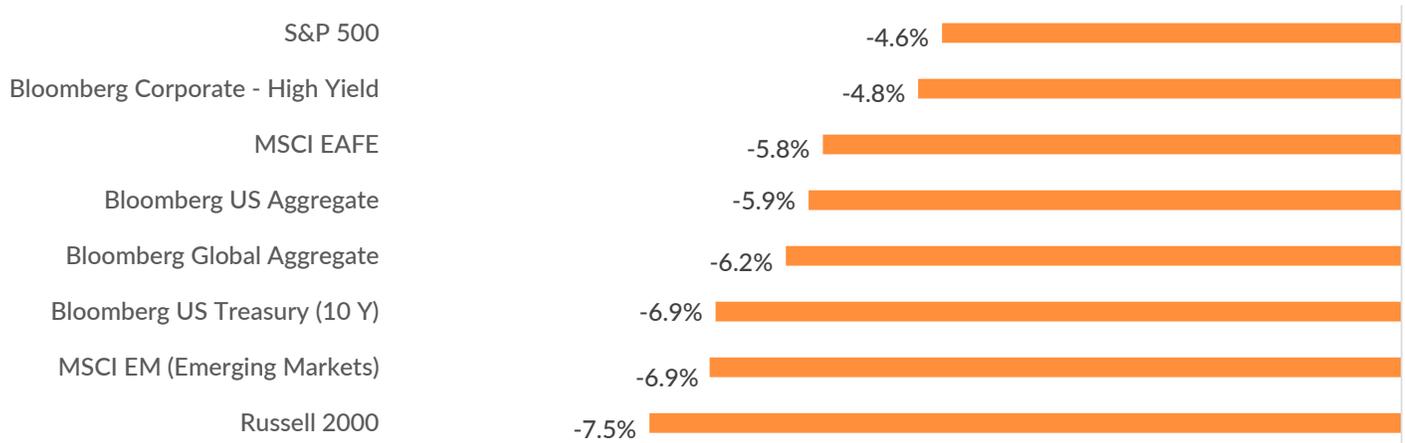


Market review: First Quarter 2022



Sources: Glenmede Investment Management LP, FactSet

As of 3/31/2022

Continued Opportunities for 2022 Amidst Market Volatility

Quarterly recap

Inflation, the dramatic repricing of the Federal Reserve's (Fed) tightening cycle and the Russian invasion of Ukraine drove a risk-off market sentiment this quarter. The S&P 500 index experienced its worst quarterly return since the depths of COVID-19 in Q1 2020, with a drawdown in Q1 2022 of -4.6%. After closing at 90 new all-time highs over the past six quarters, the S&P 500 closed at only one new all-time high this quarter, on the first trading day of the year, entering correction territory (defined as a 10% drawdown) 34 trading days later, although ultimately recouping over half of those losses in the final weeks of the quarter. The CBOE Volatility Index (VIX) closed at an average of 25.2% for the quarter, above the longer-term average since 1990 of 19.5% and reflective of increased investor perceived risk and uncertainty in the market.

Small cap (Russell 2000 Index) shifted to a negative return this quarter, experiencing a decline of 7.5%, its worst quarterly performance since Q1 2020. Large cap growth underperformed large cap value for the first time in a year, with the Russell 1000 Growth Index declining 9.0% compared to the Russell 1000 Value index decline of 0.7%. Small cap growth (Russell 2000 Growth Index) underperformed small cap value (Russell 2000 Value Index) for the sixth quarter in a row to end the quarter with a return of -12.6% for growth versus -2.4% for value. International markets also saw weakness with a decline of 5.8% for Q1 2022 for developed international (MSCI EAFE Index) and a decline of 6.9% for international emerging markets (MSCI Emerging Markets Index). During the quarter, MSCI reclassified Russian indices from emerging

markets to standalone markets, removing Russian stock exposure for the MSCI Emerging Market Index.

The impact of the repricing of the Fed's tightening cycle amidst a high inflation narrative drove U.S. Treasuries to some of the worst quarterly performance on record, with the U.S. Treasury 2-year yield and 10-year yield increasing over 150 bps to 2.30% and 80 bps to 2.33%, respectively. The flattening of the yield curve resulting in the inversion of the 5-year/30-year U.S. Treasury yield curve for the first time in 16 years, and the brief inversion of the 2-year/10-year U.S. Treasury yield curve increased investor concern of an eventual recession and potential Fed misstep. The year started with market expectations of three to four rate hikes in 2022, but ended the quarter with the expectation of potentially nine 25 bps rate hikes this year following the kickoff 25 bps hike in March.

