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Country Selection – A Fool's Errand

An Empirical Analysis of the Impact of Country Selection on Equity Returns

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- The best and worst performing emerging market countries diverge significantly, influencing equity returns in emerging market portfolios.
- Empirical evidence suggests allocating based on the country is a fool's errand. Active managers in emerging markets have failed in aggregate to consistently enhance returns through country selection.
- We recommend allocating to managers that take a risk-based approach to country exposures and drive alpha primarily through security selection.

When portfolio managers invest outside of their home country, generally, they start by seeking to identify those securities they conclude have the best chance of outperforming their appropriate index.

While stock selection plays an important part in the investment process, portfolio managers often underestimate or fail to maintain an appropriate awareness of the risks arising from the portfolio's country exposures, which are a result of stock selection.

The spread between the average returns of the top and bottom performing countries can be substantial and may have a material impact on returns.

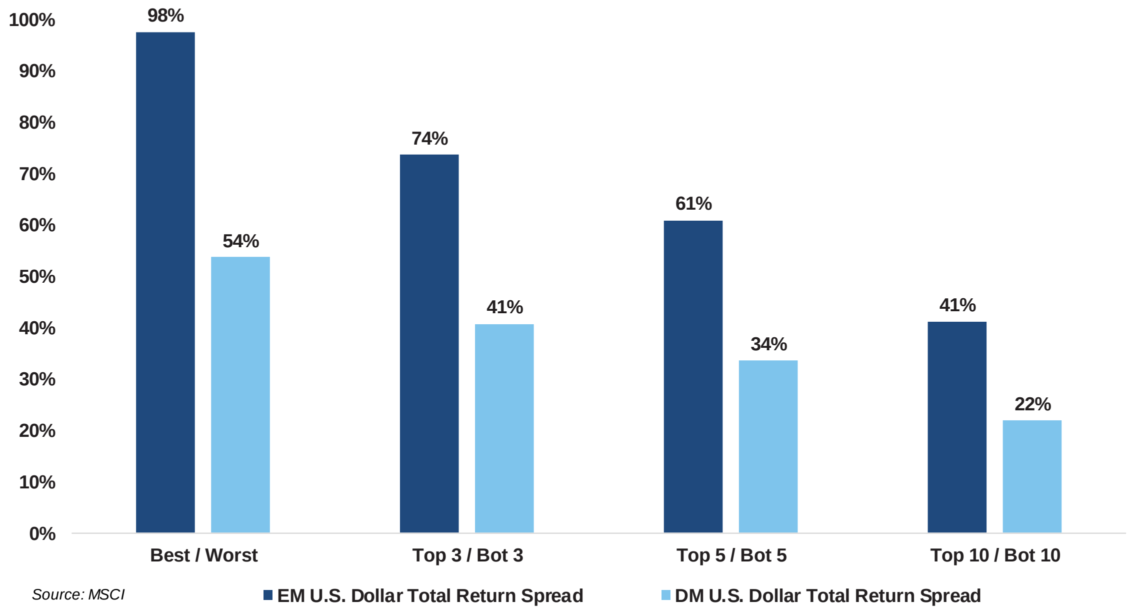
Below, Exhibit 1 illustrates the dispersion of country equity returns for emerging and developed markets by graphing the average annual country return spreads between 2001 and 2018.

The chart shows the magnitude of various return spreads. The top-to-bottom or "Best / Worst" refers to the return of the best performing country, minus the return of the worst performing country. The top-three-to-bottom-three or "Top 3 / Bottom 3" country spread equals the average return of the best three countries' returns minus the average return of the worst three.

The analysis illustrates wide return spreads exist regardless of the number of countries included in the top and bottom performing groups. It supports the notion that the large variation in country returns is not the result of a few countries generating extreme returns in a given year.

Exhibit 1

Average Annual Country Total Return Spreads (2001 – 2018)



Source: MSCI

Historical country returns spreads within emerging markets consistently registered 80 to 88 percent greater than developed markets regardless of the number of countries included in the top and bottom returning groups. Even after removing the largest country return outlier in emerging markets, spreads remained 40 to 60 percent larger relative to developed markets. The larger magnitude and variation in country return spreads in emerging markets highlights the presence of greater risks and opportunities relative to developed markets.

We evaluated emerging markets' annual return spreads for both sector and currency during the same time period (2001 – 2018) and found that while both top-down factors exhibited large spreads of about the same size (currency spreads slightly exceeded sector spreads) on an absolute basis, the magnitude paled in comparison to country return spreads, which on average were more than twice as wide. With greater variation in results among emerging market countries, the remainder of our analysis focuses on this grouping of countries to illustrate the materiality of country selection in portfolio outcomes.

