

## China, Concentration & Cap Bias in Emerging Markets

A dedicated allocation to emerging markets small cap can offset unintended risks and improve outcomes in your emerging markets portfolio

### **Regulatory Risk**

Chinese government intervention rattled equity markets and caused an outsized impact on emerging markets portfolios

### **Concentration Risk**

Mega cap stocks have a dominating presence in emerging markets indices that sway returns

### **Large Cap Bias**

Institutional portfolios have a large cap bias in emerging markets and are missing out on the full spectrum of the opportunity set

The 2021 pullback in Chinese stocks driven by Beijing's regulatory crackdown has highlighted risks for many emerging markets portfolios. The most common benchmark for broad emerging markets exposure is the MSCI Emerging Markets Index, which has almost a third of its weight in China and heavy exposure to some of the companies impacted most by these abrupt changes. One approach managers can take to balance out this concentrated exposure in large cap is with a dedicated allocation to emerging markets small cap stocks.

Our research shows emerging markets small cap stocks are widely under-represented in institutional portfolios. In the emerging markets investable universe, small cap stocks outnumber large and mid cap stocks by 10:1 and represent 29% of the total market cap. Yet, according to eVestment, out of the 663 global emerging markets strategies, only 83 are in dedicated small cap strategies, representing just 3% of total assets invested in the emerging markets asset class.

In this paper, we demonstrate that asset allocators can enhance their emerging markets allocation by diversifying down the market cap spectrum into small cap, providing access to a differentiated source of returns and exposures. Importantly, we highlight that due to market dynamics in the emerging markets small cap universe, active managers have been able to add meaningful and consistent alpha in both up and down markets.

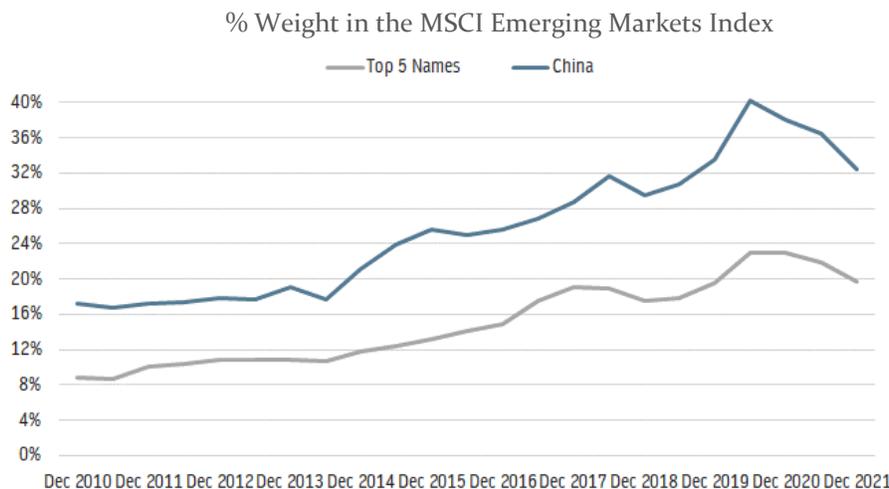
## China’s government intervention emphasized the often overlooked single-country and concentration risks present in emerging markets

Globally, it is common for institutional investors to own a dedicated allocation to small cap stocks alongside existing large cap allocations. Combining the two asset classes can potentially achieve beneficial and differentiated returns and exposures when compared to a standalone large cap allocation. The same principles should hold true in emerging markets, where the need for diversification is magnified given the prominence of mega cap stocks and single-country concentration risks in emerging markets.

The MSCI Emerging Markets Index is the most common benchmark for institutional emerging markets managers. Among the benchmark’s 1,400 securities, the top five holdings represent an overwhelming 20% of the weight as of December 2021. The influence of the benchmark’s five largest names has increased substantially over the past decade, as their total weight has more than doubled.

Similarly, exposure to China has ballooned over the years. In the last decade, the weight of China grew from 17% to nearly 40% of the MSCI Emerging Markets Index at the beginning of 2021 - the highest level ever for any single country and greater than the weight of the bottom 24 countries combined!

### Index concentration in China and mega-cap names has increased substantially over the past decade



The MSCI Emerging Markets Index is not representative of broad emerging markets exposure

The increasing concentration of this index warrants investor attention given the outsized exposure to a single country and just a handful of stocks. The top five mega cap names, Taiwan Semiconductor, Alibaba, Tencent, Samsung and Meituan, helped propel the MSCI Emerging Markets Index to outperform its small cap counterpart in 2019 and 2020, accounting for 34% and 65% of the index’s gains, respectively. However, in 2021, four of these five stocks have lost steam and have been a significant drag on the index. A big reason for the selloff of these mega cap names was the Chinese government’s crackdown on technology and for-profit education stocks in mid-2021, where Beijing showed little regard for shareholders.

