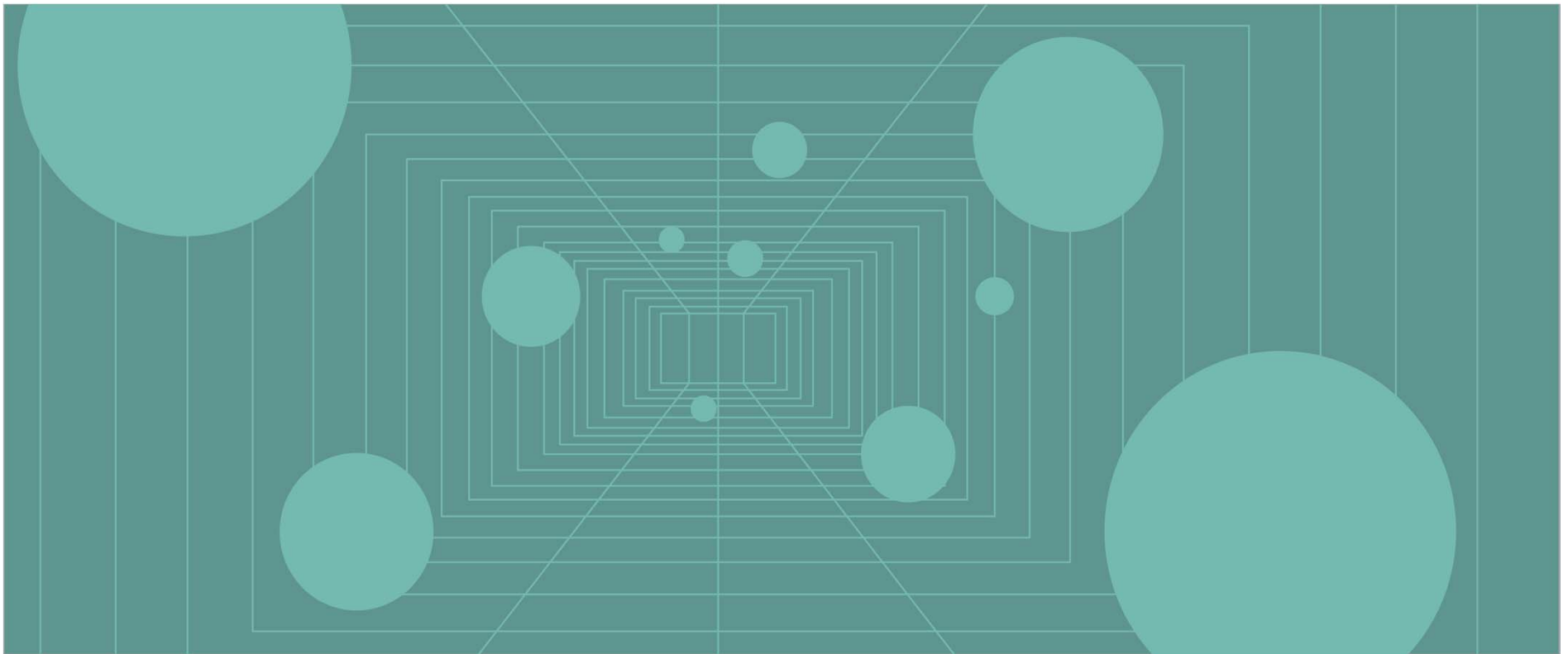


# EMERGING MARKETS EQUITY MANAGER PERFORMANCE

ANALYSIS OF 2017 AND PERFORMANCE SINCE 2000



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## Summary Observations

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- Despite exceptional overall returns, more than 55% of active emerging markets equity managers underperformed the MSCI Emerging Markets Index gross of fees in 2017, marking the first time since 2009 that the majority have underperformed in back-to-back years. The median manager underperformed the index by 60 basis points (bps). After applying a fee proxy of 95 bps, nearly 59% of managers underperformed, and nearly three-quarters of those underperformers lagged the index by more than 250 bps.
- Active managers tend to make off-benchmark bets and hold some cash, so three factors can create a better environment for active management: outperformance of small-cap stocks, outperformance of stocks in frontier markets, and outperformance of cash over the index. In 2017, all three factors were arrayed against emerging markets equity managers: emerging markets small-cap stocks underperformed the emerging markets index by more than 350 bps, frontier markets equities underperformed emerging markets equities by more than 540 bps, and cash underperformed the emerging markets index by almost 3,700 bps.
- Managers' sector allocations can differ substantially from the index. The largest absolute sector weighting differences between the index and median manager was in IT, where the median manager was underweight by 180 bps. IT was the top-performing sector for 2017, outperforming the MSCI Emerging Markets Index by more than 2,300 bps. The median manager overweighted three sectors, consumer discretionary, industrials, and financials (in rank order). Only one—consumer discretionary—outperformed the index (by 280 bps). The other two combined for an underperformance versus the index of more than 1,500 bps.

