

The Opportunity in US Micro Cap

Over longer time periods, micro cap stocks have historically carried a significant return premium over large cap stocks. Data going back to 1926 shows micro cap stocks outperforming large cap 70% of the time over rolling 10-year periods, and by an average of +278 basis points annualized! Not only has the asset class meaningfully outperformed, active managers in the space have been able to add significant value above micro cap indices.

That said, the recent geopolitical and economic backdrop has led investors to shy away from typically economically sensitive areas of the market like micro cap, in favor of the perceived safety of large cap stocks. For the trailing 1-year ending 3/31/2022, the Russell Microcap Index is <u>down</u> 11.0%, while the Russell 1000 Index is <u>up</u> 13.3%. If history is any guide, this kind of dislocation among size categories does not persist. We believe the best defense is diversification, and this may be a timely opportunity to introduce or increase an allocation to micro cap stocks.

Key Takeaways

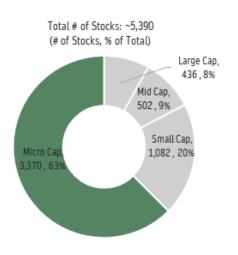
- Most institutional portfolios lack a specialized micro cap manager and are underexposed to the opportunity set.
- Historical long-term US equity returns point to the existence of a micro cap premium over large cap.
- Micro cap active managers have demonstrated the ability to add consistent alpha.
- Micro cap offers a differentiated source of returns resulting in lower correlations among major global equity markets.
- We believe a targeted and efficient approach to research and portfolio construction is required to unlock value in this inefficient space.



An Overlooked Opportunity

The definition of 'micro cap' can vary among investors. At EAM and for the purposes of this analysis, we define micro cap in line with FTSE Russell methodology. The Russell Microcap Index is constructed by taking the lower 1,000 stocks in the Russell 2000 Index, plus the next 1,000 stocks by market cap. As of December 31, 2021, this results in the Russell Microcap Index having a weighted average market cap of \$835 Million. Accordingly, we estimate the micro cap opportunity set as those stocks below \$1.5 Billion in market cap, resulting in a universe of 3,370 stocks. This means over 60% of all publicly traded stocks in the US are micro cap.

More than half of all publicly traded stocks in the US are micro cap





Despite micro cap stocks outnumbering large caps on US exchanges by 7:1, the number of investment strategies dedicated to US micro cap is limited. There are nearly 3,000 actively-managed US equity investment strategies in the eVestment database, representing over \$10 Trillion in assets under management. Of those, only 76 strategies are categorized as micro cap, representing just 0.27% of total assets invested. This suggests that institutional managers are under-exposed to a huge subset of the US equity universe.

In contrast, there are 644 US small cap products available. Many investors choose to allocate to a dedicated small cap strategy, believing it provides sufficient exposure to the lower end of the market cap spectrum. Indeed, micro cap equities are usually considered a subset of the small cap universe. However, the Russell 2000 Index, the most common US small cap benchmark, is market cap-weighted with just 20% of its weight in stocks below \$1.5 Billion in market cap. Consequently, the median small cap manager is even less exposed, having just a 16% allocation to stocks below \$1.5 Billion in market cap.

Additionally, relying solely on a small cap manager for access to micro cap can make portfolio risk exposures difficult to measure and control. A small cap manager may then be rewarded for taking incremental market risk when they should really only be compensated for generating excess returns. One way to potentially avoid this, is to have a dedicated micro cap manager, with a micro cap benchmark, who is able to harness the potential of stock picking in this rich opportunity set.



Micro cap has historically outperformed large cap, but not recently

The theory of a 'small cap premium' presumes that stocks with low market capitalizations should earn greater returns than stocks with higher market capitalizations to compensate for a higher level of risk. Indeed, historical US equity data dating back to 1926, shows the smallest two deciles by market cap have returned 12.0% annualized, outperforming the largest two deciles by 192 basis points annualized. Said another way, \$1 Million invested in micro cap stocks in 1926 would have grown to be \$49 Million at the end of 2022, compared to if it was invested in large cap stocks would have grown to \$9.4 Million.

