Gyroscope Capital Management Group

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Quarterly Commentary

As portfolio managers, we frequently speak with investors and their advisors regarding the performance of the U.S. equity market and the strategies that we manage. During these conversations we often hear references to market indices, such as the Dow Jones Industrial Average (DJIA), Nasdaq Composite (COMP), or, S&P 500, as “the market.” For example, when we hear investors talk about how *the market* has moved by a certain number of points, we know they’re typically referring to changes in the DJIA, which is not representative of the market as a whole.

Despite the widespread recognition of well-known market indices, we have found that many investors don’t fully understand how these indices are constituted, constructed, and weighted. Further complicating the discussion is the common practice of using the terms “index” and “benchmark” interchangeably. Although an index may be, and often is, a reasonable benchmark for an investment strategy, performance comparisons to market indices are often imperfect. Understanding the distinction between the two concepts and how they relate to a given strategy is of critical importance as it relates to evaluating strategy performance.

In this piece we attempt to highlight the importance of understanding the use of an index as a benchmark from an investor’s perspective. We do so by first discussing the distinction between an index and a benchmark. We then highlight how benchmark performance comparisons relate to both active and passive investors. Next, we describe the strengths, weaknesses, and inherent biases of some well-known indices. Finally, using our Dividend Income Strategy as an example, we discuss some important points to consider when comparing an investment manager to an index as a benchmark.

DIFFERENCES BETWEEN INDICES AND BENCHMARKS

Although the terms “Index” and “benchmark” are often used synonymously, they represent unique concepts. An **index** is a statistical tool used to measure performance by taking a sample of a population that is representative of the whole. Investors use indices to measure performance because tracking all securities in an asset class or sub-asset class would be too burdensome.

A **benchmark** is similar to an index in that it is meant to represent a large collection of individual securities. However, unlike an index, a benchmark is used to measure the relative performance of an investment manager. At the highest level, one can think of a benchmark as an all-inclusive collection of securities that a manager would hold if she were tasked with replacing all her positions with a single, passively managed portfolio.

Generally speaking, nearly all benchmarks are indices but not all indices are benchmarks. This is because indices are developed for a variety of purposes and used by a diverse population while benchmarks are selected specifically for the purpose of evaluating investment manager performance. As a matter of practical convenience, investors and managers alike frequently choose to compare performance to indices since developing, tracking, and maintaining a benchmark that is unique to a manager's investment universe (the set of securities a manager can choose from) is often prohibitively burdensome.

WHY BENCHMARKS ARE IMPORTANT

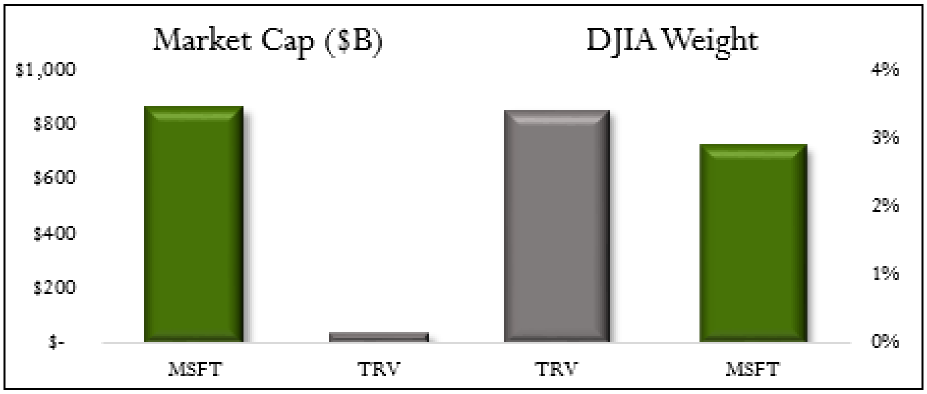
Absolute performance numbers are substantially meaningless without a point of reference. For any performance evaluation to be meaningful, investors need to compare their account's returns to a passive alternative with similar risks. Consider how an investor would view a 2% month-end gain on a well-diversified U.S. equity portfolio without a benchmark. If a representative U.S. equity index had declined by 10%, an investor might by pleased with this performance. Conversely, if the same index had been up by 14%, an investor might be less than pleased. An appropriate benchmark makes meaningful performance evaluation possible.

CHARACTERISTICS OF APPROPRIATE BENCHMARKS

Determining which (if any) index is an "appropriate" benchmark can prove to be a challenging exercise and any selection is often the subject of debate. Generally speaking, an appropriate benchmark should: be consistent with the manager's investment style and expertise, have a similar risk/return profile and factor exposures, be easily calculable on a frequent basis, and be a relative performance reference for which the investment manager accepts responsibility.

CHARACTERISTICS AND CONSTRUCTION OF COMMONLY CITED BENCHMARKS

DJIA – The Dow Jones Industrial Average is perhaps the most widely-referenced Index by the financial media. The DJIA was the first measure of the broad U.S. stock market and has been in existence for over 120 years. Today, the DJIA holds 30 large cap stocks and its performance is intended to represent the performance of U.S. equity markets. The DJIA has two advantages. First, it has a long historical track record. Second, the construction of the DJIA is simple and easy to understand. Despite these benefits, the DJIA has a critical disadvantage in terms of use as a benchmark. As a price-weighted index the DJIA is over-influenced by higher priced stocks and thus index weights do not reflect constituents' relative economic importance. For example, The Traveler's Co. (TRV) has an index weight of 3.40%, which exceeds Microsoft Corporation's (MSFT) 2.83% weight. However, in terms of market capitalization (the total value of shares outstanding), MSFT is 24 times larger than TRV.