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## Summary Observations (continued)

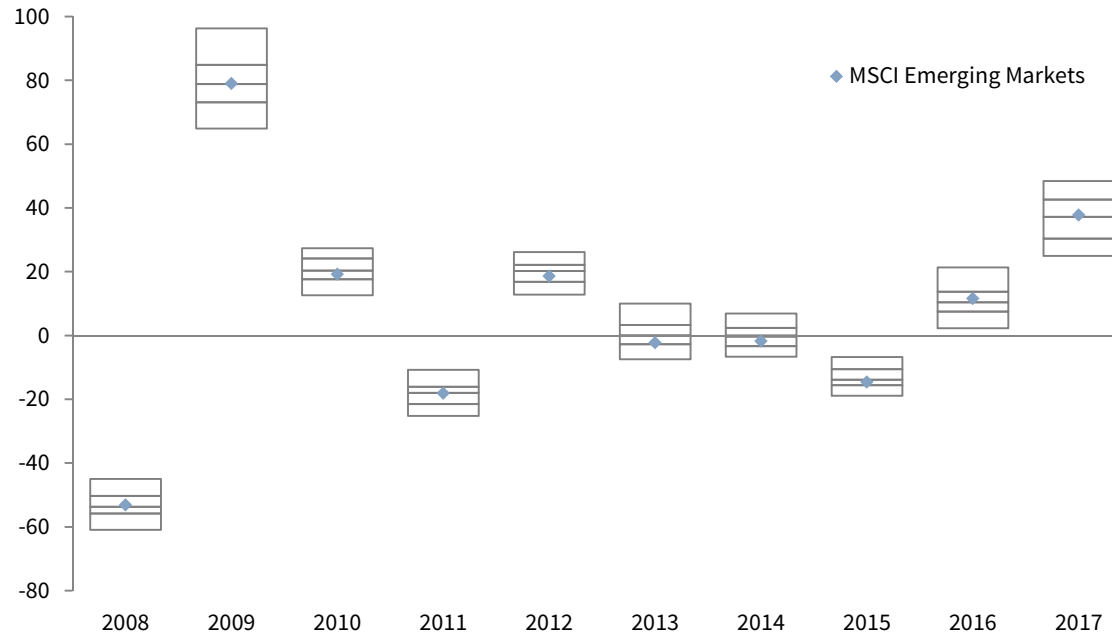
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- Country bets can also significantly impact relative performance. China was the top-performing of the six largest index constituents, outperforming the index by nearly 1,700 bps. The median manager, however, was underweight to China by 270 bps, likely missing out on the tailwind Chinese equities provided in 2017. Of the six largest (by weight) MSCI Emerging Markets Index constituents, managers were only overweight (by 60 bps) to Brazil, which underperformed the overall index by more than 1,300 bps. More than 30% of managers had off benchmark bets to Hong Kong, Argentina, the United Kingdom, and/or the United States. Of these, only Argentina outperformed the EM index (by more than 3,600 bps). The other three posted combined underperformance against the overall index return of more than 3,200 bps.
- While sector and country bets are always important, stock selection can be quite meaningful during years when equity gains are particularly concentrated in a small number of stocks. In 2017, woe betide the manager that underweighted new-tech Chinese behemoths Alibaba and Tencent, which jumped 96% and 113%, respectively. If a manager held a market weight in the IT sector, holding the sector's median stock, her IT shares would have appreciated by only 25%, less than half the return of the cap-weighted IT sector. Similarly, the median MSCI China stock returned 29%, while the MSCI China Index thumped that return by more than 22 percentage points, thanks in large part to Alibaba and Tencent.
- Movement between quintiles is fairly common. Over half of top-quintile managers in the 2008–12 period ended in the bottom quintile in the 2013–17 period.

# More than 55% of managers underperformed the index in 2017

## EMERGING MARKETS EQUITY MANAGERS ANNUAL RETURNS BY QUANTILES

2008-17 • Percent (%)



