



*Public Agenda Item #16

Global Public Equity Program Market Update and Program Overview

March 11, 2020

John Streun, CFA, CPA, Director of Global Public Equity
Lauren Honza, CFA, MBA, External Advisor Portfolio Manager
Michael Clements, CMT, Chief Trader

Global Public Equity Program



Agenda

- Investment Objective and 2019 Performance
- Notable Structural Changes in Global Public Equities
- Global Public Equity Team Update
- Portfolio Structure and Positioning
- External Advisor Program Update
- Trading Update
- 2020 Public Equity Outlook
- Global Public Equity Initiatives for 2020

Global Public Equity Program

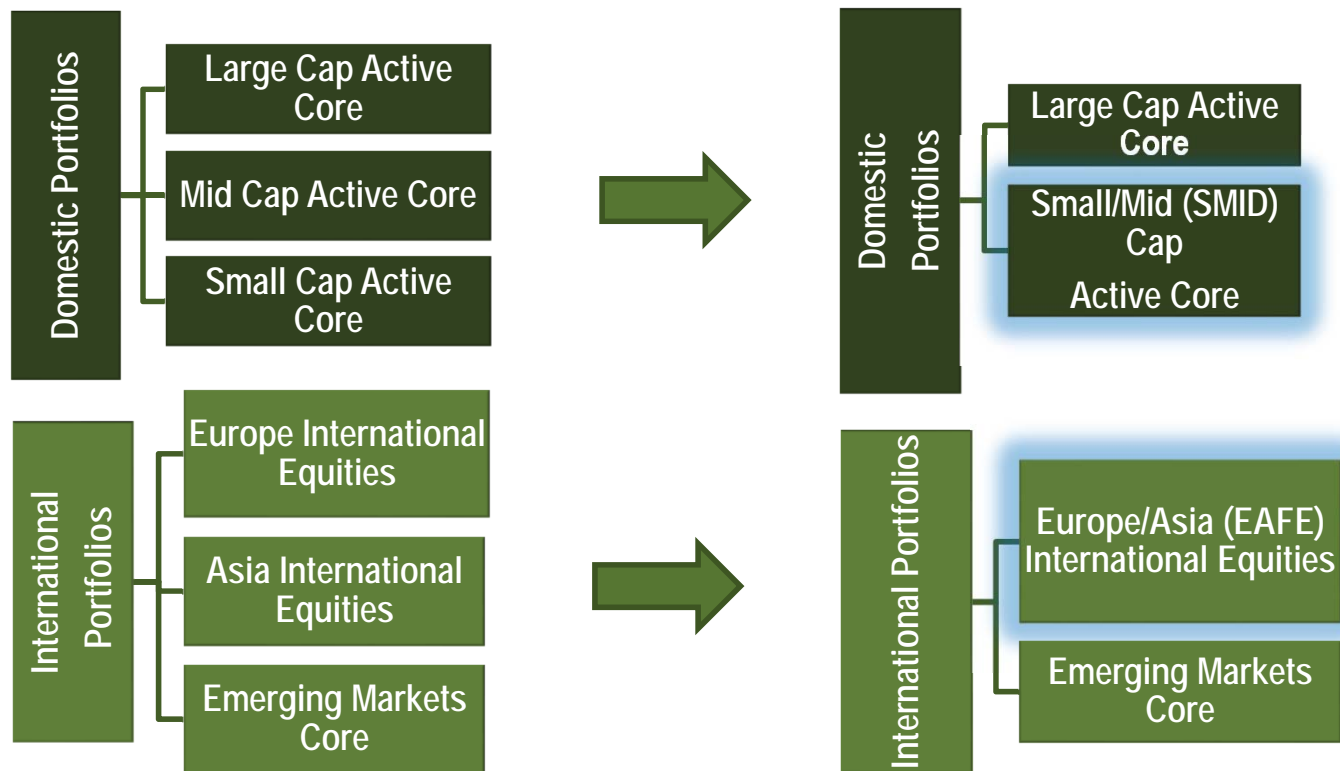
Investment Objective & Strategy



- **Investment Objective** – Outperform the Global Public Equity benchmark over rolling five-year periods, while maintaining compliance with the active risk budget.
- **Investment Strategy** – Combine lower risk internal strategies with higher risk external strategies to produce a stable excess return with a target tracking error of 150 basis points and an excess return ratio of 25 basis points or better.

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Portfolio Structure Changes – Internal Actively Managed Portfolios



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Public Equity Team



Public Equity Team

Leadership: John Streun, Andrew Hodson, Tim Reynolds, Michael Clements, Lauren Honza

Domestic Portfolio Managers:

Large Cap

Kelley Hewell, MBA, CFA (27)

Small and Mid Cap

Andrew Hodson, MBA, CFA (18)

International Portfolio Managers:

International Developed

Keith Lyons, MBA (16)
Nancy McCarthy, MBA, CFA (12)

Emerging Markets

Tim Reynolds, MS, CFA, CAIA (28)

Canada & International Value

Carlos Chujoy, CFA (27)
Yu Tang, CFA (6)

Quantitative

Carlos Chujoy, CFA (27)
Yu Tang, CFA(6)

Trading

Michael Clements, CMT (22)
Rob Newhall, CMT (7)
Travis Olson, CPA (5)

External Advisor Team

John Streun, MS, CFA, CPA (27)
Lauren Honza, MBA, CFA (26)
Michael McCrary, MBA (19)
Mark Long, MBA, CFA (23)
Kelley Hewell, MBA, CFA (27)

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Public Equity Team



Public Equity Structure

International

Emerging Markets

Tim Reynolds, MS, CFA, CAIA (28)

John Taylor, MBA, CFA (13)

June Kim (13)

Ian Smith, MBA, CFA (11)

[Open]

Domestic

Large Cap

Kelley Hewell, MBA, CFA (27)

Bob Wood, MBA, CFA (30)

Michael Yuan, CFA (22)

Paul Knight, CFA (18)

Derek Sadowsky, CFA (21)

International Developed

Keith Lyons, MBA (16)

Nancy McCarthy, MBA, CFA (12)

Teofilo Bacungan, MBA, CFA (19)

T.J. Qatato, MPA, CFA (24)

John McCaffrey, MBA (5)

Small and Mid Cap

Andrew Hodson, MBA, CFA (18)

Ben Schuman, CFA (14)

Jake Tisinger, CFA (11)

Mark Long, MBA, CFA (23)

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Asset Class Performance Highlights

