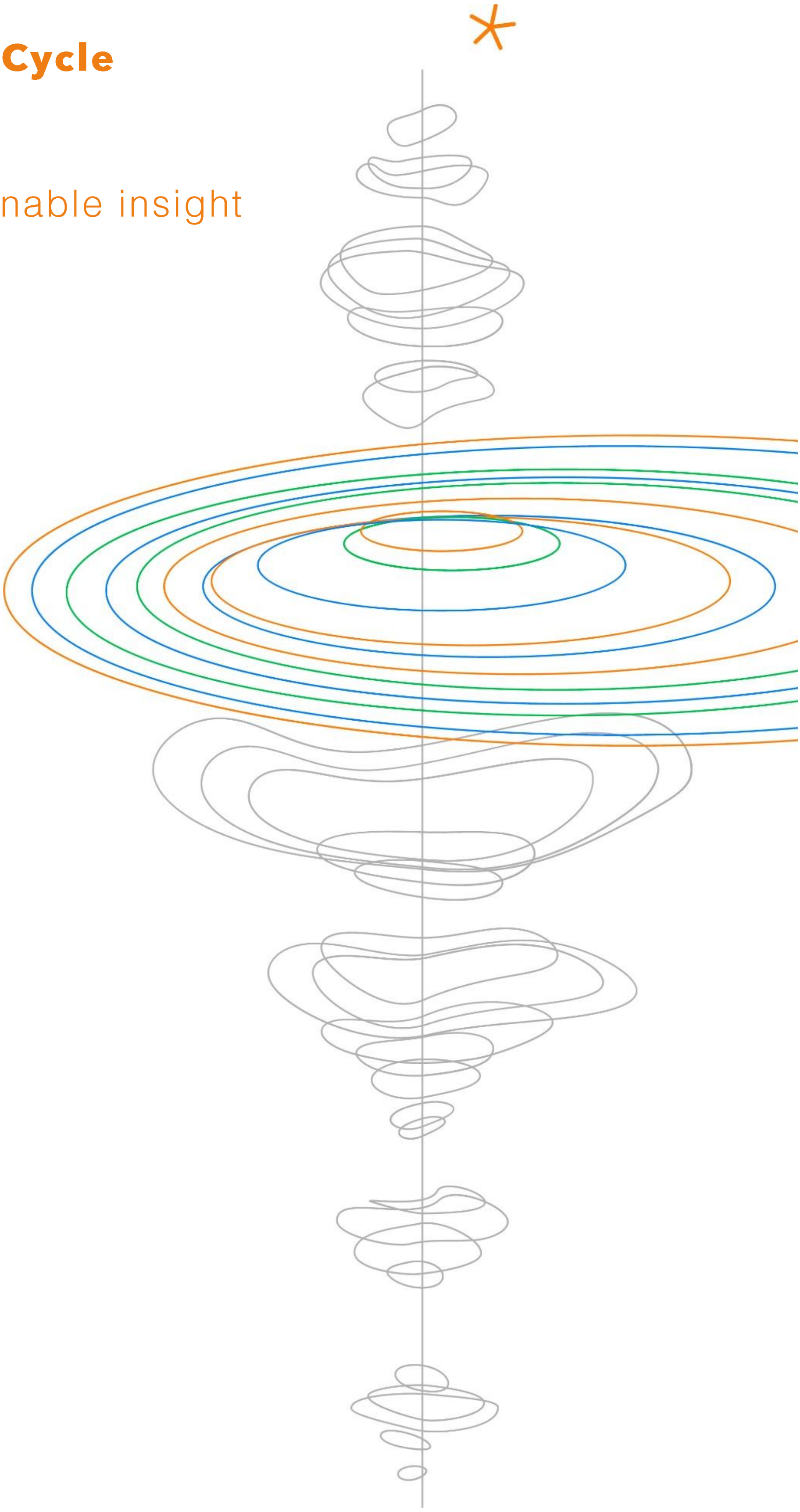
Is The Concentration Cycle Coming to An End?

