

INCEPTION:
May 2018

BENCHMARK:
MSCI EM Small Cap Index

STRATEGY ASSETS:
US\$135 million

LEAD PORTFOLIO MANAGER:
Arup Datta, MBA, CFA

STRATEGY OVERVIEW

We seek to provide long-term capital appreciation by applying a quantitative, bottom-up stock selection investment process, based on fundamental insights, to a broad emerging market universe.

- Focus on Stock Selection
- Core focus that aims to add value across a variety of market conditions, both growth and value
- Nimble – incorporating daily changes in stock alpha rankings
- Daily rebalancing & trading, predictive transaction cost modelling, focus on capacity
- Mid and small cap focus

APPROACH

- Bottom-up, quantitative stock selection process applied to a broad investable universe of over 6,000 securities from 26 emerging markets countries and a select number of frontier countries.
- Stocks are analyzed through a region/sector relative model framework.
- Individual stock weights are assigned based upon sub-factors, which are grouped into four "super factors", Value, Revisions, Quality and Informed Investor.
 - **Value:** focuses on value metrics, consisting of cash flow, dividend, book, revenue and earnings based sub-factors.
 - **Revisions:** focuses on analyst revisions in forecasts.
 - **Quality:** incorporates sub-factors based upon capital allocation, operating efficiency and the application of accounting principles.
 - **Informed Investor:** analyzes investor activity, such as short interest and option pricing
- Contextual modeling is utilized to further refine the weights of factors assigned to stocks.
- The priority in executing the investment process is to remain nimble in seeking to generate alpha for clients. To retain this advantage, the team uses a proprietary transaction cost model, rebalances daily and maintains a strict focus on capacity.

INVESTMENT PROCESS

Universe



- Proprietary data warehouse
- Investable universe of 6,000 securities
- Emerging Markets
- Select Frontier Markets

Stock selection



- Bottom-up
- Region and sector relative
- Alpha Factors
- Contextual

Portfolio construction



- Return Forecast
- Constraint-based optimization
- Proprietary risk models
- PM review

Implementation

- Transaction cost estimates
- Pre/Post trade analysis
- Capacity limits
- CIO/Compliance review

Investing involves risk. Please read the important disclosures under "Disclaimer" which contain more information about the significance and the limitations of the information on this page.

SECTOR ALLOCATION (Ex. Cash & Equivalents)

SECTOR	PORTFOLIO	BENCHMARK
Information Technology	19.85%	18.49%
Industrials	14.15%	15.31%
Materials	14.07%	12.32%
Consumer Discretionary	11.03%	12.14%
Financials	9.51%	10.10%
Health Care	8.52%	9.46%
Real Estate	7.89%	6.43%
Consumer Staples	4.50%	6.05%
Communication Services	3.87%	3.93%
Utilities	3.40%	3.80%
Energy	3.20%	1.96%
	100.00%	100.00%

GEOGRAPHIC ALLOCATION (Ex. Cash & Equivalents)

COUNTRY	PORTFOLIO	BENCHMARK
South Korea	21.15%	18.00%
Taiwan	20.83%	21.64%
India	15.18%	17.54%
China	13.41%	10.33%
Brazil	6.00%	6.98%
South Africa	5.16%	3.64%
Indonesia	2.07%	1.39%
Thailand	1.96%	3.43%
Mexico	1.84%	1.80%
Philippines	1.74%	0.90%
Greece	1.67%	1.13%
Turkey	1.51%	1.24%
Russia	1.48%	0.99%
Malaysia	1.31%	2.87%
Chile	1.15%	0.81%
Poland	0.79%	1.32%
Pakistan	0.75%	0.35%
Saudi Arabia	0.69%	2.42%
Egypt	0.57%	0.26%
Argentina	0.40%	0.40%
Nigeria	0.23%	0.00%
Vietnam	0.13%	0.00%
Other	0.00%	2.54%
	100.00%	100.00%

