



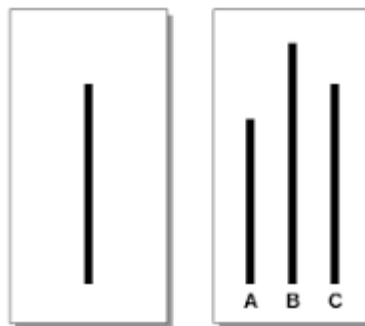
2020 3rd Quarter Stock Market Commentary

SHEEPLE

“A pack of lemmings looks like a group of rugged individualists compared with Wall Street when it gets a concept in its teeth.”

– Warren Buffett

In 1951 psychologist Solomon Asch performed a now famous experiment involving students at Swarthmore College. Students were given the task of stating which of the lines labeled A, B or C were the same length as the target line shown on the left. Unsurprisingly, when placed in a room alone, the students answered correctly more than 99% of the time.



But something interesting happened when the experiment was repeated in a room with seven other students who had agreed in advance to give a coordinated, but incorrect answer. In any given trial of the experiment, one third conformed with the majority selection, even though it was obviously wrong. Over twelve trials, fully 75% of the participants conformed at least once. When interviewed later, some of the participants admitted to deliberately answering incorrectly so as to fit in with the group (normative influence) while others went along because they believed the group to be better informed than they were (informational influence).

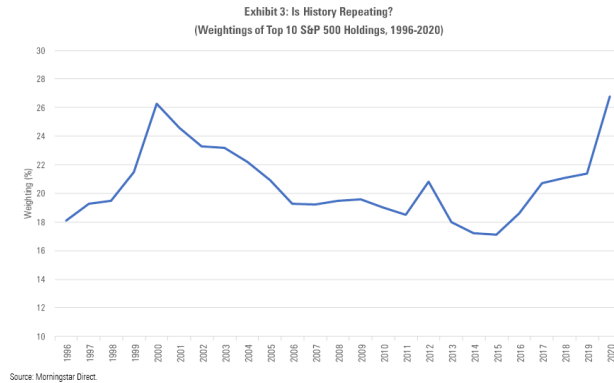
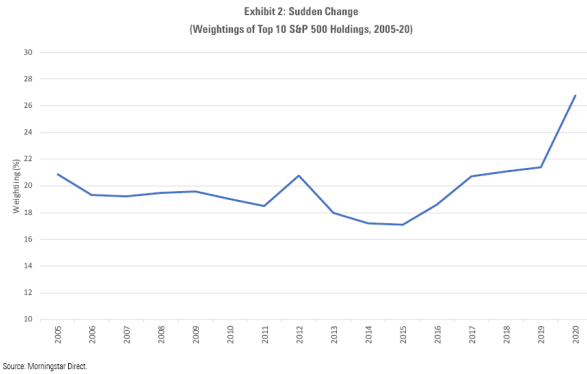
Over the subsequent years, Asch's seminal research has received criticism for the experiment's design – there was a small sample size, all the participants were male, all were roughly the same age, and so on. But these critiques did little to invalidate the basic conclusion: we are hard-wired

to conform to the attitudes, beliefs and behaviors of our peers. Literally thousands of experiments have supported this thesis. In 2008 Professor Jens Krause and Dr. John Dyer of Leeds University instructed a group of study participants to roam randomly in a huge hall without talking to anyone else. They told a few participants exactly where to walk. They found that if as few as 5% of the people walked purposefully, the other 95% soon started to follow them. This is often referred to as herding, and the fact that people frequently behave like sheep has given rise to the portmanteau “sheeple,” the title of our essay. But it is not necessary to set up controlled experiments to observe this behavior. What else can explain the occurrence of panic buying of pet rocks or cabbage patch kids?

