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The need for multi-factor equity investing in dynamic markets

Jie Lu Ph.D.
Portfolio Manager
Eastspring Investments

Michael (Xiaochen) Sun Ph.D.
Director, Quant Capability
Eastspring Investments

"THE WHOLE IS GREATER THAN THE SUM OF ITS PARTS" – ARISTOTLE

Aristotle's famous quote indicates the essence of successful investment strategies. It acknowledges the fact that the total effect of integrated elements often generates superior outcomes compared to the added contributions of each isolated component.

This holistic view recognises the value of interactions between parts and hence fundamentally resonates with the principles of multi-factor investing. In addition, this perspective also underpins the concept of diversification more generally, which in the current environment deserves more attention in investment portfolios.

UNVEILING CONCENTRATION RISK

Financial markets have witnessed a tumultuous first half of 2023, characterised by a range of notable events. From a surge in tech stocks driven by artificial intelligence (AI), to market volatility in commodities and cryptocurrencies, and even a severe banking crash reminiscent of the Lehman Brothers collapse. However, what sets this period apart is the persistent rise in interest rates, which has been a departure from the market conditions experienced in 2022.

Despite the challenging environment, global stocks, as measured by the MSCI ACWI, have managed to rally by approximately 14%[1]. Yet, this rally has been accompanied by a significant concentration of value appreciation within specific sectors. The AI boom, buoyed in part by advancements in technology like ChatGPT, has pushed the "Mega Tech" giants such as Apple, Microsoft, Alphabet (Google's parent company), Amazon, and Netflix to impressive gains of 35% to 50%, as shown in Fig 1.

Notably, Meta and Tesla have more than doubled in value, while the soaring demand for semiconductor chips driven by AI applications has catapulted Nvidia's stock price by a staggering 185%, briefly propelling it into the exclusive club of U.S. companies with a market value surpassing $1 trillion.

This prevailing trend of mega-cap stocks dominating the market significantly amplifies the concentration risk within the equity market. Consequently, there is a heightened level of risk associated with the market due to its concentrated nature.

To quantify the extent of market concentration, we can utilise the concept of the effective number of stocks. This metric provides a simple measure of index concentration, ranging from 1 (indicating complete concentration in

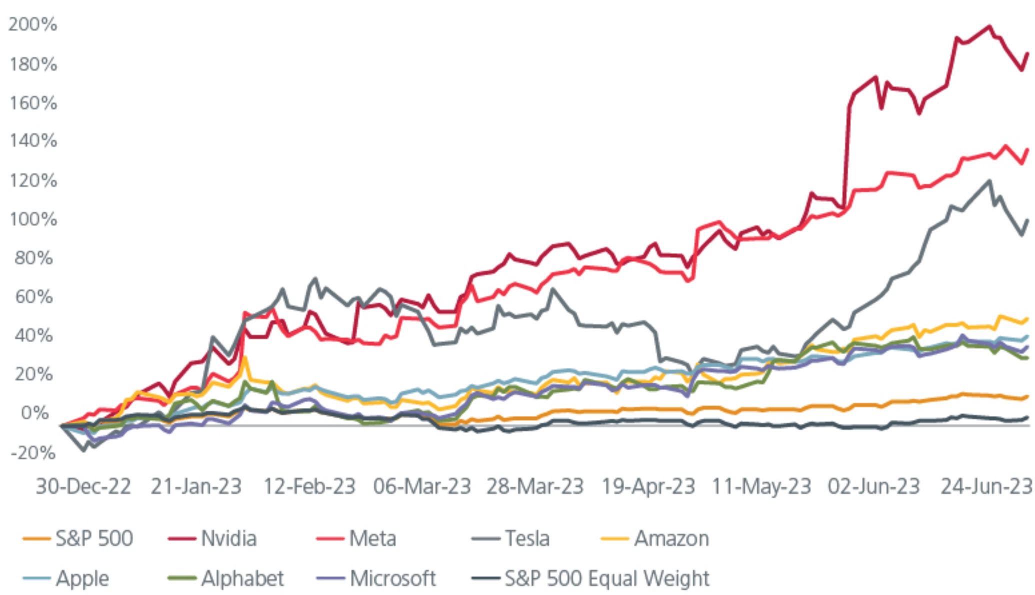
Source: [1]As at June 2023.

a single stock) to N, representing the total number of constituents in the index. A low effective number of constituents indicates a high level of index concentration.