Our analysis of annual country equity return spreads uncovered several interesting facts. It showed the bottom performing country in emerging markets produced a negative return in 17 of the last 18 years, and the average annual return of the bottom 10 countries was negative for 11 of those 18-years.

The random nature of country returns provided an interesting observation. A country's relative return performance in a given year was not predictive of its future relative performance. For example, not a single top returning country successfully maintained its position the following year.

The majority of the time, the top returning country in a given year generated relative returns placing it in the bottom half of the sample the next year. We found no relationship exists between a country's relative return one year and the next year. And, choosing countries based on immediate past relative return results is an ineffective strategy for making country allocation decisions.

Below, Exhibit 2 depicts this finding. It shows the absolute and relative calendar year performance for each country in the sample.

Exhibit 2

Key		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
RUSSIA	Highest Return	55.5%	150.5%	143.5%	132.4%	161.6%	82.9%	94.4%	-11.1%	190.7%	77.4%	6.0%	64.2%	66.0%	29.3%	36.3%	66.2%	73.5%	1.6%
KOREA		48.0%	43.7%	125.3%	126.2%	107.2%	73.8%	79.6%	-25.1%	128.1%	73.9%	0.1%	47.1%	51.0%	26.6%	10.4%	55.6%	54.7%	-0.4%
COLOMBIA		45.1%	41.9%	114.4%	91.5%	73.6%	68.0%	74.1%	-29.3%	126.2%	55.7%	-0.9%	46.4%	34.6%	25.6%	4.2%	54.8%	54.1%	-0.5%
SRI LANKA		43.0%	33.9%	100.4%	85.6%	73.1%	67.3%	73.1%	-34.7%	104.2%	53.3%	-2.7%	39.2%	11.0%	23.9%	0.9%	40.4%	47.3%	-4.4%
JORDAN		34.0%	30.5%	94.1%	61.1%	63.8%	62.1%	66.2%	-35.8%	102.8%	44.2%	-5.0%	35.9%	10.9%	22.8%	-0.5%	35.4%	42.2%	-4.4%
PERU		19.9%	30.3%	91.8%	61.1%	62.3%	58.2%	58.4%	-37.9%	97.5%	43.4%	-6.0%	34.5%	10.4%	19.0%	-2.3%	34.3%	39.9%	-5.5%
MEXICO		18.4%	28.0%	87.6%	50.6%	57.0%	55.6%	55.3%	-40.2%	88.9%	37.0%	-11.2%	32.5%	9.1%	18.9%	-6.1%	26.6%	38.8%	-5.5%
TAIWAN		10.0%	27.3%	83.3%	48.3%	56.4%	51.0%	54.2%	-41.2%	85.6%	34.2%	-12.0%	29.1%	8.2%	18.7%	-6.7%	26.5%	38.4%	-6.0%
THAILAND		5.0%	24.8%	78.3%	46.1%	56.1%	47.4%	47.7%	-42.9%	84.3%	33.9%	-12.1%	26.0%	7.7%	16.5%	-6.8%	18.5%	38.4%	-6.1%
MALAYSIA		4.6%	15.4%	76.5%	44.9%	49.1%	45.4%	46.1%	-43.1%	79.2%	33.9%	-14.4%	22.8%	3.9%	13.0%	-7.8%	17.9%	36.1%	-7.3%
CZECH REPUBLIC		-2.3%	8.3%	75.1%	41.4%	45.8%	45.3%	46.0%	-46.5%	77.6%	27.6%	-14.7%	22.7%	3.6%	10.5%	-11.7%	17.0%	35.5%	-7.5%
CHILE		-3.6%	7.9%	69.5%	35.9%	37.6%	41.4%	40.4%	-48.5%	76.6%	26.7%	-15.2%	21.2%	2.6%	9.4%	-13.7%	15.6%	34.5%	-8.9%
INDONESIA		-9.0%	4.3%	66.4%	28.0%	34.7%	39.2%	39.2%	-50.8%	71.9%	26.3%	-18.4%	20.2%	0.8%	8.0%	-13.8%	8.7%	28.6%	-9.2%
HUNGARY		-9.4%	1.6%	64.4%	25.8%	33.5%	37.1%	37.8%	-52.2%	71.3%	21.8%	-19.6%	18.7%	0.2%	5.2%	-14.4%	4.9%	27.5%	-10.7%
MOROCCO		-14.0%	1.0%	57.5%	25.7%	28.3%	35.0%	32.9%	-52.4%	65.6%	20.9%	-20.4%	16.7%	-2.7%	-0.7%	-17.7%	3.6%	25.1%	-11.1%
BRAZIL		-17.0%	-0.7%	57.1%	24.7%	26.8%	33.9%	31.9%	-52.6%	64.0%	20.8%	-20.9%	14.3%	-3.3%	-2.1%	-18.4%	0.9%	24.6%	-11.5%
SOUTH AFRICA		-17.2%	-8.9%	48.4%	22.1%	24.2%	33.7%	26.5%	-54.4%	62.3%	19.1%	-21.4%	13.7%	-3.8%	-4.4%	-19.5%	0.1%	24.2%	-12.9%
PHILIPPINES		-19.4%	-13.3%	45.9%	22.1%	22.6%	28.7%	24.5%	-54.8%	57.8%	15.2%	-21.8%	7.8%	-5.5%	-9.3%	-20.1%	-1.1%	24.1%	-14.0%
ARGENTINA		-19.7%	-13.8%	45.7%	19.8%	20.9%	20.5%	24.3%	-55.3%	56.6%	14.9%	-23.1%	5.2%	-5.8%	-10.7%	-22.4%	-1.4%	23.8%	-15.5%
INDIA		-19.8%	-14.0%	43.0%	19.1%	19.8%	20.0%	24.0%	-56.2%	53.9%	12.4%	-27.7%	4.6%	-6.2%	-11.1%	-23.5%	-3.9%	16.3%	-16.5%
PORTUGAL		-22.0%	-20.3%	41.9%	16.5%	17.9%	17.1%	23.0%	-56.5%	52.1%	6.5%	-28.0%	4.5%	-10.5%	-13.0%	-23.7%	-5.0%	16.0%	-18.9%
CHINA		-24.7%	-24.7%	41.5%	15.2%	16.1%	13.6%	18.1%	-59.6%	41.5%	4.6%	-30.1%	3.5%	-14.6%	-14.0%	-25.4%	-5.0%	11.1%	-19.7%
PAKISTAN		-25.7%	-25.3%	40.6%	10.8%	15.1%	12.6%	16.8%	-61.5%	40.4%	4.4%	-33.6%	2.5%	-16.0%	-14.2%	-25.5%	-6.6%	9.5%	-20.9%
POLAND		-27.7%	-29.5%	35.1%	9.0%	13.4%	11.1%	15.0%	-62.3%	39.7%	-2.5%	-35.4%	0.0%	-21.1%	-19.8%	-31.7%	-8.5%	5.2%	-24.8%
GREECE		-29.6%	-30.7%	35.0%	5.5%	8.7%	3.0%	12.2%	-64.6%	26.5%	-9.5%	-37.2%	-0.6%	-22.0%	-27.4%	-31.9%	-9.2%	5.1%	-34.8%
ISRAEL		-31.4%	-31.3%	32.8%	3.0%	6.4%	-5.3%	8.4%	-66.0%	25.0%	-9.6%	-38.9%	-4.7%	-23.5%	-38.2%	-41.4%	-11.5%	2.5%	-36.8%
TURKEY		-32.8%	-35.8%	32.0%	1.9%	2.3%	-7.2%	-4.0%	-73.9%	-5.1%	-11.3%	-46.9%	-12.0%	-26.8%	-40.0%	-41.8%	-12.1%	2.1%	-41.4%
EGYPT	Lowest Return	-41.3%	-50.7%	26.6%	-1.2%	-1.9%	-30.9%	-13.6%	-74.2%	-5.3%	-44.9%	-62.8%	-37.1%	-29.8%	-46.3%	-61.3%	-24.9%	-24.4%	-50.8%

