



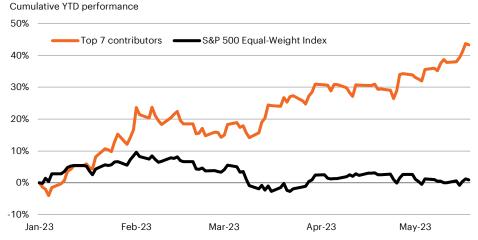
Equities

Concentration issues: A look at the top-heavy U.S. equity market

The U.S. stock market is concentrated in a small number of stocks to a degree it has not been in roughly four decades. While the performance of this cohort has driven stellar gains for U.S. indexes over the last ten years, high concentration now presents a problem for investors going forward.

Despite a strong start to 2023 for U.S. equity indexes, there remains an air of uncertainty around the outlook for risk assets. One reason for the apprehension is likely the narrow nature of the returns; 88% of gains in the S&P 500 YTD can be attributed to seven of the largest stocks in the index. Outside these megacap names, market performance looks much weaker, especially in cyclical industries. This type of perplexing and challenging investing environment is an inevitable consequence of a market that is highly concentrated in a few stocks, especially when those stocks share common traits. In this note, we will quantify the extent of U.S. equity market concentration, compare today's backdrop to that of previous concentrated markets and discuss the significant implications for equity investors. Our view is that while concentration has worked to investors' benefit in 2023, this period should be taken as a warning the strategies employed to generate strong gains over the past deacde will not be the same as those needed in the coming period.

2023 gains have been powered by the megacaps



Source: Bloomberg Finance, L.P., as of May 19, 2023. Top seven contributors to return in 2023 through May 19 are AAPL, MSFT, NVDA, GOOG, AMZN, META, and TSLA. The above is a market-cap-weighted index of those seven stocks.

Key takeaways

- Gains over the first five months of 2023 were overwhelmingly driven by a few large stocks.¹
- Concentration in U.S. equity markets has risen sharply since 2015, with the top 10 of the S&P 500 now comprising 30% of total index market cap.²
- The cash flow of these stocks is impressive, but their relative valuations look historically expensive.
- An extended period of low and declining interest rates has delivered a market concentrated in stocks that benefit from this macro environment.
- We believe investors should be proactive in adjusting their strategies to reflect the increased risk from concentration.

Sorry for the weight

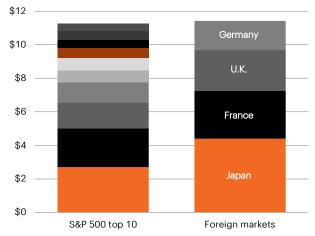
Today's U.S. equity market is more concentrated than at any point since the mid-1970s. The top 10 stocks in the S&P 500—2% of total companies in the index—comprise 30% of the overall index market capitalization. This represents a drastic increase since 2015, when the top 10 stocks comprised only 17.8% of the overall index, which approached the lowest level of concentration over the past seven decades. The outperformance of the megacap stocks that today populate the market's upper echelon was the defining characteristic of global equity markets over the past eight years, helping to drive massive U.S. regional outperformance and ultimately delivering the current level of concentration.

U.S. market concentration near 40-year high



Given that periods of elevated U.S. market concentration are generally preceded by U.S. outperformance against the rest of the world, they are also usually characterized by a higher U.S. share of global equity value. Today is no different—the U.S. comprises roughly 42% of overall global equity market cap, a share that is on par with highs from the mid-1970s and the late-1990s. Of course, the U.S. economy represents only about 20% of global GDP, much lower than in the 1970s, illustrating the extent to which globalization has driven the growth in U.S. megacaps. To put the weight of the top of the U.S. market into perspective, the 10 largest stocks in the S&P 500 together hold an aggregate market cap of more than \$11 trillion, which is about equal to the total value of the stock markets of the U.K., Japan, Germany and France—combined.¹

Aggregate market cap (\$ trillions)



Source: Bloomberg Finance, L.P., as of May 19, 2023. Top 10 stocks in S&P 500 are, in order: AAPL, MSFT, GOOG, AMZN, NVDA, BRK, META, UNH, TSLA, XOM. Regoinal markets represented by MSCI UK Index, MSCI Japan Index, MSCI Germany Index, and MSCI France Index.

