



A SYSTEMATIC ADVANTAGE IN SMALL & MICRO CAPS

We originally drafted this piece in 2020, and because we found ourselves still sending it out to clients four years later, we thought it made sense to update. While some of the data have changed, all of the original paper's main objectives remain intact.

Many of us have been taught that the small cap equity market is less efficient, i.e., less followed, than the large cap equity market. The opportunities for able-minded, diligent investors, therefore, should be more pervasive in small caps. As intuitive as this notion may be, however, it fails to provide tangible support for simple questions like...

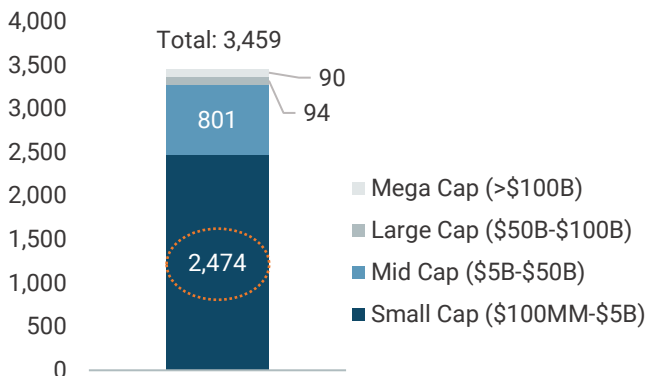
- Why is the small cap market less efficient than the large cap market, and how much less efficient is it?
- Is there a systematic way to take advantage of small cap inefficiencies?

Why is the small cap market less efficient than the large cap market, and how less efficient is it?

Measured by total market value, the large cap market is significantly larger than the small cap market. Measured by total number of opportunities, however, the small cap market dwarfs the large cap market. In fact, more than 70% of publicly traded US stocks are small cap, as highlighted in Chart 1. This includes US companies according to Bloomberg's "country of risk" designation that are actively traded on a US exchange. It excludes non-equity securities like ETFs and closed-end funds, and also excludes companies with a market cap below \$100 million.

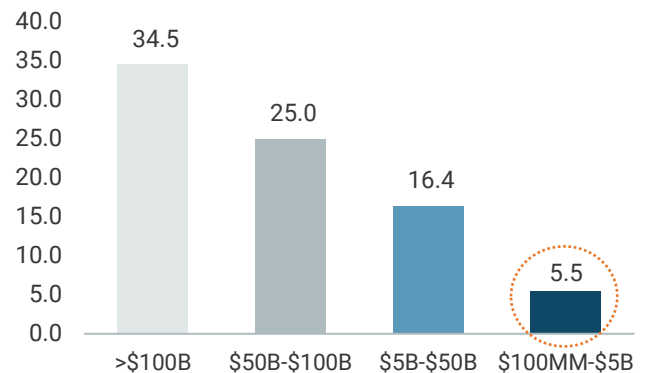
Chart 1: Number of Publicly Traded Equities in the US

As of May 8, 2024



For the 3,459 stocks in Chart 1, there are 32,076 formal analyst ratings, i.e., buy/sell/hold, so the average company has ~9 analysts covering it. Each of the so-called Magnificent 7 stocks have more than 60 formal ratings, while more than 400 stocks have no ratings/coverage at all. The relationship between the level of sell side coverage and a company's market cap is summarized in Chart 2.

Chart 2: Avg Number of Sell Side Ratings by Mkt Cap
As of May 8, 2024



Outperformance in the large cap equity market can be achieved by interpreting available information in a different way than consensus, and then being correct about that interpretation. This is best accomplished by implementing an economically sound and consistent investment approach. Adding value in the small cap equity market can be achieved this same way, but can also be achieved by uncovering information that has simply been overlooked by the market. Naturally, these informational inefficiencies are rare for a company with an army of analysts covering it actively.

Another important consideration that we believe is overlooked is the quality of coverage. It seems logical that the best and/or most experienced sell side analysts cover stocks that would command the most attention—those with large asset bases. Naturally, these are large cap companies. Conversely, an obscure small cap company is more likely to be covered by a freshly minted graduate, if it is covered at all. Consequently, we believe the difference between the sell side coverage of large caps and small caps from Chart 2 is greatly *understated*.