Notably, as shown in Fig 2, the effective number of companies within the S&P 500 index has witnessed a persistent decline since March 2018, reaching an unprecedented low of only 60 effective stocks by June 2023. This level is significantly below the pre-pandemic low of 96 recorded during the dot-com bubble period, highlighting a reduced level of diversification, and underscoring the critical need to evaluate concentration risks meticulously.

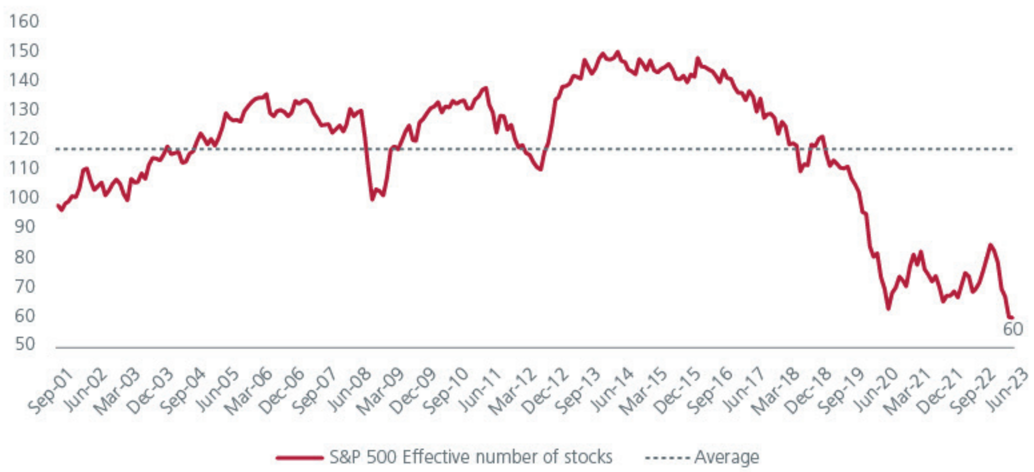
Recognising the concentration risk, market cap index providers have taken action. For example, the Nasdaq-100 Index, the underlying index for Invesco QQQ Trust (QQQ), the world's fifth-largest exchange-traded fund (ETF), underwent a special rebalance on July 24.

Fig 1: The magnificent seven dominated the upside



Source: Refinitiv Eikon, S&P Global, and Eastspring Investments, June 2023.

Fig 2: Historical low hit of effective number of stocks



Source: Bloomberg, S&P Dow Jones Indices, and Eastspring Investments.

This rebalance aimed to address the over-concentration of the index, particularly among the "Magnificent Seven" companies, including Microsoft, Apple, NVIDIA, Amazon, Tesla, Meta Platforms, and Alphabet, which collectively represent nearly 55% of the index as of June 2023. The special rebalance did not involve the removal or addition of securities but instead focused on reducing the index's concentration in its largest constituents. This move serves as a reminder of the risks associated with over-reliance on a narrow market leadership.

THE ENDURING IMPORTANCE OF DIVERSIFICATION

Diversification, as advocated by Harry Markowitz's renowned statement that "Diversification is the only free lunch," plays a crucial role in managing risk and optimising portfolio performance. In 1952, Harry Markowitz revolutionised the field of portfolio management with his dissertation on "Portfolio Selection[2]," which laid the foundation for Modern Portfolio Theory. His insights highlighted the goal of maximising returns for a given level of risk, achieved through the incorporation of less correlated securities into a portfolio. Markowitz's ground-breaking formula enabled investors to mathematically balance risk tolerance and reward expectations, ultimately constructing an optimal portfolio.

While the benefits of diversification have long been recognised across individual stocks and asset classes, the concept extends beyond these boundaries. With the development of financial literature and theoretical frameworks, such as Robert C. Merton's Intertemporal Capital Asset Pricing Model (ICAPM)[3], the focus shifted towards diversification among factors. This evolution facilitated the emergence of multi-factor investing, allowing investors to enjoy the benefits of factor exposure while reducing overall deviation from the benchmark.

