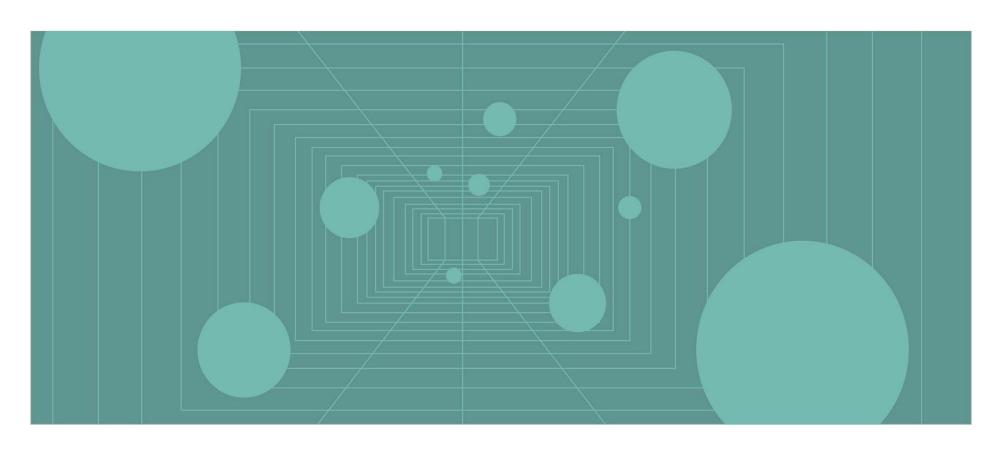
GLOBAL EX US EQUITY MANAGER PERFORMANCE

ANALYSIS OF 2019 AND PERFORMANCE SINCE 2000





Summary Observations

- In 2019, 63% of active global ex US managers outperformed the MSCI EAFE Index gross of fees, with the median manager outperforming by 183 basis points (bps). Since 2000, the median manager has now underperformed the index in just three calendar years.
- After adding a fee proxy of 70 bps, 58% of managers outperformed the benchmark in 2019. The majority of managers have outperformed the fee-adjusted index in more than half of the calendar years dating back to 2000, posting better performance in 12 of those 20 years.
- By style, the median growth manager in the global ex US region bested value and diverse strategies. All three strategies outperformed their respective style benchmarks for the year, although value bested its benchmark by the widest margin. Looking longer term, the median value manager has outperformed the value index in nine of the last 11 years dating back to the global financial crisis (GFC). Prior to that, value had bested growth in seven of nine years from 2000 to 2008.
- On a median basis, managers were significantly overweight the IT sector, which was far and away the best-performing sector in 2019. Conversely, managers held sizable underweight positions in two underperforming sectors: consumer staples and real estate. Energy lagged all other sectors and trailed the index by more than 14 percentage points, but managers did not significantly differentiate from the market weight.

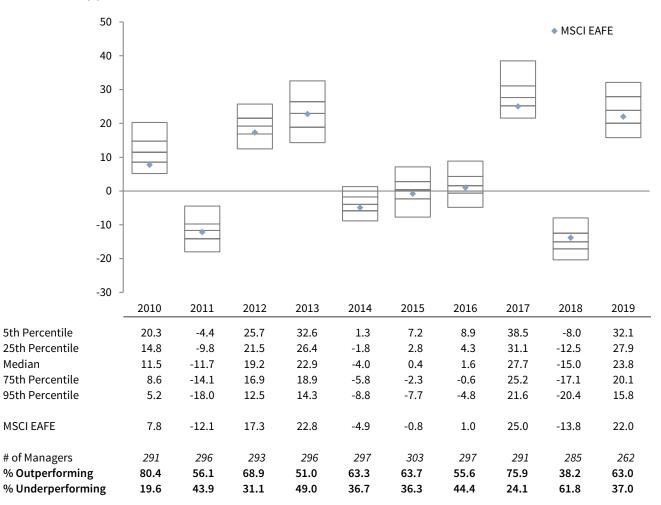
Summary Observations (continued)