Calendar Year 2019



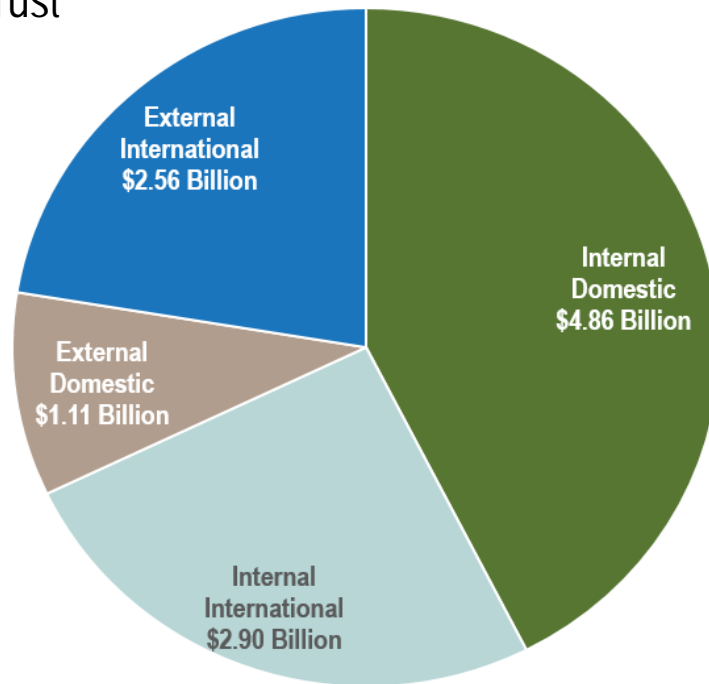
- Strong absolute returns of 26.18% for Calendar Year 2019
- Slight relative under performance of -57 basis points
- 3 out of 4 fundamental internal portfolios outperformed their benchmarks
- 8 out of 10 external portfolios outperformed their benchmarks
- 5 out of 5 new international small cap managers out performed
- Stock selection from both internal and external portfolios was a positive contributor
- The lagged reporting of the Directional Growth Portfolio detracted from performance
- An under weight to U.S. large cap stocks hurt performance
- The small allocation to cash in a strong market environment also detracted from performance

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Global Portfolio Structure – Dollar Allocation (12/31/2019)



39% of Trust

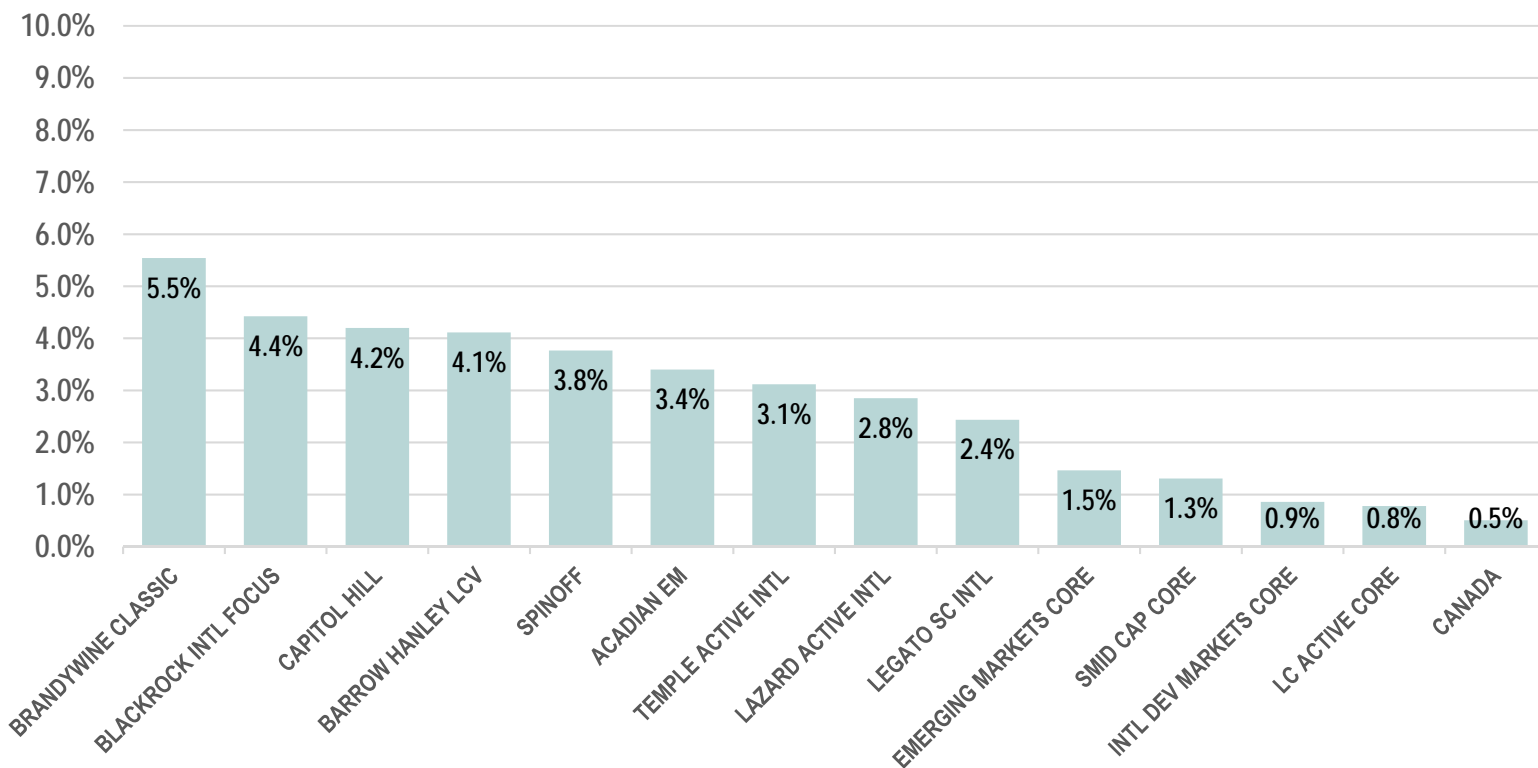


GLOBAL COMPOSITE	\$11,437,303,684
Internal Domestic	4,862,872,473
LC ACTIVE CORE	3,385,170,023
SMID CAP CORE	877,240,643
CAPITOL HILL	323,506,812
SPINOFF	276,954,995
Internal International	2,903,672,432
INTL DEV MARKETS CORE	1,367,763,249
EMERGING MARKETS CORE	785,055,388
INTL DEV MARKETS VALUE	518,886,627
CANADA	231,967,168
External Domestic	1,108,447,832
BRANDYWINE CLASSIC	518,486,354
BARROW HANLEY LCV	409,830,482
ALLIANZ	180,130,996
External International	2,562,310,947
MARSHALL WACE	382,543,533
LAZARD ACTIVE INTL	343,168,699
BLACKROCK INTL FOCUS	335,512,429
TEMPLE ACTIVE INTL	308,286,738
LEGATO SC INTL	210,415,671
LEGATO EM	159,887,076
ACADIAN EM	131,141,032
ALGERT JAPAN	147,800,014
KAYNE ANDERSON INTL	121,711,937
AXIOM INTL SMALL CAP	120,805,857
QMA EMERGING MKTS SM	111,665,530
GLOBAL ALPHA INTL SM	96,319,868
EAM INTL SMALL CAP	93,052,563