Source: MSCI

[1]Returns are U.S. Dollar total returns

Having established country selection as a key macroeconomic driver of returns, we set out to determine whether active managers' country selection decisions added value.

To assess this, we performed a quarterly attribution analysis of all 87 active managers in the asset class who have a 10-year track record. Of the 87 managers, only 19 of them (or approximately 22 percent) added value through country selection in the majority of the 40 quarters analyzed.

Four managers added value from country selection exactly half the time. Sixty-seven managers (or 74 percent) destroyed value with their country allocation decisions in the majority of the quarters evaluated.

Dividing the sample of 40 quarters into four 10-quarter sub-periods, we found none of the managers in the sample added value the majority of the time from country selection decisions in each sub-period.

The numbers reflect the extreme difficulty of making top-down country allocation decisions correctly and very few managers possess the skill to consistently enhance returns through country selection.

Despite active managers' inability to consistently create value through country selection, the case for active management remains especially compelling in emerging markets equities.

With the analysis in our *The Next Chapter in the Active Versus Passive Debate* white paper as the foundation, we analyzed the excess returns generated by the 25th, 50th and 75th percentile manager in our 87 manager emerging markets equity peer group for the trailing three-year periods on a quarterly basis over the last decade.

Exhibit 3 shows, the active manager ranking in the 25th percentile generated between zero and two percent annualized excess return over the MSCI Emerging Markets Index in 55 percent of the periods. And, between two and four percent annualized excess return in 41 percent of the periods.