The Graph to the left illustrates the shortcomings of a price-weighted index. Despite MSFT's vastly larger market capitalization, its weight in the DJIA is smaller than that of TRV, the smallest company in the DJIA.

Bloomberg Data as of 2/22/19

Clearly, this weighting scheme makes the DJIA a poor index to use as a benchmark because it assumes that each investor holds the same number of shares for each constituent. Of course, few (if any) investment professionals construct portfolios this way.

COMP – The Nasdaq Composite is a broad market index of over 3,000 securities that trade primarily on the NASDAQ exchange. In contrast to the DJIA, the COMP is float-adjusted market-capitalization weighted. This weighting scheme is superior to price-weighted indices for several reasons. Float-adjusted market-cap-weighted indices:

1. Employ an objective measure of each constituent's relative economic significance
2. Better reflect an investor's opportunity set and are thus more representative of professional portfolio construction
3. Are the only indices that all investors could hold (only measure shares available to the public)
4. Require less rebalancing. Price changes (including stock splits) do not necessitate a need to add or remove shares

Capitalization-weighted indices do have one disadvantage in that they are susceptible to being overly influenced by overpriced stocks. This is because as a company's stock price rises, so too does its weight in the index. While a large number of constituents and market-capitalization weighting scheme make the COMP's use as a benchmark more appropriate than the DJIA, its heavy bias towards technology stocks limits its use as an appropriate benchmark to strategies that favor the Info Tech sector.

S&P 500 – The S&P 500 Index is perhaps the most representative U.S. large capitalization equity index. Like the COMP, the S&P 500 is weighted by float-adjusted market cap but holds 500 leading U.S. companies which comprise roughly 80% of available U.S. stock market capitalization. Unlike the COMP, the S&P 500 is a broader, more accurate representation of U.S. sectors, industries, and companies. Yet another advantage is that it's part of a series of mutually exclusive indices (the S&P 500 [large cap], the S&P 400 [mid cap], and the S&P 600 [small cap]), which combined comprise an even broader (roughly 90% of U.S. market cap) index, the S&P 1500. Because of these features, the S&P 500 is the preferred market proxy of investment professionals, which is evidenced by over $9.9 trillion indexed or benchmarked to it.

While the S&P 500 has wide appeal as a broad market proxy, it does have some drawbacks. As noted earlier, the S&P 500 is heavily concentrated in the largest stocks. For example, the top 10 stocks by market cap (2% of the total number of stocks) represent roughly 20% of the total weight of the index. If investors/managers do not own these stocks, their returns are likely to deviate from those of the S&P 500. Like the COMP, the S&P 500 has a bias toward overpriced stocks. While, these drawbacks are generally of minor concern in the context of judging the S&P 500 as an index, they can make the S&P 500's use as a benchmark inappropriate.

INDEX/PORTFOLIO PERFORMANCE COMPARISON CONSIDERATIONS

As we've discussed, market indices are often used as benchmarks. These applications are most appropriate when the manager's style and/or mandate necessitate the manager to choose securities from this index while maintaining a similar level of risk, sector weightings and factor exposures. For example, a manager tasked with managing a 100-stock large cap core portfolio may appropriately be benchmarked against the S&P 500. Alternatively, many active managers follow specific investment strategies that cannot be adequately described by a broad-market index. Our Dividend Income Portfolio is one such strategy. The Dividend Income Portfolio is comprised of equal-weighted, U.S. large-capitalization (relatively) high-dividend-paying stocks. The strategy also employees a covered-call overlay program which materially alters the risk exposures of the underlying stocks. Comparing this portfolio to a broad market index such as the S&P 500 would be inappropriate for several reasons.

1. The Strategy is equal-weighted (this is a practical choice in order to improve call option coverage)
2. The Strategy holds 20 stocks (again a practical choice in order to improve call option coverage)

3. The Strategy focuses on stocks that pay above-market dividends. We cannot invest in more than half of the S&P 500's constituents (no AMZN, NFLX, GOOG, FB, etc.)
4. The Strategy sells call options, which generate additional income and provide limited downside protection, but thus also introduce optionality absent from the S&P 500.

When conducting performance evaluations on novel strategies, an obvious question arises, "If broad market indexes make suboptimal benchmarks, then how does one determine the most appropriate benchmark?" Unfortunately, this a complicated question without a clear-cut "right" answer and a comprehensive discussion of the topic is beyond the scope of this piece. A short (if imperfect) answer is that mangers often choose a "best fit" index that is widely used by peers, has regularly calculated prices which are publicly available, and is defined narrowly enough as to represent the manager's investment style with similar risks and characteristics.

As an example, we compare the performance of our Dividend Income Strategy to the CBOE BuyWrite Index (BXM). The BXM is an index that holds the S&P 500 and monthly sells an at-the-money S&P 500 index call option. This benchmark, like the S&P 500 itself, is an imperfect performance reference for the Dividend Income Strategy. While the BXM does not address the first three items listed above (this is true of most indices), it does share the optionality associated with call option sales. Also, our peers, other covered-call managers, tend to compare themselves to the BXM. Thus selecting the BXM as a benchmark facilitates easier comparisons of ourselves relative to our peers. Of course, investors still can (and will) choose to compare us to any number of other performance references.

***DISCLOSURE:** *The information in this document is provided solely for illustrative purposes. While Gyroscope Capital believes this information to be accurate, the firm cannot guarantee its accuracy or the validity of the results presented.*