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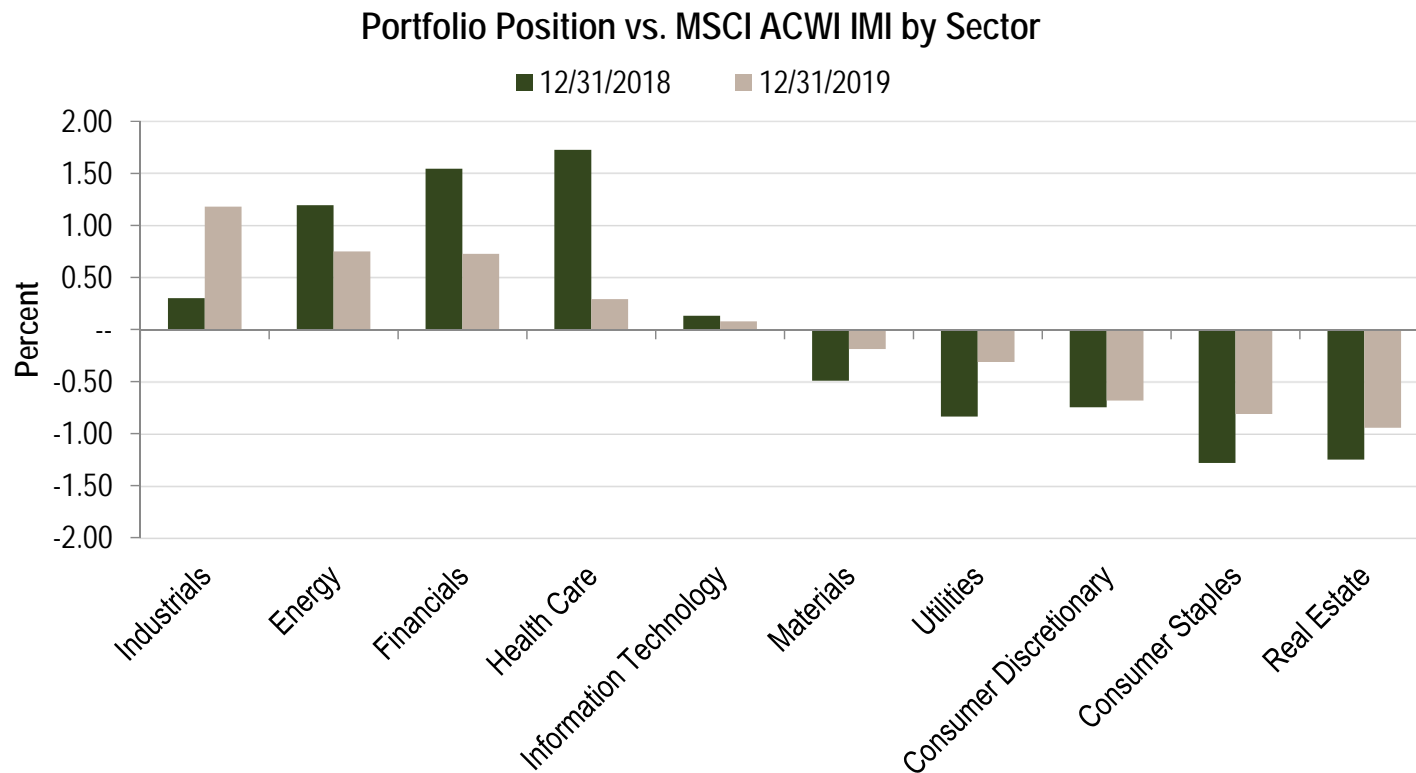
Tracking Error as of 12/31/2019



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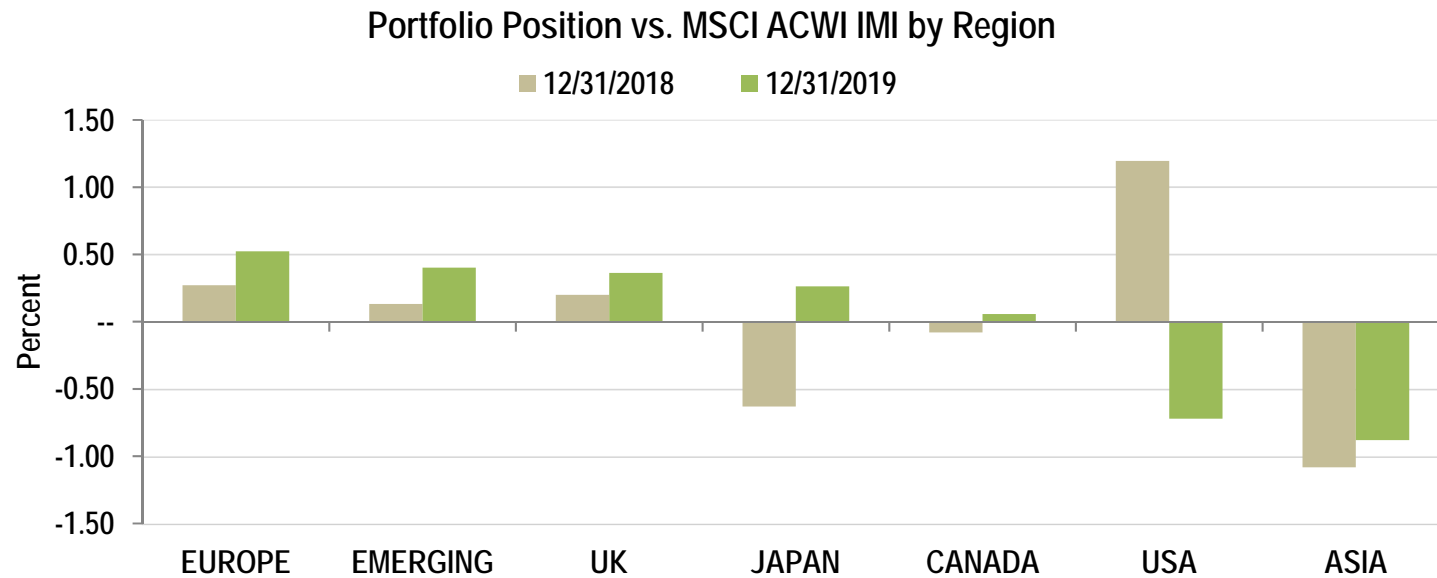
Portfolio Structure and Positioning – Sector Exposures



