# BPL FINANCE AND AUDIT COMMITTEE Evelyn Arana Ortiz, Committee Chair 4.1.25 Members of the Public may sign up for Public Comment via the CHAT by 9:00 a.m. Comments left in the chat will not be acknowledged. Written comments may be submitted to the Clerk of the Board,

## BPL OPENING STATEMENT

The Trustees of The Boston Public Library reaffirm our commitment to racial equity and to principles of diversity equity and inclusion, more broadly.

The Library is formally committed to becoming an anti-racist organization in response to systemic racism, inequity, and injustice prevalent in our society.

We acknowledge also that the Boston Public Library's Central Library stands on land that was once a water-based ecosystem providing sustenance for the indigenous Massachusetts people and is a place which has long served as a site of meeting and exchange among nations. We are committed to land acknowledgements for all locations at which we operate.

We reaffirm this commitment to set the context for our planning, deliberations, and public engagement so that they take place from the spirit of welcome and respect, found in our motto 'free to all.'

Taken from the Institutional Statement Ratified by the Board of Trustees for the Boston Public Library on September 29, 2020.



## COMMITTEE CHAIR'S REPORT

Evelyn Arana Ortiz, Committee Chair

Roll Call of Committee Members

Approval of the Meeting Minutes of 3.11.25



## INTERVIEW WITH EMERGING MONEY MANAGERS

Sebastian Grzejka, CAIA, NEPC Partner and Jonovan Sackey Senior Investment Associate

8:35-8:55 am Acadian

Renee Hoffman, Sr. VP, Senior Consultant Relations Officer Colin Pascoe, Associate, Consultant Relations

8:55-9:15 am RBC

Kim Jackson, Consultant Relations Manager Alissa Howard, Institutional Portfolio Manager Andy Donahue, Managing Director, Institutional Sales

9:15-9:35 am William Blair

Madelyn Schiller, CFA, Business Development & Consultant Relations Vivian Lin Thurston, CFA, Partner

9:35-9:55 am Committee Discussion and Vote



#### VOTES OF APPROVAL FOR NEW MANAGER

Evelyn Arana Ortiz, Committee Chair

VOTED: "that, the Finance and Audit Committee of the Public Library of the City of Boston approve the (INSERT NAME) as their selection for an Emerging Money Manager for the portfolio for (ENTER AMOUNT or Percentage) as discussed and agreed upon with NEPC."



# New Business

BOSTON PUBLIC LIBRARY



## **Public Comment**

## BOSTON PUBLIC LIBRARY



- People will be chosen in the order they were received and allowed 2 minutes to speak.
- The Moderator will unmute your mic when you are called on.
- Comments made in chat during meeting will not be acknowledged.
- If follow up is required, please send your contact email or phone number to the Clerk of the Board at <u>pcarver@bpl.org</u>

# Adjournment

## BOSTON PUBLIC LIBRARY



- Please check the BPL website for details/changes of the calendar of meetings
- Next meeting scheduled for May 13, 2025 at 8:30 a.m.





## **Boston Public Library**

**Emerging Markets Equity** 





## **Presentation Team**

#### **Ken Masse**, CFA — Vice President, Portfolio Manager

Ken joined Acadian in 2023 and is a Portfolio Manager on the Equity Team. Before joining Acadian, Ken worked for Invesco as Director of Client Engagement for their indexing business. In this role, he was responsible for all client relationships of the unit globally, worked on product development, analysis, and attribution of performance, and was a featured speaker at industry conferences. Prior to Invesco, he worked at PanAgora Asset Management, where he was a director and portfolio manager in charge of the portfolio construction and trading for the active equity group. Ken earned an M.S. in finance from Boston College Carroll School of Management and a B.S. in finance from Bentley University. He is a CFA charterholder.

#### **Andrew Miller** — Senior Vice President, Business Development

Andrew joined Acadian in 2004 and is a senior member of Acadian's Global Client Group, focusing on business development within public pension and Taft-Hartley funds. Prior to his current role, he worked in client service, business development, and operations functions at Acadian. Before joining Acadian, he worked in global custody at State Street Corporation. Andrew is a member of numerous public pension associations including: the National Association of State Retirement Administrators (NASRA), National Council on Teacher Retirement (NCTR), National Conference on Public Employee Retirement Systems (NCPERS), and the State Association of County Retirement Systems (SACRS). He also serves on the Fenway High School (Boston) Investment Committee. Andrew received an M.B.A. from Northeastern University and a B.A. from Wheaton College.





