

# Economic & Market Outlook

## Executive Summary

- ~ The global equity markets experienced a notable 3.1% rally in the second quarter, with the S&P 500 advancing by 4.3%. However, this growth was driven by a surprisingly small number of securities.
- ~ A significant factor behind this performance divergence lies in mathematics: the few stocks at the forefront of this rally, notably the Magnificent 7, hold substantial weight in the index. These leading stocks demonstrated robust fundamental performance and saw their valuations expand, further contributing to their dominance.
- ~ Despite their strong showing, the expectations for the largest US stocks are higher than ever and may be increasingly difficult to meet. The considerable size of these companies poses a challenge for continued growth in economic earnings per share.
- ~ Given these dynamics, it appears that investing in the median stock could offer a better risk-adjusted option.

## An Odd Market

What a bewildering market we've just witnessed. Daily, US equity indices climbed higher, yet a glance at a stock screen would have revealed few green tickers. Stock market breadth was abysmal, regardless of how you analyzed the data. Let's break it down:

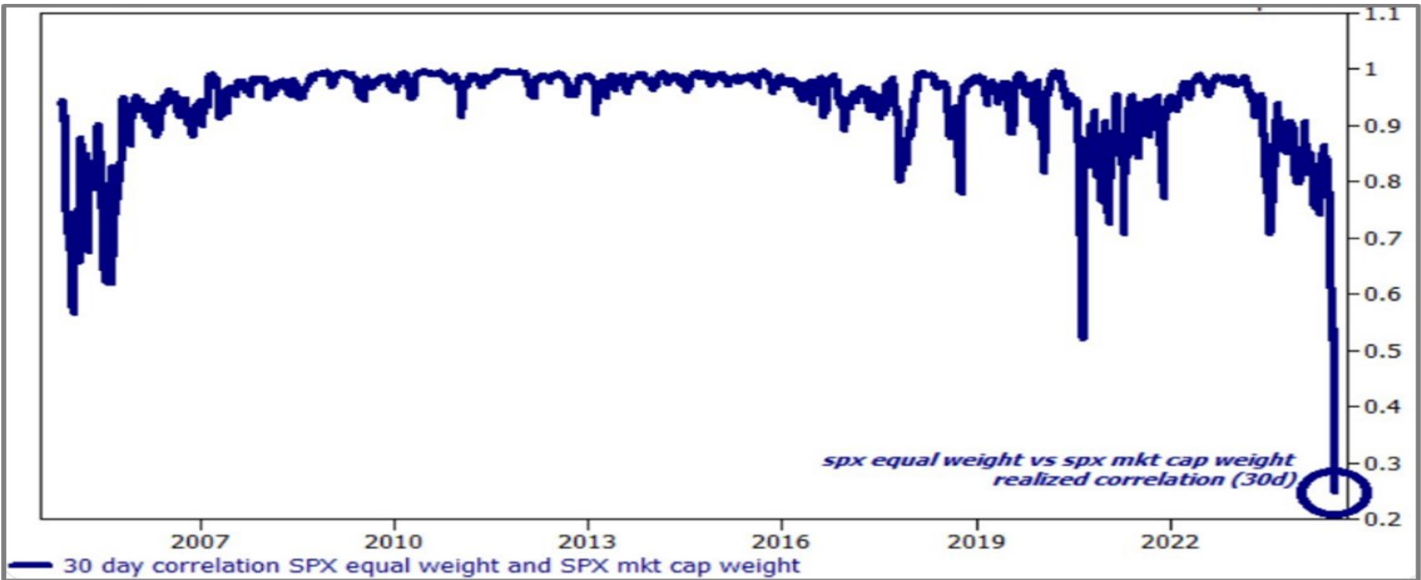
Last quarter, the S&P 500 returned 4.3%. Remarkably, the five largest stocks (MSFT, AAPL, NVDA, AMZN, and GOOG) accounted for 93% of that move, while the top 10 stocks contributed 122%. In other words, if you owned the other 490 stocks, your return would have been -1.0%. The median S&P stock fell -2.6% last quarter. Small-cap stocks lost -3.3% and are now negative for the year. Less than 5% of S&P 500 stocks are testing new highs, and fewer than 25% are outperforming the index. This is truly an abnormal bull, frankly, a frustrating market.