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Portfolio Structure and Positioning – Regional Exposures

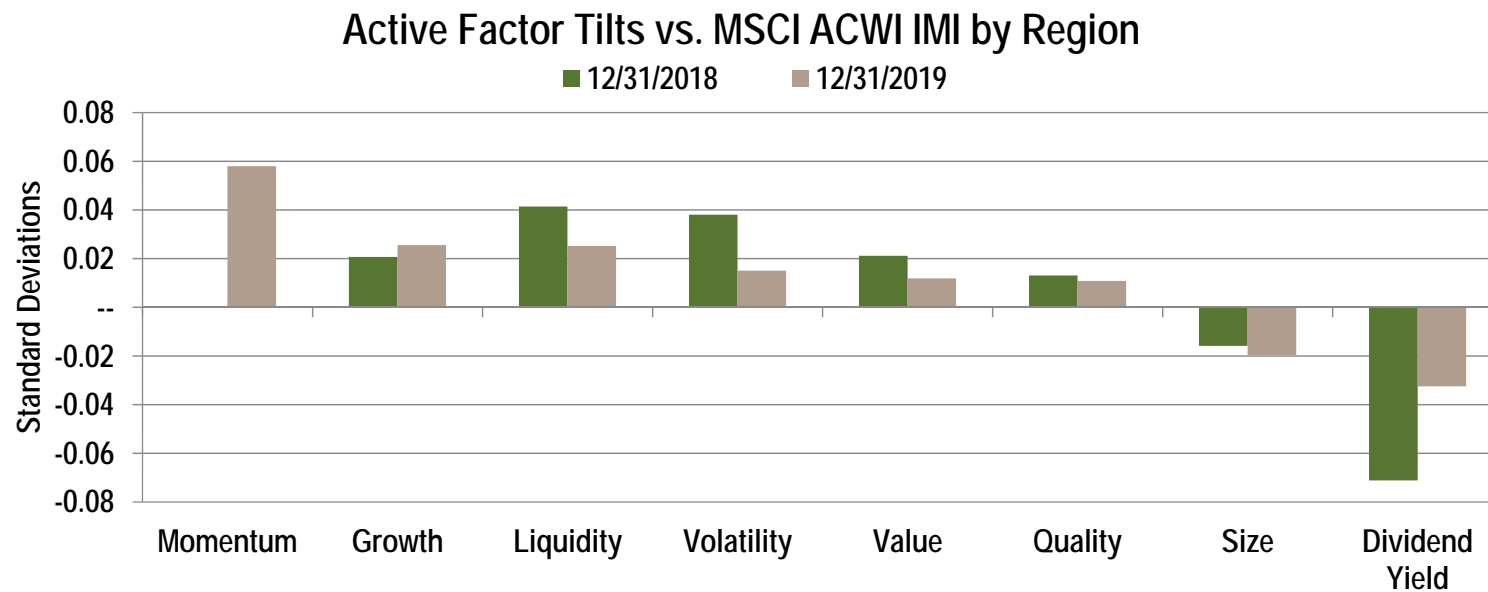


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Factor Exposures (Portfolio Characteristics)



- Factor tilts are modest
- The overall composite does have exposure to momentum and growth



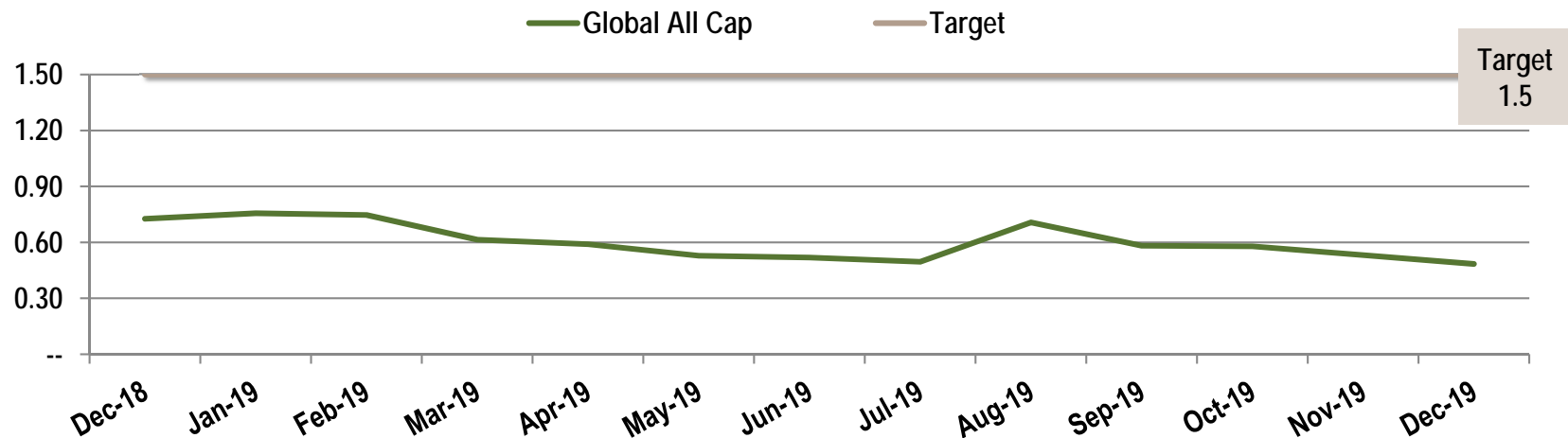
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Active Risk/Tracking Error