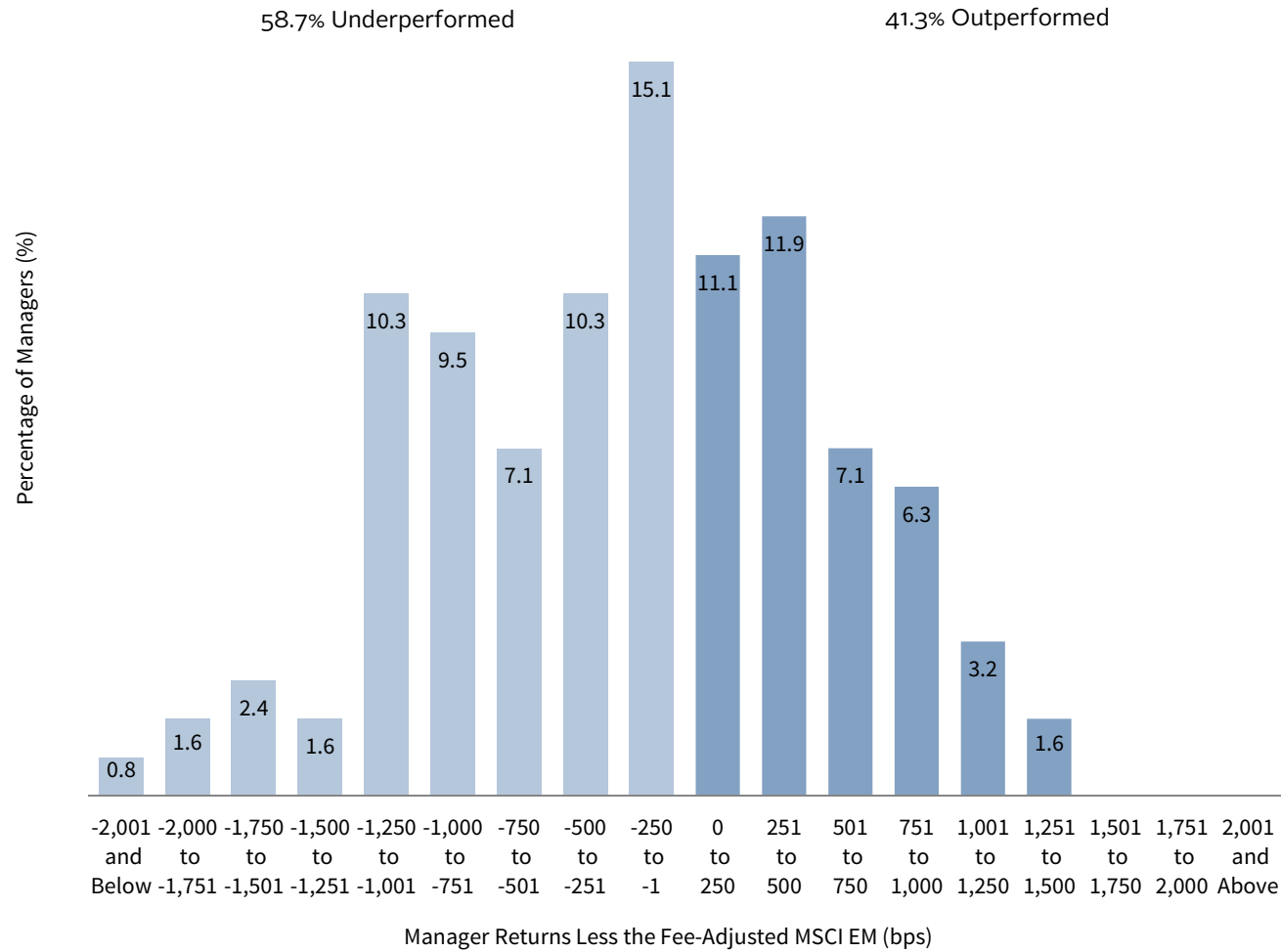
This marked the second year in a row of active managers underperforming the index, and is the first time since 2009 that managers have underperformed in back-to-back years

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
5th Percentile	-44.9	96.3	27.3	-10.8	26.2	10.0	6.9	-6.7	21.4	48.5
25th Percentile	-50.3	84.9	24.1	-16.1	22.2	3.3	2.4	-10.6	13.7	42.6
Median	-53.7	78.8	20.3	-18.0	20.2	-0.1	-0.4	-13.9	10.5	37.2
75th Percentile	-55.9	73.2	17.7	-21.5	16.8	-2.7	-3.3	-15.6	7.6	30.4
95th Percentile	-60.9	64.9	12.6	-25.2	12.9	-7.4	-6.6	-18.9	2.3	25.0
MSCI EM	-53.2	79.0	19.2	-18.2	18.6	-2.3	-1.8	-14.6	11.6	37.8
# of Managers	86	92	101	109	121	142	149	157	159	126
% Outperforming	44.2	48.9	63.4	51.4	66.1	70.4	65.1	61.8	39.0	43.7
% Underperforming	55.8	51.1	36.6	48.6	33.9	29.6	34.9	38.2	61.0	56.3