## Acadian

Investing systematically for over 30 years, we combine intellectual rigor, rich data, and powerful tools to deliver results with analytical clarity.



## **Acadian Systematic Investing Built On**



## Economic intuition & insights of a talented, experienced, diverse group of investors:

100+ person investment team | 1600+ years' collective experience 95+ advanced analytical degrees **PEOPLE** 

#### **DATA**

## Extensive data repository supplemented by alternative data scouting effort:

620M+ daily observations | 61TB+ data

150+ global markets | 65K+ traded assets





#### **Transforming information into insights:**

Robust technological infrastructure

Sophisticated analytical tools & portfolio attribution illuminate trends, relationships, and drivers of alpha

**CLARITY** 



## Why Acadian in Emerging Markets?

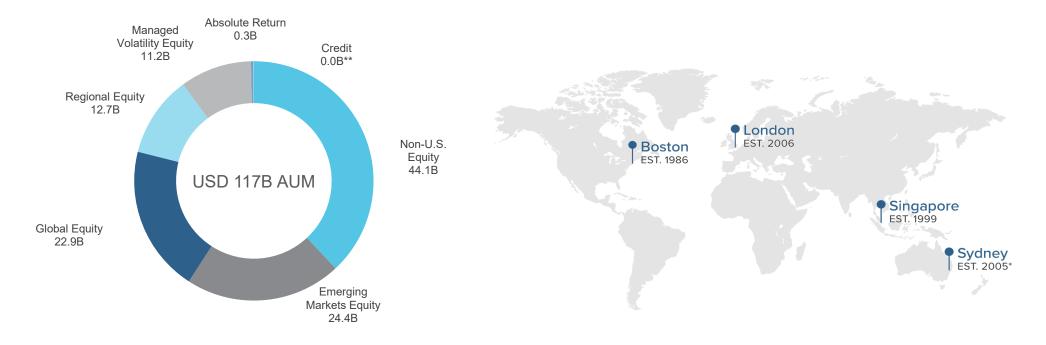
- Pioneering investor in emerging markets equities, beginning in 1994
- Broad and mispriced security universe in an inefficient asset class
- Outperformance in 18 out of 31 years, with a since inception annualized return of 6.5% versus
   4.7% for the benchmark as of February 28, 2025\*





## **Organizational Overview**

- Acadian has been a pioneer in systematic investing since our founding in 1986
- We believe that a systematic approach grounded in fundamentals is well suited to delivering consistent risk-adjusted returns
- Our 363-person team is focused on continuous research and innovation



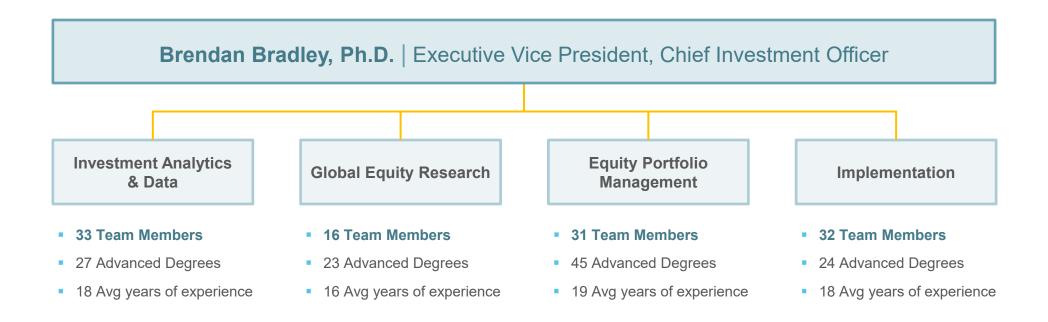
December 31, 2024

Rounding is applied to the total firm AUM which includes \$1461.3 million in model advisory contracts where Acadian does not have trading authority. The individual strategy level assets under management (AUM) are rounded to the nearest million unless otherwise noted and do not include model advisory assets.