The 25th percentile manager generated negative excess returns in three percent of the trailing three-year periods. Whereas, the 50th percentile manager generated positive excess returns 76 percent of the time. The average active manager still generated positive excess returns a majority of the time, which is not true for some asset classes, including U.S. Large Cap equities.

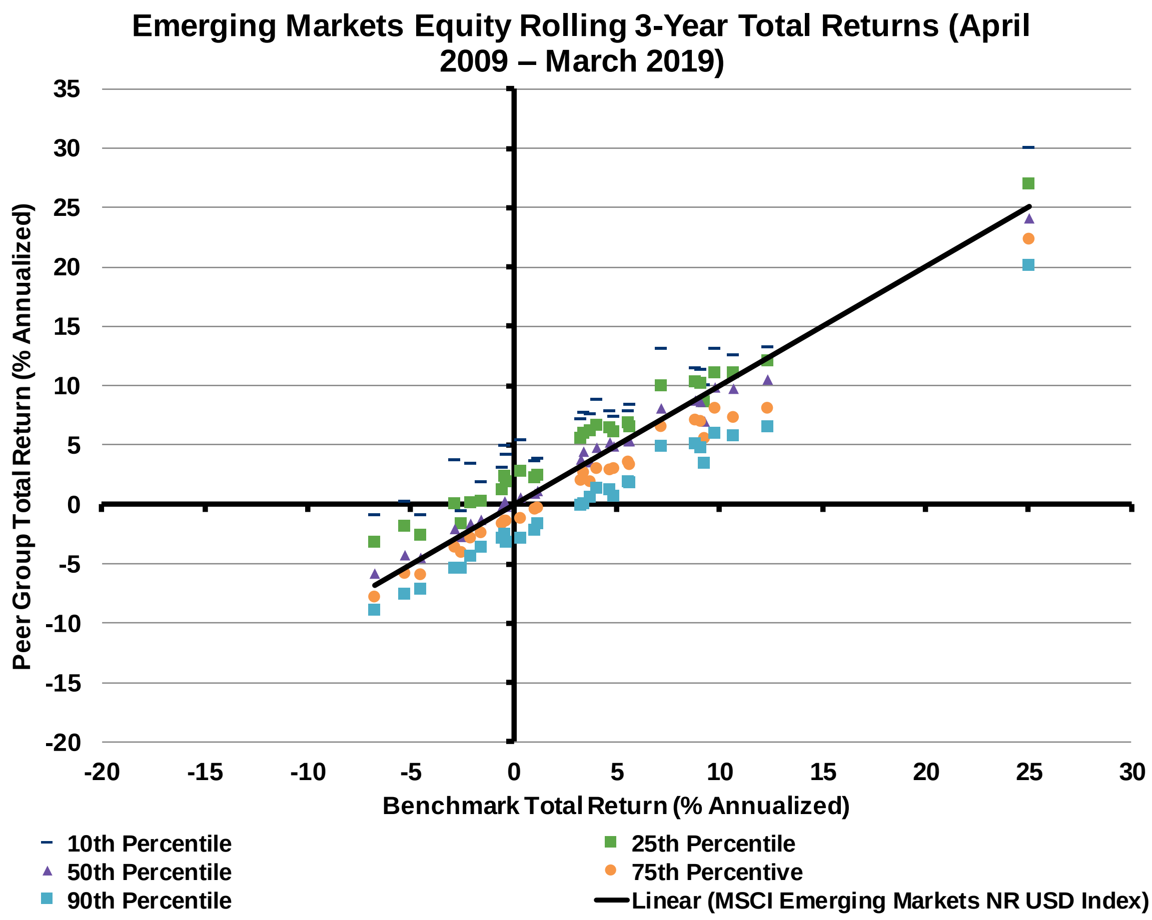
Exhibit 3

	% of Rolling 3-year periods:					
	Below -4% excess return	Between -2% and -4% excess return	Between 0% and -2% excess return	Between 0% and +2% excess return	Between +2% and +4% excess return	Above +4% excess return
Emerging Markets						
25% percentile			3%	55%	41%	
50% percentile			24%	**76%**		
75% percentile		14%	**86%**			

Source: Morningstar

Exhibit 4 depicts the percentiles for each level of benchmark return and makes the case for active management as good manager selection has resulted in positive excess return regardless of the absolute return of the benchmark.

Exhibit 4



Source: Morningstar

Exhibit 4 illustrates that top performing managers tend to generate significant excess returns while the average active manager still generates positive excess returns on average regardless of the benchmark's return. Despite evidence in favor of active management, the failure of most of the peer group to consistently add value through country selection reinforces the idea that bottom-up security selection is paramount.

When it comes to manager selection, we remain skeptical of managers who make active, top-down macroeconomic bets as part of their investment process. Instead, we favor an approach that allocates towards strategies that seek to create alpha through bottom-up security selection.