#### MSCI Emerging Markets Index Top 5 Names

	Weight	2021 Return
Taiwan Semiconductor	7.0%	12.1%
Tencent Holdings	4.3%	-19.2%
Samsung Electronics	4.0%	-9.1%
Alibaba Group Holding	3.0%	-42.7%
Meituan	1.5%	-23.9%
<b>Total % in the Top 5</b>	<b>19.7%</b>	

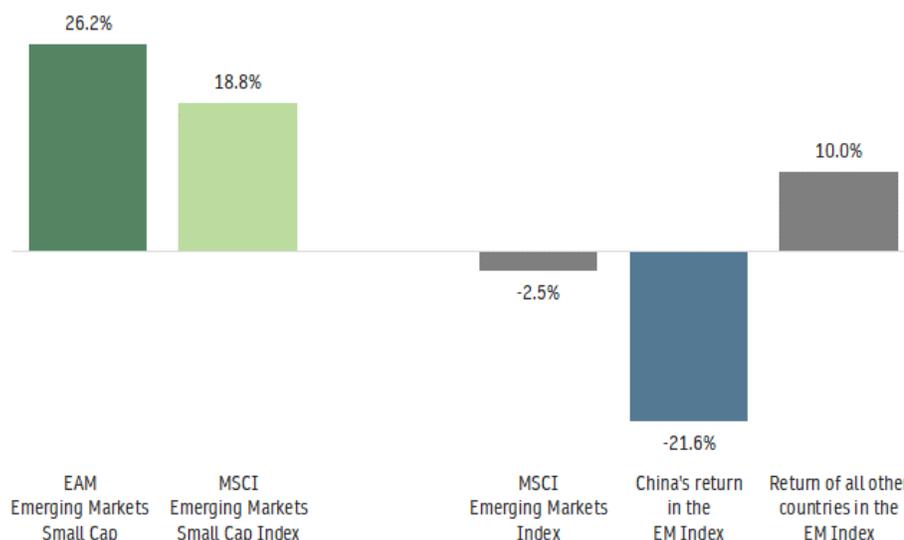
## Chinese mega cap stocks were a significant detractor in emerging markets in 2021

Single-country risk within the MSCI Emerging Markets Index also became more visible this year. The pullback in China rattled investors and exposed the authority the Chinese government has on public equity markets. Beijing’s regulatory crackdown has had far reaching implications for Chinese companies, but particularly for large technology companies. So far this year, Chinese stocks in the MSCI Emerging Markets Index were down 21.6%, while all other countries in the index were collectively up 10%.

Small cap, on the other hand continued to perform well in 2021. Risk appetites and diversification among holdings have propelled the MSCI Emerging Markets Small Cap Index to gain 18.8% in the year. Nearly 40% of the massive performance difference between the small and large cap indices can be attributed to China.

### Underperformance of Chinese stocks has nullified emerging markets gains in 2021

Performance for Calendar Year 2021



EAM Emerging Markets Small Cap strategy returns are presented on a gross basis. Please see important performance disclosures at the end of this document.

These events in China have uncovered the single-country and concentration risks present in emerging markets. Despite little clarity on future Chinese government intervention, it is evident that Beijing’s authority is unlimited and therefore diversification seems prudent. An allocation to emerging markets small cap stocks can help dilute these concentration and country risks that are present in many emerging markets portfolios.

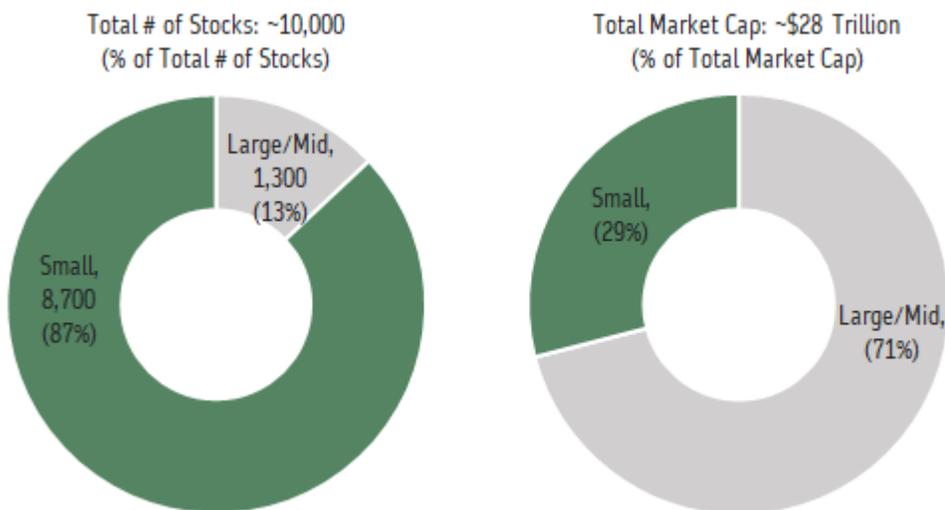
	MSCI Emerging Markets Index	MSCI Emerging Markets Small Cap Index	Relative
China	32.4	8.8	-23.6
Russia	3.6	1.0	-2.6
Saudi Arabia	3.3	2.3	-1.1
Mexico	2.0	1.7	-0.3
Indonesia	1.4	1.9	0.4
South Africa	3.2	3.7	0.5
Malaysia	1.4	2.8	1.5
Brazil	4.0	5.7	1.7
Thailand	1.7	3.7	2.0
Korea	12.8	16.3	3.4
Taiwan	16.1	22.4	6.4
India	12.5	21.8	9.3