Of particular interest to investors is herding behavior in financial markets. For example, there have been numerous sudden bursts of panic selling in the stock market over the years in which there was no economic event to trigger the collapse. In October, 1987, the stock market declined over several days, causing computer programs to generate sell orders in a strategy called portfolio insurance. On Monday, October 22, individual investors simultaneously decided that the decline signaled deeper problems, and they started selling indiscriminately. The market fell a stunning 22.6% in a single day. On May 6, 2010, a series of 19,000 spoofed orders spooked market participants, causing a wave of selling that drove the market down 1,000 points in only 36 minutes. This has been dubbed the “flash crash,” and prices quickly recovered when it was realized that it was simply driven by fear, rather than fundamentals.

Recently, the market has been exhibiting herd behavior to the upside, as investors are plowing money into a small number of technology companies. They are aggressively purchasing stocks just because they are moving up, a strategy known as momentum investing. Individuals who shunned shares of Tesla a year ago when they sold for \$350 (before a 5:1 split) are eager to buy them at \$2,100. Perhaps struggling retailers who cannot match the aggressive pricing of Amazon and Walmart should take note of this predilection and adopt the slogan “Why pay less when you can pay more?”

Of particular importance to investors are the stocks of five behemoths which have come to dominate the major market indices, especially the S&P 500: Amazon, Apple, Alphabet (formerly Google), Facebook and Microsoft. In the left-hand chart below, we have shown the percentage of the S&P 500 accounted for by its ten largest holdings (the six largest are all tech stocks). Since 2006 this percentage was reasonably stable near 20%, but this year it has spiked higher since the pandemic. The graph to the right shows the same data, but over a longer time horizon. It is apparent that this high degree of concentration in a small number of technology companies has actually occurred once before, in 2000. How did that work out?



After these charts were prepared the concentration became even more extreme, with the five stocks listed above exceeding 25% of the S&P 500. According to Goldman Sachs analysts, this was the highest concentration in at least 30 years. At the peak of the tech bubble the top 5 accounted for a much smaller 18% of the index. It has since slipped to roughly 23%.

Remarkably, following the crowd can produce superior returns in the short term. All financial markets - stocks, bonds, commodities and currencies - exhibit near-term price momentum. If an investor had adopted the strategy of buying stocks of companies once they became one of the ten largest, they would have outperformed the broad market by 0.7% for the next year. Longer term, though, the data is not nearly as encouraging. Over the five years after joining the top-ten club these same companies tend to lag by 1.1% per year. They do even worse over the subsequent ten years, trailing by 1.5% annually.

It is simply difficult for mega-cap stocks to stay on top. Their sheer size makes it hard to compound their sales enough to justify their valuations. At one time, Exxon, General Electric, IBM, Philip Morris, AT&T and Cisco each held the title of the world's most valuable company. None of these companies has been able to sustain the growth that propelled them to the top.

Of course, momentum investing does not require that investors buy only the largest companies. (It just so happens that recently the best performers have been the largest companies.) It is a strategy in which investors buy the stocks which have performed the best relative to the broad market over some pre-determined time period, usually three or six months, and then hold them for a similar time. Then they must redeploy the funds into the next set of market leaders. Quantitative investment manager AQR Capital Management has published extensively on this subject (see *The Case for Momentum Investing*) and found that it does deliver superior returns. (They found superior results for value investing and small-cap investing, too.) Interestingly, though, stocks which outperformed the market over five-year periods were found to lag the market over the subsequent five years. Momentum investing is inherently a short-term oriented strategy. As a result, transaction costs tend to be well above average, and gains are almost always taxed at ordinary income rates, rather than lower capital gains rates. It is worth noting that of the mutual funds which have the word "momentum" in their name, not a single one has outperformed its benchmark since inception. The translation from theory to practice has proven to be quite difficult.

Momentum investing can certainly play a role in overall portfolio construction. Because it often performs well in periods when other strategies are lagging, it can be useful as a diversification tool, just as exposure to real estate or commodities can. Plus, it can be appealing to many people to own some of whatever everyone else is talking about. But it requires a constant re-shuffling of portfolio holdings to jettison stocks to re-allocate the funds into other holdings with stronger relative performance. It is only appropriate for investors with a high tolerance for paying taxes. For us, it is more compelling to buy what is inexpensive. After all, if you want to lead the orchestra, it is necessary to turn your back on the crowd.