Original research, actionable insight



October 2022

out-of-the-box thinking

noun. Thinking that moves away from established convention to incorporate alternative perspectives and which sometimes leads to novel ideas and solutions.

A note from the Portfolio Management desk…

2022 turned out totally different from what most investors had anticipated in the beginning of the year – this shows yet again that trying to predict asset prices is everything but an easy exercise.

In this note, we do not aspire to make predictions about the future. Instead, we provide an interpretation of the most recent evolutions in markets that focuses on the observation of cycles of concentration and deconcentration; after a long period of record market concentration, equity markets experienced a first mean reversion since the beginning of the year. Even more interestingly, **we argue why this first mean reversion still leaves a lot of room for a massive reduction of the still high market concentration**.

The topic seems to be even more relevant today than ever before, given the massive exposure of investors to passive strategies. After the last extremely large drop of market concentration in 2000, index mutual funds' total net assets grew significantly. According to the ICI 2022 factbook, in the US they grew from $384 billion to $5.7 trillion. The ICI numbers document that index mutual funds' share of long-term mutual fund net assets more than tripled, from 7.5 percent at year-end 2000 to 25.9 percent at year-end 2021. Within index mutual funds, equity flows accounted for the bulk (82 percent) of net assets at year-end 2021. It is not surprising, but does explain why we have this record market concentration especially in equity markets.

To all investors who are largely allocated to passive and benchmark hugging strategies: hopefully you have enjoyed the concentration ride over the past years, now might be a good time to at least partially reduce the big concentration bet and to opt for diversification.

And to all investors who allocate to active managers taking large bets: crystal balls often become less effective during high uncertain times such as the ones we face now. Diversification could very well make a lot of sense for you right now!

Dr. Tatjana Xenia Puhan
Deputy Chief Investment Officer

I. FIRST DROP OF MARKET CONCENTRATION

Key take-aways of this section

- Towards the end of Q1 2022, geopolitical tensions, inflation fears and rising rates triggered a drop of market concentration.
- So far, this repricing has mostly been driven by growth stocks ex Mega Caps, leaving still a lot of room for further drop of market concentration.

Inflation is here to stay! Rates have risen and will probably continue to rise until year end. In conjunction, we have seen the first repricing in risky assets with the worst quarter for global stocks since 2008 (excluding Q1 2020).

What can we make of this? What was the impact of this on the extremely overstretched level of market concentration? What is the outlook for financial markets and specifically, market concentration for the second half of the year?

Looking at equity markets, we observed in Q2 an additional significant contraction driven by a repricing due to rising rates, inflation concerns, geopolitical tensions and also rebalancing of investors who reduced their speculative equity positions to the lowest levels since 2016. The big institutional de-risking has only started now and will provide potential for a lot more downside pressure in the weeks or months to come. And earnings downside risk seems far from being priced in already.

The main themes that drove markets throughout the third quarter were:

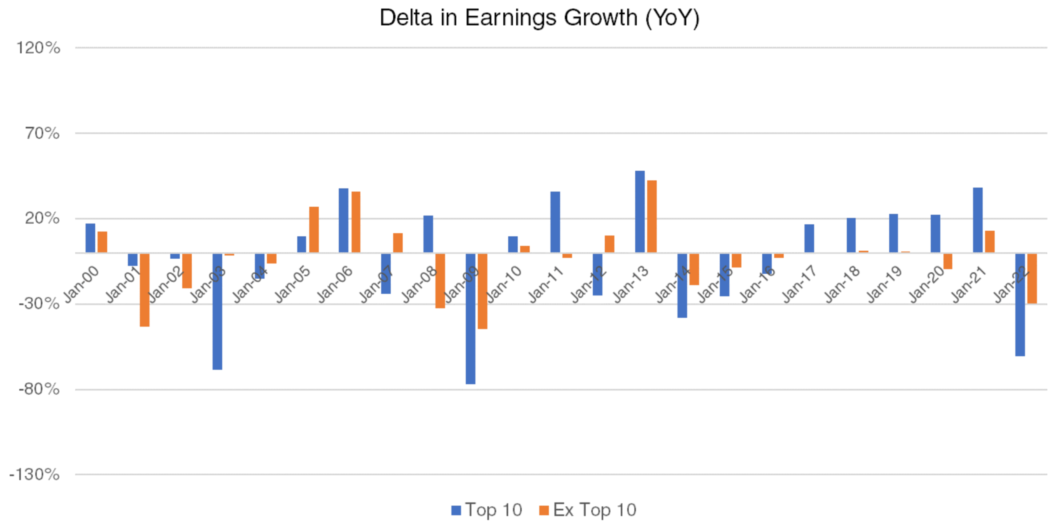
- Central Banks turning more hawkish than investors had originally priced in
- The Russia-Ukraine war continuing to push inflation and increase economic uncertainty, particularly in Europe
- China and its increasingly hostile relationship with the Western world, as well as its zero Covid policy

These themes did not affect all asset classes in the same way. It seems equity investors still wear the most rose-colored glasses and do not want to give up yet on the Central Bank Put. In the month of July most equity markets posted significantly positive returns (up to more than +10%!). This significant rebound showed that investors fully bought the story that Central Banks will be able to get inflation under control in an orderly manner and without a "hard landing". The "soft landing scenario" is primarily wishful thinking. Central Banks will have to become meaningfully more hawkish than initially announced to get a grip on inflation which was completely underestimated by investors.

The months of August and September were a volatile back and forth with equity markets gradually capitulating and repricing their way to positive assessment of the economic situation. While every positive datapoint resulted in a strong positive reaction, it was, however, proven wrong on the following day with more devastating negative news on the macro-economic or corporate earnings side. By the end of the quarter, it became more than obvious that the Central Bank Put may have expired and that all state and monetary policy interventionism is just another way of kicking the can down the road and probably only making things worse. The higher-than-expected inflation numbers coming out for the US right before the end of the quarter signalled to many investors that it will not be that easy and quick to bring down inflation.

However, the repricing in equities is probably not over yet. In fact, with the new earnings season coming up we expect downside surprises that could affect valuations of mega cap stocks. In 2022, earnings growth of the Top 10 stocks in the S&P500 has already decelerated, which is highlighted in Figure 1.

Figure 1: S&P 500 – Change of earnings growth of the ten largest stocks (12/30/1999 – 9/30/2022)



Source: TOBAM, Bloomberg.

Moreover, it seems like most of the repricing happened on the more growth-related part of the market. Meaning that the developed markets mega-cap stocks that contributed enormously to the market concentration did not lose that much of their collective weight (from 21.2% in 12/2021 to 20.6% in 9/2022) in the cap-weighted index as illustrated in Figure 1. This is why their impact on market deconcentration, referring to the change in Constant Matrix DR^2 during the first half of this year, has been mild so far.

Figure 2: Top 5 Market Cap US index stocks and their weight/performance evolution along with the DR^2

Security Name	31/12/2019	31/12/2020	31/12/2021	31/03/2022	30/06/2022	30/09/2022	YTD Return
APPLE INC	4.06%	5.86%	6.35%	6.57%	6.21%	6.57%	-21.85%
MICROSOFT CORP	4.12%	4.88%	5.78%	5.63%	5.66%	5.41%	-30.30%
ALPHABET	2.80%	3.02%	3.77%	3.86%	3.65%	3.35%	-33.75%
AMAZON.COM INC	2.67%	4.08%	3.32%	3.47%	2.77%	3.12%	-32.22%
TESLA MOTORS INC	0.19%	1.54%	1.98%	2.13%	1.68%	2.14%	-24.70%
Top 5 USA Benchmark	13.84%	19.37%	21.20%	21.65%	19.97%	20.60%	-28.14%
USA Benchmark ex Top 5	86.16%	80.63%	78.80%	78.35%	80.03%	79.40%	-24.16%
Constant Matrix DR2	6.12	6.16	5.93	5.88	6.07	6.05	
Weight change with respect to previous year		39.94%	9.42%	2.14%	-5.78%	-2.82%	
Constant Matrix DR2 % Change wrt Previous Year		0.64%	-3.76%	-0.86%	2.45%	2.07%	

Source: TOBAM and Bloomberg.