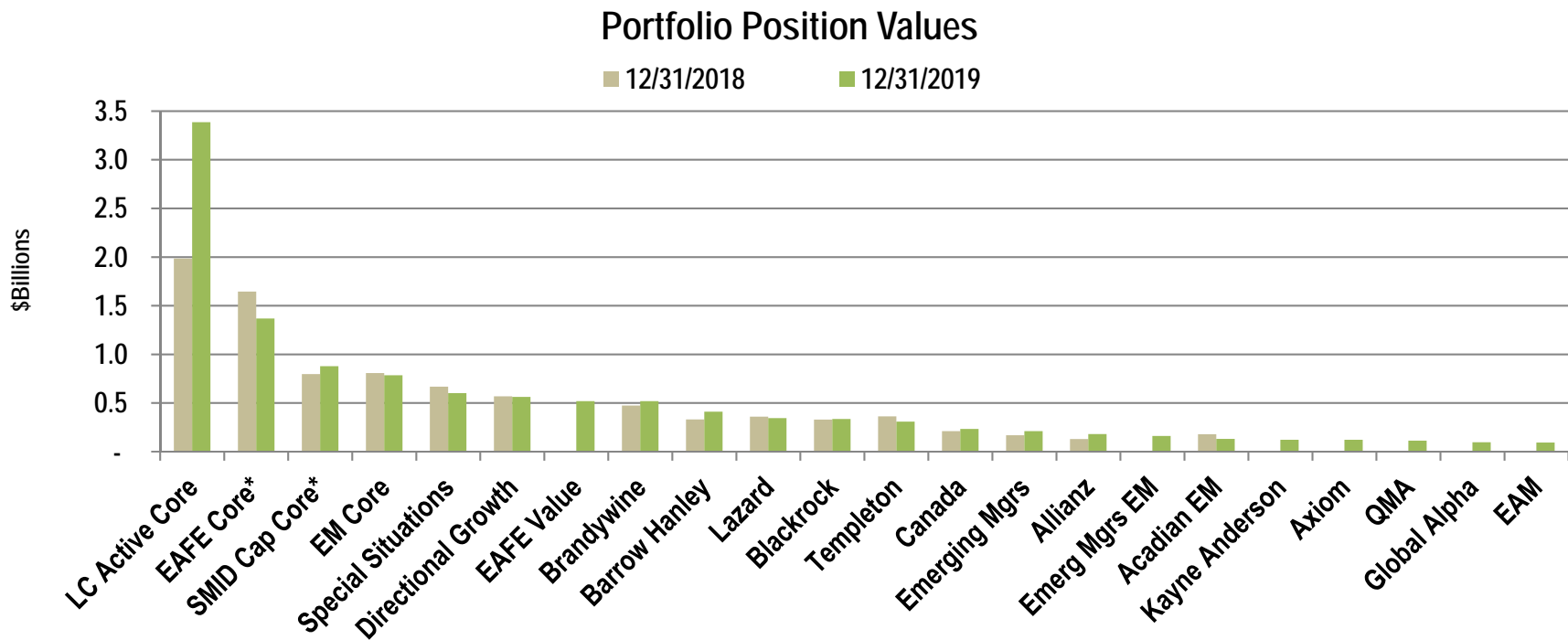
- Forecast risk levels remained within policy limits

Forecast Active Risk of Global Equity Portfolio



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Portfolio Position Values



*EAFE Core combined the former Europe and Asia Intl Portfolios
 *SMID Cap Core combined Small and Mid Cap Domestic Portfolios



External Advisor Program

Lauren Honza, MBA, CFA, External Advisor Portfolio Manager

External Advisor Program

Funded External Advisors



Firm	Strategy	Selection Date	Portfolio Inception
Acadian Asset Management	Emerging Markets	12/2/2011	11/1/2017
AllianzGI Strctrd Alpha LC 350	Domestic Large Cap	5/29/2018	8/1/2018
Axiom International Investors	International Small Cap Equity	12/20/2018	3/1/2019
Barrow, Hanley, Mewhinney & Strauss	Large Cap Value	12/2/2010	4/1/2011
BlackRock	International	12/2/2011	3/1/2015
Brandywine GIM	Large Cap Value	12/2/2010	4/1/2017
EAM Investors	International Small Cap	12/20/2018	3/1/2019
Global Alpha Capital Management	International Small Cap	12/20/2018	3/1/2019
Kayne Anderson Rudnick	International Small Cap	12/20/2018	3/1/2019
Lazard Asset Management	International	8/23/2011	12/1/2011
Quantitative Management Associates	Emerging Markets Small Cap	12/20/2018	3/1/2019
Templeton	International	11/19/2002	4/1/2003
Legato Capital Management	International Small Cap	5/25/2010	2/1/2017
Legato Capital Management	Emerging Markets	9/25/2019	11/1/2019

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External Advisor Program

Select Pool



Firm	Strategy	Selection Date	Portfolio Inception
Algert Global	International Small Cap	12/20/2018	TBD
Ativo Capital Management	International Small Cap	12/20/2018	TBD
Copper Rock Capital Partners	Emerging Markets Small Cap	12/20/2018	TBD
Fisher Investments	International	1/24/2006	TBD
Strategic Global Advisors	International Small Cap Equity	12/20/2018	TBD
TimesSquare Capital Management	International Small Cap	12/20/2018	TBD

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External Advisor Program

Funding: International Small Cap



- Ten strategies approved for placement into Select Pool in December 2018
- Five strategies funded in February 2019
 - Axiom International Small Cap
 - EAM International Small Cap
 - Global Alpha International Small Cap
 - KAR International Small Cap
 - QMA Emerging Markets Small Cap

External Advisor Program

New Mandate: Legato Capital Management Emerging Markets



- Approved by Asset Class Investment Committee in October 2019
- Funding Amount: \$150 Million
- Excess Return Objective: 1.50% - 3.00%
- Tracking Error: Target of 300 basis points
- Four Managers
 - Change Global Investment/Emerging Markets All Cap Value
 - NS Partners/Emerging Markets All Cap Growth
 - Rondure Global Advisors/New World Fund
 - Trinetra Investment Management/Emerging Markets Growth

External Advisor Program

RFP: International Advisory Services



- Published January 24, 2020
- Benchmarks: *MSCI ACWI ex-US* and *MSCI EAFE*
- Process
 - Phase I: Minimum Requirements and Short Form Review
 - Phase II: Investment DDQ Review and Operational DDQ Review
 - Phase III: Onsite Meetings and Reference Checks
 - Phase IV: Committee Approval
 - Phase V: Contract/Fund