- On a median basis, managers were underweight five of the six countries to which the MSCI EAFE Index has a weight greater than 5%. The largest underweight was to Japan, which underperformed MSCI EAFE in USD terms. Global ex US equity managers tend to make numerous off-benchmark country bets. In 2019, there were six different countries in the MSCI EAFE index where at least 40% of managers had allocations: Canada, China, India, South Korea, Taiwan, and the United States. The performance of these countries in USD terms was mixed; however, the three most heavily weighted off-benchmark bets—China, Canada, and United States—all outperformed the MSCI EAFE Index.
- High dispersion in stock returns is often thought to mean more managers will outperform. In fact, the relationship is extremely weak. Rather, stock dispersion is more likely to increase the dispersion of managers' excess returns—greater stock dispersion gives managers more of an opportunity to separate from the pack, but this can be to the upside or the downside. Since the GFC, stock return dispersion has been quite low; 2019 remained near the lowest observations in the past decade.
- Persistence in manager outperformance is rare, yet global ex US managers in the top-performing initial quintile showed better-than-expected consistency, as more than half of the top-performing managers from 2010 to 2014 remained in the top quintile in the 2015–19 period. This stands in contrast to prior ten-year windows, when top performers during the initial five-year period tended to rotate to bottom quintiles in the subsequent five-year periods.

63% of managers outperformed the index in 2019

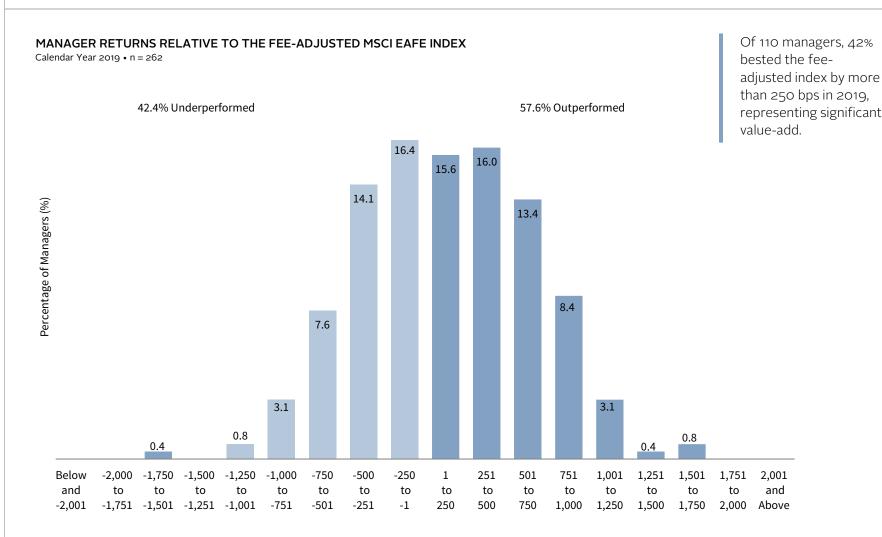
GLOBAL EX US EQUITY MANAGER ANNUAL RETURNS BY QUARTILES

2010-19 • Percent (%)



The median manager outperformed the index by 183 bps in 2019, a marked reversal from the underperformance seen in 2018.