<sup>\*</sup>As a separate legal entity, Acadian Asset Management (Australia) Limited. This was initially established as a joint venture with Colonial First State Investments Limited and became a wholly owned entity on June 30, 2015.
\*\*Credit AUM: \$63.4M



## **Investment Team – Equities**





## Representative Investors

#### **Public**

Employees' Retirement Fund of the City of Dallas

Florida State Board of Administration

Government Pension Investment Fund (Japan)

Los Angeles County Employees Retirement Association

Massachusetts Pension Reserves Investment Management Board

Municipal Employees' Retirement System of Michigan

New York City Employees Retirement System

Ohio Public Employees Retirement System

Oregon Public Employees

Public School & Education Employee Retirement Systems of Missouri

Tennessee Consolidated Retirement System

Virginia Retirement System

West Virginia Investment Management Board

#### Corporate

3M Company

Altria Group

Dow Inc.

JM Family Enterprises, Inc.

Pfizer

The Boeing Company

#### **Endowment/Foundation**

Carnegie Mellon University
Cornell University

#### Sub-Advisory

Harbor Overseas Fund Optimum International Fund SEI

#### Taft-Hartley

North Atlantic States Carpenters Benefit Funds Producer-Writers Guild of America Pension Plan

#### Australia

Aware Super Colonial First State Investments Ltd. Rest Super

#### Canada

Mouvement Desjardins Ville de Montréal

#### Europe

Fidelity International
Hampshire County Council
Kempen Capital Management





## **Investment Philosophy**

- Financial assets are often mispriced due to investors incorrectly processing information, having incomplete information, or both
- Systematic processes best capture inefficiencies arising from mispriced fundamental and market information
- Our edge comes from embracing new ideas and a continuous investment in people, technology, and data



## **Investment Process**



#### **Emerging Markets**

18,000 stock investment universe



#### **Objective Return Forecast**

#### Stock-specific

Selection within traditionally defined groups

+

#### Peer

Overlooked information from alternative peer groups

+

#### Macro

Top-down group signals (industry and country)



## Disciplined Portfolio Construction

Multi-horizon forecasts

Proprietary risk models

Dynamic transaction cost modeling



#### **Structured Trading Process**

Systematic approach

Dynamic routing based on order profiling

Real-time oversight

ESG Issues Are Integrated Throughout

Integrated ESG Signals
Active Research Agenda

Application of ESG Screens, Risk Management, Portfolio Tilting\* Portfolio Characteristics Report, Proxy Voting, Women & Minority Brokerage, Engagement Reporting



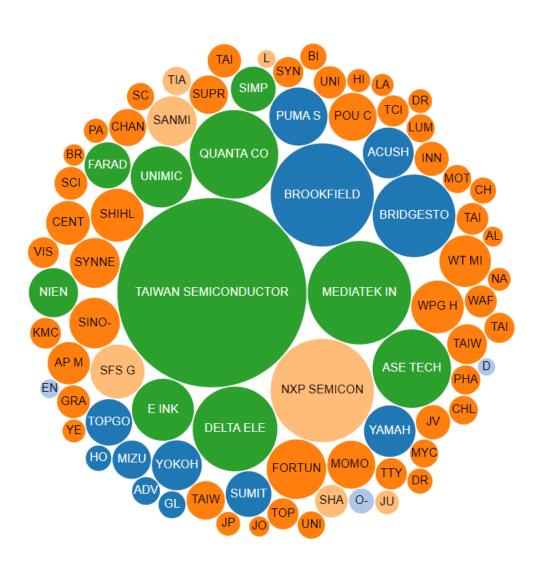
## **Return Forecast Example**

Model	Theme		Sample signals	Forecast		
	Value	<b>→</b>	Adjusted Intrinsic Value Extended Asset Value	+0.59		
Stock-	Quality	$\rightarrow$	Financial Strength  Management Behavior	+0.60		
Specific	Growth	$\rightarrow$	Earnings Surprise Recommendation Change	+0.79		
	Technical	$\rightarrow$	Institutional Investor Crowding Smart Reversal	+1.05		Total Forecast +3.57%
					1	
	Propriotary		Momentum			Company: FUSHENG PRECISION CO LTD
Peer	Networks	+0.56	+0.56		Market Cap: USD 1B	
					J	Country: Taiwan
			Corruption Adjusted Valuation	1	]	Industry: Consumer Durables & Apparel
	Country	$\rightarrow$	Macro Environment	+0.12		<b>Description:</b> Engaged in the manufacture, processing,
Macro	Industry	$\rightarrow$	Quality Global Growth Sensitivity	-0.12		assembly and sale of various metal products, such as golf club heads
	Country/Industry Intersection	<b>→</b>	Price Momentum Adjusted Valuation	+0.02		



