A SYSTEMATIC ADVANTAGE IN SMALL & MICRO CAPS

"Right now, I'm having amnesia and déjà vu at the same time...I think I've forgotten this before."

-Steven Wright, Comedian

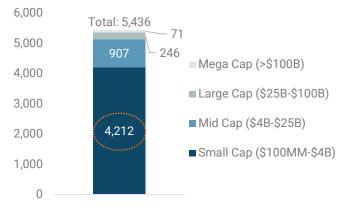
The objective of this paper is to revisit important concepts that have likely been learned in the past, but perhaps have faded from memory. Many of us have been taught that the small cap equity market is less efficient (i.e. less followed) than the large cap equity market. The opportunities for able-minded, 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, nearly twothirds of publicly traded US stocks are small cap, as highlighted in Chart 1.

Chart 1: Number of Publicly Traded Equities in the US As of June 2020



Based on information from Bloomberg, we estimate there are approximately 2,500 sell side analysts covering the US equity market. Most cover multiple securities across their area of expertise, typically an industry or sub-industry. The coverage area varies from one analyst to another, depending on the complexity of the companies followed and differences in individual bandwidth. For the 5,436 stocks in Chart 1, there are 32,224 formal analyst ratings (i.e. buy/sell/hold), which implies that the average analyst provides about 13 ratings and the average company has 6 analysts covering it. Facebook and Amazon have 54 official ratings, while scores of companies have none. The relationship between the level of sell side coverage and a company's market cap is summarized in Chart 2.



Chart 2: Average Number of Sell Side Ratings by Mkt Cap As of June 2020

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 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, the vast difference between the sell side coverage of large caps and small caps from Chart 2 is *understated*.

Chart 3 dissects the small cap market further. It replicates Chart 1 but isolates just the 4,212 small cap companies. The number of stocks, i.e. opportunities, is significantly greater farther down the cap spectrum—nearly 70% of small cap stocks have a market cap below \$1 billion.

Chart 3: Number of Publicly Traded Equities in the US As of June 2020, small caps only

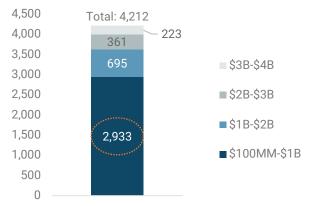


Chart 4 highlights the sell side coverage of the different market cap ranges within small cap, essentially replicating Chart 2 but isolating just the small cap market. The average sell side coverage is between 6 and 7 for the 1,279 small caps stocks with a market cap above \$1 billion. The average sell side coverage is 2 for the 2,933 stocks with a market cap below \$1 billion.

Chart 4: Average Number of Sell Side Ratings by Mkt Cap As of June 2020, small caps only

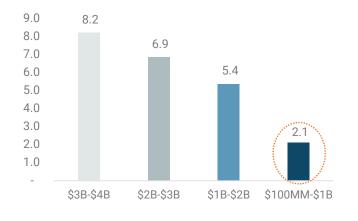
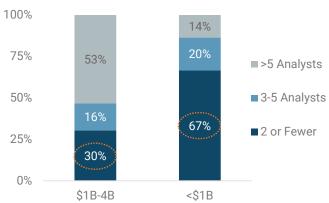


Chart 5 shows small cap stocks above \$1 billion in market cap on the left, and small cap stocks below \$1 billion on the right. More than half of the stocks above \$1 billion have at least 5 sell side analysts covering the stock; more than two-thirds of the stocks below \$1 billion, however, have 2,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

Chart 5: Small Cap Sell Side Coverage As of June 2020



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. eVestment provides data on more than 300 active small cap strategies as of June 30, 2020. More than 80% of these managers had a weighted average market cap that exceeded the Russell 2000 Index; these managers exceeded the index by a massive 85%, on average (i.e. nearly double that of the index). On an asset weighted basis, these managers had a weighted average market that was *3 times* higher than the index, 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 ("SCDV") 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 true cash flows, 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 midcycle 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 22 analysts, with average industry experience of more than 2 decades, then review the output of the models with disproportionate attention paid to its weaknesses. 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.

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, and we 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

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 not quite double the benchmark weight historically (~52% vs. ~30% as of June 2020). 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 ensures sufficient resources.

So, has this design worked in a repeatable way? We believe so. 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 advantage should not persist in the future.

Market Disruption: The recent global coronavirus pandemic has caused and continues to cause disruption in the global economy, unprecedented business and travel disruption and extreme fluctuations in global capital and financial markets. H&W is unable to predict the consequences of the upheaval caused by coronavirus pandemic, which, depending on the severity and the length of the outbreak, has the potential to negatively impact the firm's investment strategies and reduce available investment opportunities.

©2020 Hotchkis & Wiley. All rights reserved. Any unauthorized use, disclosure or distribution is prohibited. This material is for general information only and does not have regard to the specific investment objectives, financial situation and particular needs of any specific person. It is not intended to be investment advice. This material contains the opinions of the authors and not necessarily those of Hotchkis & Wiley Capital Management, LLC (H&W). Any discussion and/or view on a particular event, asset class, industry, and/or investment strategy are not investment recommendations, should not be assumed to be profitable, and are subject to change. H&W has no obligation to provide revised opinions in the event of changed circumstances. Information obtained from independent sources is considered reliable, but H&W cannot guarantee its accuracy or completeness. For Investment Advisory Clients.

All investments contain risk and may lose value. Equity securities may have greater risks and price volatility than U.S. Treasuries and bonds, where the price of these securities may decline due to various company, industry and market factors. Investing in value stocks presents the risk that value stocks may fall out of favor with investors and underperform growth stocks during given periods. Investing in smaller, medium-sized and/or newer companies involves greater risks not associated with investing in large company stocks, such as business risk, significant stock price fluctuations and illiquidity. Data source chart 1-5: Bloomberg.