However, macroeconomic considerations must not be overlooked. Some active managers who build portfolios through bottom-up security selection ignore their strategy's country exposures, which we view as a critical mistake.

It is our opinion that a risk-based approach to a portfolio's country allocations is critical in order to benefit from bottom-up stock selection. Without risk awareness and controls, large country bets can overwhelm otherwise successful bottom-up stock selection resulting in poor investor outcomes.

Appendix

We used MSCI's definitions of emerging and developed countries and relied on the countries in the MSCI Emerging Markets and MSCI World indices, respectively.

Our calculations include only countries that were in the respective index for the entire year. Under our methodology, the number of emerging markets countries included in the sample ranged from 20 to 26 while the number of developed markets countries ranged from 22 to 24.

Exhibit 2 in the paper illustrates annual relative country performance between 2001 and 2018 but only includes countries that were in the MSCI Emerging Markets Index the entire calendar year for each year in the sample.

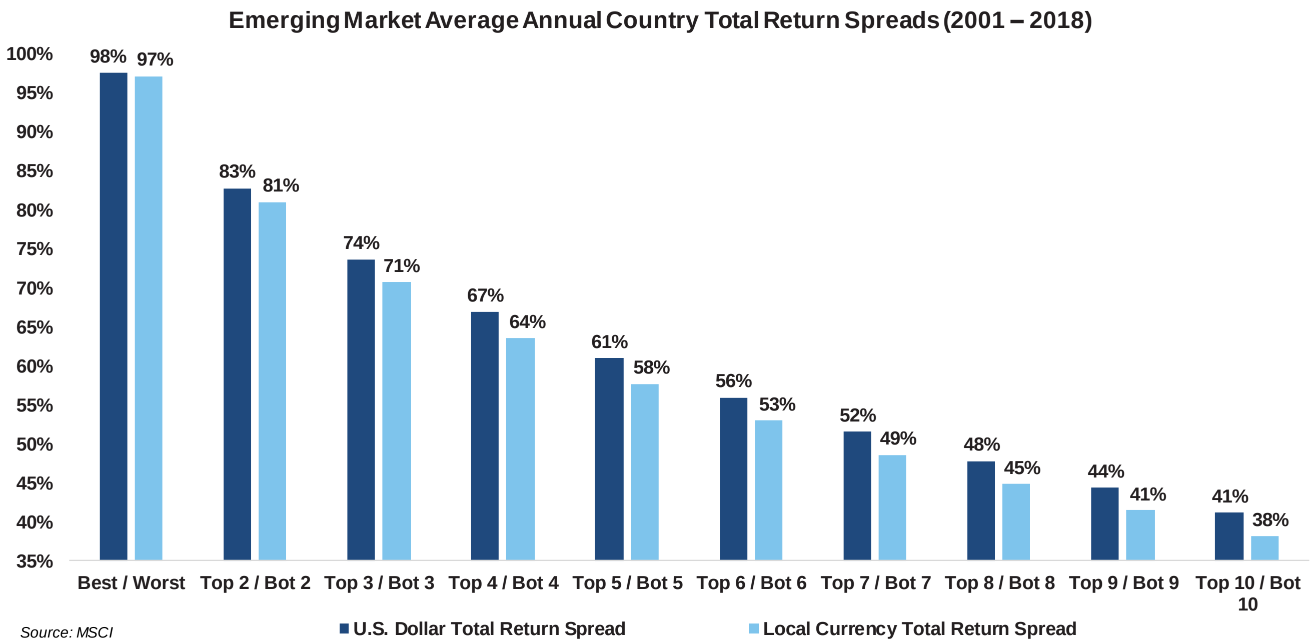
Throughout this paper we reference various return spreads such as the top-to-bottom (labeled "Best / Worst" in the charts) return spread or the top-two-to-bottom-two (labeled "Top 2 / Bot 2" in the charts) return spread. The top-to-bottom return spread is simply the return of the best performing country minus the return of the worst performing country.