## **Stock Forecast Example: Mapping Peer Relationships**

Fusheng Precision Co LTD



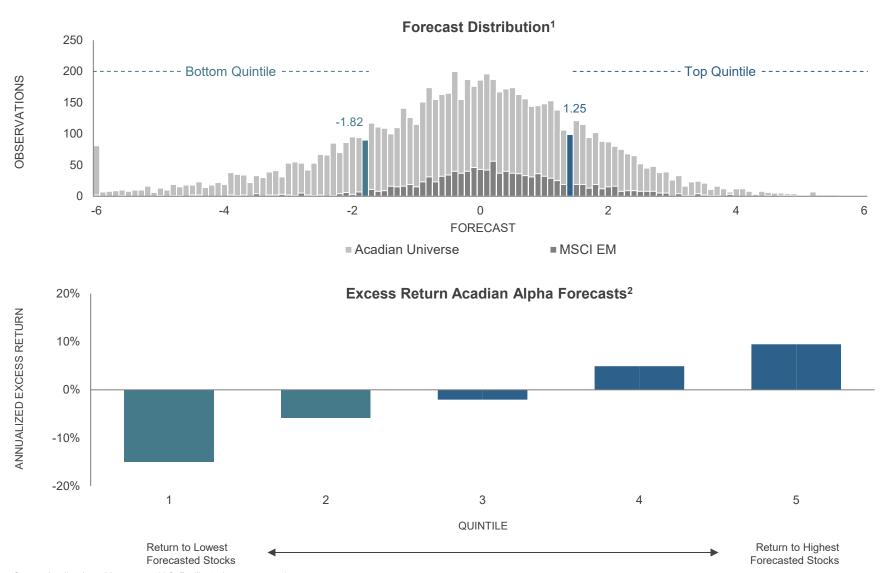
#### **LEGEND**

- Peer Linkage A
- Peer Linkage B
- Peer Linkage C
- Peer Linkage D
- Peer Linkage E



## **Stock Forecast Distribution and Returns**

Trailing 10 Years as of December 2024



Source: Acadian Asset Management LLC. For illustrative purposes only

¹Source: Acadian's Emerging Markets universe with a market cap greater than \$100M. Methodology: Observations represents the number of forecasts. The highlighted values represent the observations in the top and bottom quintiles. The information is not reflective of a particular time period and is provided for illustrative purposes only. The chart depicts our forecast distribution process based on proprietary models. There can be no assurance that the forecasts will be achieved.

¹This is not intended to represent investment returns generated by an actual portfolio. They do not represent actual trading or an actual account but were achieved by means of using Acadian's Emerging Markets universe of securities for the period specified above. Results do not reflect transaction costs or other implementation costs. Past performance is no guarantee of future results. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.



## **Risk Management and Portfolio Construction**

**Emerging Markets Equity** 

Active risk	4% - 6% tracking error
Market risk	Beta, volatility & size constrained relative to market
Security risk	Up to 2.25% active weight
Country/Industry/Currency risk	Risk aware, active bounds
Factor crowding	Mitigate factor crowding through Dynamic Factor Weighting
Human oversight	Portfolio review, discretionary risk management



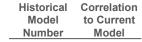
## **Research: Representative Projects**