# Relative to the fee-adjusted index, 58.7% of managers underperformed

## MANAGER RETURNS RELATIVE TO THE FEE-ADJUSTED MSCI EMERGING MARKETS INDEX

Calendar Year 2017 • n = 126

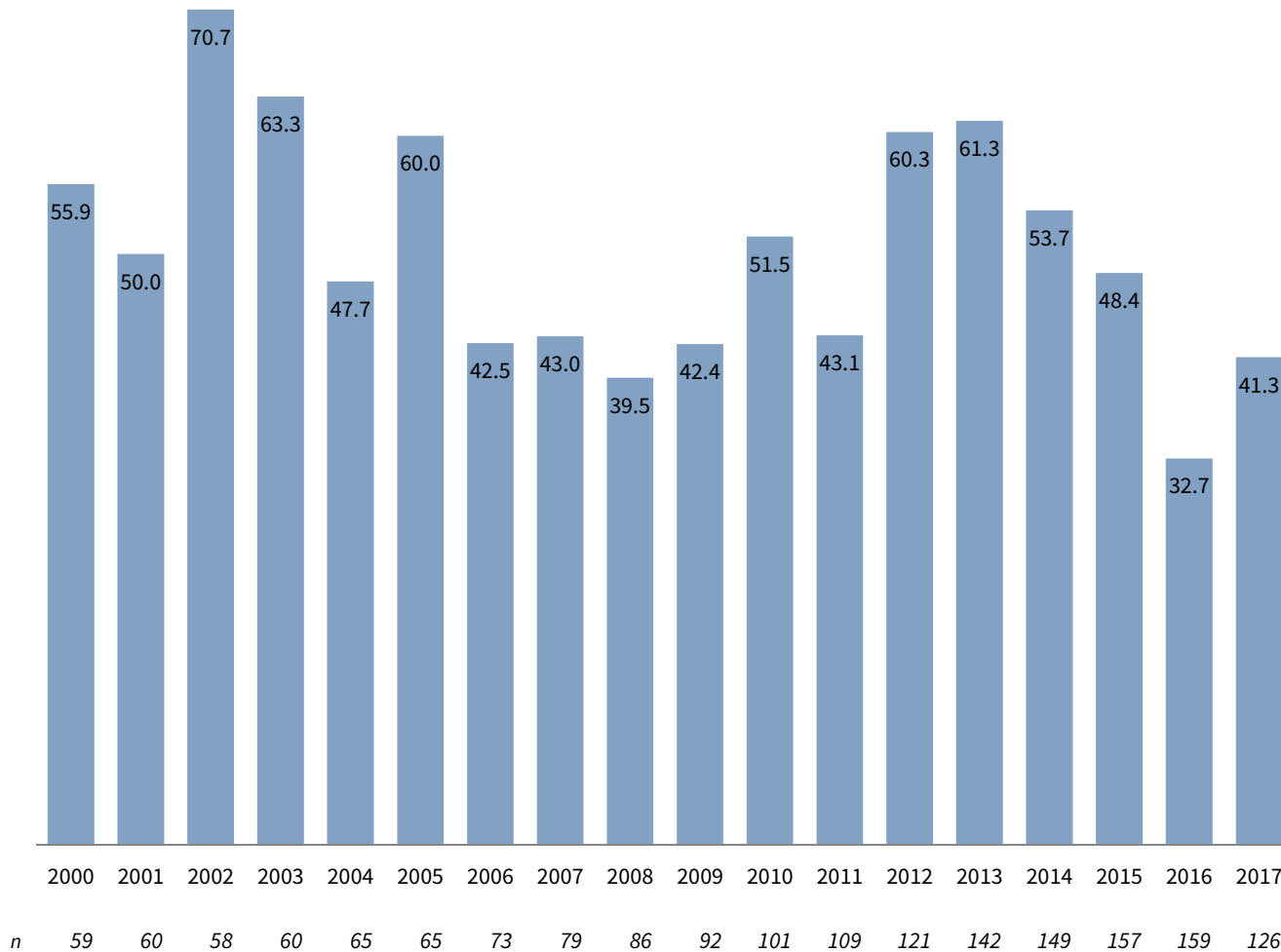


Nearly three-quarters of underperforming managers lagged the index by greater than 250 bps

## Active manager outperformance is cyclical

PERCENTAGE OF EMERGING MARKETS EQUITY MANAGERS OUTPERFORMING THE FEE-ADJUSTED MSCI EMERGING MARKETS INDEX

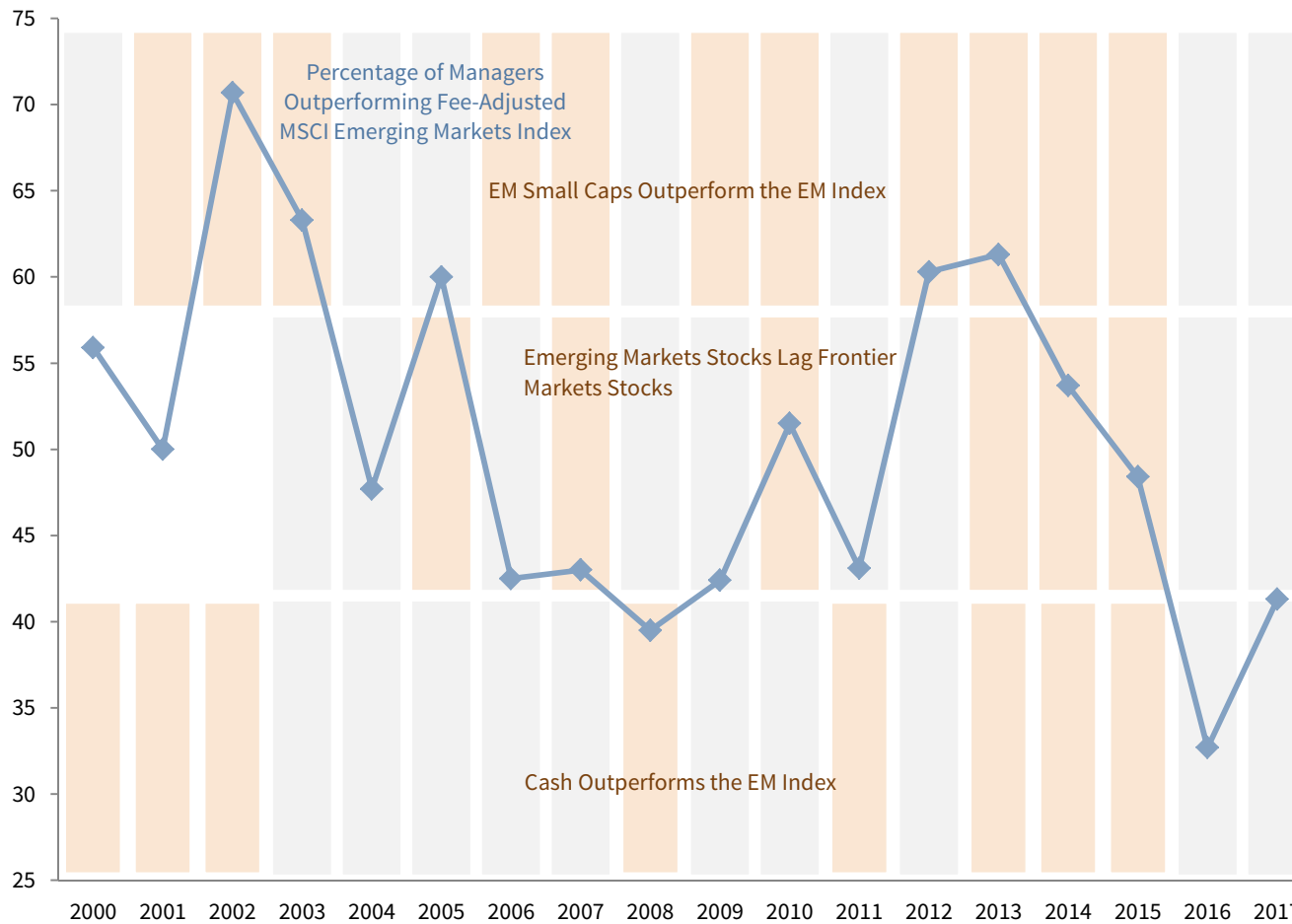
2000-17



Since 2000, the median manager has outperformed in eight years, tied in one year, and has now underperformed in nine years