There are myriad factors that have combined to create today's environment. On the fundamental side, these companies are mostly among the most profitable in the world, many having capitalized on one or more of the transformative technology trends of the past three decades. We must also acknowledge the contribution of the macro environment. Globalization allowed firms to shed costs and access a global consumer base. It also contributed to an era of sluggish domestic GDP growth and ultra-low interest rates, conditions that massively boosted the relative appeal of the megacaps' impressive FCF generation and growth profiles. Investors were willing to pay up for earnings growth in a world where that was a scarce commodity, and low interest rates gave investors the confidence to assign higher valuations. Ultimately, the key question is whether durable changes are looming to the macro conditions that made this level of concentration possible.

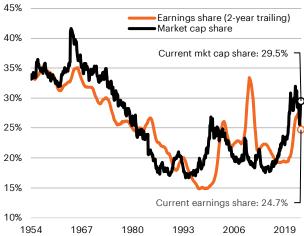
Not a bubble, but certainly no bargain

The last time the U.S. market experienced an extended increase in concentration was the late 1990s amid the dot-com bubble. While there are similarities between the two periods—mainly, the dominance of technology firms—there are also important differences. The top 10 stocks' share of total S&P 500 earnings had fallen to its lowest level in modern history (15%) in the mid-1990s, just as the market cap of the top 10 began to soar. Today's top 10 stocks have contributed around a quarter of the index's earnings—still below their market cap share,

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but certainly a less concerning gap.² Additionally, the overall free cash flow and earnings generation of the market today is much higher than in the late 1990s, meaning today's megacaps contribute a larger share of a much larger earnings pie.

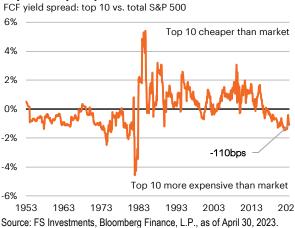
Top 10 share of S&P 500 earnings and market cap



Source: FS Investments, Bloomberg Finance, L.P., as of April 30, 2023.

Just because there is more fundamental substance underpinning today's largest companies does not mean they are attractively priced. The top 10 stocks in the S&P 500 are currently valued at a 3% free cash flow yield, well below the yield on the 10-year Treasury and not far from a two-decade low set in 2021. For much of the past four decades, the top 10 stocks have carried a higher free cash flow yield than that of the market overall, suggesting a skepticism that the largest firms' impressive free cash flow generation would be durable long term. No such skepticism is priced in today; the 3% FCF yield sits 110 bps below that of the market, a historically expensive reading. This valuation premium feels particularly high given the elevated level of interest rates.²

Top 10 hold pricey valuations



On one hand, the top 10 stocks today largely have incredibly impressive free cash flow generation, which supports their dominance and sets this environment apart from the dot-com era. On the other hand, the valuations for the top 10 appear stretched relative to the rest of the market. Considering the move higher in interest rates and the sensitivity of the top 10 stocks to moves in yields, one might have expected their valuation premium to narrow, but the opposite has happened. This suggests to us there is skepticism among investors that the macro environment is undergoing any secular change at all. It also suggests growing fears around the fate of the economic cycle. Today's market environment is indicative of the challenges of investing in a concentrated market, where a small cohort of stocks holds so much sway. We will explore that further, as well as how we believe investors should respond.

Concentration: A gift, now a curse?

There is no way around it: The historic levels of equity concentration present today make for a challenging investing environment. While we do not believe there is any definitive limit to the level of market concentration, we do believe there is a limit. Addressable markets are only so big, the global economy is only growing so quickly and regulation is a constant threat for the world's largest firms.

In hindsight, investing in the S&P 500 in 2015—when concentration was near an all-time low—was clearly a bet with risks skewed toward the upside. Not only did an investor get exposure to a well-diversified (read: unconcentrated) index, but they were able to passively ride the cohort that would become today's dominant stocks as they pushed the index higher. Today's investing environment looks completely different to us. Investing a dollar in the S&P 500 today implies a concentrated bet on a small group of stocks whose relative valuations are elevated from a historical standpoint. In other words, the starting point has materially changed, and the risks are much more two-sided.

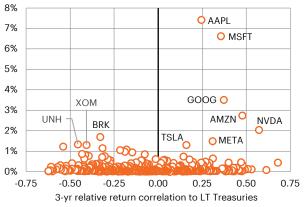
Given they comprise nearly a third of the market, the top 10 stocks hold significant sway over the direction of overall equity indexes, as demonstrated so far in 2023.² This would not be quite as concerning if the top 10 stocks were well-diversified or had distinct return drivers; unfortunately, this is not the case. Seven of the 10 largest stocks,

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including each of the top five, have relative returns that are positively correlated to the performance of bonds. Among these seven, six hail from the technology and communication services sectors, while it can be argued the seventh—Tesla—is a technology firm masquerading as a car company. The chart below shows the extent to which the outperformance of the largest U.S. stocks is tied to moves lower in interest rates.

