ALGER

Market Concentration

ARE YOU CONCENTRATING TOO MUCH?

Equity market capitalization is more concentrated now than it has been in over half a century, creating important implications for investors. In this short paper, we delve into the evolution of current market concentration and drivers of this dynamic, as well as its impact on company valuations and portfolio management. We also explore what we believe are important drivers that may propel new and growing companies to become the next market leaders.

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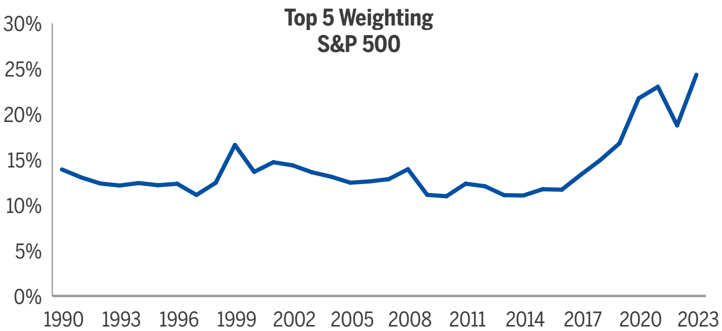
A Historical Perspective

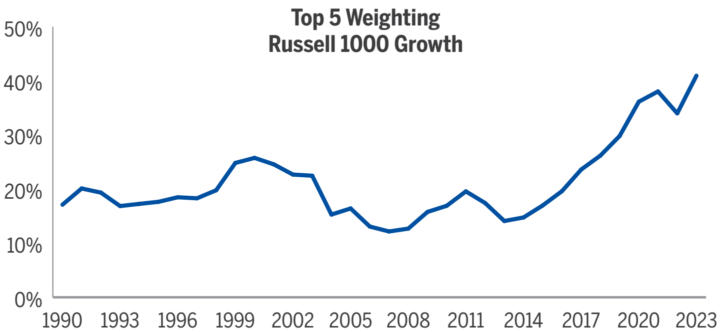
Concentration within major equity market indices is at a 50 year high. The top five companies in the S&P 500 comprise approximately one-quarter of the index (see Figure 1). This is much higher than the 14% average since 1990. Within the Russell 1000 Growth Index, the market concentration is even more stark – the top five largest companies comprise over 40% of the index, nearly double the 21% average since 1990 (see Figure 2).

The last time the stock market was this concentrated was in the early 1970s. This was the era of the Nifty Fifty, which was a time period when investors assigned very high multiples to many of the largest companies in the U.S. equity market. These stocks traded at an average price-to-earnings ratio (P/E) that was more than double that of the S&P 500. However, with the benefit of hindsight, we know that these stocks with lofty multiples were actually undervalued relative to the stock market in 1970 and only 5-10% overvalued at their peak in 1972, according to Jeremy Siegel's analysis.[1] How can stocks with premium multiples be undervalued? Their earnings growth must be faster than the market, which is what Siegel observed. In the next nearly quarter century, the Nifty Fifty grew their earnings approximately double that of the S&P 500.

Do the largest stocks of today have the potential to produce strong future fundamentals, much like the Nifty Fifty did, and thereby justify their premium valuation?

Figure 1 and Figure 2: **Market Concentration Is at Multi-Decade Highs**





Source: FactSet as of December 2023.

Today's Big Businesses Are Strong Businesses

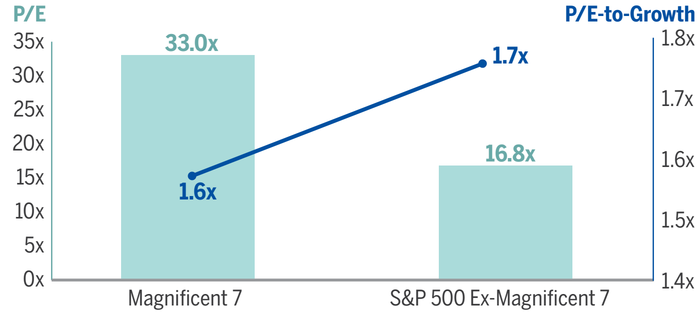
A significant driver of the largest companies in America becoming such a large share of the U.S. stock market is their fundamental success. In the past decade, the top five weighted stocks in the S&P 500 have grown their share of earnings more than 30%—from under 12% to over 15%. But that is only part of the story. These large companies today have much better business economics than their cousins of decades past. Take AT&T, for example, which was a top five S&P 500 weighting in each decade from 1930 to 1990. While it was a dominant business, AT&T reported only about 3-5% return on assets. In fact, all of the top five S&P 500 constituents in 1990 had return on assets of 8% or lower. This pales in comparison to Apple, Microsoft, or Google's return on assets today, which ranges from the teens to the mid-20 percent range. To put it in simpler terms, in 1990 AT&T generated approximately $320,000 in revenue per employee in today's dollars. By contrast, today Apple generates nearly $2.4 million in revenue per employee or almost seven times more than AT&T did in 1990, adjusted for inflation.