*The majority of listed stocks are falling, but the S&P keeps climbing higher.*



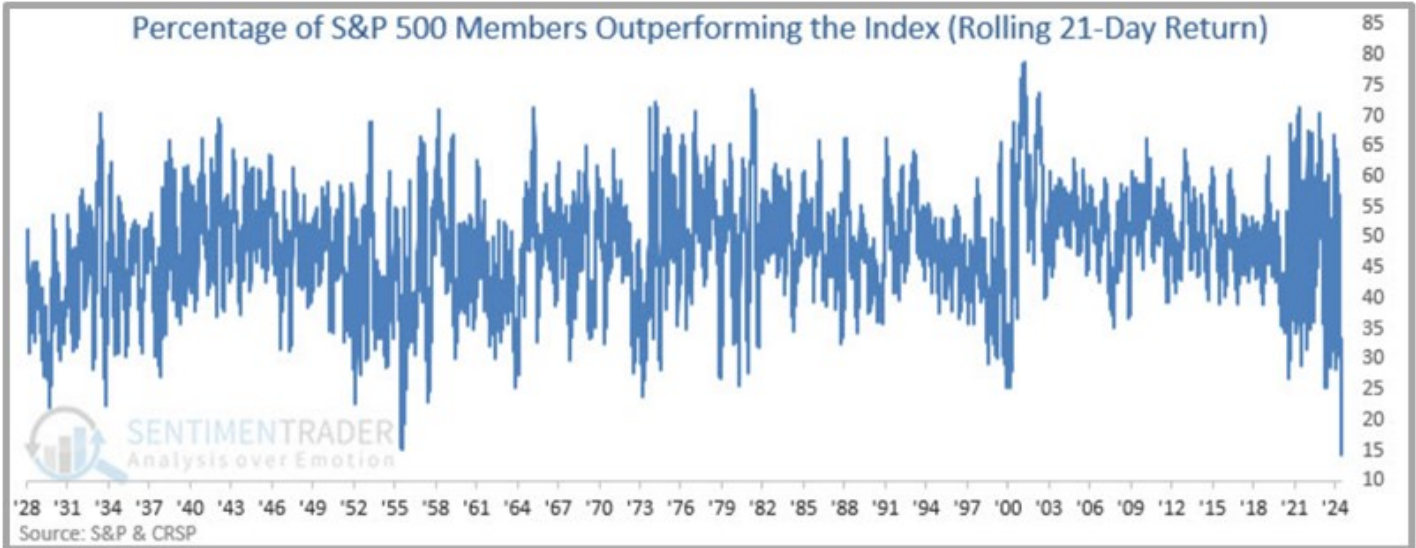
Source: Annandale Capital, Bloomberg

*The median S&P 500 stock exhibited little correlation to the S&P 500 index.*



Source: Unknown

*The majority of stocks that comprise the S&P 500 were underperforming the S&P 500.*



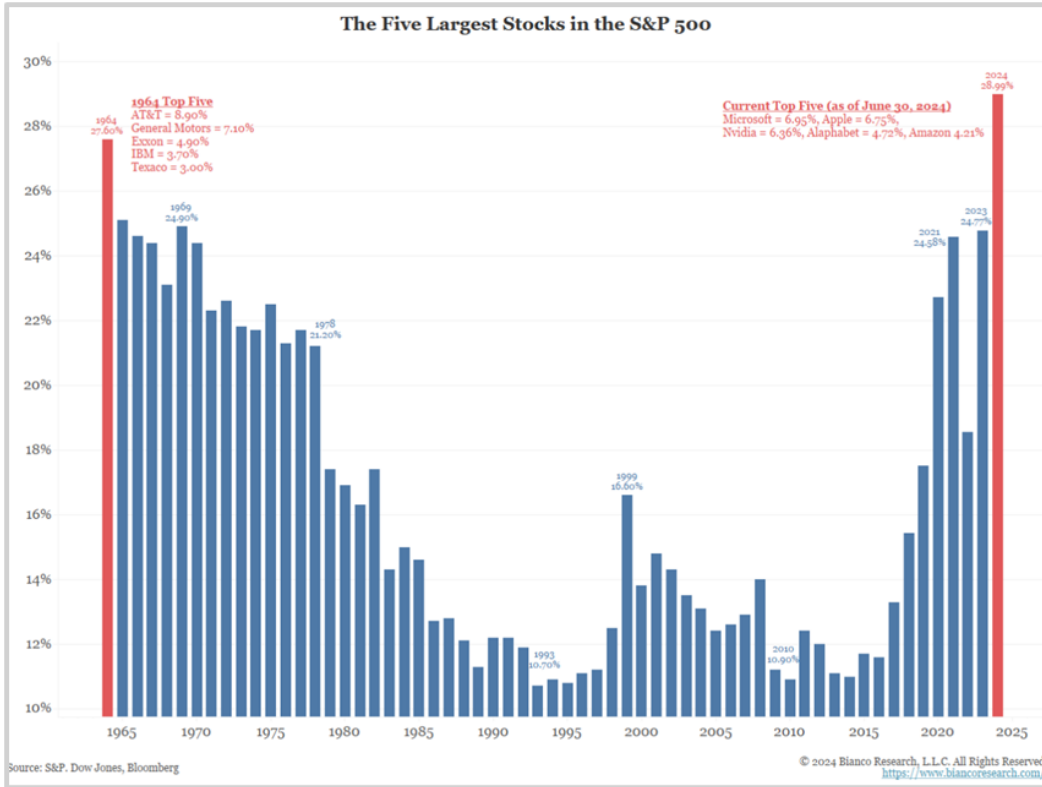
To many, this is an ominous sign. A stock market rally supported by only a handful of stocks suggests market fragility. While a major decline in the top five or ten stocks would likely drag the market down, there's no rule stating that the excluded 90-95% of stocks can't turn things around. To us, it simply is what it is: perplexing.