## In 2017, the environment remained arrayed against active managers

**PRESENCE OF FACTORS CONTRIBUTING TO A MORE FAVORABLE ENVIRONMENT FOR ACTIVE MANAGEMENT**  
2000-17

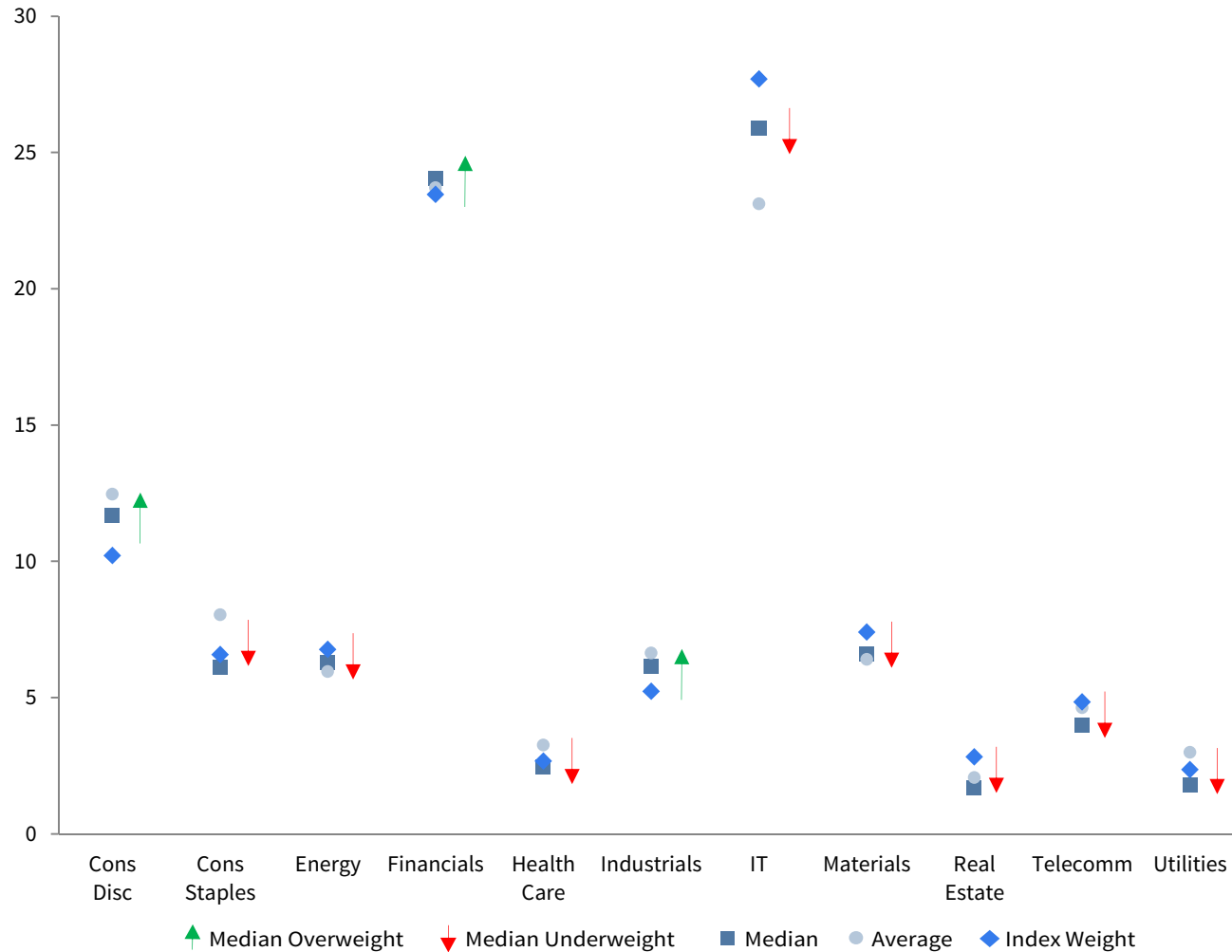


Many factors contribute to active manager out- or underperformance, but the presence of these three—all absent again in 2017—can create a more favorable environment for active management in general

## Managers' different sector allocations can affect relative performance

### EMERGING MARKETS EQUITY MANAGERS' SECTOR ALLOCATIONS VERSUS MSCI EM INDEX WEIGHT

As of December 31, 2017 • *n* = 109



Only one of the three sectors that managers overweighted in 2017 outperformed the index (consumer discretionary), while the biggest underweight (IT) ended up outperforming the benchmark by over 2,300 bps, more than any other sector