## Emerging markets small cap is fertile ground for active management

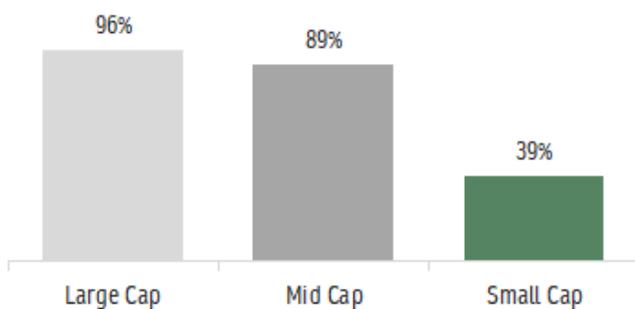
Looking at the full investable universe of emerging markets securities, small cap offers a vast opportunity set where the potential for overlooked and mispriced stocks is far greater than in large cap. As such, active managers have been able to capitalize on these opportunities to add consistent and meaningful alpha. The asset class, therefore, should be evaluated in consideration of the significant contributions from active managers.

We estimate the investable universe of emerging markets small cap equities to include approximately 8,700 public companies with market capitalizations between \$100 million and \$4 billion – that’s 87% of emerging markets stocks, ten times the number of large and mid cap combined. On a market cap basis, in aggregate small cap stocks represent 29% of the emerging markets asset class.

### Most emerging markets stocks are small cap



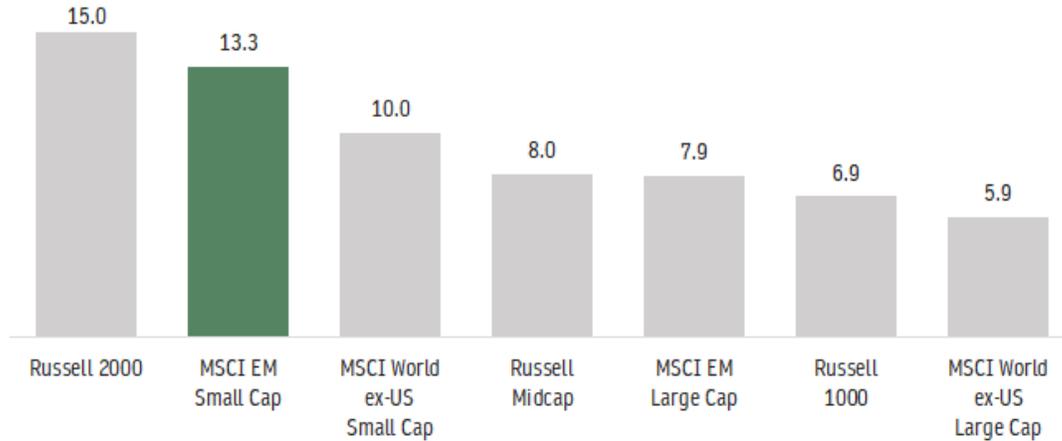
### More than half of all emerging markets small cap companies have no analyst coverage



Information inefficiencies due to lack of analyst coverage amplify opportunity for managers to exploit mispricing. With 8,700 stocks in the investable universe, research coverage is considerably light. On average, emerging markets small cap stocks are covered by 2 analysts relative to large cap at 20 analysts. In fact, more than half of all emerging markets small cap companies have no sell-side analyst coverage at all.

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. Small 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 small cap highlights a rich environment for active managers to identify companies that are positioned to outperform.