With the February CPI reading of 7.9% the highest year-over-year increase in 40 years, the winners of the inflationary narrative and geopolitical tensions were the commodity sectors, with the broader commodity basket experiencing some of the strongest quarterly performance in history. WTI crude increased over 30% on the quarter, and S&P 500 Energy sector stocks saw a quarterly record return of 39%.

To start the year, we noted the potential of the stellar economic growth from 2021 to ripple into 2022, with the expectation of monetary tightening, waning fiscal support and midterm elections likely to add volatility to markets. While corporate earnings will likely remain robust, employment and job openings strong and corporate and consumer balance sheets healthy for

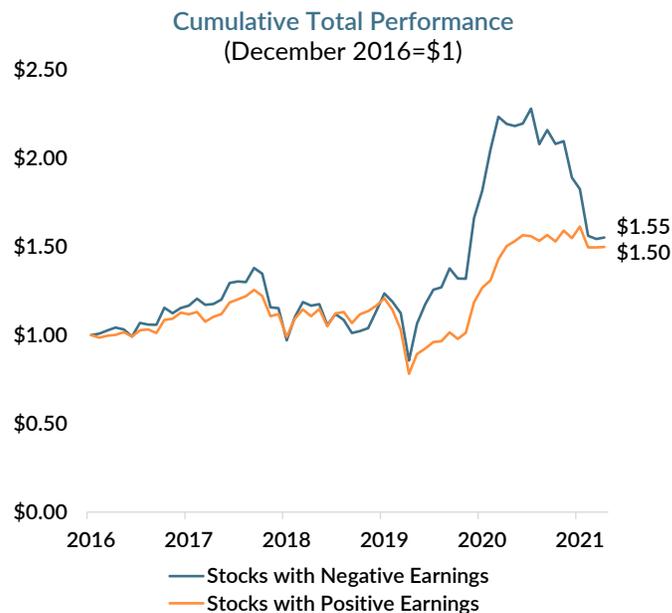
now, the continued concern of a Fed misstep, ongoing geopolitical tensions and nontransitory inflation will likely continue to create market volatility as investors begin to contemplate when and how deep of a recession may be coming.

In our [Q4 2021 Statement](#), we started the year highlighting three areas that we thought could offer interesting opportunities for 2022 – active small cap, active large cap and volatility strategies. In the sections that follow, we provide updates as we continue to see opportunities in these areas in 2022.

Small Cap: Negative Earners Could Create Positive Alpha for Active Strategies

EXHIBIT 1:

Positive vs. Negative Earnings in the Russell 2000
December 31, 2016 through March 31, 2022



Sources: Glenmede Investment Management LP, FactSet, FTSE/Russell As of 3/31/2022
Past performance is not indicative of future performance.