Generating stronger return on capital should imply a higher P/E, all else equal. In fact, the Magnificent 7 trade at more than a 70% P/E premium to the rest of the S&P 500, boosting the overall P/E on the index by more than two points.[2] This higher valuation helps increase market capitalization and translates into larger index weightings. Despite the higher P/E multiples, these stocks are still cheaper than the rest of the S&P 500 on a P/E-to-Growth multiple (PEG), which adjusts P/E for forecasted consensus growth estimates (see Figure 3).

Impact on Portfolio Management

Such intense concentration in market indices has a profound effect on many investors' portfolios, whether or not they invest directly in these benchmarks. For active managers, the weightings of the largest stocks have made it difficult, if not impossible, to overweight these companies and still comply with the "diversification" rule. Under that rule, mutual funds must keep the proportion of their portfolio's holdings with weightings of more than 5% to no more than one-quarter of the overall fund.[3] With Apple and Microsoft each more than 12% of the Russell 1000 Growth index, it is easy to see how overweighting the

Figure 3: **The Magnificent 7's Valuation is Reasonable When Looking at P/E-to-Growth**



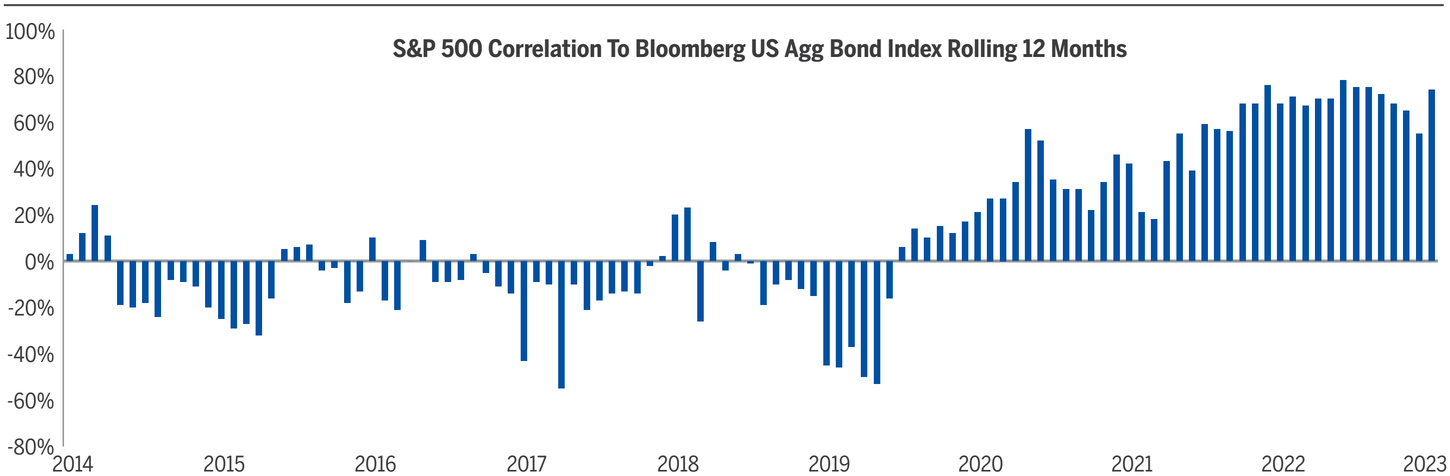
Source: FactSet and Alger analysis. Data as of October 2023. Magnificent 7 includes Apple, Microsoft, Amazon, Nvidia, Tesla, Alphabet, and MetaPlatforms.

largest constituents would cause a manager to run afoul of the diversification rule. As a result, most large cap active managers are underweight the biggest companies, which hurts relative performance if these mega caps outperform, as they have in recent years.

Another issue is that the handful of mega-cap stocks drive returns for the indices. This means that as their weighting grows, whatever influences the returns of these stocks will more greatly impact the returns of the indices. Of course, many of these stocks are in the Information Technology sector. As of the end of November 2023, technology stocks accounted for 28% and 43% of the S&P 500 and Russell 1000 Growth indices, respectively. Therefore, an index like the S&P 500 now acts more like the Information Technology sector than it did a decade ago when the sector was less than 13% of the index and certainly more than 1990 when the sector had just a 6% weighting.

It isn't just sector concentration that may lead to changes in return characteristics but factor exposure as well. Many of the mega-cap stocks, such as Apple and Microsoft, are more growth oriented and have negative correlations to interest rates. This is in stark contrast to other stocks such as Exxon Mobil or General Motors (two companies that have been in the top 5 of the S&P 500 many times in the past), which have positive correlations to rates. This dynamic may be one of the drivers behind the increasing correlation of the S&P 500 and bonds (see Figure 4).

