

INCEPTION:
May 2018

BENCHMARK:
MSCI Emerging Markets Index

STRATEGY ASSETS:
£130 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
- Large and mid 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 the 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 informed market participant activity, such as short interest in and option pricing on securities.
- 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	22.92%	20.92%
Financials	16.94%	18.24%
Consumer Discretionary	16.20%	17.65%
Communication Services	10.25%	11.74%
Materials	9.67%	8.09%
Energy	6.45%	4.84%
Industrials	5.39%	4.30%
Consumer Staples	4.57%	5.62%
Health Care	3.51%	4.46%
Real Estate	2.63%	2.15%
Utilities	1.47%	2.00%
	100.00%	100.00%

GEOGRAPHIC ALLOCATION (Ex. Cash & Equivalents)

COUNTRY	PORTFOLIO	BENCHMARK
China	40.40%	37.90%
South Korea	15.63%	13.33%
Taiwan	13.02%	13.84%
India	11.05%	9.65%
Brazil	4.98%	4.46%
Russia	4.89%	3.11%
South Africa	3.70%	3.81%
Malaysia	1.61%	1.37%
Philippines	1.20%	0.64%
Saudi Arabia	1.11%	2.77%
Thailand	1.03%	1.88%
Turkey	0.49%	0.29%
Egypt	0.31%	0.08%
Pakistan	0.30%	0.02%
Qatar	0.13%	0.68%
Mexico	0.10%	1.74%
Argentina	0.04%	0.11%
Other	0.00%	4.30%
Nigeria	0.08%	0.00%
Philippines	0.06%	0.65%
Other	0.00%	3.15%
	100.00%	100.00%

WEIGHTINGS RELATIVE TO BENCHMARK

OVERWEIGHT	SECTOR	COUNTRY	ACTIVE WEIGHT
Innolux Corp	Info. Tech.	Taiwan	+1.76%
Vedanta Ltd	Materials	India	+1.73%
Country Garden Services Holdings Co Ltd	Industrials	China	+1.72%
AU Optronics Corp	Info. Tech.	Taiwan	+1.71%
MTN Group	Comm. Serv.	South Africa	+1.66%

UNDERWEIGHT	SECTOR	COUNTRY	ACTIVE WEIGHT
Meituan Dianping	Cons. Disc.	China	-1.36%
Reliance Industries Ltd	Energy	India	-0.97%
JD.com Inc	Cons. Disc.	China	-0.90%
Housing Development Finance Corp Ltd	Financials	India	-0.72%
Pinduoduo Inc	Cons. Disc.	China	-0.65%

TOP TEN HOLDINGS (Ex. Cash & Equivalents)

HOLDING	SECTOR	COUNTRY	WEIGHT
Alibaba Group Holding Ltd	Cons. Disc.	China	6.1%
Tencent Holdings Ltd	Comm. Serv.	China	5.9%
Taiwan Semiconductor Manufacturing Co Ltd	Info. Tech.	Taiwan	5.7%
Samsung Electronics Co Ltd	Info. Tech.	South Korea	4.3%
China Construction Bank Corp	Financials	China	2.5%
Country Garden Services Holdings Co Ltd	Industrials	China	1.9%
Innolux Corp	Info. Tech.	Taiwan	1.8%
Vedanta Ltd	Materials	India	1.8%
AU Optronics Corp	Info. Tech.	Taiwan	1.8%
MTN Group	Comm. Serv.	South Africa	1.8%
Total:			33.7%
Cash & Equivalents			1.7%

CHARACTERISTICS

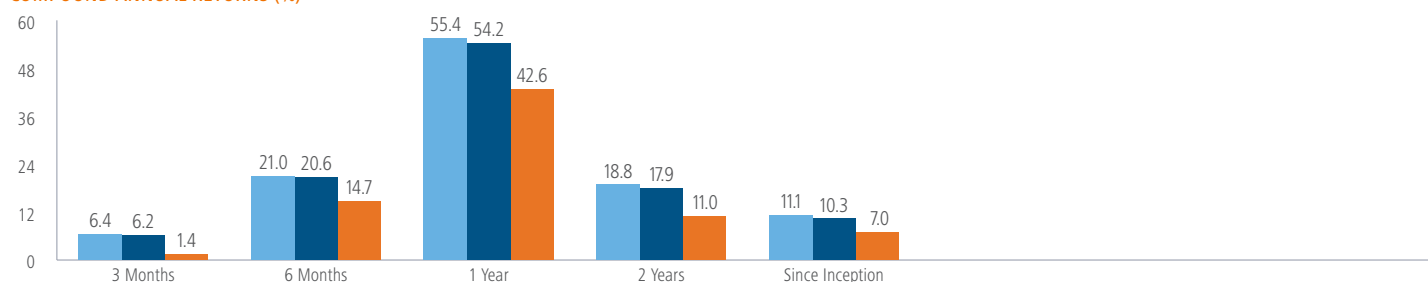
	PORTFOLIO	BENCHMARK
Forward Price/Earnings	8.8	14.0
Price/Tangible Book	1.5	2.0
Price/Cash Flow	4.9	8.0
Price/Sales	0.9	1.6
% Net Earnings Revisions (3M)	44.3%	16.1%
% Net Sales Revisions (3M)	44.0%	28.1%
Predicted Beta	1.0	1.0
Dividend Yield	3.0	1.9
Turnover (1 year to March)	169.36%	N/A
Median Market Cap (GBP millions)	8,425	5,313
Weighted Market Cap (GBP Millions)	116,995	126,122