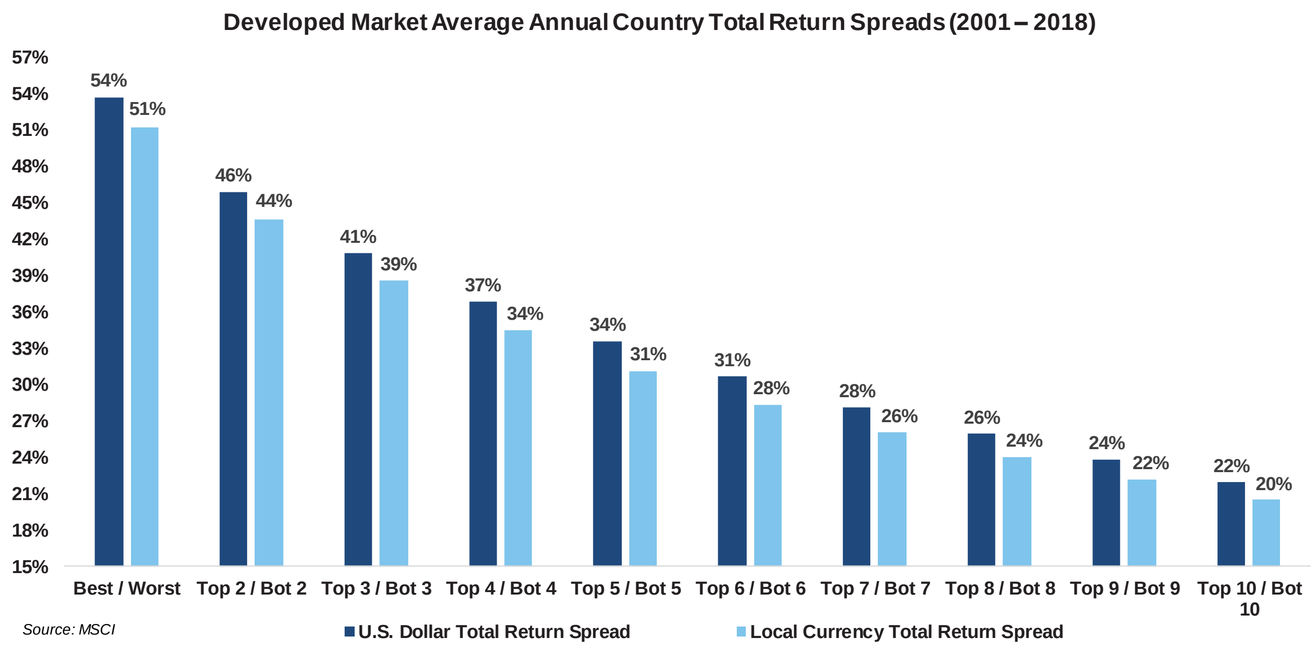
The top-two-to-bottom-two spread (labeled "Top 2 / Bot 2" in the charts) refers to the average return of the top two performing countries minus the average return of the two bottom performing countries in the specified asset class. The classification continues all the way up to a top-10-to-bottom-10 (labeled "Top 10/Bot 10" in the charts) spread, which equals the average return of the 10 best returning countries minus the average return of the 10 worst returning in the specified asset class.

We calculated the annual return spreads from 2001 through 2018 and the charts show the average annual return spread over that time period for the various spread groups (various spreads based on different numbers of countries included in the top and bottom returning country calculations). In addition to country return spreads, the same definitions are also applied to sector and currency return spreads.

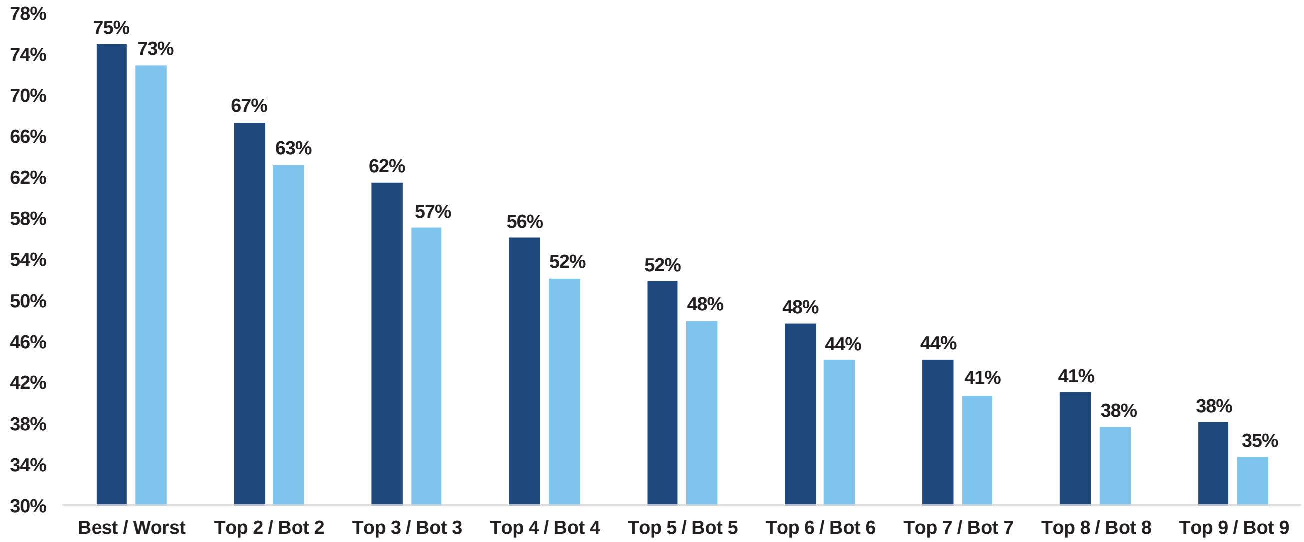
Our analysis that removed the largest return outlier from the distribution of individual country returns for a given year within emerging markets used a relatively simple methodology to determine the largest return outlier. For each country included in the emerging markets universe in a given year, we standardized the return by subtracting the average return of all the countries in the sample that year and then divided this by the sample standard deviation of the individual country returns. The standardized number, or Z-score, that we derived from this calculation indicates the number of standard deviations away from the mean an individual country return lies in the respective year. Thus, we deemed the country whose return Z-score generated the largest absolute value in a given year as the largest return outlier for that specific year. We removed the largest return outlier each year prior to calculating the return spreads excluding the largest outlier for emerging markets.