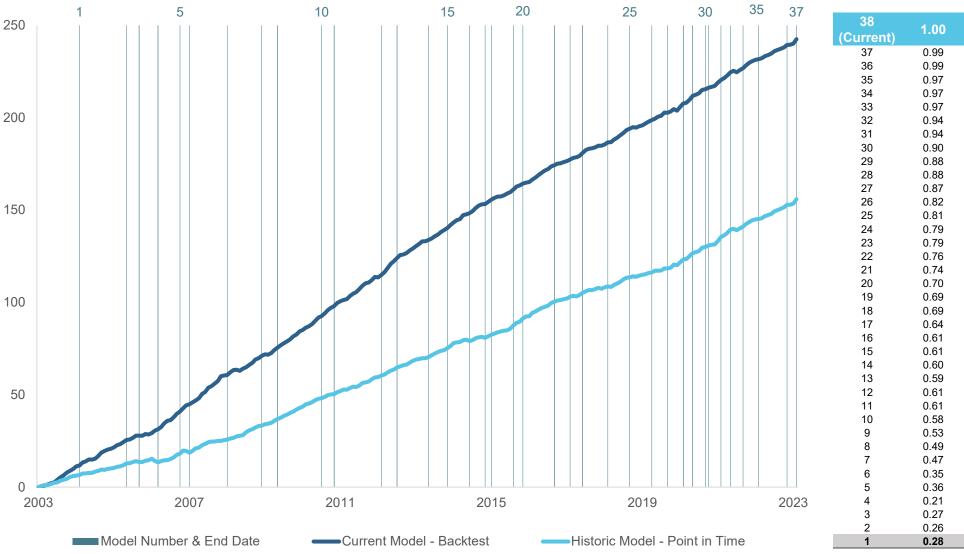
<b>Project Theme</b>	Investment Thesis	Representative Project
Alternative Data	Collective actions by uninformed investors push asset prices away from fundamentals	Passive Trading Impact
Machine Learning	Large language models can identify less obvious investment insights by processing large-scale data	LLM Sentiment
Macro	Macro models require special statistical considerations given low statistical breadth	Macro Model Refined Estimation
Group Networks	Investors overlook public firm linkages based on private subsidiaries	Private Company Similarity
ESG	Workforce skill diversity contributes more to a firm's valuation than market participants realize	Skills Diversity



## **Research: Impact**







The chart presented here is a hypothetical illustration for educational purposes only showing the cumulative sum of monthly payoffs in Emerging Markets. The light blue solid line represents the historic model's efficacy, while the dark blue solid line represents the efficacy of the current model in a backcast. Source: Acadian investable universe with a market capitalization greater than \$100MM. This is meant to be an educational illustrative example and is not intended to represent investment results generated by an actual portfolio. The payoffs do not represent actual trading or an actual account. Results do not reflect transaction costs, other implementation costs and do not reflect advisory fees or their potential impact. Hypothetical results are not indicative of actual future results. Every investment program has the opportunity for loss as well as profit.





## **Strategy Overview**

### **Emerging Markets Equity**

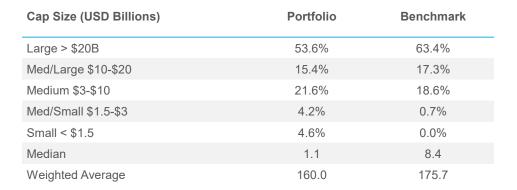
Style	All-Cap
Process	Systematic stock selection, 100+ proprietary signals
Universe	18,000 securities
Benchmark	MSCI Emerging Markets
Excess Return Target	2% - 3% (net of fees)
Active Risk Target	4% - 6%
Turnover	50% - 60%



Key Characteristics – February 28, 2025\*

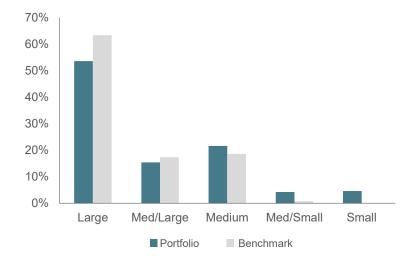
Valuation	Portfolio	Benchmark
Price/Earnings	11.6	15.6
Price/Book	1.4	1.8
Price/Sales	1.0	1.5
Price/Cash Earnings	7.2	9.7
Yield	3.4%	2.7%
Total Securities	651	1250