RISK

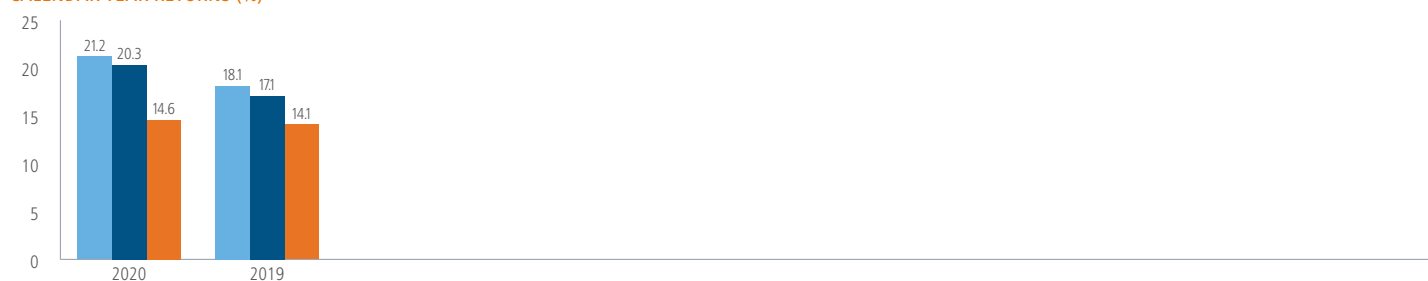
	PORTFOLIO	BENCHMARK
Standard Dev. (3-yr Trailing)	N/A	N/A
Alpha (3-yr Trailing)	N/A	N/A
Beta (3-yr Trailing)	N/A	N/A
Sharpe Ratio (3-yr Trailing)	N/A	N/A
Tracking Error (3-yr Trailing)	N/A	N/A
Information Ratio (3-yr Trailing)	N/A	N/A

COMPOSITE PERFORMANCE (£)

COMPOUND ANNUAL RETURNS (%)



CALENDAR YEAR RETURNS (%)



■ Mackenzie Emerging Markets Large Cap Equity (Gross)
 ■ Mackenzie Emerging Markets Large Cap Equity (Net)
 ■ MSCI Emerging Markets Index

*Since Composite Inception on June 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.

DISCLAIMER

Issued by Mackenzie Financial Corporation ("Mackenzie Investments"). **For Institutional Use Only.** This material does not constitute an offer to sell, or a solicitation of an offer to buy, any type of securities.

The contents of this document are provided for illustrative and marketing purposes and do not constitute specific advice. Certain information contained in this document is obtained from third parties. Mackenzie Investments believes such information to be accurate and reliable as at the date hereof, however does not guarantee that it is accurate or complete or current at all times. The information provided is subject to change without notice and Mackenzie Investments cannot be held liable for any loss arising from any use of or reliance on the information contained in this document. No portion of this communication may be reproduced or redistributed without the express permission of Mackenzie Investments. There can be no assurance any account will achieve its objectives or avoid incurring substantial losses. Performance may be volatile and may vary materially on a monthly, quarterly or annual basis, and over the course of a market cycle. This strategy is not intended as a complete investment program and is subject to numerous risks. Further information on those risks can be requested from Mackenzie.

Views expressed regarding a security, industry or market sector are the views of only that speaker/author as of the time expressed and do not necessarily represent the views of Mackenzie Investments or its affiliates. Any such views are subject to change at any time based upon markets and other conditions and Mackenzie Investments and its affiliates disclaim any responsibility to update such views. These views are not a recommendation to buy or sell and may not be relied on as investment advice and, because investment decisions are based on numerous factors, may not be relied on as an indication of trading intent on behalf of any client. Speculation or stated beliefs about future events, such as market and economic conditions, company or security performance, upcoming product offerings or other projections are "forward-looking statements". These forward-looking statements represent the beliefs of the speaker/author and do not necessarily represent the views of Mackenzie Investments or its affiliates. Forward-looking statements are inherently subject to, among other things, risks, uncertainties and assumptions which could cause actual events, results, performance or prospects to differ materially from those expressed in, or implied by, these forward-looking statements.

Past performance does not guarantee or indicate future results. Information under "Composite and Benchmark Performance (GBP)" reflects the performance of the Mackenzie Emerging Markets Large Cap Composite, and does not necessarily reflect the performance that any particular account investing in the same or similar securities may have had during the period. The performance of other accounts is likely to differ from the performance shown for a variety of reasons, including, but not limited to: differences in market conditions, portfolio turnover and in the number, types, availability and diversity of securities that can be purchased; economies of scale, regulations and other factors applicable to the management of large separate accounts and funds; client-imposed investment restrictions; the timing of client investments and withdrawals; the deduction of taxes; tax considerations; and other factors. Information regarding portfolio characteristics relates to a representative account within the composite.

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 0.75% from January 1, 2020 and 0.80% 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 Large Cap Composite seeks to provide long-term capital appreciation and outperform its benchmark. The strategy applies a quantitative, bottom-up stock selection investment process, based on fundamental insights, to emerging and selected frontier markets across large and mid-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. The composite was created on June 1, 2018.

BENCHMARK DESCRIPTION

The benchmark is the MSCI Emerging Markets Index, net of withholding taxes. The MSCI Emerging Markets Index is a free float adjusted, market capitalization weighted index that is designed to measure the large and mid cap equity market performance of emerging markets. It consists of 26 emerging market country indices.

REPORTING CURRENCY

Valuations and composite performance are reported in Pounds. The composite includes Canadian dollar and U.S. dollar portfolios that have been converted to Pounds. 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.

© Mackenzie Financial Corporation 2021. All rights reserved.

MACKENZIE INVESTMENTS

180 Queen Street West, Toronto, Ontario M5V 3K1

T 416 967-2380

F 416 922-3435

E cdeveau@mackenzieinvestments.com

mackenzieinvestments.com