Chart 3 dissects the small cap market further. It replicates Chart 1 but isolates just the 2,474 small cap companies. The number of stocks, i.e., opportunities, is significantly greater further down the market cap spectrum—more than 60% of small cap stocks have a market cap below \$1 billion.

Chart 3: Number of Publicly Traded Equities in the US
As of May 8, 2024, small caps only

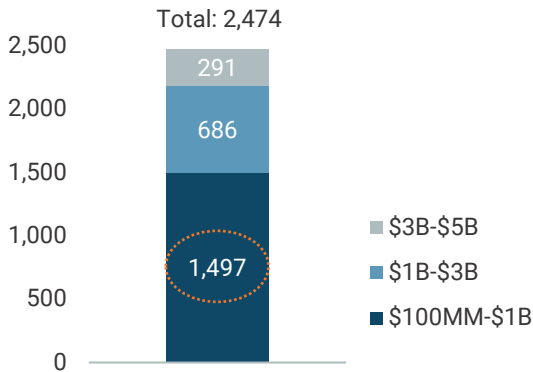


Chart 4 highlights the sell side coverage of the different market cap ranges within small cap, essentially replicating Chart 2 but isolating just the small cap market. The average sell side coverage is for the 977 small caps stocks with a market cap above \$1 billion is 8, compared to the less than 4 for the 1,497 small caps stocks with a market cap below \$1 billion.

Chart 4: Avg Number of Sell Side Ratings by Mkt Cap
As of May 8, 2024, small caps only

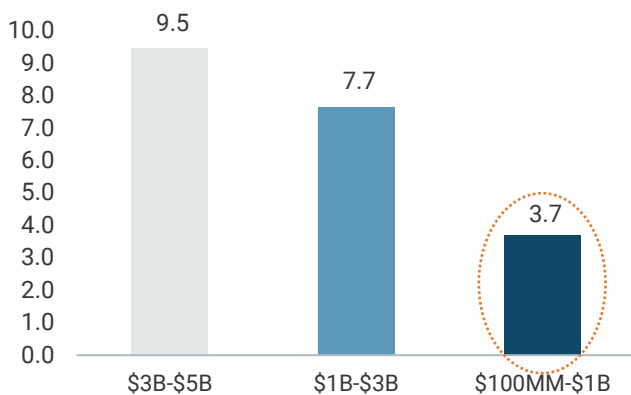
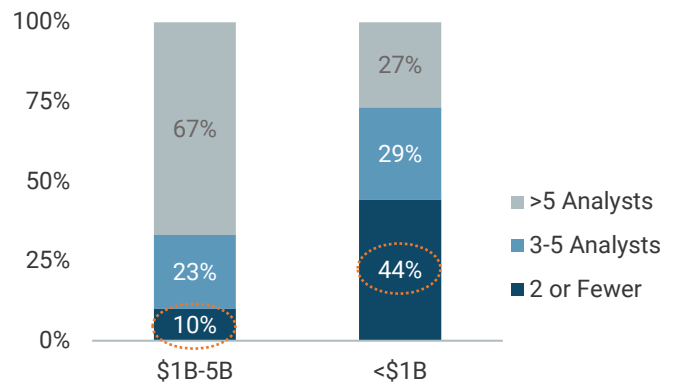


Chart 5 shows small cap stocks above \$1 billion in market cap on the left, and small cap stocks below \$1 billion on the right. Two-thirds of the stocks above \$1 billion have at least 5 sell side analysts covering the stock; More than 40% of the stocks below \$1 billion, however, have 2, 1, or zero analysts covering the stock.

Chart 5: Small Cap Sell Side Coverage
As of May 8, 2024



Buy side analysts, or research analysts of money managers that invest client assets, appear to be similarly biased toward larger cap coverage, presumably for similar reasons. Buy side data is less easy to come by, but active small cap managers demonstrate a clear bias toward the larger stocks within small cap.