Please find below the remainder of the analysis.


Emerging Market Average Annual Country Total Return Spreads (2001 – 2018)
100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
98% 97%
83% 81%
74% 71%
67% 64%
61% 58%
56% 53%
52% 49%
48% 45%
44% 41%
41% 38%
Best / Worst
Top 2 / Bot 2
Top 3 / Bot 3
Top 4 / Bot 4
Top 5 / Bot 5
Top 6 / Bot 6
Top 7 / Bot 7
Top 8 / Bot 8
Top 9 / Bot 9
Top 10 / Bot 10
Source: MSCI
U.S. Dollar Total Return Spread
Local Currency Total Return Spread

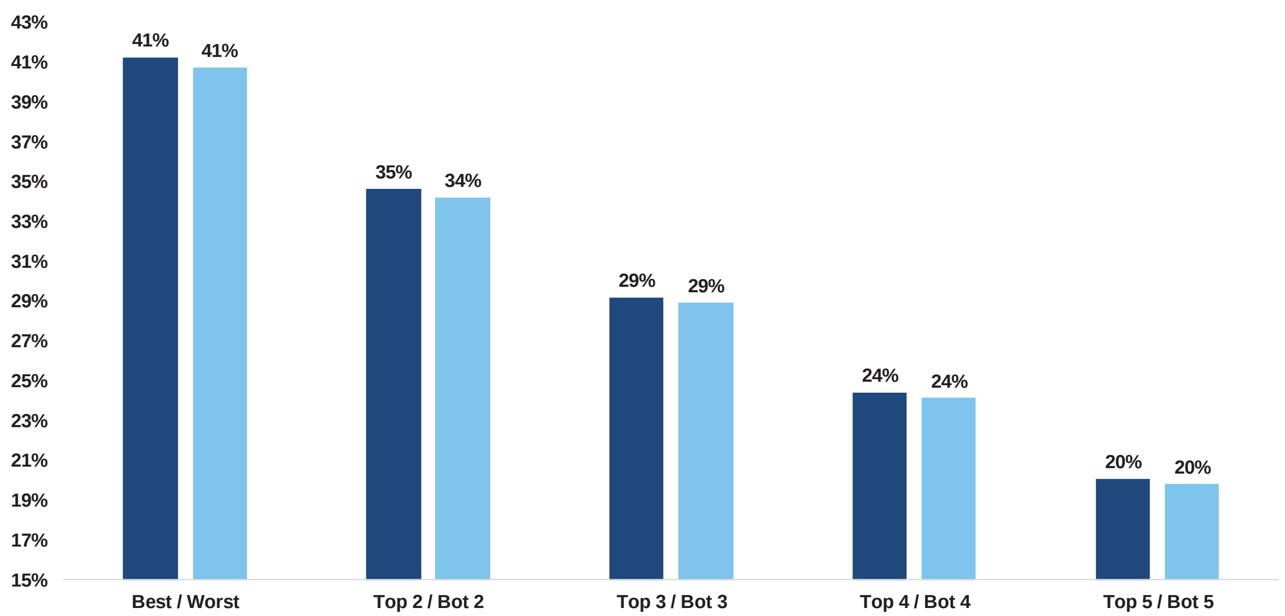

Developed Market Average Annual Country Total Return Spreads (2001 – 2018)
57%
54%
51%
48%
45%
42%
39%
36%
33%
30%
27%
24%
21%
18%
15%
54% 51%
46% 44%
41% 39%
37% 34%
34% 31%
31% 28%
28% 26%
26% 24%
24% 22%
22% 20%
Best / Worst
Top 2 / Bot 2
Top 3 / Bot 3
Top 4 / Bot 4
Top 5 / Bot 5
Top 6 / Bot 6
Top 7 / Bot 7
Top 8 / Bot 8
Top 9 / Bot 9
Top 10 / Bot 10
Source: MSCI
U.S. Dollar Total Return Spread
Local Currency Total Return Spread