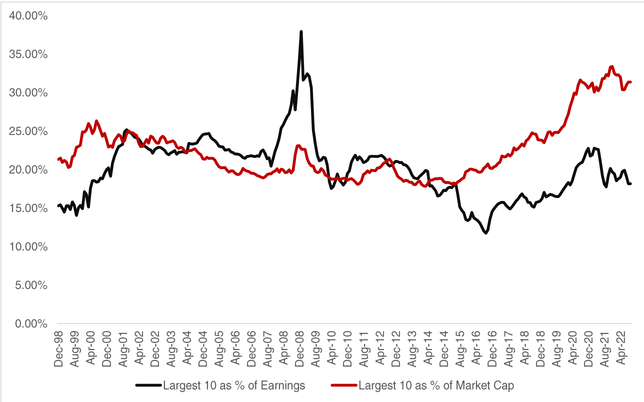
Investors have not yet been willing to give up on the mega-cap tech stocks that dominate the US market. However, this also means that there is still a lot of potential for repricing and outperformance for a diversified portfolio once investors start to reconsider the valuations of these behemoths.

The very large cap stocks that priced in a lot of future excess growth were large drivers of market momentum and concentration over the last few years. Some did underperform to some extent. However, many investors are still not giving up on the mega-cap tech stocks that dominate the US market.

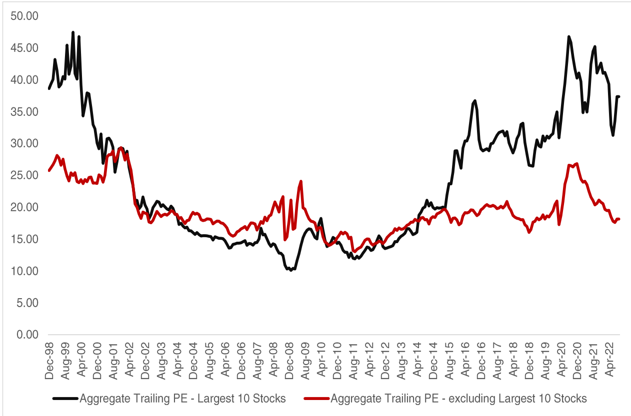
The left panel of Figure 3 highlights that for the top ten stocks in terms of S&P500 market cap, current earnings do not justify their very high market share. Hence, the very large gap in valuations of these stocks vs. the rest of the market continues to persist, as visible in the right-hand panel of the figure. This implies that expectations about a future excess growth compared to the rest of the market are still priced into these valuations.

Figure 3: S&P 500 – Historical valuations of the ten largest stocks (12/30/1998 – 09/30/2022)