### The Math that Got us Here

The five largest S&P 500 stocks now account for 29.3% of the index, while the top ten make up 38.0%. There are only two historical comparisons that come close. In 1964, stock market concentration peaked at 27.6% (top five) and 29.8% (top ten). We've surpassed that point. Market concentration in the 1920s was similar to today's levels, but the quality of data from that era is questionable.

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*The S&P 500 has never been this concentrated.*

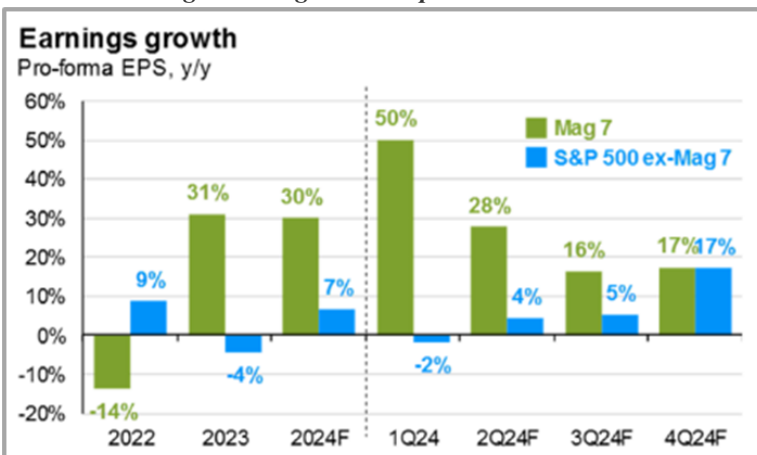


In hindsight, this level of concentration isn't surprising. The ten largest US stocks are exceptional businesses: Microsoft (MSFT), Apple (AAPL), Nvidia (NVDA), Amazon (AMZN), Alphabet (GOOG), Meta (META), Berkshire Hathaway (BRK/A), Broadcom (AVGO), Eli Lilly (LLY), and Tesla (TSLA). Excluding Berkshire Hathaway, Broadcom, and Eli Lilly leaves us with a group coined "Magnificent Seven" or "Mag 7."

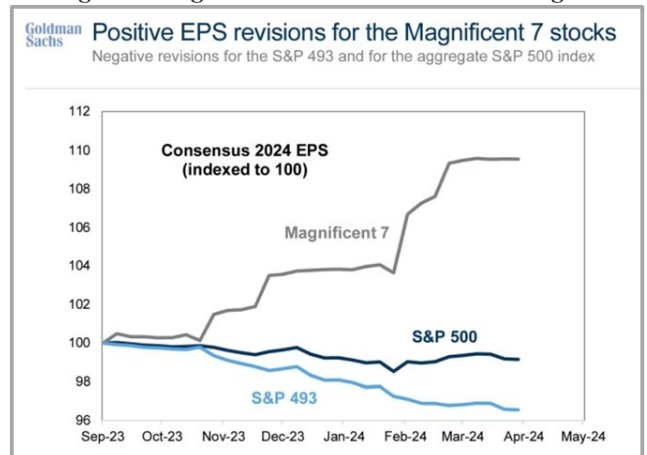
The Mag 7 have led this year's rally, while the rest of the market has been dead weight. This group of seven securities has returned 25.8%, compared to -0.1% for the rest of the S&P's constituents. But why?

The simplest explanation is that they've earned it. Last year, the Mag 7 saw profits increase by 29.0%, while the rest of the market experienced a 4.8% profit decline. Moreover, analysts have been revising earnings estimates for Mag 7 stocks upward. While estimates are essentially educated guesses, they indicate the market's perception of a company's fundamental economics, and that perception is improving for these stocks. Amazon's estimated 2025 earnings have jumped from \$5.0 to \$5.8. Nvidia from \$2.1 to \$2.7. Positive earnings growth coupled with upwards estimate revisions is a powerful combination when few other stocks stand out.