Adjusted for fees, the percentage of outperformers in 2019 was 57.6%

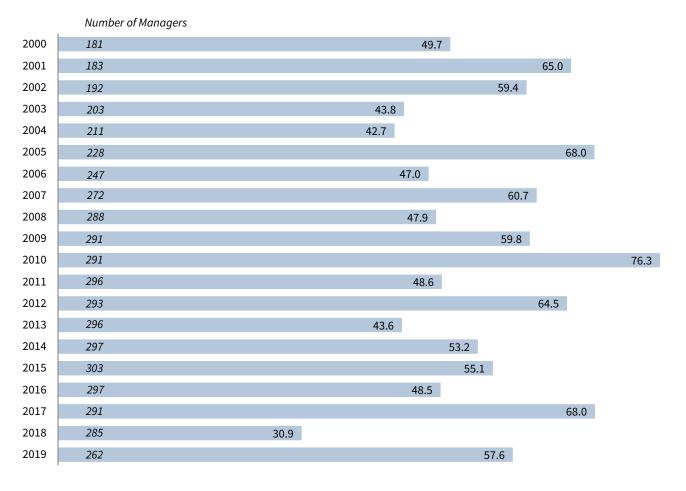


Manager Returns Less the Fee-Adjusted MSCI EAFE (bps)



Active global ex US manager outperformance is cyclical

PERCENTAGE OF GLOBAL EX US EQUITY MANAGERS OUTPERFORMING THE FEE-ADJUSTED MSCI EAFE INDEX 2000–19 • Percent (%)



for manager fees. To be included in analysis of any period longer than one quarter, managers must have had performance available for the full period.

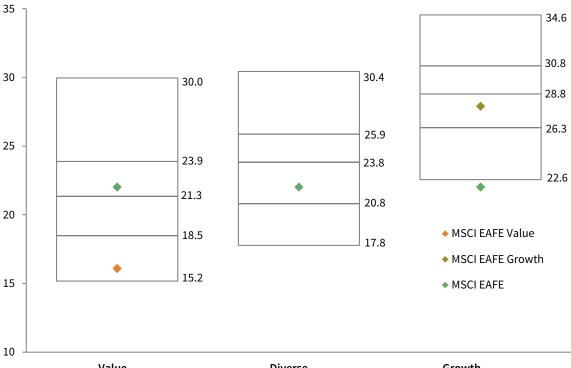
Since 2000, the majority of managers have outperformed the index slightly more than half the time, posting better performance in 11 of 20 years.

Managers bounced back in 2019 after a difficult 2018, when the percentage of global ex US managers outperforming the index was at a 20-year low.

The median growth manager fared better than other styles in 2019

GLOBAL EX US EQUITY MANAGER UNIVERSE RETURN QUARTILES BY INVESTMENT PHILOSOPHY

Calendar Year 2019 • Percent (%)



The growth outperformance was a continuation of the trend seen in 2018. All three strategies bested their respective benchmarks.

	Value	Diverse	Growth
High	32.6	32.1	39.4
Manager Median	21.3	23.8	28.8
Low	7.0	16.8	16.7
Index*	16.1	22.0	27.9
Number of Managers	88	46	66



^{*} Index represents: MSCI EAFE Value Index for Value; MSCI EAFE Index for Diverse; and MSCI EAFE Growth Index for Growth.

Sources: Cambridge Associates LLC, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Cambridge Associates LLC's (CA) manager universe statistics are derived from CA's proprietary Investment Manager Database. Managers 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. Performance is generally reported gross of investment management fees. Only managers with performance available for the entire period measured are included.

Investment styles go in and out of favor over time

THE CYCLICAL NATURE OF GLOBAL EX US EQUITY INVESTMENT PHILOSOPHIES

2000-19 • Percent (%)

Annual Total Returns

	Median			Median		Global ex US Stocks	
Year	Growth Mgr	n		Value Mgr	n	(MSCI EAFE)	
2000	-16.3	74		-5.9	53	-14.2	
2001	-21.9	76		-12.7	50	-21.4	
2002	-16.4	78		-10.0	56	-15.9	
2003	34.6	76		41.6	66	38.6	
2004	17.9	76		22.7	73	20.2	
2005	17.3	79		14.4	81	13.5	
2006	24.3	80		28.3	93	26.3	
2007	17.6	83		9.9	97	11.2	
2008	-45.0	92		-41.6	98	-43.4	
2009	35.8	87		34.7	101	31.8	
2010	12.1	84		10.6	101	7.8	
2011	-11.2	84		-11.6	103	-12.1	
2012	19.7	80		18.6	103	17.3	
2013	20.3	80		23.2	106	22.8	
2014	-3.4	79		-4.6	107	-4.9	
2015	1.3	83		-0.8	105	-0.8	
2016	-0.3	80		3.4	100	1.0	
2017	31.1	76		26.2	98	25.0	
2018	-14.2	73		-15.4	96	-13.8	
2019	28.8	66		21.3	88	22.0	
Average Annual Compound Returns: Periods Ended December 31, 2019							
Trailing 15	•	31		5.8	47	4.8	
Trailing 10		46		6.3	69	5.5	
Trailing 5-\		59		5.8	81	5.7	
Trailing 3-		64		9.1	85	9.6	