Q1 2022

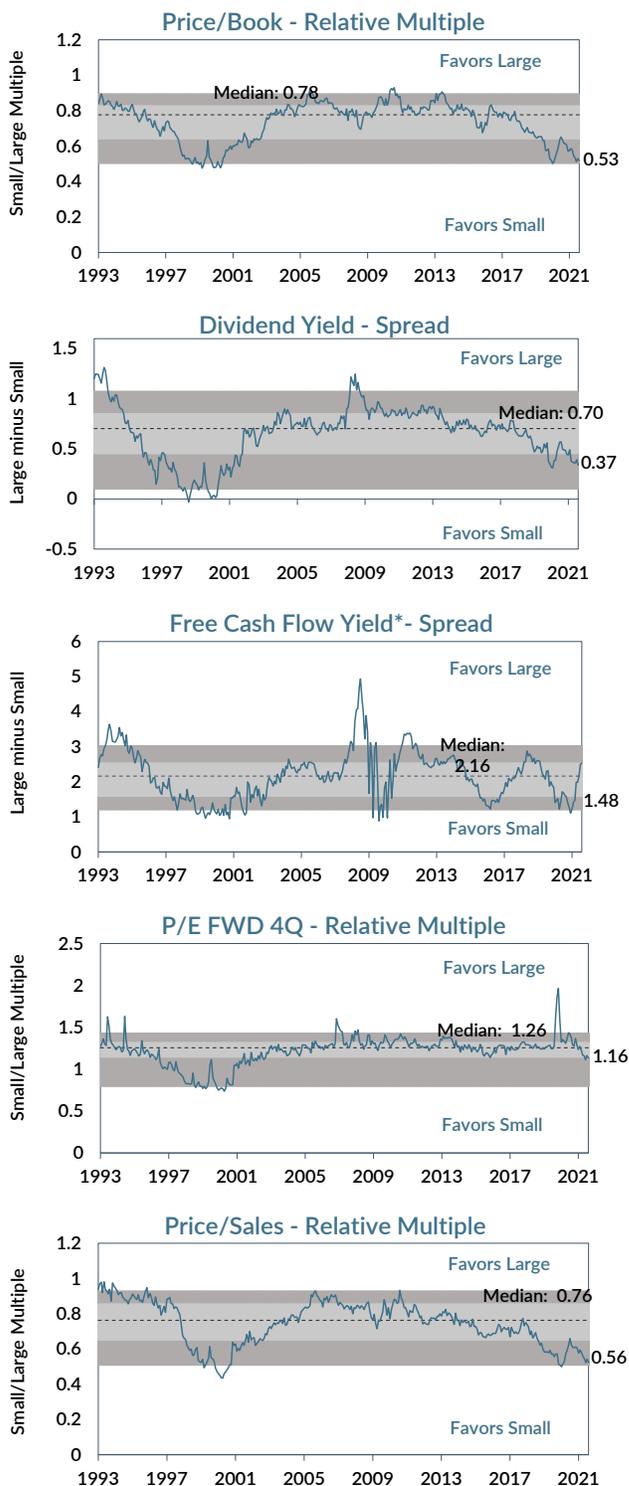
We have often discussed the cyclical periods over the past several decades of negative earners outperforming positive earners within the small cap universe (see [Why Profitability Matters: Positive versus Negative Earners](#) and [Negative Earners Could Create Positive Alpha for Active Strategies](#)). We define a negative earner as any company without earnings over the trailing 12 months. In our [Q4 2021 Quarterly Statement](#), we noted what we thought could be peak outperformance of these negative earners in mid-2021, as noted in Exhibit 1. Specifically, from December 31, 2016, through June 30, 2021, negative earners outperformed positive earners by 2x (~20% annualized return for negative earners versus ~10% return for positive earners). Since second-half 2021 through Q1 2022, negative earners declined 31.9% (not annualized) from 2021 midyear highs and positive earners declined 3.9% (not annualized), with the majority of the normalization in Q1 2022 occurring in January.

Using the longest available history for which we have usable data for the Russell 2000 (since December 31, 1986), positive earners have experienced almost 2.5x the annualized return with less than two-thirds the risk (annualized return for positive earners of 10.3% versus negative earners with 3.9% and standard deviation of 19.4% versus 32.9%, respectively). A significant portion of this longer-term outperformance of positive earners is the avoidance of large drawdowns following market bubble bursts, like the internet bubble in the early 2000s, the global financial crisis in 2008 and the more recent post-COVID lockdown of 2020 normalization.

EXHIBIT 2:

Small Cap versus Large Cap Valuations

Russell 1000 vs. Russell 2000 - Comparative Valuations



Sources: Glenmede Investment Management LP, FactSet As of 3/31/2022
(*Free Cash Flow Yield includes dividends, excludes financial companies)
Light Gray - 25/75th percentiles / Dark Gray - 5/95th percentile
Past performance is not indicative of future performance.

Outlook

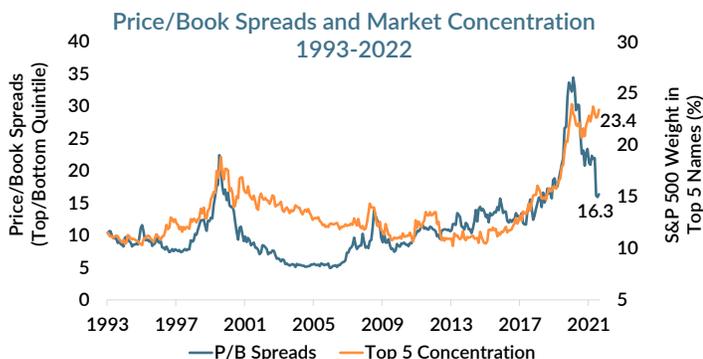
We continue to believe positive earning companies will continue to outperform negative earning companies in the long run, even with the cyclical nature of outperformance of negative earners and the more recent normalization of these stocks. Additionally, we believe the small cap universe offers a more compelling valuation risk/reward currently relative to large caps. The ratio of large cap stocks versus small cap stocks on a price-to-book, dividend yield, price-to-earnings and price-to-sales are all in the bottom 4% of observations over the past 10 and 20 years, as noted in Exhibit 2. The one metric not screening cheap on a relative basis is free cash flow yield (includes dividends, excludes financial companies), which still favors large caps.

