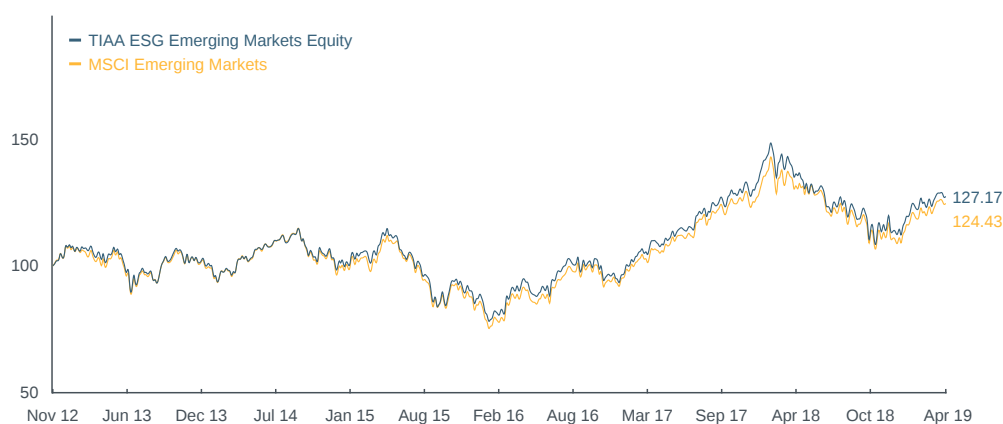


TIAA ESG EMERGING MARKETS EQUITY INDEX (USD)

The TIAA ESG Emerging Markets Equity Index is based on the MSCI Emerging Markets Index, its parent index, which captures the performance of large and mid-cap segments 24 Emerging Markets (EM) countries*. The TIAA ESG Emerging Markets Equity Index is designed to reflect an increased exposure to positive environmental, social and governance (ESG) factors as well as exhibit lower carbon exposure relative to the Parent Index. The index aims to reflect the performance of certain TIAA strategies.

CUMULATIVE INDEX PERFORMANCE - NET RETURNS (USD) (NOV 2012 – APR 2019)



ANNUAL PERFORMANCE (%)

Year	TIAA ESG Emerging Markets Equity	MSCI Emerging Markets
2018	-16.09	-14.57
2017	41.71	37.28
2016	9.30	11.19
2015	-13.93	-14.92
2014	-0.76	-2.19
2013	-2.15	-2.60

INDEX PERFORMANCE — NET RETURNS (%) (APR 30, 2019)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since Nov 30, 2012
					3 Yr	5 Yr	10 Yr	Since Nov 30, 2012	
TIAA ESG Emerging Markets Equity	1.59	2.50	-3.94	11.39	10.82	4.44	na	3.82	
MSCI Emerging Markets	2.11	3.19	-5.04	12.23	11.25	4.04	na	3.46	

FUNDAMENTALS (APR 30, 2019)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.52	15.77	13.49	1.80
2.66	13.57	12.23	1.66

INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2012 – APR 30, 2019)

	Beta	Tracking Error (%)	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since Nov 30, 2012	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
TIAA ESG Emerging Markets Equity	1.00	2.47	51.57	13.30	15.43	na	0.73	0.30	na	0.27	26.56	2018-01-26—2018-10-30
MSCI Emerging Markets	1.00	0.00	6.94	13.03	15.27	na	0.77	0.27	na	0.25	35.55	2014-09-03—2016-01-21

¹ Last 12 months ² Based on monthly net returns data ³ Based on ICE LIBOR 1M

* EM countries include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The TIAA ESG Emerging Markets Equity Index was launched on Mar 29, 2017. Data prior to the launch date is back-tested data (i.e. calculations of how the index might have performed over that time period had the index existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance.

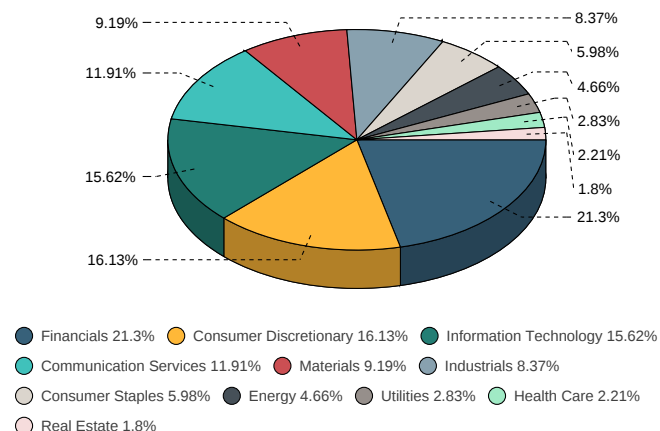
INDEX CHARACTERISTICS

	TIAA ESG Emerging Markets Equity	MSCI Emerging Markets
Number of Constituents	379	1,138
	Weight (%)	
Largest	6.85	5.22
Smallest	0.00	0.00
Average	0.26	0.09
Median	0.01	0.04

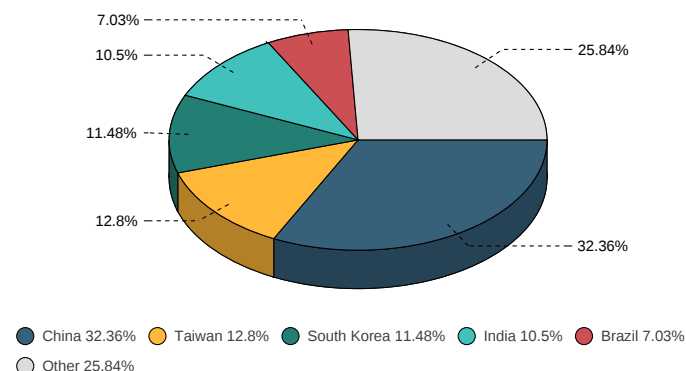
TOP 10 CONSTITUENTS

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
TENCENT HOLDINGS LI (CN)	CN	6.85	5.22	Comm Svcs
ALIBABA GROUP HLDG ADR	CN	5.97	4.44	Cons Discr
TAIWAN SEMICONDUCTOR MFG	TW	5.36	3.81	Info Tech
NASPERS N	ZA	3.28	2.07	Cons Discr
TATA CONSULTANCY	IN	2.02	0.54	Info Tech
AXIS BANK	IN	1.81	0.39	Financials
CHINA MERCHANTS BANK H	CN	1.79	0.36	Financials
ITAU UNIBANCO PN	BR	1.72	0.77	Financials
FEMSA UNIT UBD	MX	1.65	0.35	Cons Staples
BANCO BRADESCO PN	BR	1.61	0.67	Financials
Total		32.08	18.61	

SECTOR WEIGHTS



COUNTRY WEIGHTS



INDEX METHODOLOGY

The TIAA ESG Indexes are constructed and maintained in accordance with the MSCI Global Investable Market Indexes Methodology and calculated as per the MSCI Index Calculation Methodology.

The TIAA ESG Indexes are designed to reflect the performance of TIAA's strategy that seeks to increase exposure to positive environmental, social and governance (ESG) factors, as well as exhibit lower carbon exposure, relative to their corresponding Parent MSCI Indexes. Their index construction is also aimed at minimizing the tracking error of this strategy relative to the corresponding Parent Indexes.

The TIAA ESG Indexes are rebalanced quarterly coinciding with the regular Index Reviews of the MSCI Global Investable Market Indexes.

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