*Mag 7 earnings have outpaced the market.*



*Mag 7 earnings estimates have been revised higher.*



The final factor explaining their outperformance and subsequent index concentration is higher valuations. Investors are now willing to pay 20.2% and 25.6% for the same dollar of future earnings and sales, respectively.

*The Mag 7 is being capitalized at higher valuations.*

#	Company	S&P Weight	Next 12M Earnings	Next 12M Sales
1	Microsoft	7.4%	6.8%	9.2%
2	Apple	7.0%	22.6%	24.0%
3	Nvidia	6.6%	20.7%	30.1%
4	Alphabet	4.4%	27.8%	32.8%
5	Amazon	3.9%	11.2%	33.5%
6	Meta Platforms	2.5%	31.7%	43.7%
7	Tesla	1.5%	56.1%	21.9%
		33.3%	20.2%	25.6%

Source: Annandale Capital, Bloomberg

## The Expectations Game

Higher valuations benefit those who bought when valuations were lower but disadvantage later investors. It's the icing on the cake early investors didn't pay for. However, this doesn't necessarily mean the later purchases weren't economically justified or that those investors got a raw deal. If you showed us an investment guaranteed to make 30% followed by one guaranteed to make 20%, we would be excited about both. It's also plausible that the second buyer held a more optimistic forecast than the first, i.e., the second buyer believed the seller was underestimating the business's future earnings potential.

Rationales aside, higher valuations equate to greater expectations, reducing the probability of a successful outcome. Simply put, the more you pay, the better the future needs to be.

To contextualize current expectations, we've combined the financials of the Mag 7. They're an impressive group, generating over \$1.8 trillion in revenues over the trailing 12 months. Of those revenues, 26% became pre-tax profits, and 20% turned into unencumbered free cash flow. For this remarkable business, you must pay \$16.7 trillion - 65.7% of US GDP. In terms of multiples, that's 9.1x sales, 16.8x gross profits, 35.5x pre-tax income, and 44.3x free cash flow.

What must an investor believe for this valuation to make sense? The answer is growth - growth in sales and ultimately in free cash flow per share. Alternatively, the next buyer must be willing to pay an even higher price.

Here's a simple way to measure embedded expectations, imagine purchasing 100% of the business at today's valuation, holding it perpetually, and distributing all cash earnings to yourself. Calculate your internal rate of return (IRR) under different growth scenarios, assuming static 20% cash margins. This methodology eliminates the question mark surrounding the next buyer's intentions and zeroes in on the true economic value of the business.

We ran the math for you:

Scenario one: Two decades of 20% sales growth, then 3% thereafter. We like this scenario because of its absurdity. Extreme assumptions help us identify the outer bounds of reality. No large company (over \$50 billion in revenue) has achieved this. If the Mag 7 compounded revenues at 20% per annum for two decades, their revenues would be \$70.7 trillion in 20 years. Global GDP is roughly \$100 trillion, but only a portion is applicable to these companies. Google and Meta Platforms are banned in China, the US government forbids Nvidia from selling chips there, and Amazon faces stiff competition in many Asian geographies. In 20 years, \$70.7 trillion of revenues would equate to 25% of global GDP, assuming 5.0% nominal GDP growth. Excluding GDP from countries where they cannot operate, the number would be much higher, which seems preposterous. But if the Mag 7 achieved this, you'd see a 15.9% IRR. Margin expansion (or contraction) could clearly change this along with the results of our next calculation.

Scenario two: We used consensus growth expectations for the next five years (15.9% compound growth). Then, we assumed 10% revenue growth for years 6 through 20, and 3% thereafter. The result is a 9.9% IRR. These assumptions sound plausible until you dig into the data. Over the past decade, the Mag 7 grew revenue at 16.1%. Our assumptions call for 13.0% revenue growth over the next decade, even though these companies are now 4.4x larger. To our knowledge, there is little historical precedent for this level of growth at scale.

In 2016, Michael Mauboussin examined the historical record for the top 1,000 global companies dating back to 1950. The odds of a large company (over \$50 billion in annual sales) growing at 15-20% CAGR for one decade was 0.9%; only 10 companies achieved that. The odds of a large company growing at a +10% CAGR were marginally better, at 3.9%. Furthermore, we assume 13.0% revenue growth in decade one followed by 10.0% in decade two, an even taller task. The odds that this group can collectively achieve this are lower than the odds of any one company meeting the mark.