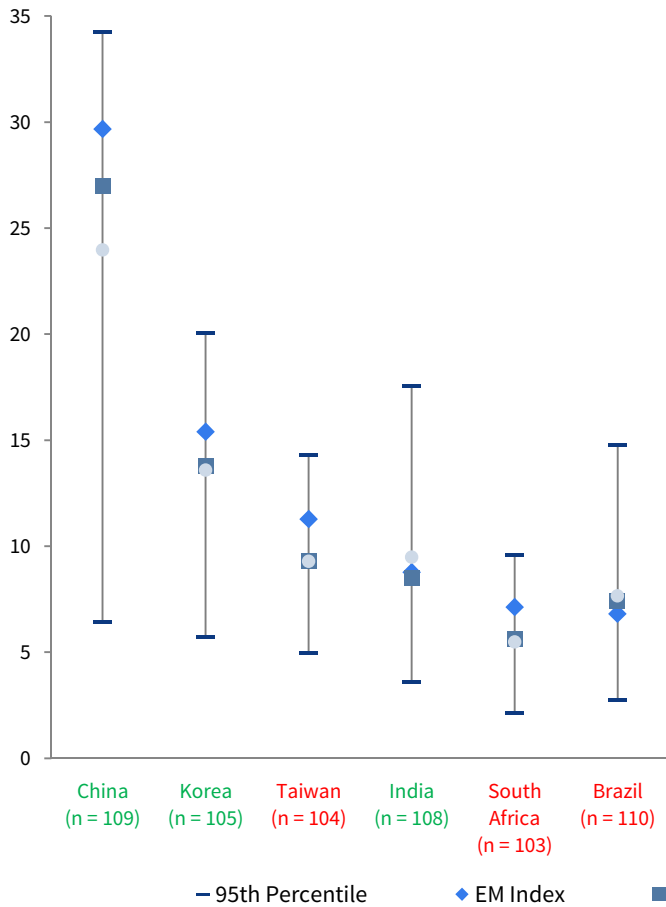


# Country bets can significantly affect relative performance

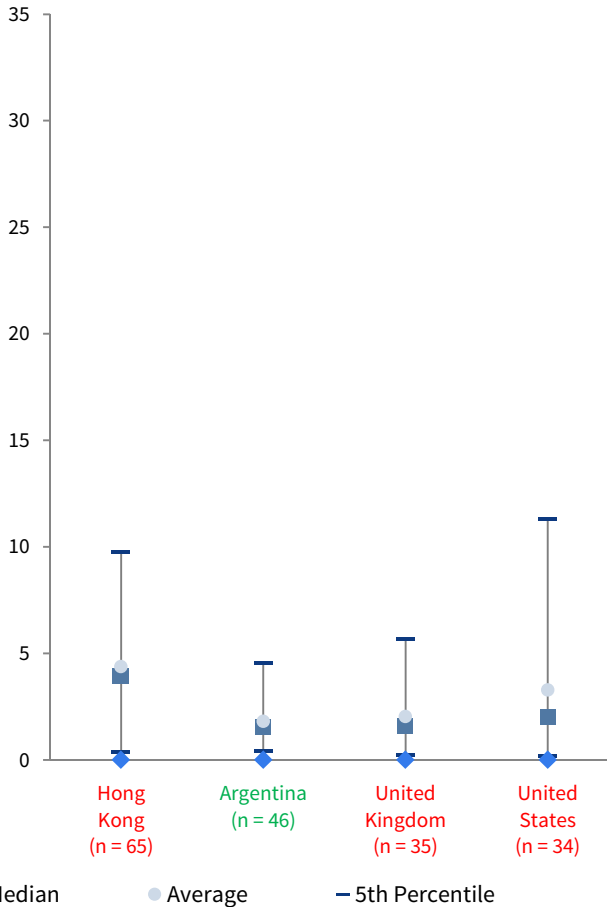
## EMERGING MARKETS EQUITY MANAGERS' COUNTRY ALLOCATIONS VS THE MSCI EM INDEX

As of December 31, 2017 • n = 110

**Manager Allocations to Six MSCI EM Countries with > 5% Weight**



**Off-Benchmark Countries Where > 30% Managers Have Allocations**



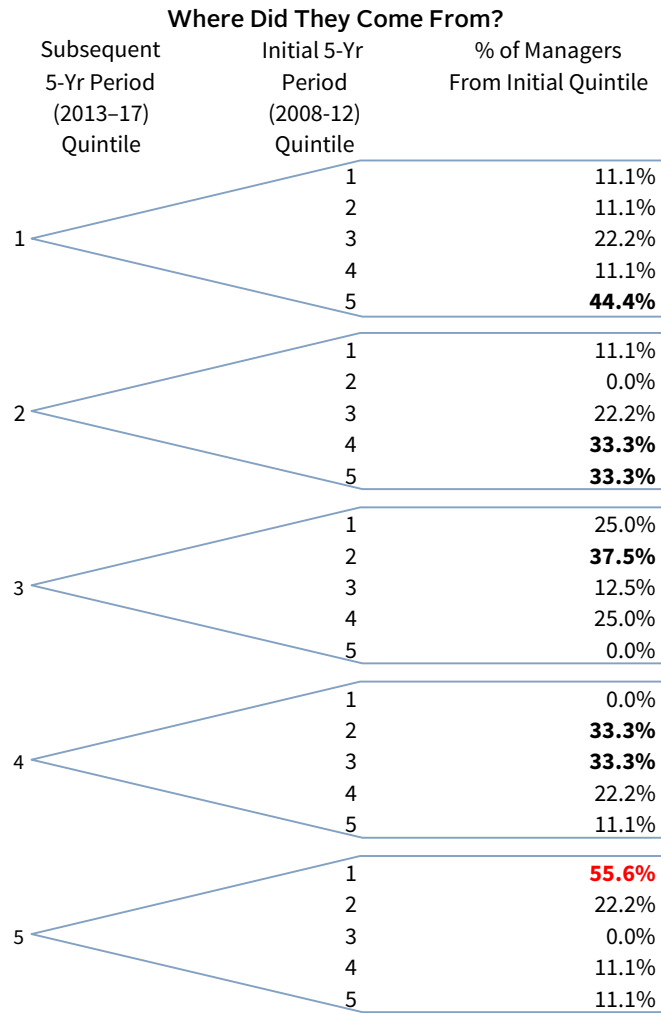
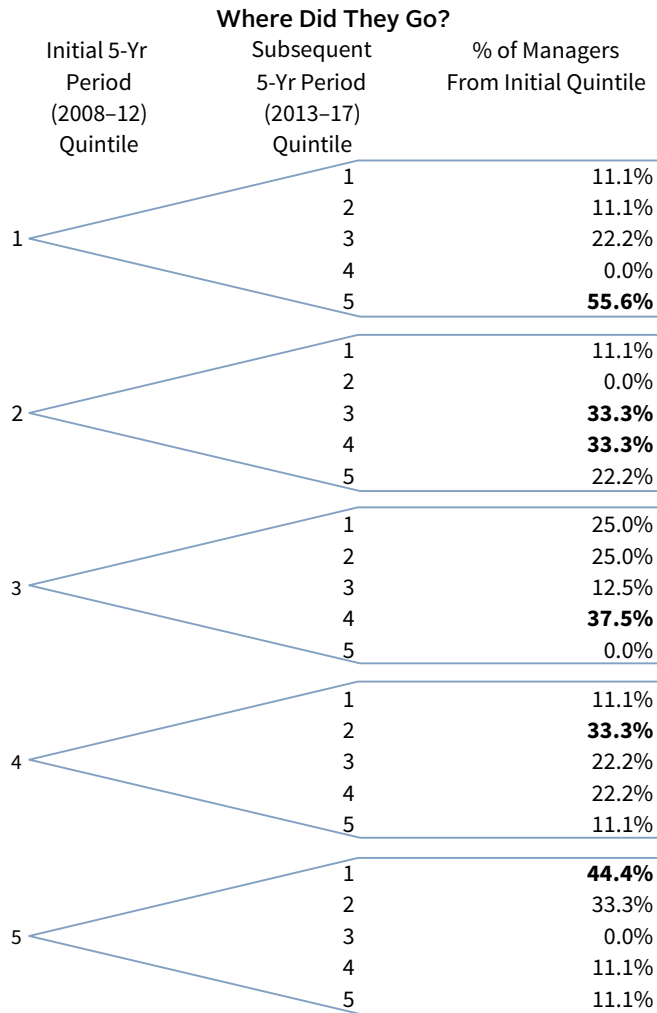
The median manager's underweight to China likely caused palpable headwinds, as the country outperformed the EM index by nearly 1,700 bps

Sources: Cambridge Associates LLC, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties. Notes: A country name in red indicates that the country underperformed the MSCI EAFE Index, while green country names indicate outperformance. Only includes data for 110 managers that provided geographic allocation as of year-end 2017. Index weights represent year-end geographic allocations of the MSCI Emerging Markets Index. The n provided for each country represents the total number of products exposed to a given country as of year-end 2017, and percentile, median, and average figures are calculated only from products with exposure to the country shown. Cambridge Associates LLC's (CA) manager universe statistics are derived from CA's proprietary Investment Manager Database. Manager that do not report in US dollars, exclude cash reserves from reported total returns, or have less than \$50 million in product assets are excluded.

# Movement between top and bottom quintiles is fairly common

## Analysis of Emerging Markets Equity Manager Returns by Quintile Over Five-Year Periods

2008-17 • n = 44



More than half of managers in the top-performing quintile over the 2008-12 period dropped to the bottom performing quintile for the 2013-17 period

# APPENDIX: YEAR-BY-YEAR ANALYSIS OF KEY FACTORS CONTRIBUTING TO A MORE OR LESS FAVORABLE ENVIRONMENT FOR ACTIVE MANAGEMENT



# Managers outperform the broad index more often when small-cap equities outperform

In 2017, small-cap underperformance was likely a headwind

## ASSESSING THE IMPACT OF CAPITALIZATION BIAS IN ACTIVE MANAGER PORTFOLIOS

2000-17

Active Managers Have Outperformed the MSCI EM Index 57% of the Time When the Index Has Beaten the MSCI EM Small Cap Index ...