WEIGHTINGS RELATIVE TO BENCHMARK

OVERWEIGHT	SECTOR	COUNTRY	ACTIVE WEIGHT
Cia Brasileira de Distribuicao	Cons. Staples	Brazil	+1.78%
Kolon Industries Inc	Materials	South Korea	+1.76%
Kinsus Interconnect Technology Corp	Info. Tech.	Taiwan	+1.73%
Hindustan Petroleum Corp Ltd	Energy	India	+1.70%
Danaos Corp	Industrials	Greece	+1.64%

UNDERWEIGHT	SECTOR	COUNTRY	ACTIVE WEIGHT
Chinasoft International Ltd.	Info. Tech.	China	-0.39%
Parade Technologies, Ltd.	Info. Tech.	Taiwan	-0.33%
Fosun International Ltd	Cons. Disc.	South Africa	-0.32%
Sino-American Silicon Products Inc.	Info. Tech.	Taiwan	-0.30%
Crompton Greaves Consumer Electricals Ltd.	Cons. Disc.	India	-0.27%

TOP TEN HOLDINGS (Ex. Cash & Equivalents)

HOLDING	SECTOR	COUNTRY	WEIGHT
Kolon Industries Inc	Materials	South Korea	1.9%
Kinsus Interconnect Technology Corp	Info. Tech.	Taiwan	1.9%
Cia Brasileira de Distribuicao	Cons. Staples	Brazil	1.8%
Jindal Steel & Power Ltd	Materials	India	1.7%
Hindustan Petroleum Corp Ltd	Energy	India	1.7%
Danaos Corp	Industrials	Greece	1.6%
ChipMOS Technologies Inc	Info. Tech.	Taiwan	1.6%
Osstem Implant Co Ltd	Health Care	South Korea	1.6%
LG Uplus Corp	Info. Tech.	South Korea	1.5%
Power Finance Corp Ltd	Financials	India	1.5%
Total:			16.8%
Cash & Equivalents			1.9%

CHARACTERISTICS

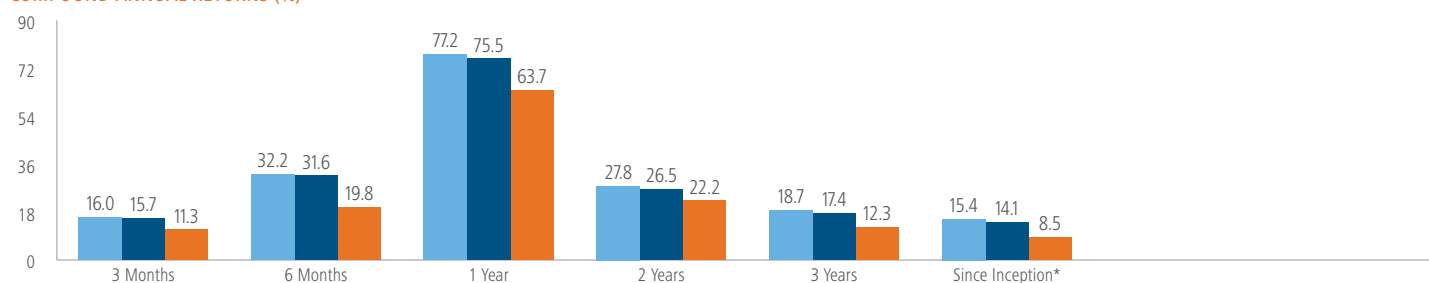
	PORTFOLIO	BENCHMARK
Forward Price/Earnings	7.5	12.6
Price/Tangible Book	1.0	1.6
Price/Cash Flow	3.4	3.0
Price/Sales	0.4	1.0
% Net Earnings Revisions (3M)	36.0%	10.6%
% Net Sales Revisions (3M)	25.3%	12.9%
Predicted Beta	1.1	1.0
Dividend Yield	3.2	1.9
Turnover (1 year to December)	255.60%	N/A
Median Market Cap (US\$ millions)	653	1,004
Weighted Market Cap (US\$ Millions)	1,845	1,877