We aren't calling the Mag 7 a bubble. They are incredible businesses, many monopolies or near-monopolies in their industries, which is why they have compounded at 39.9% over the past decade. They have earned it. But higher expectations are harder to achieve.

### The Base Rate of Sales Growth

Returning to base rates, let's revisit Mauboussin's study on sales growth. As expected, the distribution of long-term sales growth rates resembles a bell curve, clustered around 0-5% growth. This makes sense; it's mathematically impossible for a company to outgrow GDP indefinitely. Every company is constrained by the size and growth of its end market. Once you approach 100% market share, like Google in search or Microsoft in word processing, you're limited to the growth of that market. While there are new markets to pursue, like AI datacenters, each new market adds only incrementally to your legacy revenues.

Mauboussin found that only 21.1% of large companies (by revenue) were able to sustain sales growth above 5% for 10 consecutive years. This is a small percentage, yet this level of growth is often expected in sell-side and buy-side models, internal management forecasts, and by many retail investors, albeit unconsciously. The law of large numbers is real.

*Mauboussin's 2016 study on the persistence of sales growth.*

Sales: >\$50,000 Mn Sales CAGR (%)	Base Rates			
	1-Yr	3-Yr	5-Yr	10-Yr
<(25)	4.0%	2.0%	1.6%	0.0%
(25)-(20)	1.9%	0.8%	1.0%	0.3%
(20)-(15)	2.6%	2.3%	1.5%	1.0%
(15)-(10)	5.0%	4.2%	2.7%	3.1%
(10)-(5)	10.1%	10.7%	9.3%	9.8%
(5)-0	16.9%	21.4%	22.8%	26.9%
0-5	21.8%	26.5%	34.0%	37.8%
5-10	15.0%	16.9%	16.9%	17.2%
10-15	8.6%	9.2%	7.0%	3.0%
15-20	5.1%	3.2%	2.3%	0.9%
20-25	3.3%	1.6%	0.6%	0.0%
25-30	2.3%	0.7%	0.3%	0.0%
30-35	1.1%	0.1%	0.1%	0.0%
35-40	0.6%	0.3%	0.0%	0.0%
40-45	0.4%	0.1%	0.0%	0.0%
>45	1.3%	0.0%	0.0%	0.0%
Mean	2.3%	1.2%	1.0%	0.8%
Median	2.1%	1.5%	1.5%	1.1%
StDev	16.3%	10.3%	8.3%	5.8%

Source: Michael Mauboussin, Credit Suisse



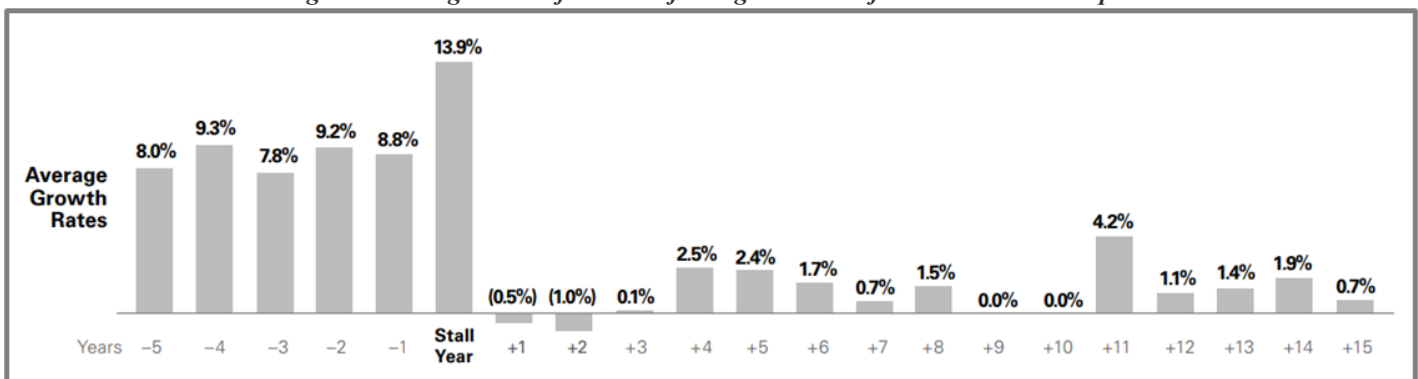
## When Growth Stalls

In early 2008, the Harvard Business Review published a study titled "When Growth Stalls," examining Fortune 100 companies over the past half-century. The authors wanted to know what happened when these companies experienced a sudden deceleration in revenue growth and why this deceleration occurred. The findings are illuminating.