Year	Total Return (%)				MSCI EM Minus MSCI EM SC (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	MSCI EM SC	Median EM Equity Manager	<i>n</i>		
2016	11.6	2.6	10.4	159	9.0	-1.2
2011	-18.2	-27.0	-18.0	109	8.8	0.2
2008	-53.2	-58.1	-53.7	86	4.9	-0.5
2000	-30.6	-35.1	-28.5	59	4.5	2.1
2005	34.5	31.0	36.6	65	3.6	2.0
<b>2017</b>	<b>37.8</b>	<b>34.2</b>	<b>37.2</b>	<b>126</b>	<b>3.5</b>	<b>-0.5</b>
2004	26.0	24.7	26.1	65	1.3	0.2

Mean 1.1 -4.0 1.4 5.1 **0.3**

... and Outperformed the MSCI EM Index in All But One Year When the Index Lagged the MSCI EM Small Cap Index

Year	Total Return (%)				MSCI EM Minus MSCI EM SC (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	MSCI EM SC	Median EM Equity Manager	<i>n</i>		
2006	32.6	33.1	33.1	73	-0.5	0.5
2007	39.8	42.3	39.8	79	-2.5	0.1
2001	-2.4	0.4	-1.4	60	-2.8	0.9
2014	-1.8	1.3	-0.4	149	-3.2	1.5
2013	-2.3	1.3	0.0	142	-3.6	2.2
2003	56.3	60.2	58.7	60	-3.9	2.5
2002	-6.0	-2.1	-3.3	58	-3.9	2.7
2012	18.6	22.6	20.2	121	-4.0	1.6
2015	-14.6	-6.6	-13.9	157	-8.0	0.7
2010	19.2	27.5	20.3	101	-8.3	1.1
2009	79.0	114.3	78.8	92	-35.3	-0.2

Mean 19.9 26.8 21.1 -6.9 **1.2**

# The median manager has consistently outperformed when frontier equities beat emerging

Frontier markets' underperformance in 2017 was likely a headwind

## ASSESSING THE IMPACT OF FRONTIER MARKETS EQUITIES ON ACTIVE MANAGER PERFORMANCE

2003-17

### Active Managers Have Outperformed the MSCI EM Index 56% of the Time When the Index Has Beaten the MSCI Frontier Index ...

Year	Total Return (%)				MSCI EM Minus MSCI FM (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	MSCI Frontier	Median EM Equity Manager	<i>n</i>		
2009	79.0	11.7	78.8	92	67.3	-0.2
2006	32.6	-8.9	33.1	73	41.4	0.5
2003	56.3	43.6	58.7	60	12.7	2.5
2012	18.6	9.2	20.2	121	9.4	1.6
2016	11.6	3.2	10.4	159	8.4	-1.2
<b>2017</b>	<b>37.8</b>	<b>32.3</b>	<b>37.2</b>	<b>126</b>	<b>5.4</b>	<b>-0.5</b>
2004	26.0	22.7	26.1	65	3.3	0.2
2008	-53.2	-54.1	-53.7	86	0.9	-0.5
2011	-18.2	-18.4	-18.0	109	0.2	0.2

Mean 21.2 4.6 21.4 16.6 **0.3**

### ... and Outperformed the MSCI EM Index 100% of the Time When the Index Lagged the MSCI Frontier Index

Year	Total Return (%)				MSCI EM Minus MSCI FM (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	MSCI Frontier	Median EM Equity Manager	<i>n</i>		
2015	-14.6	-14.1	-13.9	157	-0.5	0.7
2007	39.8	42.1	39.8	79	-2.3	0.1
2010	19.2	24.2	20.3	101	-5.0	1.1
2014	-1.8	7.2	-0.4	149	-9.0	1.5
2013	-2.3	26.3	0.0	142	-28.6	2.2
2005	34.5	72.7	36.6	65	-38.2	2.0

Mean 12.5 26.4 13.7 -13.9 **1.3**

## Years of cash outperformance have been generally been good for active managers

In 2017, cash holdings likely detracted from performance

### Assessing the Impact of Cash Drag on Active Manager Performance 2000-17

Active Managers Have Beaten the MSCI Emerging Markets Index 70% of the Time When the Index Has Beaten the 91-Day T-Bill . . .

Year	Total Return (%)				MSCI EM Minus T-Bill (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	91-Day T-Bill	Median EM Equity Manager	<i>n</i>		
2009	79.0	0.2	78.8	92	78.8	-0.2
2003	56.3	1.1	58.7	60	55.1	2.5
<b>2017</b>	<b>37.8</b>	<b>0.9</b>	<b>37.2</b>	<b>126</b>	<b>36.9</b>	<b>-0.5</b>
2007	39.8	5.0	39.8	79	34.8	0.1
2005	34.5	3.1	36.6	65	31.5	2.0
2006	32.6	4.8	33.1	73	27.7	0.5
2004	26.0	1.3	26.1	65	24.6	0.2
2010	19.2	0.1	20.3	101	19.1	1.1
2012	18.6	0.1	20.2	121	18.5	1.6
2016	11.6	0.3	10.4	159	11.3	-1.2

Mean 35.5 1.7 36.1 33.8 **0.6**

. . . And Beaten the MSCI Emerging Markets Index in All But One Year When the Index Has Lagged the 91-Day T-Bill

Year	Total Return (%)				MSCI EM Minus T-Bill (ppts)	Mgr Value Added vs MSCI EM (ppts)
	MSCI EM	91-Day T-Bill	Median EM Equity Manager	<i>n</i>		
2014	-1.8	0.0	-0.4	149	-1.9	1.5
2013	-2.3	0.1	0.0	142	-2.3	2.2
2001	-2.4	4.4	-1.4	60	-6.8	0.9
2002	-6.0	1.8	-3.3	58	-7.8	2.7
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2011	-18.2	0.1	-18.0	109	-18.3	0.2
2000	-30.6	6.2	-28.5	59	-36.8	2.1
2008	-53.2	2.1	-53.7	86	-55.2	-0.5

Mean -16.1 1.8 -14.9 -18.0 **1.2**



**CAMBRIDGE  
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