Proportion of Earnings and Market Capitalization of the ten largest stocks



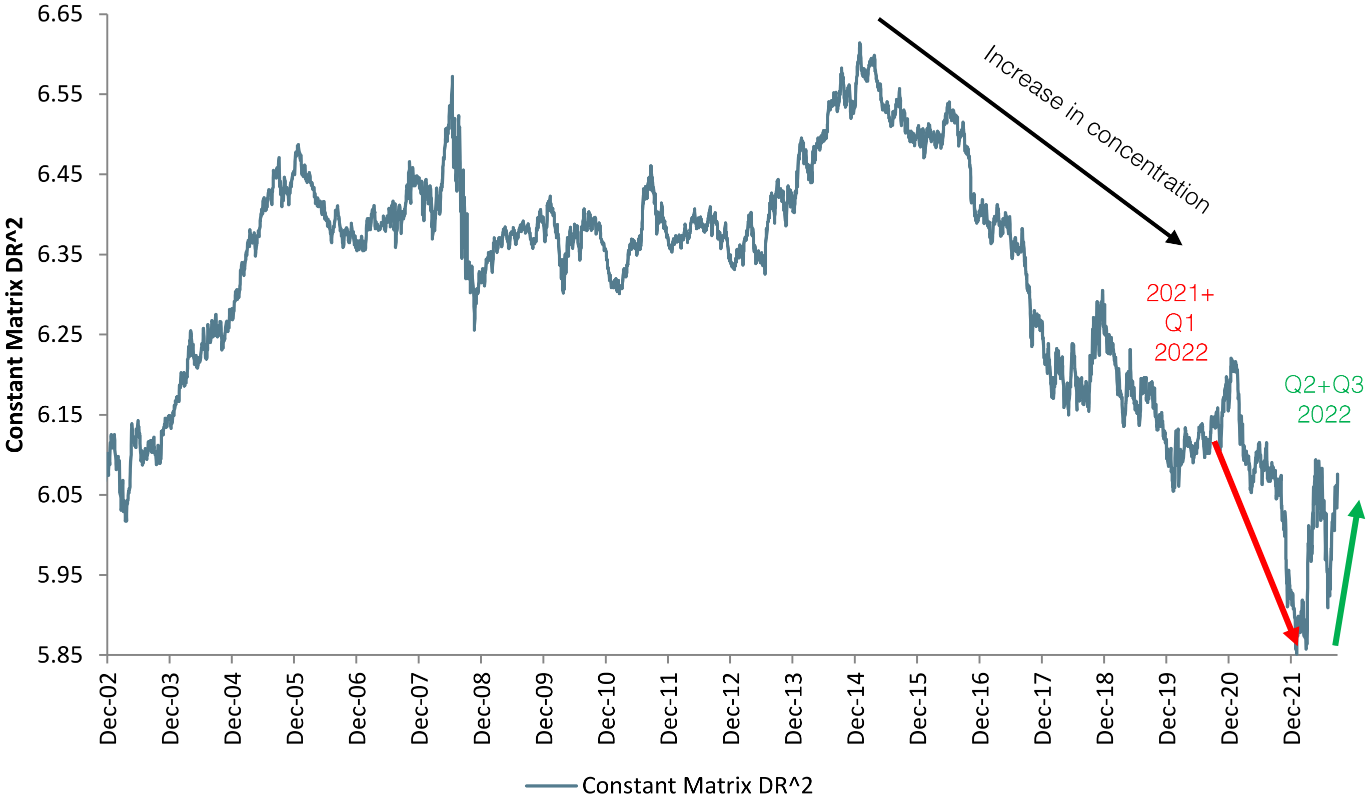
Trailing aggregate PE Ratio of the largest ten stocks vs the rest of the universe



Source: TOBAM, Bloomberg

Therefore, the first repricing of equities led only to a mild decrease in market concentration and the rubber band effect of market concentration continues to remain extremely stretched as is visible in Figure 4 taking the example of a major market cap US benchmark.

Figure 4: Market Cap weighted US benchmark const. matrix DR² (12/30/2002 – 09/30/2022)



Source: TOBAM and Bloomberg.

It seems that investors could be underestimating the downside risk to global consumption and growth and the consequences for the big tech companies, which managed to grow so significantly because their businesses were fuelled by a seemingly never-ending hunger of global consumers.

tobam* unbiased.

The fact is that the war in Ukraine and the Covid plague are not going to disappear magically and quickly. That should keep food and energy prices high. Supply constraints are not going to go away over at least the next 12-18 months. Tight labour markets (demographics!) and rapidly increasing costs of climate change and transition provide further longer-term upside risks to prices. It is not clear that Central Banks will actually be able to raise rates high enough to contain the resulting inflation.