In a multi-factor equity investment strategy, the focus lies in selecting factors with low correlations to each other, ensuring enhanced diversification and potential risk reduction within the portfolio. In Figs. 3 and 4, we have presented a group of well-established risk premium factors (with our own enhanced definition). These factors make up a diverse collection of stock return drivers that are not strongly correlated with each other (Fig. 3), as indicated by the average pairwise correlation of their returns over a 3-year rolling period in Fig. 4.

BUILDING IN RESILIENCY TO THE CYCLICALITY OF INDIVIDUAL FACTORS

Factors such as Value, Quality, Momentum, and Low Volatility offer distinct return characteristics, enabling investors to capture broader market trends. While we expect our individual alpha factors to generate long-term returns, as illustrated in Fig 5, it is important to note that they may exhibit cyclical performance in the short term. However, the short-term returns of these factors do not move together due to their contrasting exposure to the economic cycles. Fig 6.

By targeting a broad exposure to cyclical, defensive, and dynamic factors, a well-formed multi-factor strategy benefits from diversification, enabling participation in the long-term outperformance of individual factors while mitigating the cyclicality associated with each factor. With a multi-factor strategy, investors not only gain exposure to various investment themes but also mitigate the concentration risk associated with relying on a single factor. This approach allows for the benefits of factor investing while effectively managing deviations from the benchmark.

CAPTURE DIVERSIFICATION BENEFITS VIA MULTI-FACTOR STRATEGIES

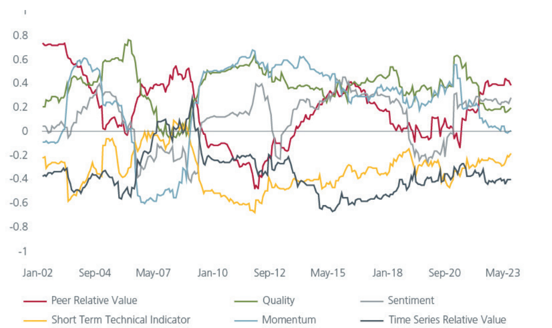
In the current market environment, where a narrow market rally driven by specific themes can lead to increased vulnerability, the need for diversification through multi-factor equity investing is paramount. Combining the wisdom of Aristotle, the insights of Markowitz, and a comprehensive understanding of the market landscape, investors can construct portfolios that capture the benefits of diversification and position themselves for long-term success.

By embracing a diversified approach, investors can navigate uncertainties, mitigate risk, and unlock the full potential of their investment strategies in the pursuit of sustainable returns.

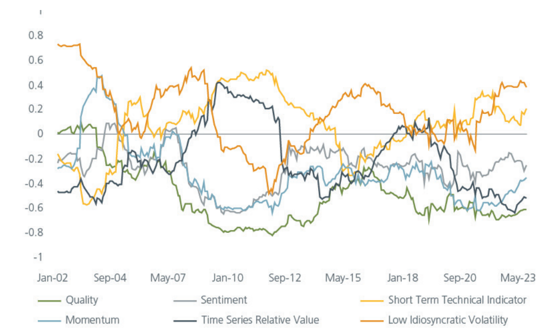
Source: [2]Portfolio Selection. Journal of Finance, 7(1), 77–91. [3]Merton, Robert C. "An Intertemporal Capital Asset Pricing Model." Econometrica 41, no. 5 (September 1973): 867–887. (Chapter 15 in Continuous-Time Finance.)