Trading Update

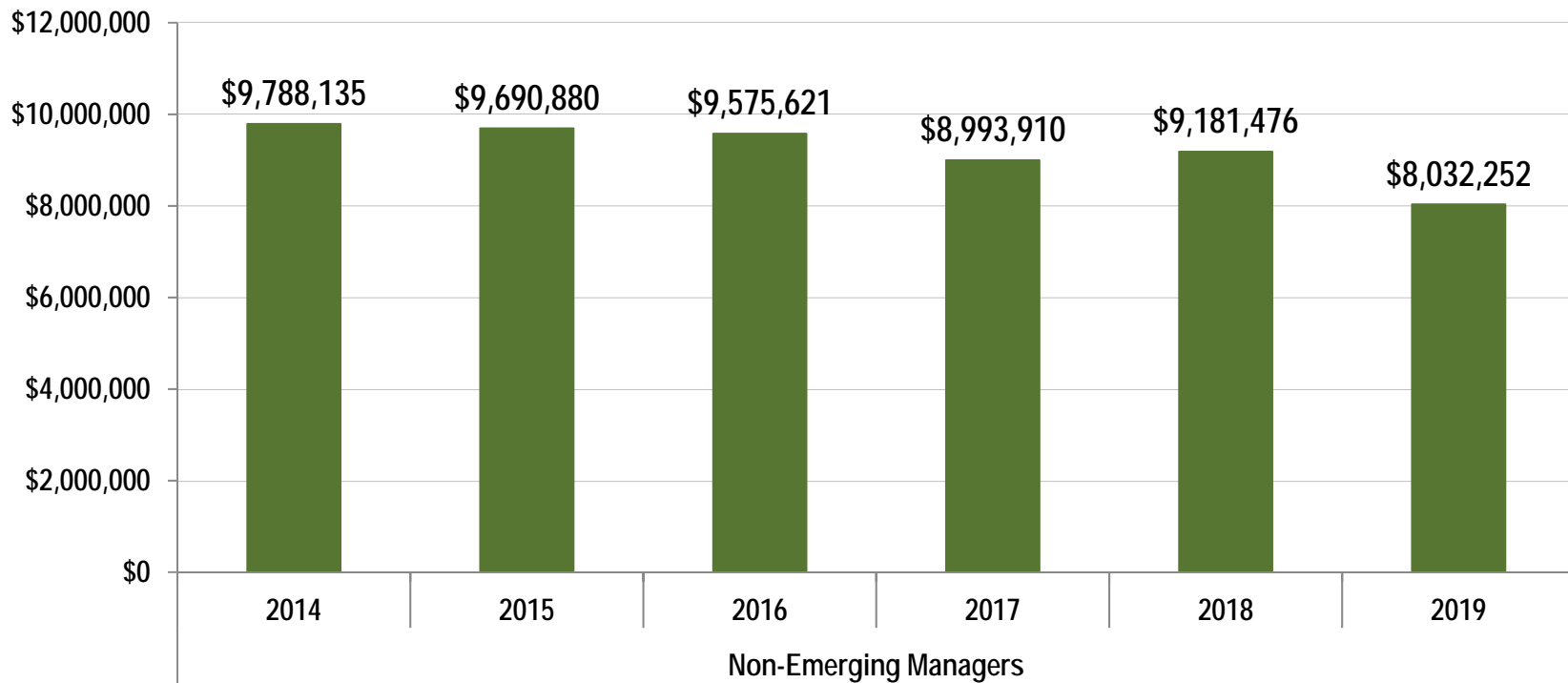
Michael Clements, CMT, Chief Equity Trader

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Total Commissions



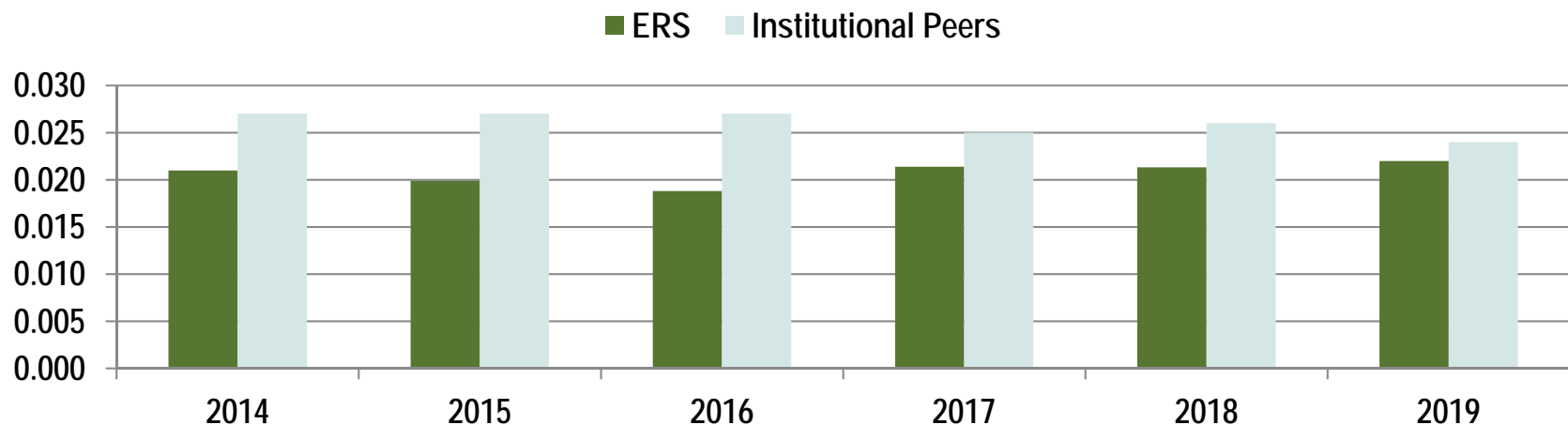
Calendar Year 2018 total commissions were 12.5% less than 2018.