87% of their sample experienced a growth stall at some point. They defined a stall as a deceleration of 4% over a ten-year period. For example, if a company grew by 10% annually over the preceding decade but only 6% annually over the subsequent decade, it was flagged.

Here is where the data gets interesting. When growth stalled, it didn't just gradually decelerate; it tended to evaporate. Fewer than half of the companies that stalled were able to return to moderate or high sales growth in the following decade. On average, the sample lost 74% of its market capitalization relative to the S&P 500 in the decade following the growth stall.

*Average real sales growth before and after a growth stall for Fortune 100 companies.*



Source: Harvard Business Review

When asked why growth stalled, the authors identified five causes within management's control and a handful outside of it. Surprisingly, external factors like regulatory actions and recessions accounted for only 13% of incidents. Most failures (87%) were strategic mistakes. For example, 13% of all growth stalls resulted from "innovation management" breakdowns. A company like Boeing becomes complacent and fails to nurture an engineering-first culture, or a large pharmaceutical company halts investment in research and development. Slow or poor product development causes a company like Blackberry to lose out in a winner-takes-all arms race for smartphones. Other categories included key customer dependency and failed acquisitions.

The category that stood out most to us was "premium-position captivity." This term refers to a firm's unwillingness or inability to change when it has a dominant market position. Few companies have what it takes to disrupt their own cash cow. Or maybe they try, but the prevailing forces are too strong. Modern-day examples include Uber vs. taxis, the internet vs. newspapers, Amazon vs. Barnes & Noble, and Netflix vs. cable incumbents. How often do incumbent firms recognize the change in the competitive landscape before it's too late? When Netflix first launched, cable companies were happy to sell Netflix their content because it was incremental profit for them. This category was the largest, accounting for 23% of the sample, reminding us how fragile even the most stable industries can be when new competition emerges.

Innovation and change can happen quickly. Jeanne Calment, the world's longest-living person, died at age 120 in August 1997. It's amazing to think of all the innovations and changes that spanned her lifetime. The year she was born, Alexander Graham Bell was awarded the patent for the first telephone, which slowly displaced the telegraph. She witnessed the birth and rise of radio, then its gradual demise with the introduction of television broadcasts. Her final years were marked by the adoption of personal computers, the internet, and cellphones, all technologies that crippled legacy modes of communication like landline phones and newspapers. Had she lived ten years longer, she would have witnessed the first iPhone, a powerful, connected device capable of streaming movies.

A popular statistic from a McKinsey study says that eight years ago, the average life of an S&P 500 company was 67 years; now it's only 15. Whether true or not, it's hard to deny the "perennial gale of creative destruction."

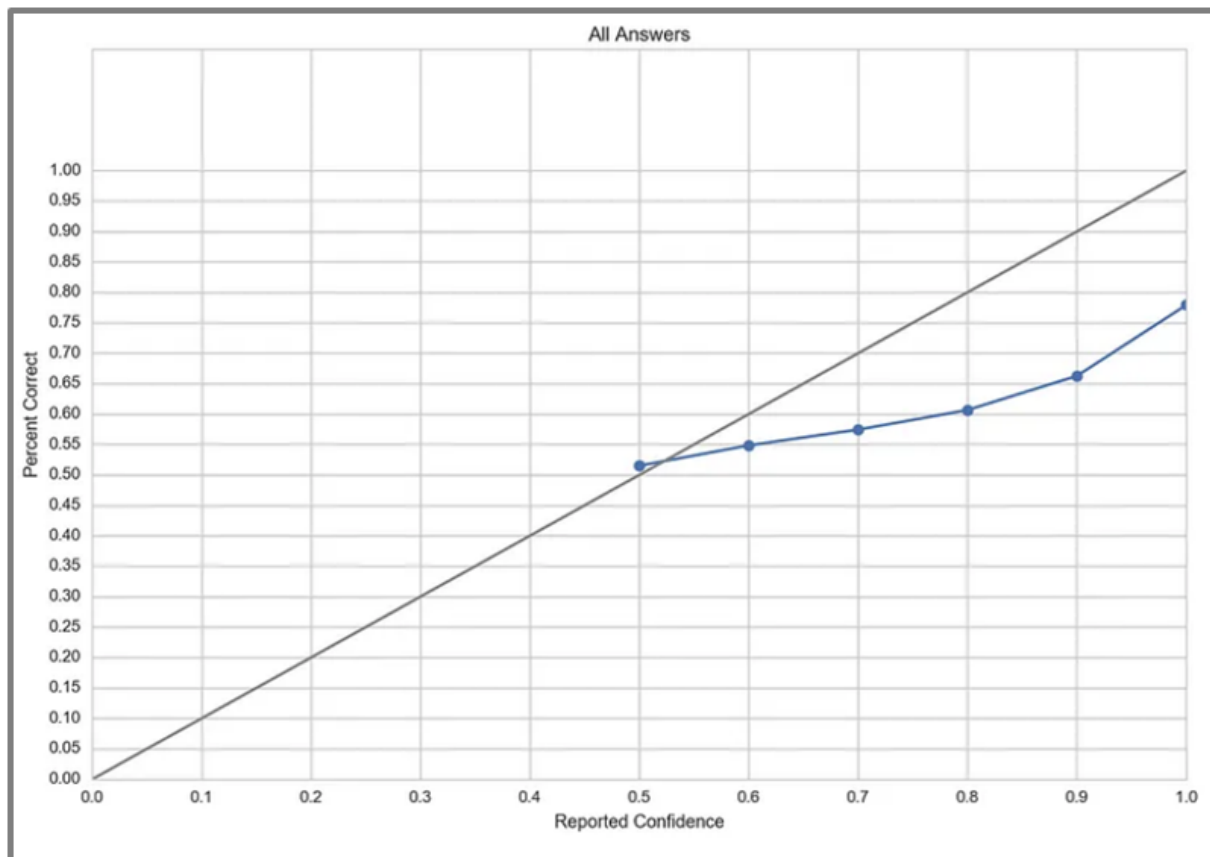
If we could leave you with one takeaway, it would be that the future is uncertain, particularly the farther you look out in time. This uncertainty is a permanent feature of capitalism and life.