1.5		Dellelli	nark-Kelat	ive variati	
1.0					
0.5					
0.0	P/E	P/B	P/S	P/CE	Yield
			Portfolio		



#### Cap Size (USD Billions)

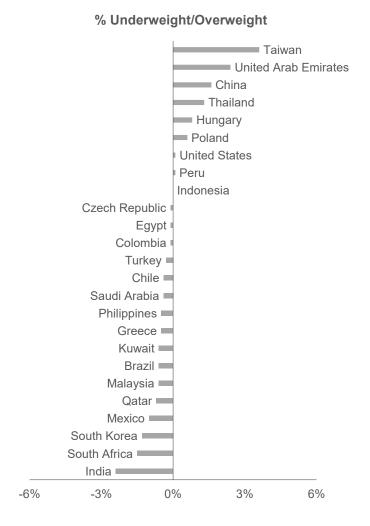
Benchmark-Relative Valuation





Emerging Markets Allocations – February 28, 2025\*

	Portfolio	Benchmark	Difference
Europe/Mid East/Africa	12.5%	12.8%	-0.3%
Czech Republic	0.1	0.1	-0.1
Egypt	0.0	0.1	-0.1
Greece	0.0	0.5	-0.5
Hungary	1.1	0.3	8.0
Kuwait	0.2	0.8	-0.6
Poland	1.5	1.0	0.6
Qatar	0.1	0.8	-0.7
Saudi Arabia	3.7	4.1	-0.4
South Africa	1.6	3.0	-1.5
Turkey	0.3	0.6	-0.3
United Arab Emirates	3.9	1.4	2.4
Latin America	4.8%	6.9%	-2.1%
Brazil	3.6	4.2	-0.6
Chile	0.0	0.5	-0.4
Colombia	0.0	0.1	-0.1
Mexico	0.9	1.8	-1.0
Peru	0.4	0.3	0.1
Asia	81.9%	80.3%	1.7%
China	32.3	30.7	1.6
India	14.5	16.9	-2.4
Indonesia	1.2	1.2	0.0
Malaysia	8.0	1.4	-0.6
Philippines	0.0	0.5	-0.5
South Korea	8.1	9.3	-1.3
Taiwan	22.7	19.1	3.6
Thailand	2.5	1.2	1.3
<b>Developed Markets</b>	0.1%	0.0%	0.1%
Cash Equitization	0.1		
Cash	0.6		





Industry Allocations – February 28, 2025\*

	Portfolio	Benchmark	Difference
Communication Services	14.7%	10.1%	4.6%
Media & Entertainment	11.4	7.3	4.1
Telecommunication Services	3.2	2.8	0.4
Consumer Discretionary	12.9%	14.3%	-1.4%
Automobiles & Components	0.6	3.7	-3.0
Consumer Discretionary Distribution & Retail	7.0	6.5	0.5
Consumer Durables & Apparel	2.1	1.2	0.9
Consumer Services	3.2	2.9	0.3
Consumer Staples	1.2%	4.6%	-3.4%
Consumer Staples Distribution & Retail	0.0	1.1	-1.1
Food, Beverage & Tobacco	0.7	2.9	-2.2
Household & Personal Products	0.5	0.6	0.0
Energy	5.1%	4.3%	0.8%
Financials Banks	<b>23.1%</b> 18.7	<b>23.6%</b> 17.8	<b>-0.6%</b>
Financial Services	2.4	2.8	-0.5
Insurance	1.9	3.0	-0.5 -1.0
Health Care	1.7%	3.4%	-1.7%
Health Care Equipment & Services	0.1	0.8	-0.8
Pharmaceuticals, Biotechnology & Life Sciences	1.6	2.5	-0.9
Industrials	5.3%	6.3%	-1.0%
Capital Goods	2.2	4.5	-2.4
Commercial & Professional Services	0.2	0.0	0.1
Transportation	3.0	1.7	1.3
Information Technology	30.4%	23.7%	6.7%
Semiconductors & Semiconductor Equipment	16.4	13.3	3.1
Software & Services	5.9	2.3	3.6
Technology Hardware & Equipment	8.1	8.1	0.0
Materials	1.5%	5.6%	-4.1%
Real Estate	2.3%	1.6%	0.7%
Equity Real Estate Investment Trusts (REITs)	0.0	0.1	-0.1
Real Estate Management	2.3	1.6	0.7
Utilities	1.2%	2.5%	-1.3%
Cash Equitization	0.1		
Cash	0.6		



Portfolio: Emerging Markets Equity. Benchmark: MSCI Emerging Markets.
\*Preliminary. The data presented here is for a representative portfolio and is supplemental to the composite performance disclosure page attached. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.