Emerging Market Average Annual Country Total Return Spreads Excluding Largest Outlier (2001 – 2018)

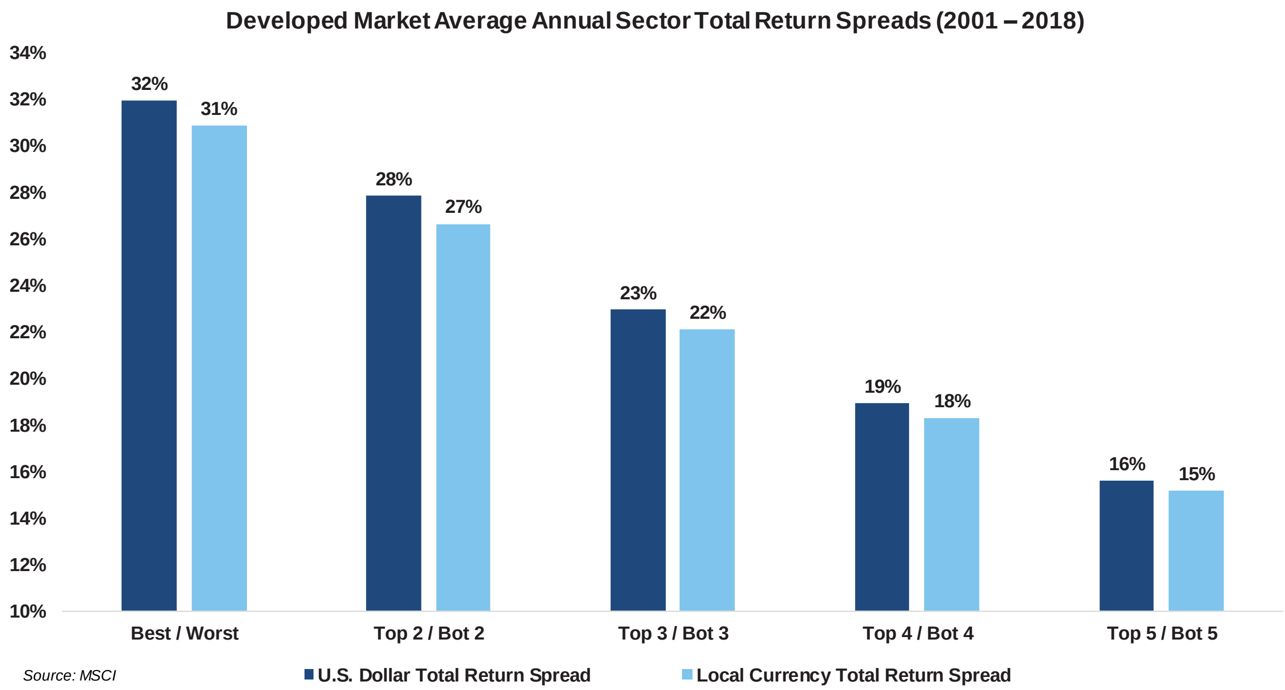


Source: MSCI

Emerging Market Average Annual Sector Total Return Spreads (2001 – 2018)



Source: MSCI


Developed Market Average Annual Sector Total Return Spreads (2001 – 2018)
34%
32%
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
32%
31%
28%
27%
23%
22%
19%
18%
16%
15%
Best / Worst
Top 2 / Bot 2
Top 3 / Bot 3
Top 4 / Bot 4
Top 5 / Bot 5
U.S. Dollar Total Return Spread
Local Currency Total Return Spread

Source: MSCI

About the Authors:

Collin researches and performs operational due diligence on core investment managers and is a team member of our Global Public Markets Group. Collin joined the firm in 2015 as a performance analyst. Previously, he was a Portfolio Administration Analyst at McDonnell Investment Management. Collin graduated from the University of Iowa with a BBA in Finance and Minor in Economics. He is a CFA® charterholder and a member of the CFA Society of Chicago. In his free time, Collin enjoys skiing, cooking and performing acoustic guitar throughout Chicago.

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As a member of our Global Public Markets Group, Joel researches and performs operational due diligence on core investment managers. Prior to joining the firm in 2018, Joel served as a Senior Analyst at Birch Lake Associates. He received a Bachelor of Arts in Politics with a Minor in Communications from Lake Forest College. Joel also earned a Master of Business Administration from the University of Chicago Booth School of Business with concentrations in Analytic Finance, Economics, Econometrics and Statistics and Entrepreneurship. Joel is a CFA® charterholder and member of the CFA Society of Chicago and CFA Institute. He enjoys playing guitar, traveling the world with his wife, playing tennis and rooting for his favorite Chicago sports teams.

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