**“Doubt is not a pleasant condition, but uncertainty is an absurd one.” Voltaire**

Humans have a natural inclination to avoid doubt, a tendency well-documented and believed to be inherited from our ancestors in harsh environments. In the time of hunter-gatherers, quickly drawing conclusions could mean the difference between life and death. Put simply, if you hear a large stick break in the woods of Yellowstone and hesitate to fully observe what's causing it, you might find yourself face-to-face with a bear.

Ironically, it's also established that humans, as a group, tend to be more confident than they should be. Ask a class of students to rank their test performance, and most will place themselves above the median—a mathematical impossibility. Another interesting observation is giving individuals a true-false quiz and asking them to assign probabilities to their answers. If someone is guessing, they might assign a 50% probability; if confident, 90% or higher. Ideally, these assigned probabilities should align with their actual correctness rate, but often they don't. As humans, we consistently overestimate our abilities.

*The results of a true / false quiz where participants reported their confidence of being correct.*



Source: Mauboussin & Mauboussin

All humans unconsciously make systematic errors in information processing, known as cognitive biases. These biases stem from our limited cognitive resources; our mental "computers" can only handle so much. To function, we rely on shortcuts and simplifications, which sometimes sacrifice accuracy in decision-making. Biases like confirmation bias, the availability heuristic, and the bandwagon effect can distort our perception of data and hinder informed decision-making.

## What to do

Investing and prediction go hand in hand. You don't make investments with the expectation of losing money, but our biases, particularly overconfidence bias, pose a problem.

One solution is to enhance our predictive abilities. Daniel Kahneman, renowned for his work on decision-making under uncertainty, advocated for integrating an "outside view." While most forecasts begin with an inside view, starting with a question and using personal knowledge, experiences, and beliefs to arrive at an answer, the outside view takes a more dispassionate, statistical approach. It disregards our explicit and implicit assumptions, instead offering a broad perspective based on extensive data samples. When employed effectively, this approach can mitigate several cognitive biases.

We see this all the time when it comes to mergers and acquisitions. In 1988, Citicorp and Travelers announced a merger of equals; the shareholder base of each company would own 50% of the new entity with a pro-forma market cap of \$140 billion. Wall Street enthusiastically embraced the deal, driving both stocks higher. However, seven years later, Citigroup (formerly Citicorp) sold its Travelers unit to MetLife for a fraction of its initial valuation. The internal view led the companies' boards to expect substantial synergies, whereas an outside view might have cautioned against overly optimistic projections, as most mergers fail to create shareholder value.

For context, a recent McKinsey poll found that fewer than 20% of companies achieve their revenue synergy targets in mergers. Despite this knowledge, corporate executives often discount such statistics, believing their situation is the exception - a classic display of overconfidence.

Mauboussin's earlier data on the base rates of sales growth serves as a pertinent example of reference data one might use when constructing an outside view of achievable growth. It's essential to note that the outside view isn't inherently superior to the inside view; both should complement each other. There will always be outliers that challenge the boundaries defined by the outside view. The objective of leveraging reference data is to counteract biases that might unknowingly skew our assessments.