Top Ten Portfolio Holdings – February 28, 2025\*

Name	Country	Industry	Portfolio (%)
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	Taiwan	Semiconductors & Semiconductor Equipment	9.8
TENCENT HOLDINGS LTD	China	Media & Entertainment	5.3
CHINA CONSTRUCTION BANK CORP.	China	Banks	3.3
ALIBABA GROUP HOLDING LTD	China	Consumer Discretionary Distribution & Retail	3.3
MEITUAN	China	Consumer Services	2.2
MEDIATEK INC	Taiwan	Semiconductors & Semiconductor Equipment	2.2
INFOSYS LTD	India	Software & Services	2.0
HCL TECHNOLOGIES LTD	India	Software & Services	1.9
BOE TECHNOLOGY GROUP CO LTD	China	Technology Hardware & Equipment	1.6
EMAAR PROPERTIES PJSC	United Arab Emirates	Real Estate Management	1.6

Summary	Portfolio	Benchmark	Active Weight
% of Portfolio for Top 10 Active Weights	18.1	3.7	14.4
% of Portfolio for Top 20 Current Holdings	46.3	28.0	18.3
% of Non-Benchmark Portfolio Holdings	13.6		
Active Share of Portfolio	58.9		



## **Emerging Markets Equity Composite**

Performance (Returns in USD – Before and After Management Fees)

Torrormanoo (rtotarno in GOE		ianagement ees)		Value-Added (gross)
Time Period	Composite (gross)*	Composite (net)*	Benchmark	vs. Benchmark
1994 (Inception: Jan 1, 1994)	(6.6)%	(7.5)%	(7.3)%	0.7%
995	(5.1)	(6.1)	(5.2)	0.1
996	11.2	10.1	6.0	5.2
997	(11.9)	(12.7)	(11.6)	(0.3)
998	(22.3)	(23.1)	(25.3)	3.0
999	`65.2 <sup>′</sup>	63.6	66.4	(1.2)
000	(25.2)	(26.0)	(30.6)	5.4
001	5.7	4.6	(2.6)	8.3
2002	(2.3)	(3.2)	(6.2)	3.9
003	75.9	74.2	55.8	20.1
004	33.7	32.4	25.6	8.1
005	35.4	34.0	34.0	1.4
2006	33.1	31.8	32.1	1.0
007	44.3	42.9	39.4	4.9
008	(55.9)		(53.3)	(2.6)
009	78.4	(56.4) 76.7	78.5	
				(0.1)
010	23.0	21.8	18.9	4.1
011	(17.8)	(18.6)	(18.4)	0.6
012	23.9	22.7	18.2	5.7
013	(1.1)	(2.1)	(2.6)	1.5
014	2.6	1.6	(2.2)	4.8
015	(16.0)	(16.8)	(14.9)	(1.1)
016	14.4	13.3	11.2	3.2
017	39.3	38.0	37.3	2.0
018	(17.4)	(18.3)	(14.6)	(2.8)
019	18.0	16.9	18.4	(0.4)
020	13.5	12.4	18.3	(4.8)
021	8.5	7.4	(2.5)	11.0
022	(19.8)	(20.6)	(20.1)	0.3
023	22.8	21.6	9.8	13.0
024	14.9	13.8	7.5	7.4
025 through February	1.0	0.9	2.3	(1.3)
ne Year Annualized Return	11.8	10.7	10.1	1.7
hree Year Annualized Return	5.6	4.6	0.5	5.1
ive Year Annualized Return	9.5	8.4	4.3	5.2
en Year Annualized Return	6.0	4.9	3.5	2.5
Since-Inception Annualized Return	7.6	6.5	4.7	2.9
Since-Inception Annualized Standard Deviation	22.2	22.2	21.5	
Since-Inception Active Risk				5.0
Since-Inception Information Ratio				0.6

Composite: Emerging Markets Equity. Benchmark: MSCI Emerging Markets (net) 2001-01-01 To Present, MSCI Emerging Markets (gross) 1994-01-01 To 2001-01-01.