Growth has edged value over short- and long-term lookback periods, and outperformed in eight of 11 years dating back to the GFC. Styles can experience cyclical shifts; value outperformed growth in seven of nine years from 2000 to 2008.

Managers' different sector allocations can affect relative performance

GLOBAL EX US EQUITY MANAGERS' MEDIAN SECTOR ALLOCATIONS VERSUS INDEX WEIGHT

Percent (%) • n=232



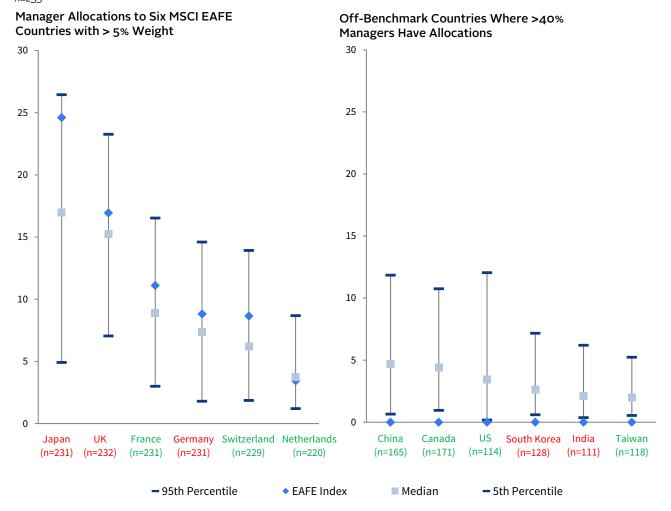
On a median basis, managers were significantly overweight the strong-performing IT sector in 2019. Managers held sizable underweight positions in the two underperforming sectors: consumer staples and real estate.



positions.

Off-benchmark country bets can significantly affect relative performance

GLOBAL EX US EQUITY MANAGERS' COUNTRY ALLOCATIONS VS THE MSCI EAFE INDEX



A majority of managers had allocations to six countries not in the MSCI EAFE Index; among these, the highest offbenchmark median allocation was to China, which bested the index in 2019.

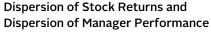
returns, or have less than \$50 million in product assets are excluded.

Dispersion of stock returns is correlated to dispersion of manager performance

STOCK DISPERSION DRIVES MANAGER DISPERSION BUT NOT MANAGER PERFORMANCE 2000-19

 $R^2 = 0.55$

20

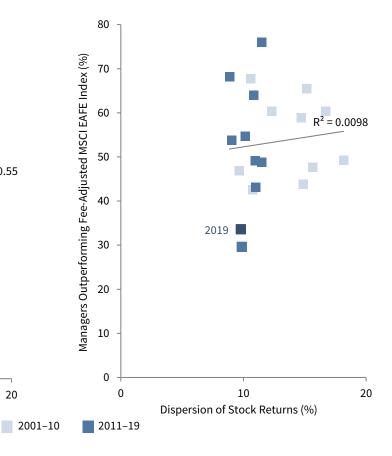


15

10

Dispersion of Stock Returns (%)

Dispersion of Stock Returns and **Managers Outperforming**



No relationship exists between stock dispersion and percentage of managers outperforming the index.