Smaller market cap stocks have historically outperformed mid and large cap



Source: Performance is based on Center for Research in Security Prices (CRSP) monthly data from January 1926 through December 2021. The market is broken into deciles based on market capitalization with the following definitions: Large (deciles 1-2), Mid (deciles 3-5), Small (deciles 6-8), Micro (deciles 9-10)

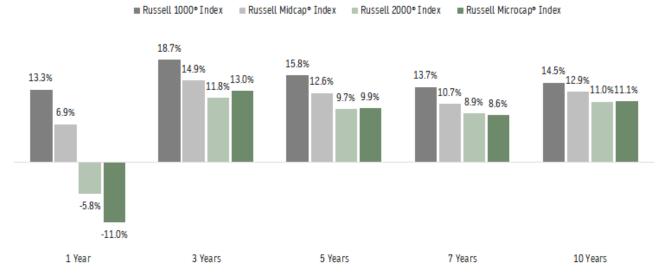
This is not to say that micro cap always outperforms. This higher return potential does come at the expense of higher volatility. If you have a long time horizon, however, the data shows micro cap outperforms *most* of the time, and the impact can be meaningful. Going back to 1926, micro cap has outperformed large cap 70% of the time on a rolling 10-year basis by an average of +278 basis points annualized.

The recent environment, however, marks a period of divergence between large and micro cap stocks. We saw such underperformance in the early months of the pandemic, and are seeing this now as rising interest rates, supply chain disruptions and inflationary fears have led micro cap stocks to fall disproportionately relative to large cap. For the trailing 1-year period ending March 2022, the Russell Microcap Index is down 11%, underperforming the Russell 1000 Index by over 24 percentage points! With this recent stretch of underperformance, micro cap now trails large cap by 339 basis points for the annualized trailing 10-year period.

If history is any guide, this diversion should not persist. Today's dislocation may represent a timely opportunity for investors wishing to either introduce an exposure to micro cap or increase existing exposure.



Current dislocation among size categories may be an opportunity



Source: FTSE Russell as of March 31, 2022.

Diversification Benefits

The characteristics of micro cap stocks can lead them to behave differently than larger companies. In today's environment, smaller companies may be more insulated from geopolitical turmoil, as most of their revenues are generated domestically. With radical lockdowns imposed in China, war in Europe, and rising inflation, some speculate we are entering a period of deglobalization. Micro cap companies may be beneficiaries of this trend as businesses look to source more of their supply chains to domestic sources.

Over the long term, smaller companies tend to be more influenced by company-specific factors rather than broad market shifts since company profitability is often determined by a focused product set. Additionally, larger companies often look to smaller companies for innovation because of their flexibility and nimbleness to their respective business climates, which results in persistence in acquisition activity.

These dynamics result in micro cap returns having a lower correlation to other asset classes and, therefore, diversification benefits when added to a portfolio. The chart below illustrates that micro cap stocks have had a meaningfully lower correlation to their larger cap counterparts.

Correlations by Asset Class

	Russell Microcap	Russell 2000	Russell 1000	S&P 500	MSCI ACWI ex-US	MSCI EAFE	MSCI Emerging Markets
Russell Microcap	1.00						
Russell 2000	0.97	1.00					
Russell 1000	0.80	0.88	1.00				
S&P 500	0.77	0.86	1.00	1.00			
MSCI ACWI ex-US	0.71	0.76	0.85	0.85	1.00		
MSCI EAFE	0.70	0.75	0.85	0.85	0.98	1.00	
MSCI Emerging Markets	0.59	0.64	0.70	0.69	0.90	0.80	1.00

Source: FTSE Russell, MSCI. Last 10 years of monthly returns ending March 31, 2022



Fertile Ground for Active Managers

The potential for a differentiated source of returns is compelling, but we believe the strongest case for a micro cap allocation stems from the opportunity for active managers to generate consistent alpha. As previously mentioned, the opportunity set is vast with over half of all publicly-listed stocks in the US falling into the micro cap category. Yet, research coverage on these stocks is relatively thin, with an average of 3 analysts covering a stock, compared to large cap which averages 23 analysts per stock. In fact, nearly 40% of micro cap stocks are not covered at all, compared to even small cap which has only 2% of stocks not covered. This could be symptomatic of the segment's frequently lower trading volumes since larger asset managers might not be as willing to invest in the segment due to liquidity constraints. The result is information inefficiencies that can create opportunities for managers to exploit mispricing.