S&P 500 stocks: index weight vs correlation to bonds

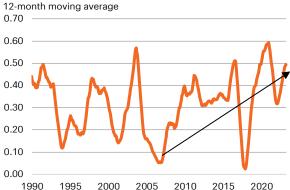
S&P 500 weight



Source: Bloomberg Finance, L.P., as of May 19, 2023.

The fact that the largest U.S. stocks are almost uniformly sensitive to the path of interest rates means they are also highly correlated to each other. The average pairwise correlation between the 10 largest S&P 500 stocks rose to a 33-year high in early 2021, and remains quite elevated at 0.50. It is no surprise that an extended era of low and declining interest rates has delivered us a market that is concentrated in stocks that most benefit from low and declining interest rates.² In essence, the top of the U.S. stock market increasingly trades as a bond proxy, which has wide-ranging consequences for portfolio construction.

Top 10 stocks' pairwise correlation



Source: FS Investments. Bloomberg Finance, L.P., as of April 30, 2023.

The current level of concentration in U.S. equity markets creates significant challenges for investors. In our view, the challenges can be summed up by the following:

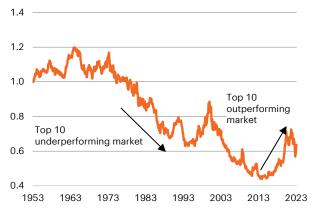
- **1.** The market is more concentrated than it has been since the mid-1970s.
- **2.** Most of the largest stocks are highly correlated with bonds and with each other.
- **3.** These stocks trade at a valuation premium to the overall market that is near a four-decade high.
- **4.** The macro environment that helped these stocks flourish—globalization and ultra-low interest rates—is under threat as it has not been in decades.

It's been a great ride, but...

Clearly, this is a different investing environment than the one that predominated for the past 15 years, and it will require investors to adjust their way of thinking. While equity performance this year showcases the ability for the megacap stocks to hold up the entire index, it should also be considered a warning. Just as increasing concentration since 2015 has driven broad U.S. indexes higher, a potential decline in concentration would almost certainly be negative for U.S. relative performance. In our view, there are multiple ways investors can adjust to what we believe will be a new backdrop.

1. Fight complacency. There is a long history of paradigm shifts within markets, and they are almost never indicated ahead of time. The outperformance of the top 10 stocks—an impressive 10,000 bps cumulatively since 2015—looks like an outlier, as an index that holds the 10 largest stocks has actually *underperformed* the S&P 500 over most periods in history. Risks from regulatory action, geopolitics and disruption are heightened for the largest stocks—and these risks are passed on to the market as a whole due to the elevated concentration.

Relative performance of top 10 stocks vs. S&P 500 over the long term



Source: FS Investments, Bloomberg Finance, L.P., as of April 30, 2023.

2. Understanding the market cycle will be even more important. The top of the U.S. equity market has become almost a distinct asset class, outperforming when interest rates fall and risk appetite sours. Understanding these macro drivers, and how they impact the relative performance of the megacaps is, therefore, critical, Our core quantitative model, called Strategic Domain, was built to track the market cycle and has historically been powerful in predicting the forward relative performance of the top 10 stocks. When our Domain model indicates "Deep Value"—an early cycle signal—the top 10 stocks have gone on to underperform on average. Conversely, a late-cycle Full Growth reading generally portends top 10 outperformance. The nature of today's concentrated market only raises the stakes for understanding these market cycle dynamics.²

Relative fwd. return based on starting domain Top 10 stocks vs. total S&P 500

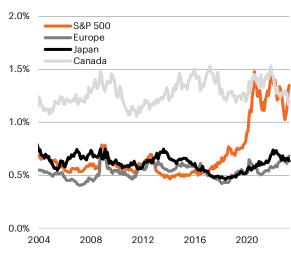
Strategic Domain	3-Month	6-Month	12-Month	
Deep Value	-0.66%	-1.09%	-2.56%	
Value	-0.20%	-0.85%	-1.67%	
Neutral	0.33%	0.08%	0.34%	
Growth	0.14%	0.62%	1.96%	
Full Growth	0.25%	0.66%	1.47%	

Source: FS Investments, as of April 30, 2023.