After Central Banks tried to make us believe that inflation was only transitory, they now try to make us believe that our economies will have a "soft landing" and everything will be alright. One does not have to be a genius economist to have doubts about this new fairy tale. However, markets seem to believe it at least partly for the moment and, hence, the potential for mean reversion and repricing remains important until year-end and further out.

II. TAKING A LONGER-TERM PERSPECTIVE

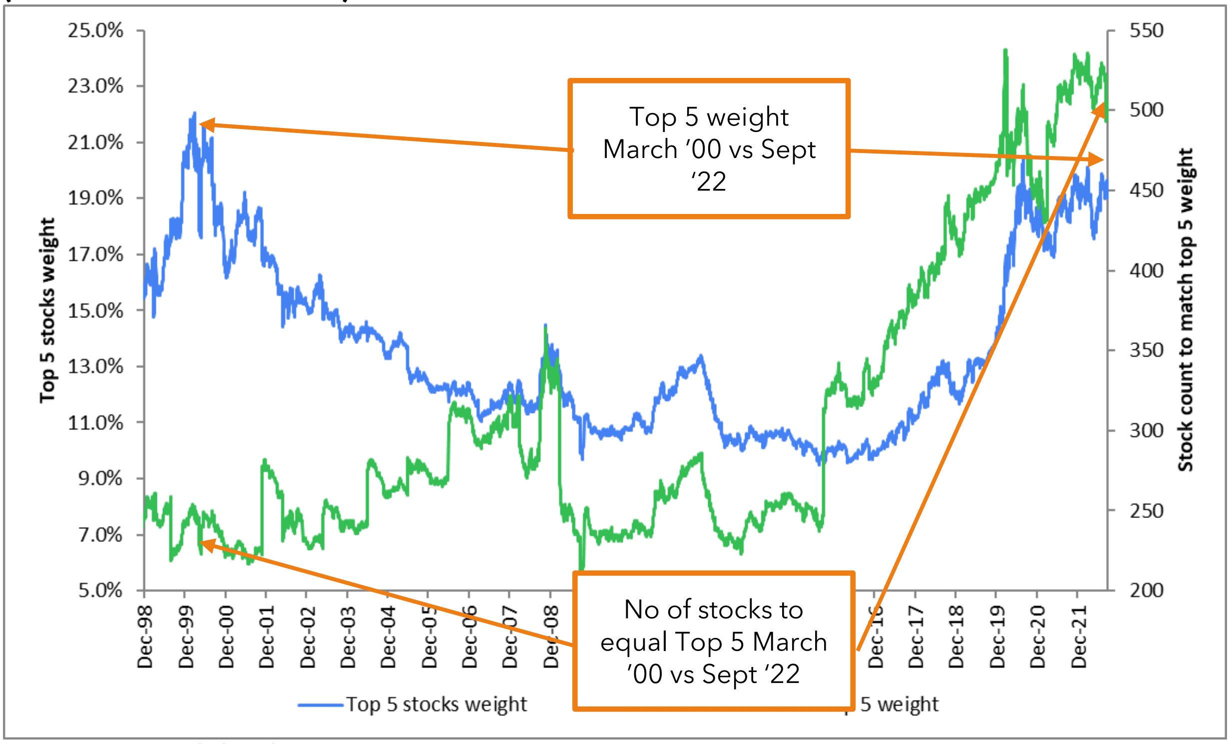
Key take-aways of this section

- The current concentration cycle seems to be even more extreme than the TMT bubble, which was also preceded by a massive concentration of the cap-weighted index.
- The large excess returns delivered in only a few months and a relatively small increase in diversification, provides an indication of the huge potential that could be unleashed in case of a more significant mean reversion.

Taking a longer-term perspective of this cycles' market concentration, helps to even better understand why we suggest in the above that the snap back of the extremely stretched rubber band of market concentration can lead to a quite violent repricing. As a comparison, market concentration nowadays is even worse than during the TMT-related concentration cycle in the late 90s and early 2000s, as shown by Figure 5. The great concentration cycle, which was due to the excessively increasing valuations of Telecom, Media and Technology stocks, started in the 90's; it reached its highest point in March 2000.