Thin research coverage compared to larger market cap segments



Additionally, the asset class has a consistently higher degree of cross-sectional volatility compared to other equity asset classes, which is to say, these stocks tend to act very differently from one another. Micro cap companies typically address specific markets and sell a narrow set of products and services. Their success or failure is more often driven by company-specific factors, and the result is a wide range of outcomes. The higher level of cross-sectional volatility in micro cap highlights a rich environment for active managers to identify companies that are positioned to outperform.

The higher level of cross-sectional volatility highlights the size of the active management opportunity

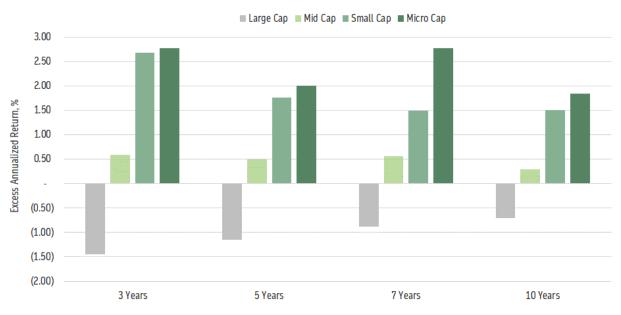


Source: Calculated using monthly data from FactSet for the last 5 years ending December 31, 2021.



A broad universe of stocks, low research coverage, and high cross-sectional volatility have resulted in a large, inefficient market where the potential for overlooked and mispriced securities is far greater than in large cap. Skilled active managers have the opportunity to exploit these types of situations to generate consistent excess returns beyond what might be expected in a large cap strategy. eVestment manager performance confirms micro cap active managers have indeed generated higher excess returns than their larger market cap peers.

Micro cap active managers have been able to add impressive excess return over larger cap peers



Source: eVestment data as of March 31, 2022. Excess return of the median manager within each respective peer group is shown, calculated using benchmarks as follows: Large Cap (Russell 1000 Index), Mid Cap (Russell Mid Cap Index), Small Cap (Russell 2000 Index), Micro Cap (Russell Micro Cap Index).

Looking at historical rolling periods of median active manager excess returns shows the consistency of this outperformance. Since inception of the Russell Microcap Index in June 2000, the median active manager has outperformed the index in 93% of rolling 3-year periods, and by an average of 265 basis points. On a rolling 5-year basis, the median active manager has outperformed the index in 99% of periods, and by an average of 280 basis points.



Manager Selection: EAM's Expertise in US Micro Cap

The sheer size and rapidly changing dynamic of the micro cap universe can make it difficult for many managers to research each and every stock thoroughly. Thus, we believe a systematic investment approach is paramount in helping managers identify and capitalize on those opportunities with the most potential in a timely fashion.

We have shown that an allocation to US micro cap stocks provides a compelling, complementary exposure for allocators that either have a large cap bias or are looking for additional alpha opportunity. EAM has been able to navigate the large selection universe of micro cap stocks by utilizing a systematic approach designed to deliver consistent and predictable return streams. Our Informed Momentum approach combines stock selection, tailored risk management, and efficient implementation to effectively deliver the momentum premium. This approach is the foundation of our firm and has been applied consistently across all EAM's strategies since inception in 2007. Historically, our success is shown by positive inception-to-date alpha through 3/31/2022 for all EAM's strategies, which span the small cap equity universe worldwide.

Strong inception- to-date alpha	Benchmark-like volatility with beta at or below 1.0	Favorable upside and downside capture ratios	Excess return correlations complement traditional styles	Consistent exposure to stock-specific risk and momentum
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Performance

	YTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD*
EAM US Micro Cap (Gross)	-12.01%	-9.59%	16.93%	16.76%	11.35%	13.88%	11.20%
EAM US Micro Cap (Net)	-12.18%	-10.31%	16.00%	15.84%	10.46%	12.98%	10.32%
Russell Microcap Growth Index	-13.71%	-25.51%	9.05%	7.97%	5.61%	9.34%	6.20%
Russell Microcap Index	-7.60%	-10.99%	13.03%	9.86%	8.57%	11.14%	7.08%
Russell Microcap Value Index	-3.45%	0.58%	14.98%	10.66%	10.27%	12.09%	7.38%