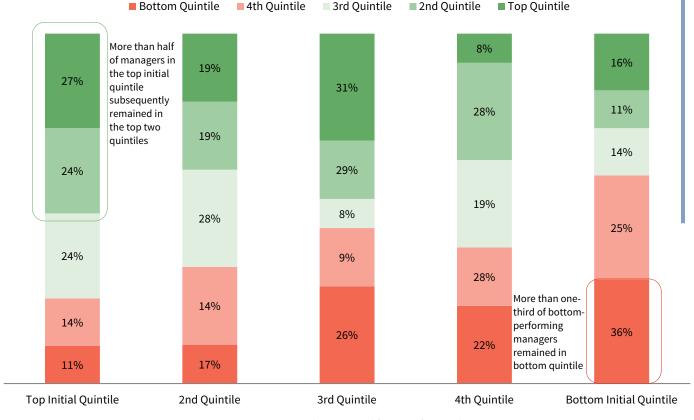
Dispersion of Manager Excess Returns (ppts)

0

Managers typically move between top and bottom quintiles, but recently have shown consistency

ANALYSIS OF GLOBAL EX US EQUITY MANAGER RETURNS BY QUINTILE OVER FIVE-YEAR PERIODS 2010-19 • *n* = 182

Percent of Managers in Subsequent 5-Yr Period (2015-19) Quintile



Global ex US managers in the top-performing initial quintile showed rare consistency, as more than half remained in the top two quintiles during the subsequent five-year period. This stands in contrast to prior tenyear windows, when top performers during the initial five-year period tended to rotate to bottom quintiles in the subsequent fiveyear periods.

Initial 5-Yr Period (2010–14) Quintile



	Contributors to this report inc	clude Sean Duffin.	Lauren Musselman.	Morgen Ellis	and Kristin Roesch.
--	---------------------------------	--------------------	-------------------	--------------	---------------------

Copyright © 2020 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of US and global copyright laws (e.g., 17 U.S.C.101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages.

This report is provided for informational purposes only. The information does not represent investment advice or recommendations, nor does it constitute an offer to sell or a solicitation of an offer to buy any securities. Any references to specific investments are for illustrative purposes only. The information herein does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Information in this report or on which the information is based may be based on publicly available data. CA considers such data reliable but does not represent it as accurate, complete, or independently verified, and it should not be relied on as such. Nothing contained in this report should be construed as the provision of tax, accounting, or legal advice. Past performance is not indicative of future performance. Broad-based securities indexes are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Any information or opinions provided in this report are as of the date of the report, and CA is under no obligation to update the information or communicate that any updates have been made. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified.

The terms "CA" or "Cambridge Associates" may refer to any one or more CA entity including: Cambridge Associates, LLC (a registered investment adviser with the US Securities and Exchange Commission, a Commodity Trading Adviser registered with the US Commodity Futures Trading Commission and National Futures Association, and a Massachusetts limited liability company with offices in Arlington, VA; Boston, MA; Dallas, TX; Menlo Park, CA, New York, NY; and San Francisco, CA), Cambridge Associates Limited (a registered limited company in England and Wales, No. 06135829, that is authorised and regulated by the UK Financial Conduct Authority in the conduct of Investment Business, reference number: 474331); Cambridge Associates Limited, LLC (a registered investment adviser with the US Securities and Exchange Commission, an Exempt Market Dealer and Portfolio Manager in the Canadian provinces of Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia, Ontario, Québec, and Saskatchewan, and a Massachusetts limited liability company with a branch office in Sydney, Australia, ARBN 109 366 654), Cambridge Associates Investment Consultancy (Beijing) Ltd (a wholly owned subsidiary of Cambridge Associates, LLC which is registered with the Beijing Administration for Industry and Commerce, registration No. 110000450174972), and Cambridge Associates Asia Pte Ltd (a Singapore corporation, registration No. 200101063G, which holds a Capital Market Services License to conduct Fund Management for Accredited and/or Institutional Investors only by the Monetary Authority of Singapore).