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The average “All-In” blended commission rates

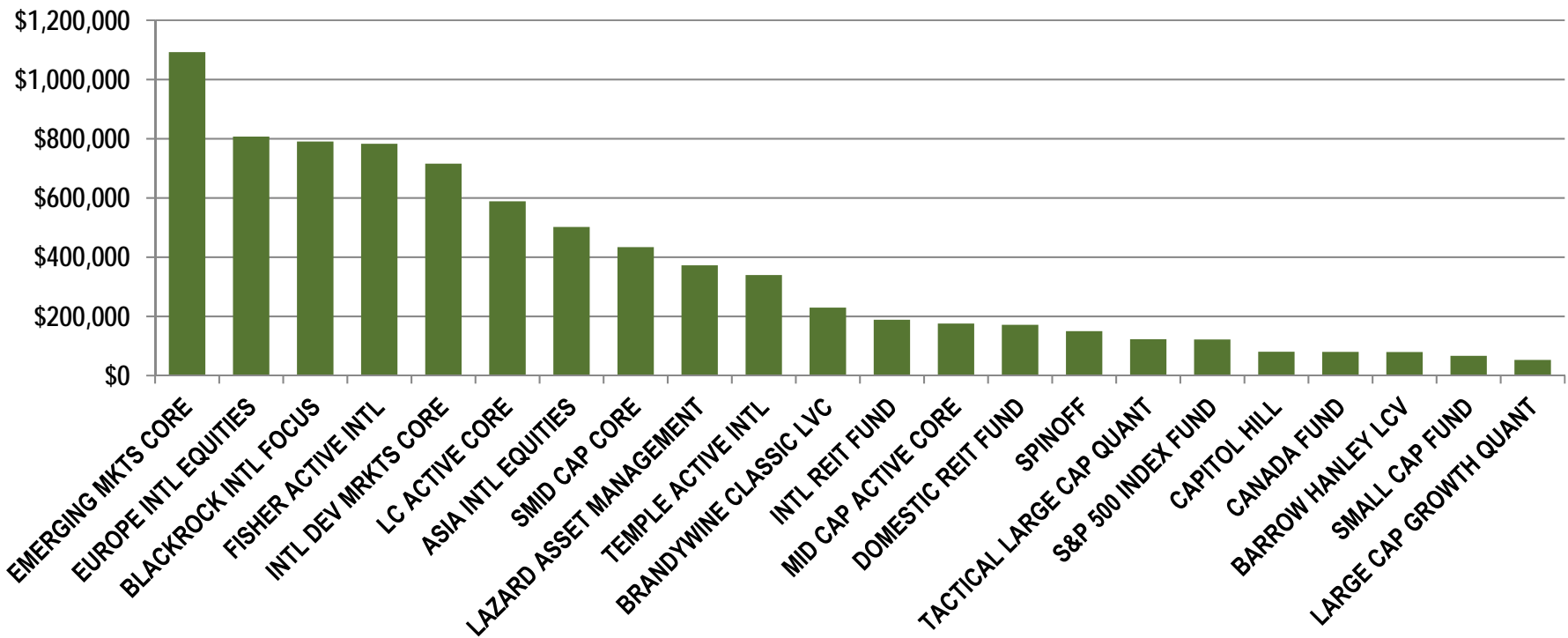


- Average “all-in” blended commission rate paid by U.S. institutions to brokers on domestic shares was 2.4 cents-per-share, down from 2.6 cents-per-share in 2018.
 - This average rate takes into account commissions on single-stock, program, and direct-market-access electronic trades.
- ERS’ average commission was 2.2 cents-per-share, up from 2.1 cents-per-share in 2018.

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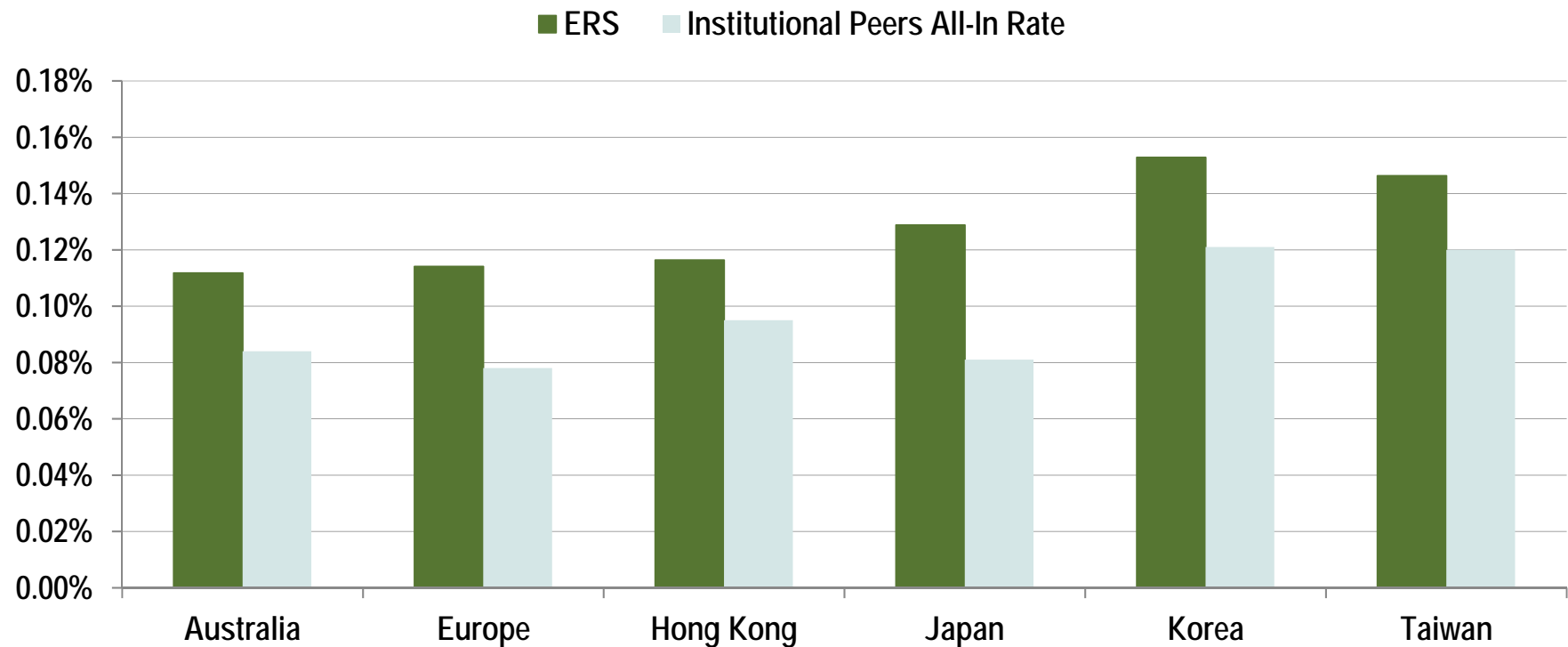
Commission by Portfolio



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International Commission Rates