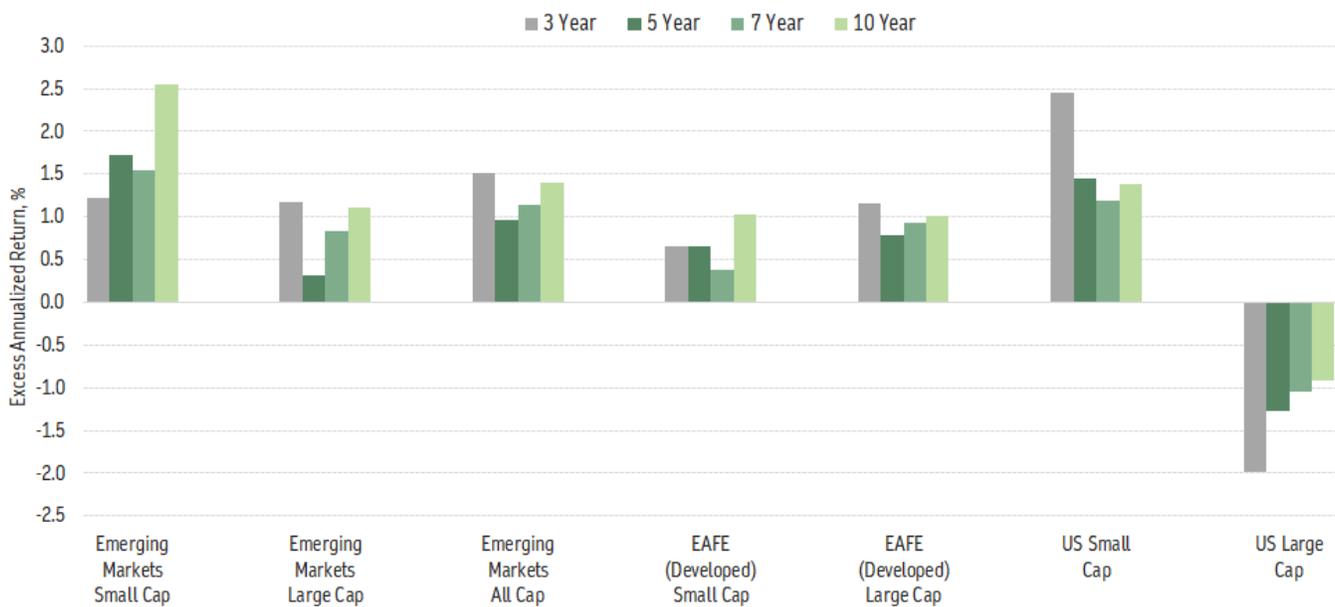
Higher cross-sectional volatility highlights the active management opportunity



Skilled, active managers have been able to exploit these types of situations to generate consistent excess returns beyond what might be expected in a large cap strategy

Indeed, skilled, active managers have been able to exploit these types of situations to generate consistent excess returns beyond what might be expected in a large cap strategy. Hence, a dedicated, actively managed emerging markets small cap strategy can help capture the full potential of the asset class, whereas an all cap approach risks significantly diluting this possible alpha and an indexed approach potentially misses it altogether. eVestment manager performance confirms that emerging markets small cap managers have been able to add significantly more alpha than their large cap or developed market peers over longer-term time periods.

Emerging markets small cap managers have had higher excess returns than their large cap and developed market peers over longer time periods

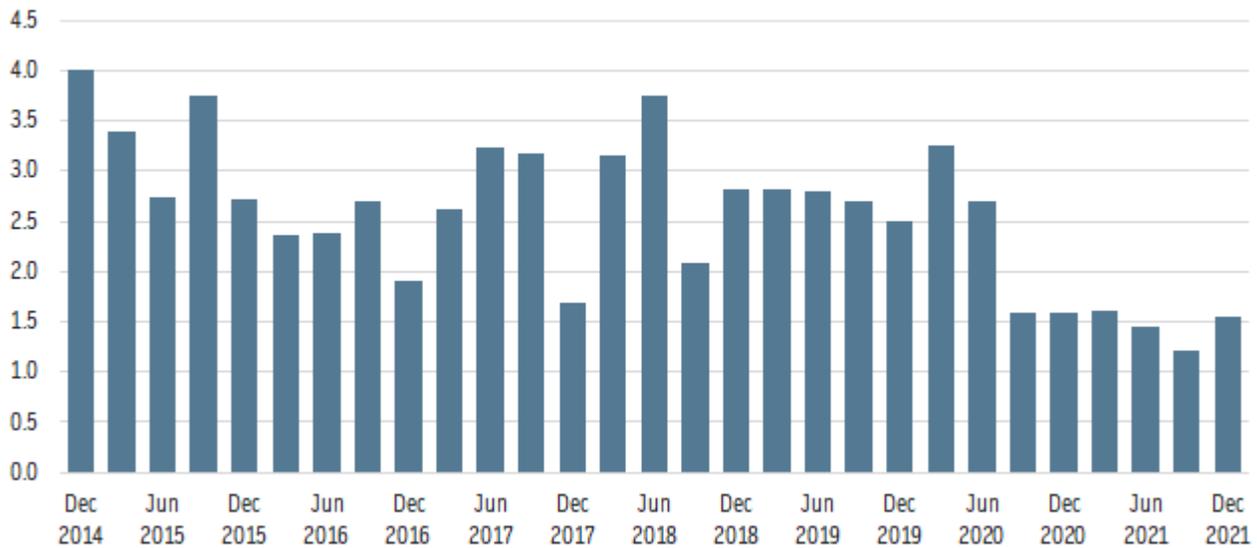


Source: eVestment median manager excess returns are for each respective universe and associated benchmark as of December 31, 2021.