Fig 3: 3-year rolling factor return pairwise correlations

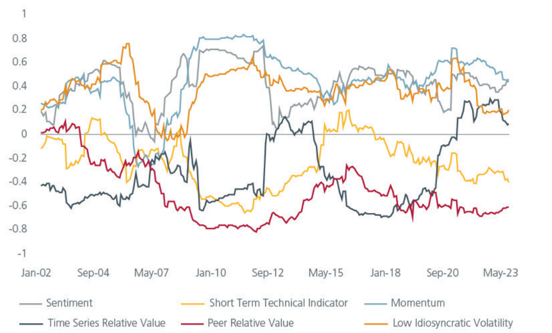
Low volatility vs other factors



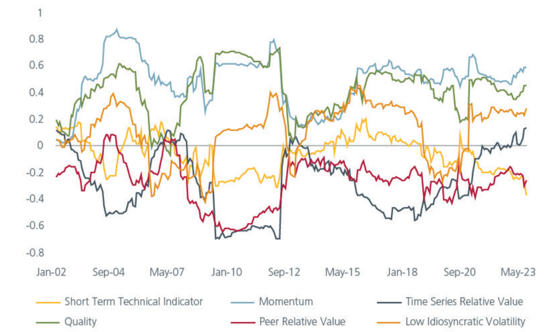
Peer relative value vs other factors



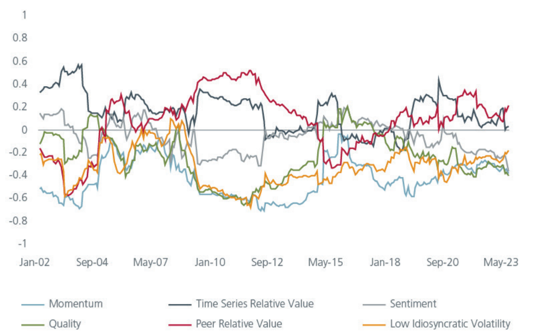
Quality vs other factors



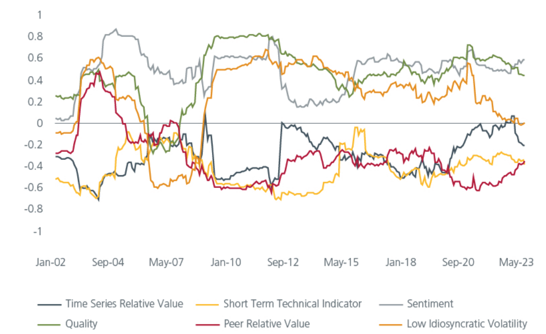
Sentiment vs other factors



Short-term technical vs other factors

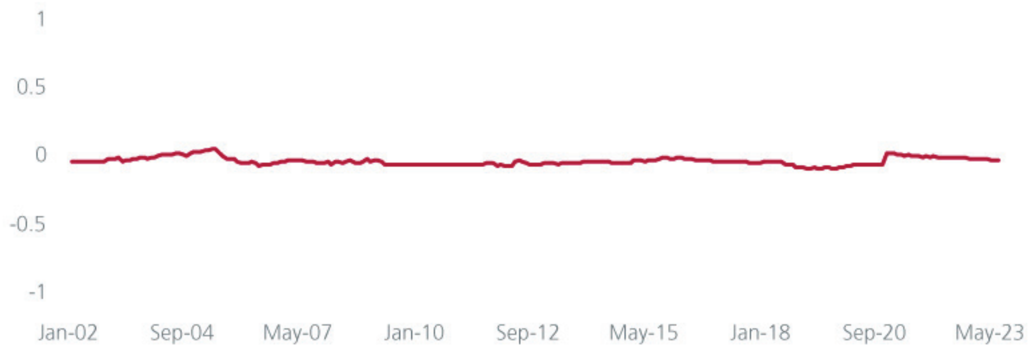


Momentum vs other factors



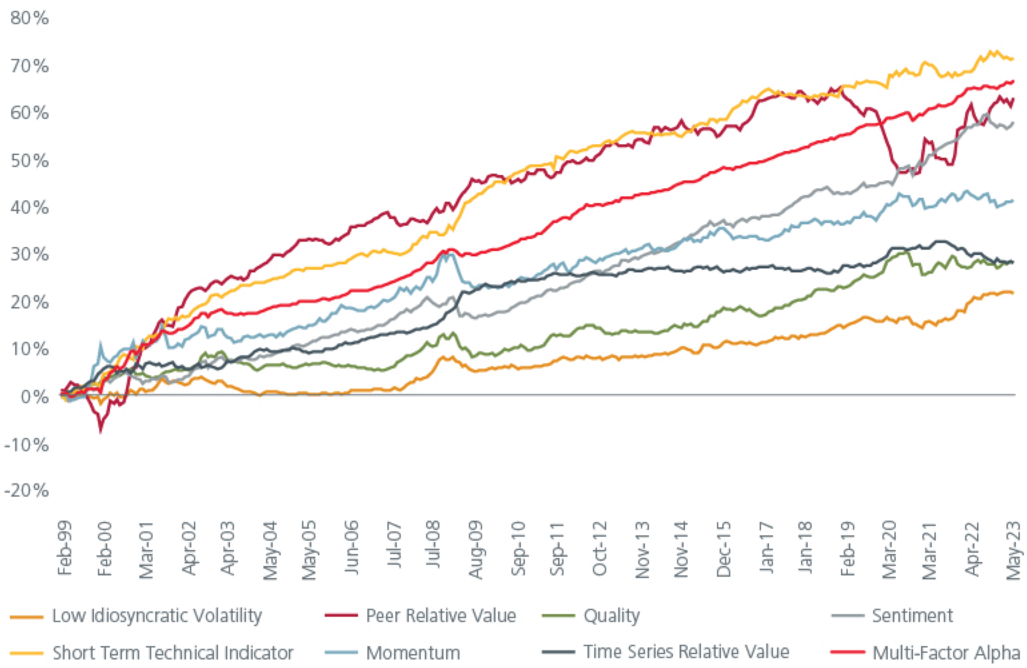