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ERS Global Public Equity

Outlook for 2020

John Streun, MS, CFA, CPA, Director of Global Public Equity

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Macro



JPMorgan Global Composite PMI SA



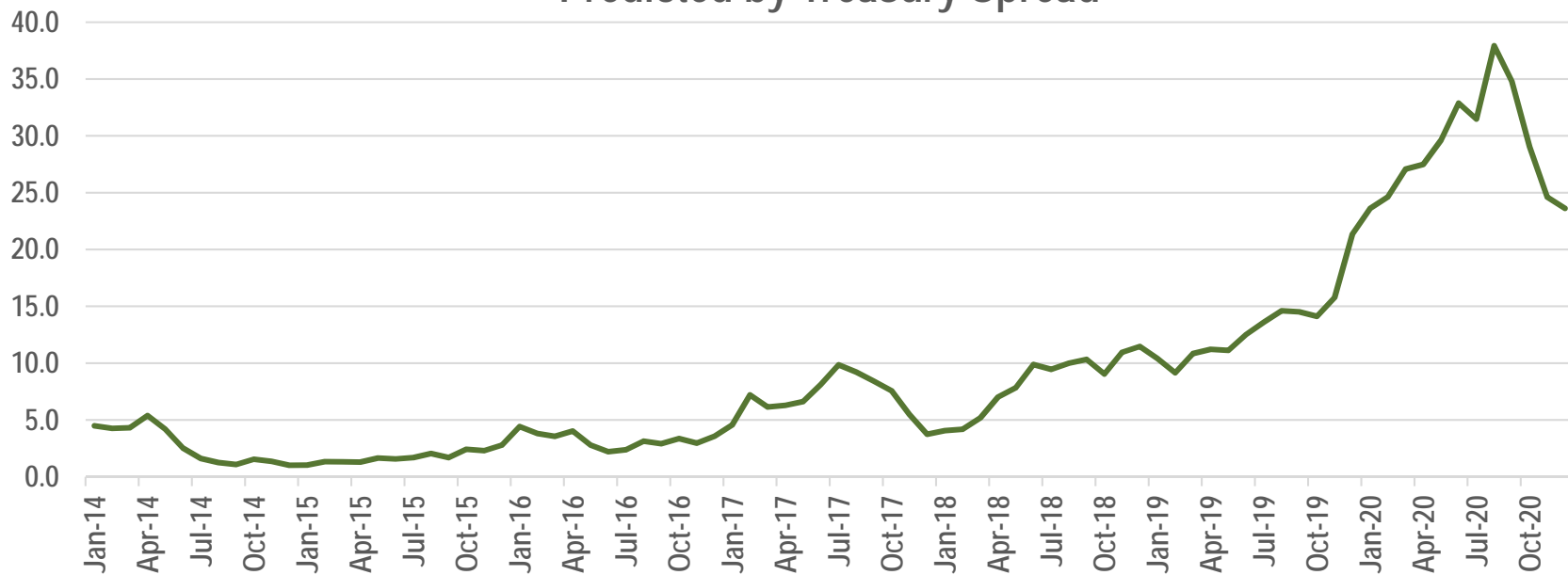
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Macro



NY Fed Prob of Recession in US Twelve Months Ahead
Predicted by Treasury Spread



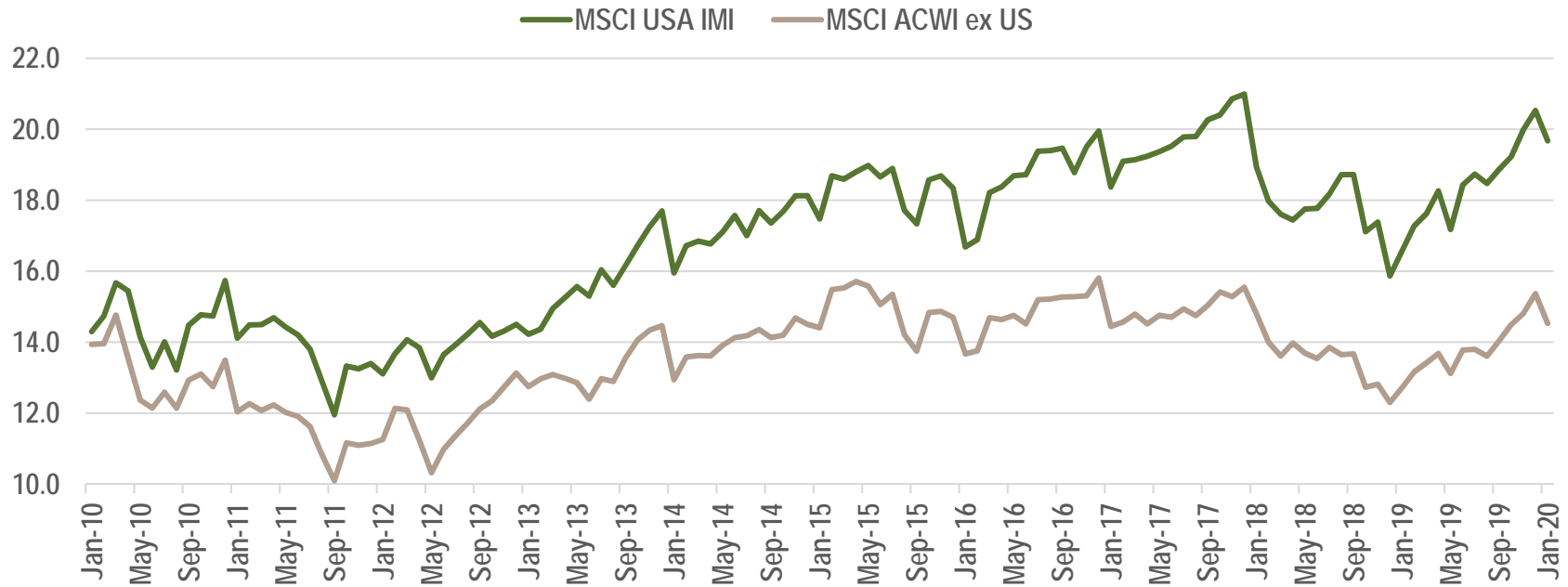
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Macro



Forward P/E Ratios for US vs International Equities



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Goals and Objectives for 2020

John Streun, MS, CFA, CPA, Director of Global Public Equity

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Initiatives for 2020



- Select Pool buildout
- External advisor scorecard
- Evaluate target tracking error
- Assess external advisor fees
- Continue to build out and integrate internal team

Questions?