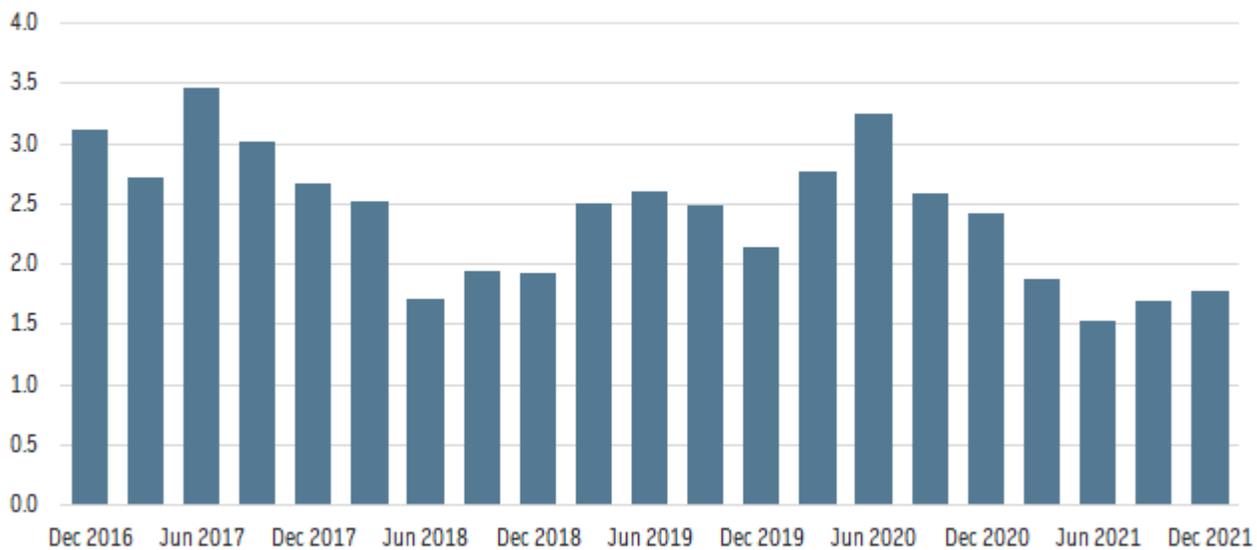
## Active managers have consistently added value in emerging markets small cap

Looking at rolling 3- and 5-year periods of median active manager excess returns shows the consistency of this outperformance. Over the last decade, the median active manager has added +256 basis points of excess return on average over 3-year periods, and +242 basis points annualized on average over rolling 5-year periods.

Median Active Manager Excess Return: Rolling 3 Year Periods



Median Active Manager Excess Return: Rolling 5 Year Periods



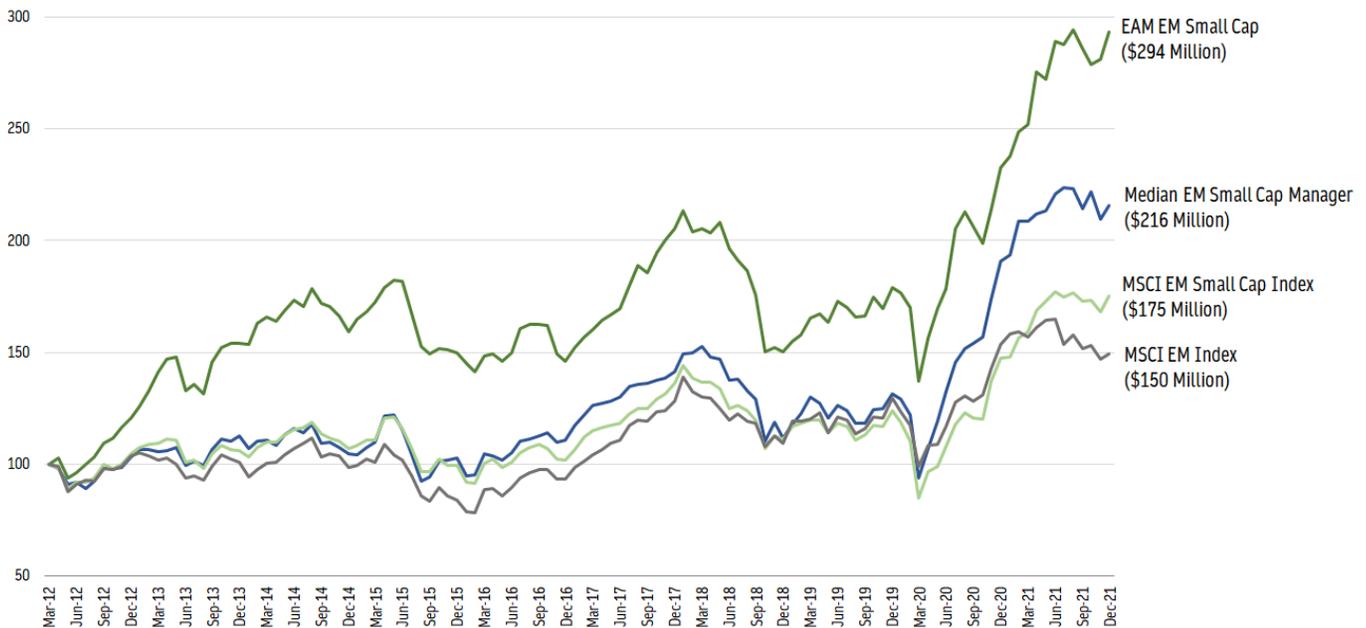
Source: MSCI, eVestment. eVestment median manager excess returns for quarterly rolling periods, calculated using the Emerging Markets Small Cap universe and relative to the MSCI EM Small Cap Index. Please see important disclosures at the end of this document.