Source: Bloomberg, S&P Dow Jones Indices, Refinitiv, and Eastspring Investments.

Fig 4: 3-year rolling average pairwise correlation of factor returns



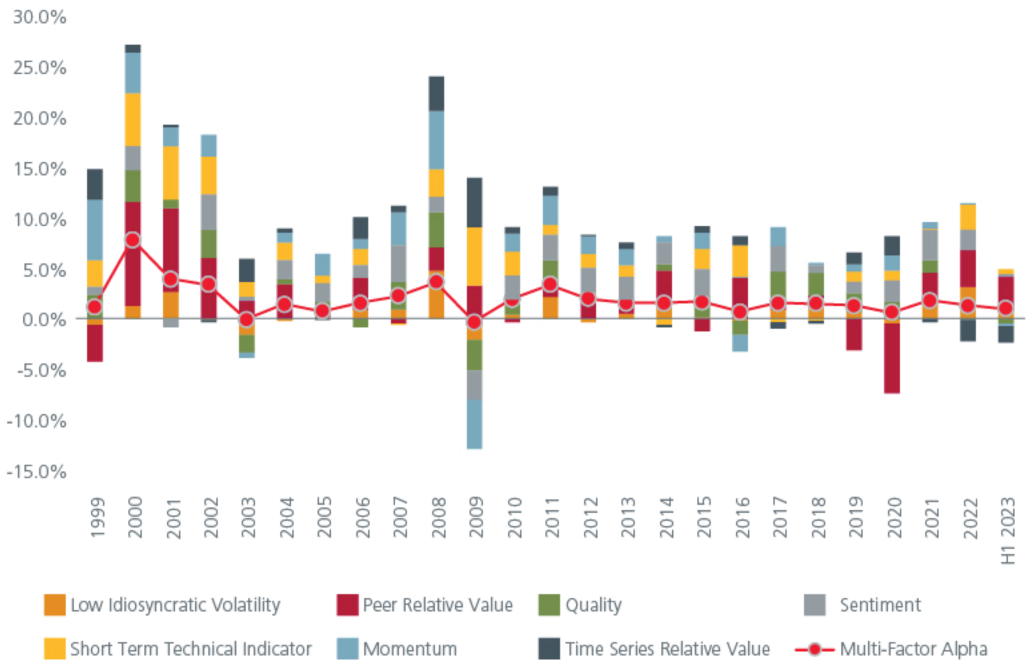
Source: Bloomberg, S&P Dow Jones Indices, Refinitiv, and Eastspring Investments.

Fig 5: Single factors' long-term performance



Source: Bloomberg, S&P Dow Jones Indices, Refinitiv, and Eastspring Investments

Fig 6: Multi-factors' long-term performance



Source: Bloomberg, S&P Dow Jones Indices, Refinitiv, and Eastspring Investments.

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