Risk Statistics

	EAM US Micro Cap	Russell Microcap Growth Index	EAM US Micro Cap	Russell Microcap Index
Annualized Return	11.20%	6.20%	11.20%	7.08%
Excess Return	5.00%	-	4.12%	-
Alpha	5.10%	-	4.32%	-
Tracking Error	7.44%	-	9.20%	-
Standard Deviation	23.9%	23.3%	23.9%	22.0%
Information Ratio	0.67	-	0.45	-
Sharpe Ratio	0.44	0.24	0.44	0.29
Beta	0.97	1.00	1.00	1.00
R-Squared	0.90	1.00	0.85	1.00
Up Market Capture	109.0%	-	109.0%	-
Down Market Capture	94.4%	-	95.7%	-

Performance and risk for the EAM US Micro Cap strategy is since inception, October 2, 2007 – March 31, 2022, gross of fees. Please see important disclosures at the end of this document.



About EAM

EAM Investors is solely focused on delivering alpha for clients in global equity markets. Our approach to investing leverages our collective insight within a systematic process designed to deliver consistent and predictable outcomes. As of 3/31/2022, we manage \$2.8 Billion on behalf of our clients.

About the Authors

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Travis is CEO and Chief Investment Officer of EAM Investors, a firm he co-founded in 2007. In addition, he is Portfolio Manager for EAM's US and Global strategies, as well as an analyst across all EAM's strategies. Prior to founding EAM, Travis was a Partner, Managing Director and Portfolio Manager with Nicholas-Applegate Capital Management where he had lead portfolio management responsibilities for their Micro and Ultra Micro Cap investment strategies and a senior role in the firm's US Micro/Emerging Growth team. He has 24 years of institutional investment experience specializing in small and micro cap equities. He holds an MBA from San Diego State University and a BA in Economics and a BA in Psychology from the University of Arizona.

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Michele is a Director of Communications and ESG lead at EAM Investors. Prior to joining EAM Investors in 2014, Michele was with Fidelity Investments for eleven years most recently serving as a Portfolio Associate and Portfolio Analyst, where she provided multiple portfolio managers with support by monitoring and analyzing portfolio positioning, risk metrics, characteristics, and performance. Additional positions at Fidelity included Operations Analyst and Senior Control Accountant. Michele has 18 years of investment experience. She holds an MBA from Northeastern University and a BS in Finance from Bentley University.



Important Disclosures

Past performance does not ensure future results, and there is no assurance that the portfolios will achieve their investment objectives.

The inception date for the EAM US Micro Cap composite is October 2, 2007. Net returns are net of the maximum annual management fee of 0.80%. The Russell Microcap Index consists of the smallest 1,000 companies in the small-cap Russell 2000 Index plus the next 1,000 securities. The Russell Microcap Value Index measures the performance of those Russell Microcap companies with lower price-to-book ratios and lower forecasted growth values. The Russell Microcap Index and the Russell Microcap Value Index are being presented for informational purposes only. The Russell Microcap Growth Index (RMGI) measures the performance of those Russell Microcap companies with higher price-to-book ratios and higher forecasted growth values. The Russell Microcap Growth Index has been chosen as a benchmark to the EAM US Micro Cap composite because the Advisor believes that it is the most appropriate broad-based securities index to be used for comparative purposes given the investment growth-oriented strategy of the portfolio.

Gross and net composite returns are presented net of brokerage commissions and include income from interest and dividends as well as capital gains less applicable withholdings. The returns do not reflect the deduction of other taxes a typical investor may accrue or custodial fees. The U.S Dollar is the currency used to express performance. All periods greater than one year are annualized.

The portfolios are actively managed and holdings are subject to change. We believe the information presented is reliable, but we do not guarantee its accuracy. The opinions expressed will evolve as future events unfold. The investment risk of the portfolios may be increased by the portfolios' ability to invest in smaller company stocks, and IPOs. Investing in growth stocks involves certain risks, in part, because the value of securities is based upon future expectations that may or may not be met. Small company stocks are generally riskier than large company stocks due to greater volatility and less liquidity.

Risk statistics for the EAM US Micro Cap portfolio are calculated for the period beginning October 2, 2007 through March 31, 2022.

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