It has taken over a decade for a number of imbalances in the financial system to build, and this has created a dynamic market environment. As the Fed embarks on a tightening cycle to combat persistent inflation, geopolitics remains in flux as globalization unwinds, and the aforementioned attractive valuation levels, we believe positive earning small caps offer a compelling risk/reward relative to other equities.

Large Cap: Concentration Risk Remains

EXHIBIT 3:

“Correction” of price-to-book spreads following peak concentration periods



Sources: Glenmede Investment Management LP, FactSet
Price/Book Spreads measure the most expensive quintile of price to book, divided by the least expensive quintile, across the Russell 3000. Market Concentration measures the aggregate weight of the largest 5 names in the S&P 500 Index. Past performance is not indicative of future performance. As of 3/31/2022

Q1 2022

At the start of the year, we noted the increased concentration of a handful of names within the large cap indices, which persisted into Q1 2022. Specifically, the top five weights in the S&P 500 (Apple, Microsoft, Amazon, Alphabet and Tesla) represented 23.4% of the index as of March 31, 2022. Concentration of this magnitude is rare, with only the dot-com and global financial crisis of 2008 periods experiencing peaks of greater than 14% since 1993.

Interestingly, as noted in Exhibit 3, during these periods of peak concentration, markets also experienced similar peaks of growth-to-value valuation extremes. We define growth-to-value valuation as price-to-book spreads of the most expensive quintile divided by the least expensive quintile of the Russell 3000 index. In the internet bubble, price-to-book spreads peaked at over 22x in February 2000, and market concentration peaked at 18.8% weight for the top five names in March 2000. During the global financial crisis, price-to-book spreads peaked at 13.9x in February 2009, and market concentration peaked at 14.3% in November 2008. In the most recent peak during the COVID lockdown of 2020, price-to-book spreads peaked at over 34x in September 2020, and market concentration peaked at 23.9% in August 2020.

As seen in Exhibit 3, the “correction” of price-to-book spreads has been sharp since the peak concentration in August 2020, similar to previous periods of extremes. In Q1 2022, amidst the repricing of the Fed’s tightening cycle, large cap growth underperformed large cap value, with the Russell 1000 Growth index declining 9.0% compared to a 0.7% decline for the Russell 1000 Value index. While growth stocks rebounded in the latter half of March to being a rounding error away from a bear market (Russell 1000 Growth index declined 19.8% from a market high on January 3, 2022, to a quarter low on March 14, 2022, versus a 6.0% decline in the Russell 1000 Value index during this same

period), we believe investor focus has likely shifted from the previous few years of “growth at any cost” narrative to a more reasonable valuation narrative.

Outlook

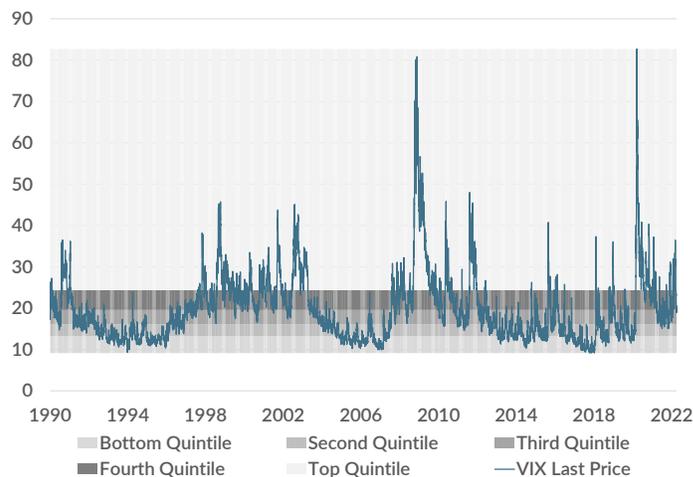
While we have seen some normalization of the growth-to-value extremes experienced in the pandemic lockdown of 2020, we continue to believe that market concentration in large cap indices remains a risk. As seen in Exhibit 3, outside of peaks, market concentration seems to lag value spreads significantly, particularly after sharp moves in value spreads. After the internet bubble peak, value spreads had reverted to normal levels by February 2001, while market concentration took until March 2004 to get to a neutral reading. In the early runup after the global financial crisis, value spreads were above average and rising by September 2013, while market concentration was below average (and catching up to value) until early 2018. Most recently, value spreads have fallen by more than 3 standard deviations, while market concentration remains quite elevated near 4 standard deviations.