Figure 4: **Is High Equities and Bond Correlation Driven by More Growth Oriented Stocks?**



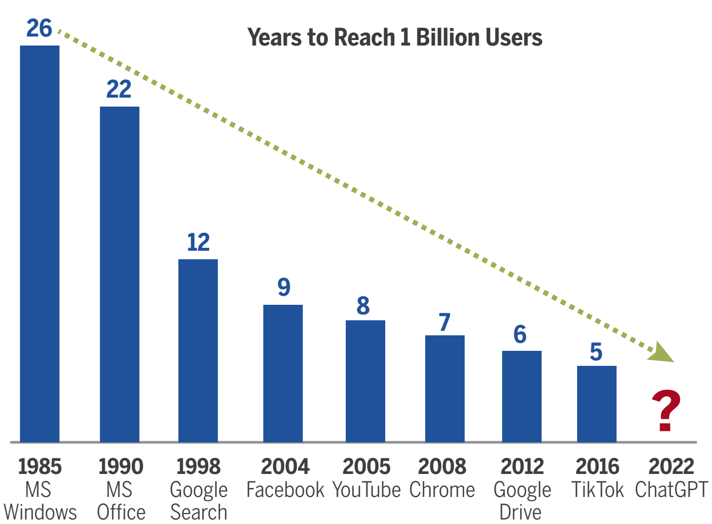
Source: FactSet as of October 2023. Correlation is a statistical measure that shows how two variables are related to each other.

An Opportunity for Investors?

While fantastic profitability and strong growth are good reasons that a handful of mega-cap stocks dominate equity indices today, the last 50 years of data shows that it is unlikely that concentration will increase much more.

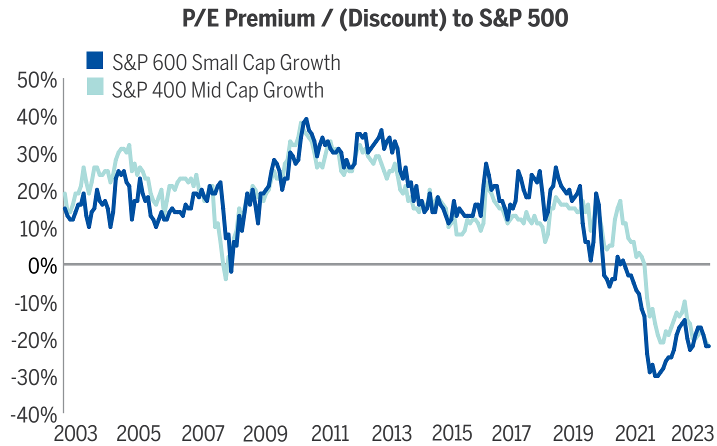
Furthermore, the era of companies persistently holding a top 5 or 10 position in index weightings over decades, like AT&T was able to do, is probably behind us. That is because while the profitability and return on capital of companies is higher than ever, the period for which they earn those high returns, their competitive advantage period, is shrinking. In the late 1970s, companies in the S&P 500 used to have an average tenure of 30-35 years; today it is closer to 20 years and likely to fall in the future.[4] We believe this is because the pace of innovation is accelerating. For example, the speed at which companies can scale up and disrupt industries is increasing (see Figure 5). Possibly the biggest driver of future change, artificial intelligence (AI), is growing faster than previous general-purpose technologies such as the computer. Data shows that AI is doubling its training computation, a key driver of intelligence, every four months, which is much faster than the two years that Moore's Law has accurately forecasted with regard to transistors on computer chips.

Figure 5: **New Products and Services Have Diffused Through Society Faster Due to Innovation**



Source: Asymco, Visual Capitalist, company disclosures, Alger estimates.
Investing in innovation is not without risk and there is no guarantee that investme research and development will result in a company gaining market share or achiev enhanced revenue.

Figure 6: **: Small and Mid Cap Stocks Trading at a Historic Discount to Large Cap Stocks**



Source: FactSet as of November 2023.

This faster pace of change and shorter competitive advantage periods may make room for new companies to ascend to the top of the index weighting charts. While that does not necessarily assure lower levels of concentration, the next crop of market leaders may not be able to dominate to the same extent that the present ones do.

If change is accelerating, it may make new and upcoming companies that can become the leaders of tomorrow even more attractive. Importantly, these small and mid-cap growth companies are historically inexpensive (see Figure 6). If some of these companies do go on to challenge the old guard of mega-cap companies in the years to come, it could prove to be quite an opportunity for investors.

Examining Your Portfolio's Concentration

With equity market capitalization more concentrated than it has been in more than 50 years, is now the time to examine your portfolio's concentration? You may not be concentrating too much in the Magnificent 7 or mega-cap technology stocks, but you may want to explore other areas of the market capitalization spectrum.

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Director of Market Strategy

[1] Jeremy Siegel, "Valuing Growth Stocks: Revisiting the Nifty Fifty," AAII Journal, October 1998. The analysis defines value with respect to market returns over the period December 1970–August 1998 such that a fairly valued portfolio would show the same return as the S&P 500 over this time period, while an overvalued portfolio would underperform the index, and an undervalued portfolio would outperform the index.

[2] Based on Alger's analysis of FactSet data. Note that the Magnificent 7 include Apple, Amazon, Alphabet, Nvidia, Meta, Microsoft and Tesla.

[3] The calculation is based on cost rather than market value.

[4] S. Patrick Viguerie, Ned Calder, and Brian Hindo, "Innosight 2021 Corporate Longevity Forecast," May 2021.

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