## Compelling Risk-Reward Opportunity

From a total return perspective, the MSCI Emerging Markets Small Cap Index has only slightly edged large cap for the trailing 10-year period, but the median emerging markets small cap manager has added significant value above both benchmarks. The chart below demonstrates that this success has materialized into a meaningful impact on investor dollars.

### Active management alpha has had a meaningful impact on investor dollars

Cumulative Growth of \$100 Million



Source: MSCI, eVestment. eVestment median EM Small Cap manager ranked on annualized return for the period April 1, 2012 through December 31, 2021. EAM Emerging Markets Small Cap strategy returns are for the composite gross of fees. Please see important disclosures at the end of this document.

This begs the question, why have asset allocators been chronically under-invested in an area where active managers have found so much success? The perceived high risk associated with emerging markets small cap companies might be one reason. It is true that volatility may be marginally higher for small cap relative to large cap, however, it is not to the degree that some may think. Additionally, higher Sharpe ratios for emerging markets small cap indicate this risk is well-compensated.

### Higher Sharpe ratios for small cap indicate higher risk is well-compensated

	1 Year			3 Year			5 Year			7 Year			Since Inception		
	Return	Std. Dev. (%)	Sharpe Ratio	Return	Std. Dev. (%)	Sharpe Ratio	Return	Std. Dev. (%)	Sharpe Ratio	Return	Std. Dev. (%)	Sharpe Ratio	Return	Std. Dev. (%)	Sharpe Ratio
EAM EM Small Cap	26.19%	12.61	2.07	24.93%	20.80	1.15	15.01%	19.06	0.73	9.13%	17.80	0.47	11.68%	17.02	0.65
MSCI EM Small Cap Index	18.75%	10.08	1.86	16.46%	22.20	0.70	11.47%	19.20	0.54	7.32%	18.52	0.35	5.93%	16.96	0.31
MSCI EM Index	-2.54%	11.08	-0.23	10.94%	18.59	0.54	9.87%	16.63	0.53	6.11%	16.93	0.31	4.22%	16.07	0.22

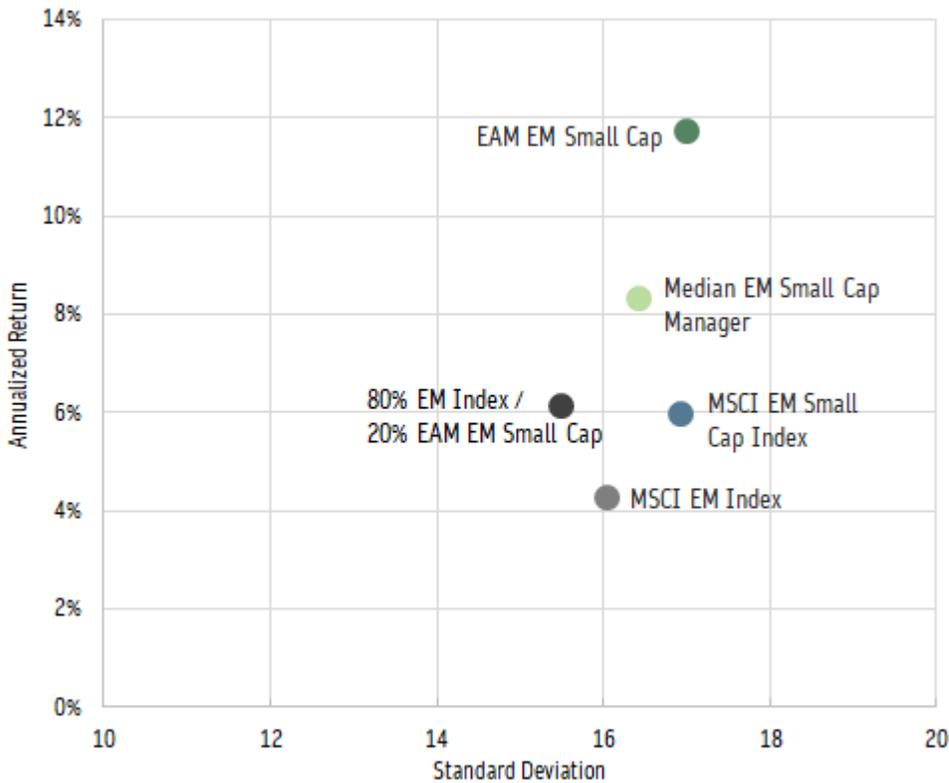
EAM EM Small Cap risk and returns are for the composite, gross of fees. Please see important disclosures at the end of this document.