## Our preferred solution

Prediction cannot be eliminated from the investing process, but its impact can be minimized - a strategy we prefer whenever feasible. This reduction can be approached in two ways.

The first is straightforward: diversification of investments. If a single investment constitutes a large portion of a portfolio, implying high confidence in its prediction, the potential damage from being wrong is equally substantial. It's crucial to note that leveraging a portfolio offsets this benefit. Moreover, both the inside and outside views are susceptible to risks, including those we haven't yet anticipated. Was there a reference dataset that could have forewarned investors about the impact of COVID-19? The most significant risks often stem from the unknown unknowns, and diversifying risk is the only effective strategy to mitigate the impact of true uncertainty.

The second approach is to adhere to Benjamin Graham's wisdom: "The purpose of a margin of safety is to render a forecast unnecessary." This concept is intuitive and illustrated effectively with an extreme example. Consider a company with two perpetual bonds of equal seniority, where one trades at par and the other at a 50% discount. Assuming a 10% coupon rate, investors in the first bond reduce their risk exposure by 10% annually, while those in the second bond reduce theirs by 20%. Additionally, in the event of the issuer declaring bankruptcy and restructuring during the holding period, the second investor would require a lower recovery rate than the first. Simply put, by paying a lower price, investors can accommodate a broader range of outcomes, all else being equal.

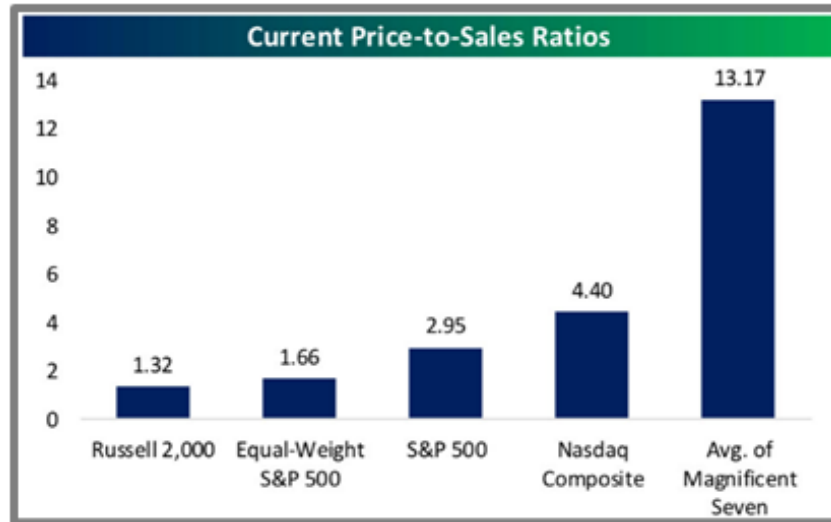
## Conclusion

We won't revisit all the details from last quarter's commentary, but it's notable that divergences between large and small stocks, US and overseas stocks, and technology and non-technology stocks have widened in the past three



months. High-yield bond spreads remain near their historically tight levels, and the real yield on US Treasuries is positive. While we can't predict when these equity divergences will resolve, we believe they can't persist indefinitely. Perhaps we'll be surprised. In the meantime, we are comfortable holding median stocks both domestically and internationally, as well as safer fixed-income instruments, given their more reasonable valuations and diversification benefits.

#### Price-to-Sales Multiples Across the US



Source: Bespoke Research

Uncertainty is inherent in both life and investments; our approach is to embrace it, learn from it, and develop strategies to manage it effectively.

#### Update

Starting on July 10th, the significant divergence between the Mag 7 and the rest of the market took a sudden and abrupt U-turn. Mag 7 stocks have fallen by 4.0%, while the other 493 stocks have rallied by 2.7%. This sudden shift in sentiment is most striking in small-cap stocks, which as of July 16th are 4.4 standard deviations above their 50-day moving average. Furthermore, small caps are on track for their best weekly performance relative to the S&P 500 in recorded history. In less than a week, small caps have surged 10.3%, outperforming the Mag 7 by 14.3%. This is a notable and welcome shift in the markets, but we wouldn't read too much into it. It simply highlights the erratic nature of market returns. Despite this move, the performance gap between large and small stocks, the average stock and the median stock, and the Mag 7 and the rest of the market remains dauntingly wide. Regarding our earlier comment, "A major decline in the five or ten largest stocks would probably take the market with it, but there is no rule saying the stocks excluded from the market's rally, the other 95 or 90%, can't turn things around," we have an answer, at least for now. Note this update was written on July 17<sup>th</sup>.

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