RISK

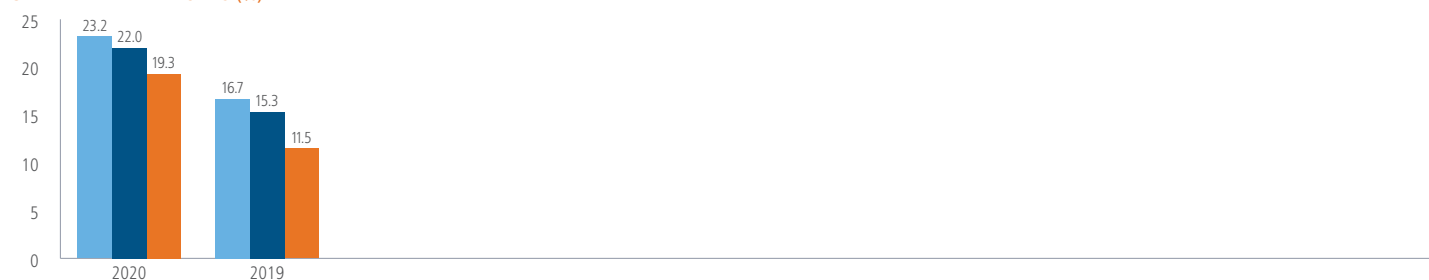
	PORTFOLIO	BENCHMARK
Standard Dev. (3-yr Trailing)	25.3	23.4
Alpha (3-yr Trailing)	6.3	N/A
Beta (3-yr Trailing)	1.1	N/A
Sharpe Ratio (3-yr Trailing)	0.7	0.5
Tracking Error (3-yr Trailing)	6.0	N/A
Information Ratio (3-yr Trailing)	1.2	N/A

COMPOSITE PERFORMANCE (US\$)

COMPOUND ANNUAL RETURNS (%)



CALENDAR YEAR RETURNS (%)



■ Mackenzie Emerging Markets Small Cap (Gross) ■ Mackenzie Emerging Markets Small Cap (Net) ■ MSCI Emerging Markets Small Cap Index

*Since Composite Inception on May 1, 2018

Past performance does not guarantee or indicate future results. Mackenzie Portfolio Analytics Group is responsible for calculating the non-benchmark information shown above. That information, which does not constitute formal investment guidelines/restrictions, is subject to change from time to time and over time.

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Gross and net returns do not include the deduction of custody fees. The returns assume the reinvestment of dividends, interest, and realized and unrealized capital gains and losses. Gross performance results also do not reflect the deduction of management fees and other fees and expenses. Net performance results reflect the deduction of the maximum standard fee 1.00% from January 1, 2020 and 1.20% until December 31, 2019 charged to institutional clients without considering breakpoints, calculated daily and invoiced quarterly, as well as the transaction costs and other fees and expenses, including certain taxes. Index returns do not reflect transaction costs or the deduction of other fees and expenses and it is not possible to invest directly in an index.

COMPLIANCE STATEMENT

Mackenzie Investments claims compliance with the Global Investment Performance Standards (GIPS®).

COMPOSITE DESCRIPTION

The Emerging Markets Small Cap Composite seeks to provide long-term capital appreciation and outperform its benchmark (MSCI EM Small Cap Index). The strategy applies a quantitative, bottom-up stock selection investment process, based on fundamental insights, to emerging and selected frontier markets across small-cap stocks. The investment process focuses on a succinct, high conviction set of factors, which are applied within the context of a region/sector/industry relative model.

BENCHMARK DESCRIPTION

The benchmark is the MSCI Emerging Markets Small Cap Index, net of withholding taxes. The MSCI Emerging Markets Small Cap Index includes small-cap representation across 24 emerging markets countries. The index covers approximately 14% of the free float adjusted market capitalization in each country.

REPORTING CURRENCY

Valuations and composite performance are reported in U.S. dollars. The composite includes Canadian dollar portfolios that have been converted to U.S. dollars. Returns were converted at the end of each month based on the 4:00 PM spot rate on the last business day of the month as reported by StatPro to our system vendor CGI StarSource.

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