For perspective, the weighted average market cap of the Russell 2000 Index is about \$3.6 billion, excluding outliers Super Micro Computer and MicroStrategy, which have market caps that are nearly \$60 billion and \$30 billion, respectively. More than 75% of the 400+ active small cap strategies in the eVestment database had a market cap larger than \$3.6 billion (all as of March 31, 2024). These managers' market cap exceeded the index by an average of 71%, getting close to double that of the index (>\$6B). On an asset weighted basis, these managers had a weighted average market cap that was nearly 3 times higher than the index (~\$10B), indicating that the larger the manager, the larger the market cap bias.

At the end of the day, it is difficult to support a small cap strategy that satisfies the following criteria:

- Stays true to its original mandate without taking excessive liquidity risk
- Has sufficient resources but is financially tenable for the sponsoring firm

All too often, small cap managers that develop a successful track record early on, stray from the original process that generated that success if/when the asset base grows. Worse still would be staying true to the original mandate but assuming excessive liquidity risk. Unfortunately, both occur as the temptation of near-term revenue too often trumps the long-term benefit of clients. We believe what is best for the client long-term is also best for the manager long-term. Failed strategies produce no

revenue. We gave a lot of thought to these difficult questions and designed our Small Cap Diversified Value strategy to disentangle these problems while taking advantage of the small cap market's inefficiencies.

Is there a systematic way to take advantage of small cap inefficiencies?

The breadth and thinly followed nature of the small cap market has one large benefit and one large drawback. The benefit is that there are overlooked opportunities available. The drawback is that the large universe makes these opportunities difficult to find. Our solution: proprietary models designed to narrow the universe to a more attractive and more manageable subset.

Our models are not screens that score companies based on current metrics like P/E, EPS growth, etc. Instead, they are designed to replicate what one of our analysts would do during the normal course of our research process. The myriad of adjustments that our models make fall into two categories: accounting and normalizing. Accounting adjustments are designed to better capture sustainable cash earnings, and to allow for an apples-to-apples comparison between companies. Our normalizing adjustments are designed to estimate a company's valuation by reverting current margins and returns on capital, to normal or mid-cycle levels.

The objective of the models is NOT to make an investment decision, but rather to prioritize the research effort for our research team. As well designed as we believe our models to be, we acknowledge their imperfections—appropriately adjusting for fundamental changes is difficult to automate. Our 25-person investment team, however, averages 25 years of industry experience and 18 years with Hotchkis & Wiley. We also have a 7-person research associate group supporting the investment team. The investment team reviews the output of the models with disproportionate attention paid to the model's limitations. The analyst can either 1) endorse the model results; 2) make an adjustment to any element of the model, or 3) eliminate the name from consideration.

All adjustments are saved in our database, so that the next time we run our models any analyst adjustments will be reflected in the model output. As time passes, therefore, the models incorporate more and more human input. This is why having a large, experienced, and stable investment team is a critical competitive advantage—we attribute the strategy's success to this characteristic. To assess company level risk, the team also provides Fundamental Risk Ratings, which rates each company based on three pillars: 1) balance sheet strength; 2) business quality; and 3) governance.

After a portfolio level risk evaluation on the back end, which considers sector/industry allocation, factor exposures, trading liquidity, and ESG issues, we have a rank order of securities starting from most attractive based on the risk/return profile. We then construct a roughly 400 stock portfolio:

Top 100:	0.4% weight
Next 100:	0.3% weight
Next 100:	0.2% weight
Next 100:	0.1% weight

We believe our models work well in the small cap market due to its information inefficiencies. They work disproportionately well further down the market cap spectrum. As a result, the portfolio typically exhibits outsized exposure to stocks with a market cap of less than \$1 billion, averaging 1.5x to 2.0x the benchmark exposure (29% vs. 18% as of March 31, 2024). The diversification of the strategy combined with our inclination to limit strategies to responsible asset levels allows us to remain true to our core competency, without taking excessive liquidity risk. It also permits a financially tenable strategy for the firm, and the structure of our team/firm helps ensure sufficient resources.

We view the strategy's design as having worked in a consistent and repeatable way. While stock selection in this market cap cohort has not been the sole driver of outperformance for the strategy, it has been a substantial and consistent contributor. This provides us with reassurance that what we created is systematically advantaged, and we see no reason why that should not persist in the future.

Data source: Charts 1-5, Bloomberg

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