Similar to today, the five largest stocks of a major market cap US benchmark represented more than 20% of the index at the time. In March 2000, one would have needed approximately half as many stocks (253) of the smallest caps in the benchmark as today (495) to get to the same weight as the top five stocks. This remarkable observation indicates that market concentration today is even more extreme.

Figure 5: Market Cap US Benchmark: Top 5 weights vs. Number of stocks to equal top 5 weights (12/30/2002-09/30/2022)



Source: TOBAM and Bloomberg.

It is difficult to say what made this concentration so excessive. Was it the massive adoption of passive investing that started after 2000? In the US only, according to the ICI 2022 factbook, index funds grew from $384 billion to $5.7 trillion tripling their market share from 7.5 percent at year-end 2000 to 25.9 percent at year-end 2021, while index equity mutual funds accounted for the bulk (82 percent) of index mutual fund net assets. A recent study by Haddad et al. (2022)[1] highlights that an increase in passive investing as large as the increase over the last 20 years leads to substantially more inelastic aggregate demand curves for individual stocks (by 15%), i.e., destroying competition in the stock market that can exacerbate inefficient risk concentrations. And to what extent has retail investors' increased participation in the market through online brokerages contributed to market concentration?

From a performance point of view, an extreme concentration cycle such as the one we have experienced back in the late 90s and early 2000s already created a massive difference in performances between a diversified investor and an investor who was exposed to the massive bets of the cap-weighted index portfolio. We plot the effect of concentration/deconcentration cycles in the US equity market as an example (Figure 6) and try to link this to the performance of a maximally diversified portfolio. We have segmented the period into concentration/deconcentration cycles.

The orange line on the Z-Axis depicts the cumulative changes of the square of the "constant matrix diversification ratios" for a major market cap US benchmark, for as long as these changes were negative. When the orange line increases, the cap-weighted index is concentrating. Conversely, when the orange line decreases, it indicates that the cap-weighted index becomes less concentrated (more diversified).

