Letter on the Economy

## What A Stock Index Doesn’t Tell You

In the investment world, an index is a hypothetical portfolio representing a segment of the financial market. Familiar index names include Dow Jones Industrials, S\&P 500, and Nasdaq Composite. Indexes can be useful in representing sectors within the broader market; however, they are limited and can be somewhat deceptive. Here, we explore recent market behavior through the lens of an index and show why it is important to stick to proven drivers of return.

Many common indexes, including the S\&P 500, are market-cap weighted, meaning individual stocks are weighted within the index based on the ir company value. Lately, a few U.S. companies have become unusually large relative to the rest of the companies in the U.S. Because of this, these indexes are currently dominated by a few mega companies. As of July, the top 9 companies in the S\&P 500 represent $27 \%$ of its value. ${ }^{1}$ In the NASDAQ Composite, which tracks 2,500 companies, the top 5 companies represent $34 \%$ of its value. ${ }^{1}$ This concentration is so vast that in July, NASDAQ adjusted how they weight companies within one of their indexes, the NASDAQ-100. ${ }^{2}$

Increasingly, these indexes are representing a slim segment of the market instead of the sector they are meant to model. These indexes now move to the beat of a few high-flying companies due to the ir cap-weighting structure. How is this a problem? For one, it can lead an investor to misjudge the performance of an entire market sector. Or worse, it could encourage an investor to "cherry pick" those top holdings in an index and bet on a few, high-flying individual stocks. In either case, investors may not be diversifying as much as they think, increasing their portfolio risk.

When a company grows so rapidly that it ranks among largest in the U.S. stock market, its investment return can be impressive. But chasing big, hot stocks is risky. History shows that not long after joining the top 10 largest companies, as measured by market cap, these stocks on average lag the market. ${ }^{3}$

## Average Annualized Outperformance Before and After First Year in Top 10 Largest U.S. Stocks ${ }^{3}$



As shown at left, from 1927 to 2022 the average annualized return in the three years before a stock joins the Top 10 is more than $25 \%$ higher than the general market. In the 3 years after joining the Top 10, these stocks, on average, underperform the market, and the gap increases 5 and 10 years out. ${ }^{3}$

Part of the explanation is that these mega stocks, which are usually growth stocks, feature high prices relative to earnings (P/E). High P/E levels have never held up over long periods, meaning either the company must follow through with sustained, high growth, or the share price will eventually fall.

In 2022, we saw this play out with steep declines for growth stocks after strong gains the previous year. Most of today's mega-grow th stocks fall into the tech and communications sectors. After these two hot sectors returned $33 \%$ and $21 \%$ in 2021, they returned $-30 \%$ and $-40 \%$ respectively in 2022 . ${ }^{4}$

The year 2022 demonstrated how quickly performance can change even for companies that appeared immune to market forces. This is a pattern that has played out throughout history. Twenty years ago, the largest company in the world was General Electric, long believed to be unstoppable, and the most popular new technology was provided by TiV o. Today, General Electric ranks $99^{\text {th }}$ in value among global companies with a market cap of $\$ 118$ billion. ${ }^{8} \mathrm{TiVo}$ is a business unit within Xperi, a small software company valued at $\$ 418$ million. ${ }^{8}$

High P/E tech companies are even more susceptible to steep declines. What is considered a high P/E? The historical average corporate stock P/E is near 17, so companies with P/E's above 80 are high risk. A P/E of 80 means that investors believe so strongly in the growth prospects that they will pay 80 times a company's annual profit, even if it is paying no earnings to shareholders yet (zero dividend). Some of the largest companies in the S\&P 500, such as Tesla, Amazon and NVDIA, were all above a P/E level of 80 this past quarter.

Other tech and communications companies once sporting P/E's above 80 while dominating their respective industries include the familiar names of AOL, AT\&T, Cisco, and Yahoo! ${ }^{5}$ These all suffered spectacular crashes when investors' unrealistic growth expectations were eventually unmet.

Countless other brilliant tech-giant innovators fell off the map completely, such as Digital Equipment Corp (minicomputer), Sperry Rand (Univac, first computer), Wang (computers), B urroughs (first calculator), Palm (PalmPilot), Vitesse (semiconductors), JDS Uniphase (networks), Broadvision (software), Maxton (storage drives), and Xerox (first copier). ${ }^{5}$ They also dominated in the ir heyday. What eventually trips these behemoths? Often, the culprits are new technologies (Palm, TiVo), competition (AOL, Yahoo!), and regulation (AT\&T).
> "Fundamental rule of investing: never buy stocks, especially large-cap stocks, selling at hefty $P / E$ premiums to the general market."

- Jeremy Seigel, Professor Emeritus at the Wharton School of Business, The Future for Investors ${ }^{5}$

Unlike growth stocks, where trading is based on potential for a distant earnings stream, value stocks feature lower stock prices relative to earnings. Value stocks have similarly gone through periods of both extreme over- and underperformance in recent years, a reminder that the short term can be unpredictable.

The two-and-a-half years from July 2020 to December 2022, was one of the best periods for value stocks ever, where value beat growth by an annualized $22.1 \%$ (see chart at top of following page). The three-year period just prior to this, from July 2017 through July 2020, was historically one of the worst for value stocks, underperforming growth stocks by an annualized $20.7 \%$. ${ }^{6}$ Investors deterred by the rough 3 -year stretch and drawn to the over-performance of notable growth stocks leading the S\&P 500 may have missed out on the sudden, strong return of the value premium in recent years.

Relative Performance of Value verses Growth Stocks in Three Periods (1926-2022, 2017-2020 and 2020-2022) ${ }^{6}$


At Sharper Granite, we tilt portfolios toward proven, long-term drivers of return, like the value premium. The chart below shows how value stocks have outperformed growth stocks in the long run, despite the short-term bumps. From July 1926 through December 2022, value stocks have outperformed growth stocks by an average of $4.4 \%$ per year. ${ }^{7}$

## Difference in Return for Value Stocks minus Growth Stocks in U.S. Markets, 1927-2022 ${ }^{7}$



The recent changes in the overall market, especially that of the relative performances of value and growth funds, were not signaled by the S\&P 500 or any index for that matter. Future performance of the biggest stocks is not obvious when looking at a stock index. Indexes cannot tell you where to invest, what to invest in or when to change your strategy. By sticking with a strategy centered on proven drivers of return, such as value and low $\mathrm{P} / \mathrm{E}$ ratios, disciplined investors will be positioned for the changes ahead, whenever they occur.

## Notes and Acknow ledgements:

1. Slickcharts, S\&P 500 Index, September 2023
2. "The Nasdaq-100 Is Undergoing a Special Rebalance,"NASDAQ, Motley Fool, July 17, 2023
3. "Think Twice About Chasing the Biggest Stocks," Dimensional Fund Advisors, July 2023
4. S\&P Tech Index, S\&PCommunications Index returns with dividends added, 2021 and 2022
5. The Future for Investors, Jeremy Siegel, Professor Emeritus of Finance, University of Pennsylvania, 2004
6. "The Value ofDiscipline in Value Investing," Dimensional Fund Advisors, April 2023
7. "When It's Value vs Growth, History is On Value's Side," Dimensional Fund Advisors, May 2023
8. S\&P sector indexes, MSCI international indexes, Yahoo! Finance valuations ofGeneral Electric and Xperi, September 30, 2023
