the Nasdaq 100 is overvalued, or the G3 central bank balance sheet (i.e. liquidity) will start moving up again soon.

Given the commitment of central banks to rein in inflation, chances are that the former is the case.

Quant funds were doing much of stock trading earlier this year, and their trading was driven by fundamental news. But recently, fear of missing out on AI has incentivized retail investors to enter the market en masse, as reported by VandaTrack.

According to the Harvard and Shanghai researchers mentioned above, over the entire bubble period they looked at, retail investors accounted for 78 per cent of the volatility of stock

returns. In the expansion phase, trading by retail investors newly entering the market explained 43 per cent of the volatility of stock returns.

In contributing to stock market volatility over the bubble period, retail investors usually do it in the wrong direction. They are the worst market timers, as another study by BlackRock clearly showed, or the fools as per the quoted research paper's findings.

Having been through the first and second steps of Prof. Kidleberger's description of a bubble formation and its deflation, what is left now is step three, that of panic selling.

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