## Risk is not as high as may be perceived

In fact, since inception of our strategy in 2012, active managers, including EAM, have outperformed demonstrating better returns, with similar volatility to large cap. Further, over this period, adding a 20% EAM Emerging Markets Small Cap allocation to a portfolio indexed to the MSCI Emerging Markets Index would have yielded an additional 189 basis points annually, with incrementally lower risk.

### Risk-Return Profile of Emerging Markets

Since Inception of EAM EM Small Cap Composite, April 2012 – December 2021



Emerging markets small cap has outperformed large cap with similar volatility

Source: MSCI, FTSE Russell, eVestment. eVestment median EM Small Cap manager ranked on annualized return for the period April 1, 2012 through December 31, 2021. Corresponding standard deviation is annualized for the same period. EAM Emerging Markets Small Cap strategy returns are for the composite gross of fees. Please see important disclosures at the end of this document.

## Active managers can provide downside protection

Of particular concern for investors are periods of market drawdowns, when ‘risk assets’ typically lag. The 2008 financial crisis marked the largest decline in index history, in which the MSCI EM Index fell -61.6% from Nov 2007 through Feb 2009, while the MSCI EM Small Cap Index retreated -65.2% for the same period. Since then, the EM Small Cap Index has experienced four bear markets, which are typically defined as periods when the index falls by more than 20%. In each of them, small cap fell by as much or more than the broad EM Index. However, in every case the median active manager provided cushion against small cap’s underperformance, to the tune of over 300 basis points.

Equally as important, active managers have demonstrated the ability to add considerable value in the subsequent rally periods. In the most recent rally, however, in small cap equities globally including EM, active managers have struggled to find footing in the extreme market shifts of the pandemic recovery. If history is any guide, this is an anomaly, and active managers can be expected to add alpha as markets continue to normalize.

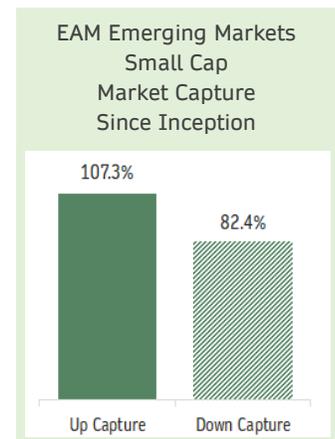
Since inception of our strategy in April 2012, the EAM Emerging Markets Small Cap strategy has demonstrated favorable market capture, outperforming in up-markets while also offering downside protection.

### Active managers have added value in both up and down markets

Drawdown/Recovery periods when the EM Small Cap Index was down >20%

Drawdown Periods					
	Length (months)	MSCI EM Index	MSCI EM Small Cap Index	Median EM Small Cap Manager	Small Cap Manager Alpha
Nov'07 - Feb'09	16	-61.6%	-65.2%	-63.0%	2.28%
May'11 - Dec'11	7	-22.5%	-28.4%	-23.2%	5.17%
Jun'15 - Feb'16	9	-24.8%	-24.6%	-20.6%	3.99%
Feb'18 - Oct'18	9	-22.2%	-25.8%	-24.1%	1.71%
Jan'20 - Mar'20	3	-23.6%	-31.4%	-29.2%	2.15%
<b>Average</b>	<b>9</b>	<b>-30.9%</b>	<b>-35.1%</b>	<b>-32.0%</b>	<b>3.06%</b>

Subsequent Rally					
	Length (months)	MSCI EM Index	MSCI EM Small Cap Index	Median EM Small Cap Manager	Small Cap Manager Alpha
Mar'09 - Apr'11	26	152.9%	206.4%	221.5%	15.17%
Jan'12 - May'15	41	19.0%	41.5%	55.3%	13.75%
Mar'16 - Jan'18	23	77.1%	57.8%	64.0%	6.19%
Nov'18 - Dec'19	13	20.0%	15.7%	19.4%	3.67%
Apr'20 - Dec'21	21	50.9%	106.4%	96.3%	-10.10%
<b>Average</b>	<b>25</b>	<b>64.0%</b>	<b>85.6%</b>	<b>91.3%</b>	<b>5.74%</b>



EInvestment median EM Small Cap manager ranked on cumulative return for each period cited. EAM EM Small Cap market capture is since inception April 2012 – December 2021, gross of fees, versus the MSCI EM Small Cap Index. Please see important disclosures at the end of this document.