In our Q4 2021 Quarterly Statement, we noted that after notable outperformance of the top 5 weightings for the three years prior to peak concentration in March 2000 (14.0% annualized outperformance between March 1997 through March 2000), these same top five underperformed the broader index by -6.1% annualized over the next three years. If market concentration were to normalize as it did during previous peaks, this would suggest that a strategy based on avoiding the largest names in the index should outperform a pure value-based approach, in comparison to their historical performance. We continue to believe this concentration could create an opportunity for outperformance by active strategies with lower concentrations in these mega caps or large cap allocations that are more diversified versus strategies with high exposures to these five largest companies.

Volatility: Compensation for Short Volatility Remains Attractive

EXHIBIT 4:

CBOE Volatility Index (VIX) Last Price and Quintiles (1990- Q1 2022)



Sources: Glenmede Investment Management LP, Bloomberg
Past performance is not indicative of future performance.

As of 3/31/2022

Q1 2022

Like many other aspects of the market, volatility cycles through regimes. Our expectation for 2022 was – and continues to be – that the broader markets will remain in a higher volatility regime. As previously noted, the VIX closed at an average of 25.2% for the quarter, above the longer-term average since 1990 of 19.5% and reflective of the increased investor perceived risk and uncertainty in the market.

Using the VIX as a proxy for market volatility, Exhibit 4 charts the VIX closing price over the past 32 years divided into quintiles. More than 50% of Q1 2022 saw the VIX close within the top quintile and 86% of the daily close observations of the VIX were in the top two quintiles, greater than the distributional expectations of 20% and 40%, respectively.

The realized volatility of the S&P 500 for the quarter measured by closing prices was 21.5%, above the quarterly average since 1990 of 15.9%. Notably, this

quarter was the first in 19 years (since Q1 2003) that the realized volatility for the quarter was above 20% and the absolute quarterly return was less than 5% (Q1 2022 with 21.5% realized volatility versus S&P 500 drawdown of 4.6% and Q1 2003 with 24.1% realized volatility versus the S&P 500 drawdown of 3.2%). In other words, the market anticipated and experienced more volatility this quarter than average, as noted by both the implied and realized volatility being above average. Notably, the S&P 500 experienced highly oscillating volatility versus straight up or down, with the S&P 500 ultimately ending lower on the quarter.

Outlook

Starting valuations are important to determining how well an investor is compensated for risk. The volatility risk premium, defined as the market-implied volatility

(expected) minus market realized volatility (historical), is a risk premium that is currently above historical averages, as discussed above with the current VIX levels relative to history. The transition from a low to high volatility regime is likely more advantageous for long volatility strategies, as experienced in early 2020 at the start of the volatility regime shift. Since the start of the pandemic, the market has adjusted expectations for volatility higher, and we continue to believe that we are in a higher volatility regime. The transition from a high to low volatility regime is likely more advantageous for short volatility strategies. As such, with the compensation for short volatility risk remaining elevated relative to history in this higher volatility regime, we continue to prefer strategies with short volatility exposure.

THE QUARTERLY STATEMENT

is a Glenmede Investment Management LP newsletter written in collaboration with the investment teams and:



Stacey Gilbert
Chief Investment Officer/
Portfolio Manager,
Derivatives

All data is as of 3/31/2022 unless otherwise noted. Opinions represent those of Glenmede Investment Management LP (GIM) as of the date of this report and are for general informational purposes only. This document is intended for sophisticated, institutional investors only and is not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GIM's opinions may change at any time without notice to you.

Any opinions, expectations or projections expressed herein are based on information available at the time of publication and may change thereafter, and actual future developments or outcomes (including performance) may differ materially from any opinions, expectations or projections expressed herein due to various risks and uncertainties. Information obtained from third parties, including any source identified herein, is assumed to be reliable, but accuracy cannot be assured. This paper represents the view of its authors as of the date it was produced, and may change without notice. There can be no assurance that the same factors would result in the same decisions being made in the future. In addition, the views are not intended as a recommendation of any security, sector or product. Returns reported represent past performance and are not indicative of future results. Actual performance may be lower or higher than the performance set forth above. For institutional adviser use only, not intended to be shared with retail clients.