3. Diversify globally. As we've discussed, the incredibly strong returns contributed by today's largest stocks have been a primary driver of U.S. equity market outperformance. This has also meant that the U.S.' share of global equity markets has risen from 30% to more than 40% today. The average investor is thus more exposed to U.S. stocks than they have been in years. Going forward, the fate of these largest stocks will have an outsized impact on the relative performance of the U.S. market as a whole.

In addition, other regional markets have largely not experienced nearly the same increase in concentration that the U.S. market has. The below chart shows values for a measure of the total level of market concentration called the Hirschmann-Herfindahl Index. While it is challenging to measure total-market concentration over time given changes in index construction, this shows that the increase in concentration over the past eight years has been unique to the U.S. Thus, we firmly believe markets outside the U.S. should play a more important role in equity portfolios than they did over the past decade.

Regional equity market concentration Normalized Hirschmann-Herfindahl scores



Source: FS Investments, Bloomberg Finance, L.P., as of April 30, 2023.

4. Get more active. The past ten years have been among the worst in history for active equity strategies, a period that has coincided with the parabolic growth of passive investing. Persistently rising concentration makes it challenging for active strategies to outperform passive funds, which programmatically assign higher and higher weights to the leading stocks. The data bears that out—active funds' excess returns relative to their passive peers have been declining consistently since 2015, when concentration began to increase.³ Fund fees have been declining over this period as well, implying gross excess returns have suffered even more than the chart shows. We believe the period of rising equity market concentration has had a significant and negative impact on the performance of active equity funds, and that any stall or reversal in the trend would likely benefit active strategies.

Active funds have hugely underperformed Active equity fund alpha, 10-year trailing (bps ann.)

200
100
0
-100
-200
-300
-300

Source: Morningstar, as of August 31, 2022. Represents annualized relative 10-year trailing return of equal-weighted average active fund, compared to equal-weighted average passive fund in the same Morningstar category.

Conclusion

2012

After a brief respite in 2022, when the colossal technology and media stocks were punished by a newly hawkish Fed, 2023 has seen the return of increasing market concentration. While the S&P 500 Index rose (slightly) from early February through Mid-May, a greater number of individual stocks in the index declined by more than 10% over that period than had a positive return. Narrowing of market performance is a classic late-cycle signal and often accompanies a Growth or Full Growth reading in our Strategic Domain model, as it does currently.

Make no mistake—despite the lift being provided to the overall index today, a Full Growth reading in our model portends poor forward market performance. As we can see below, seven of the past eight large S&P 500 drawdowns have occurred in a Growth or Full Growth setting, with the only exception being the COVID-driven plunge in early 2020. Further, there is little to suggest the largest stocks reliably outperform the market during the full length of these drawdowns. Ultimately, our models point to the potential for further market declines ahead, and while index concentration has thus far masked underlying weakness, the sustainability of that backdrop is tenuous at best.²

S&P 500 drawdowns of at least 10% since 1980

Peak date	Trough date	FS Domain at peak	FS Domain at trough	S&P 500	Top 10 vs. S&P 500
Dec-21	Sep-22	Value	Growth	-24%	-6%
Dec-19	Mar-20	Value	Full Growth	-20%	10%
Sep-18	Dec-18	Growth	Growth	-14%	-4%
Oct-07	Feb-09	Full Growth	Deep Value	-51%	-1%
Aug-00	Sep-02	Full Growth	Full Growth	-45%	-16%
Jun-98	Aug-98	Full Growth	Full Growth	-15%	3%
May-90	Oct-90	Growth	Growth	-15%	7%
Aug-87	Nov-87	Neutral	Deep Value	-30%	0%
Nov-80	Jul-82	Full Growth	Deep Value	-17%	-12%

Source: FS Investments, as of April 30, 2023. Most recent drawdown represents a local trough that may or may not be ultimate trough. Top 10 stocks held constant from peak to trough.

Rising U.S. equity market concentration has played a key role in the stellar stock market returns and the growth in passive investing over the past eight years. Less is usually more in periods of steadily rising concentration, as the bar for active management is incredibly high. Unfortunately, eventually there is a point where the music stops, and investors must invest new money in what has become an incredibly highly concentrated market. We believe that time has come, as the largest stocks pose at least as much downside risk as upside risk for the first time in years. Not only do the usual cautions around regulation, slowing growth and disruption apply, but the top 10 stocks are trading at a valuation premium close to the highest in four decades. We believe investors should be proactive in addressing the risks posed by elevated concentrations in their portfolios today.

- 1 Bloomberg Finance, L.P., as of May 19, 2023.
- 2 FS Investments, as of April 30, 2023.
- 3 Morningstar Direct, as of August 31, 2022.

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