## Manager Selection: EAM's Expertise in Emerging Markets Small Cap

We have shown that emerging markets small cap 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 emerging markets small cap stocks by utilizing a systematic approach to deliver more 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 12/31/2021 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

	QTD	YTD	1 Year	3 Year	5 Year	7 Year	ITD*
EAM Emerging Markets Small Cap (Gross)	2.69%	26.19%	26.19%	24.93%	15.01%	9.13%	11.68%
EAM Emerging Markets Small Cap (Net)	2.47%	25.13%	25.13%	23.88%	14.04%	8.21%	10.73%
MSCI Emerging Markets Small Cap Index	1.33%	18.75%	18.75%	16.46%	11.47%	7.32%	5.93%
MSCI EM Small Cap Growth Index	2.85%	20.41%	20.41%	19.20%	12.22%	7.12%	6.09%
MSCI EM Small Cap Value Index	-0.20%	17.00%	17.00%	13.56%	10.56%	7.38%	5.68%

### Risk Statistics

	EAM Emerging Markets Small Cap	MSCI Emerging Markets Small Cap Index
Excess Return	5.75%	-
Alpha	6.34%	-
Tracking Error	8.70%	-
Standard Deviation	16.9%	16.9%
R-Squared	0.75	1.00
Beta	0.87	1.00
Information Ratio	0.66	-
Sharpe Ratio	0.65	0.31

Performance and risk for the EAM Emerging Markets Small Cap strategy is since inception, April 1, 2012 - December 31, 2021, gross of fees. Please see important disclosures at the end of this document.

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## 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. We currently manage \$3.2 Billion on behalf of our clients.

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## About the Authors

### Josh Moss

Josh is a Managing Director and Portfolio Manager of EAM Investors, a firm he co-founded in 2007. Josh is a Portfolio Manager for EAM's Non-US strategies, as well as an analyst across all EAM's strategies. Prior to founding EAM, he was a Vice President and Equity Analyst at Nicholas-Applegate Capital Management where he served on the firm's US Micro/Emerging Growth Team with primary research responsibilities for the Micro Cap and Ultra Micro Cap investment strategies. Prior to joining the US Micro/Emerging team, Josh was assigned to the firm's Global Select team. During his tenure with the Global Select strategy, his duties included co-portfolio management and research head of the Global Consumer Discretionary Sector. Previously, Josh was with Credit Suisse First Boston as a Vice President in equity sales and investment banking. He has 22 years of direct investment experience. He holds an MBA from the Anderson School of Management at the University of California, Los Angeles and a BA from the University of California, San Diego.

### John Scripp

John is a Managing Director and Portfolio Manager for EAM's Non-US strategies and is an analyst across all EAM's investment strategies. Prior to his portfolio manager position, John served as a research analyst with EAM. Before joining the firm at its inception in 2007, he had prior research experience at Nicholas-Applegate Capital Management working with the US Micro/Emerging Growth investment team. John has 15 years of experience in the institutional investment business. He holds a BA in Economics from the University of Wisconsin, Madison.

### Michele Rodrigues

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.

Gross and net 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. Net returns are net of the maximum annual management fees of 0.85% for the EAM Emerging Markets Small Cap portfolio.

All periods greater than one year are annualized. Inception-To-Date returns for the EAM Emerging Markets Small Cap portfolio is from the period beginning April 1, 2012.

The MSCI Emerging Markets Small Cap Index includes small cap representation across 23 Emerging Markets countries and is designed to measure small cap equity market performance in the global emerging markets. The MSCI Emerging Markets Small Cap Index has been chosen as a benchmark to the EAM Emerging Markets Small Cap strategy because the Advisor believes that it is the most appropriate broad-based securities index available to be used for comparative purposes given the investment strategy of the portfolios. The MSCI Emerging Markets Small Cap Growth Index captures small cap securities exhibiting overall growth style characteristics across the Emerging Market countries as determined by MSCI and is included solely for informational purposes. The MSCI Emerging Markets Small Cap Value Index captures small cap securities exhibiting overall value style characteristics across the Emerging Market countries as determined by MSCI and is included solely for informational purposes.

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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 Emerging Markets Small Cap portfolio are calculated for the period beginning April 1, 2012 through December 31, 2021.

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