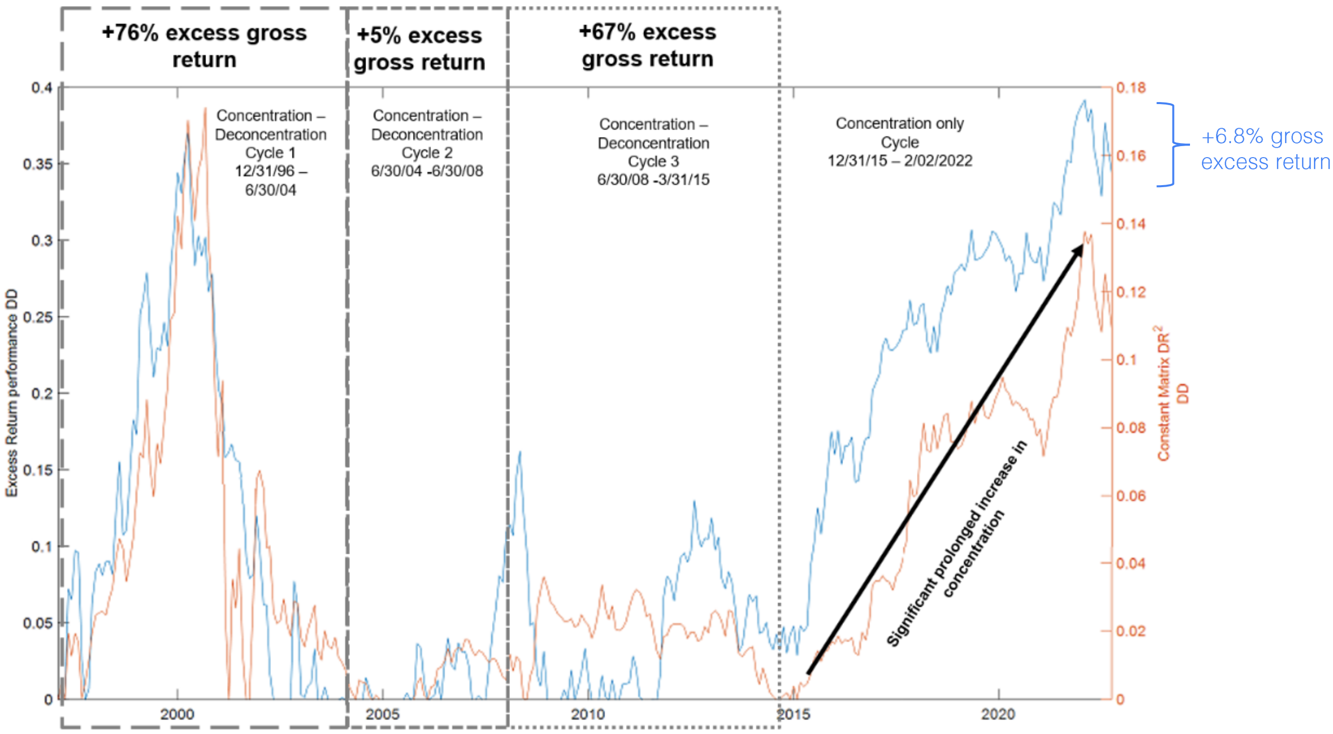
The blue line represents the cumulative negative gross excess returns of the implementable version of a maximally diversified portfolio. This means that whenever this blue line increases, the maxdiv strategy underperforms the market cap US index and the other way around. At the top of the graph in Figure 6, we have noted the cumulative gross outperformance of the strategy that investors could have earned had they invested right in the very beginning of the respective concentration/deconcentration cycle and had they stayed invested until the very end of the cycle.

[1] Haddad, Valentin, Huebner, Paul and Loualiche, Erik, 2022, How Competitive is the Stock Market? Theory, Evidence from Portfolios, and Implications for the Rise of Passive Investing, Working Paper UCLA.

As Figure 6 highlights, an investor who started to invest into a diversified US large cap equity portfolio just before the big concentration driven by the TMT stocks started, would have outperformed an investor in the cap-weighted portfolio by +76% at the end of the full concentration and deconcentration cycle.

How large is this effect going to be this time when the rubber band seems to be even more stretched? Obviously, we cannot make any statement about his. A first indication is, however, the period in 2022 when, as explained in Section 1, a mild deconcentration started. Since end of March 2022, the diversified portfolio has outperformed by more than 6%, whereas the weight of the top stocks has not even moved by much.

Figure 6: Market cap US index Cycles of Market Concentration and Deconcentration and Gross Returns of a Simulated Maximum Diversification Portfolio (12/30/1996-09/30/2022)



Source: Bloomberg, TOBAM as of September 30th 2022.

III. CONCLUSION

While we do not know what the months to come are going to bring, we feel that it is probably unrealistic to hope for a sudden resolution of the Ukraine-Russia tension, supply chain constraints, inflation, or a turnaround in the negative momentum in geopolitics that have developed. Moreover, the slowdown in earnings momentum points towards negative surprises that are still to come and that haven't really been anticipated yet by investors.

All of this together has a very large potential to trigger the mean reversion or re-ordering of record market concentration that will eventually happen.
In this context, rethinking portfolio risk management and reducing risk concentrations might turn out to be not only a good idea, but rather an imperative.

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The Maximum Diversification® approach, TOBAM's flagship investment process founded in 2006, is supported by original, patented research and a mathematical definition of diversification and provides clients with diversified core exposures, across equity and fixed income markets.

In line with its mission statement and commitment to diversification, TOBAM also launched a separate activity on cryptocurrencies in 2017.

As at December 2021, TOBAM manages approx. $10 billion on behalf of clients globally. TOBAM's team is composed of 51 professionals.

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