\*Returns that include the most recent month are preliminary. Acadian Asset Management LLC claims compliance with the Global Investment Performance Standards (GIPS®). GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Past performance is no guarantee of future returns. The complete performance disclosure can be found in the composite performance disclosure page attached. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.





## **Commingled Fund Summary of Terms**

Name	Acadian Emerging Markets Equity Fund	
AUM as of February 2025	\$1.7 Billion	
Inception Date	September 2003	
Benchmark	MSCI Emerging Markets	
Eligible Investors	Qualified Purchasers (3(c)(7))	
ERISA Qualified	Yes	
Valuation	Daily	
Liquidity   Notice Period	10 Business Days	
Management Fee	0.85% all in (0.75% management fee + 0.10% OPEX Cap)	



## **World Equity Valuation**

February 28, 2025\*

Universe	Index	Price/ Earnings	Price/ Book	Price/ Sales	Price/ Cash	Yield
Emerging Markets	MSCI Emerging Markets	15.6	1.8	1.5	9.7	2.7%
Emerging Markets Small-Cap	MSCI EM Small-Cap	20.1	1.4	1.0	10.3	2.4%
Europe	MSCI Europe	16.0	2.2	1.6	9.7	3.0%
Frontier Markets	MSCI Frontier 15% Country Capped	10.3	1.5	1.2	6.8	4.5%
Japan Large-Cap	TOPIX	13.8	1.3	0.9	8.2	2.4%
Non-U.S. Equity	MSCI EAFE	15.7	1.9	1.5	9.7	2.9%
Non-U.S. Small-Cap Equity	MSCI EAFE Small-Cap	16.1	1.3	0.8	8.1	3.0%
Non-U.S. Micro-Cap	MSCI World ex-U.S. Micro-Cap	26.5	0.7	0.5	5.8	2.7%
U.S. Large-Cap	S&P 500	26.6	5.1	3.1	17.8	1.3%
U.S. Small-Cap	Russell 2000	47.7	2.0	1.3	17.7	1.4%
U.S. Micro-Cap	MSCI U.S. Micro-Cap	-14.5	1.5	0.7	-10.3	1.2%
World	MSCI World	22.8	3.6	2.5	14.7	1.7%

<sup>\*</sup>Preliminary. Data Source: MSCI, TOPIX, Russell, and S&P.

It is not possible to invest directly in any index.

Index Sources: Standard & Poor's, Russell, Morgan Stanley Capital International and Russell/Nomura. MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI. Copyright © 2025, Standard & Poor's Financial Services LLC. All rights reserved. Russell Investments Copyright© Russell Investments 1998 – 2025. All rights reserved.

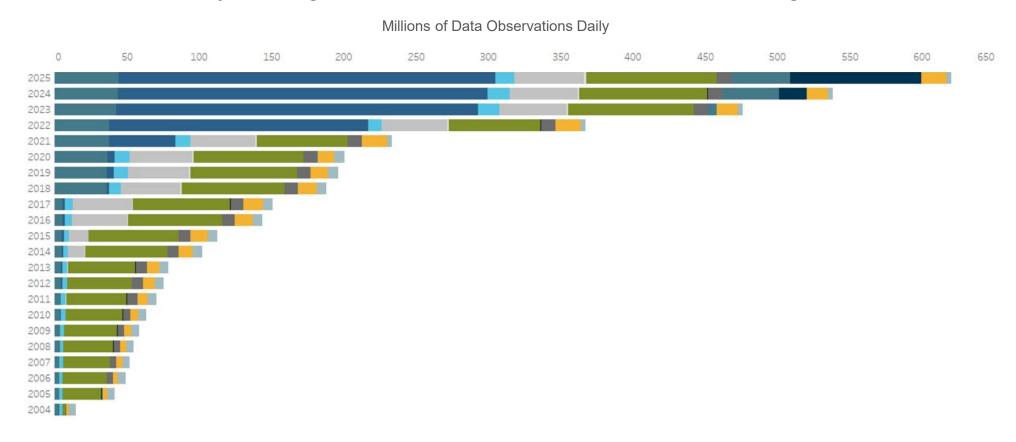


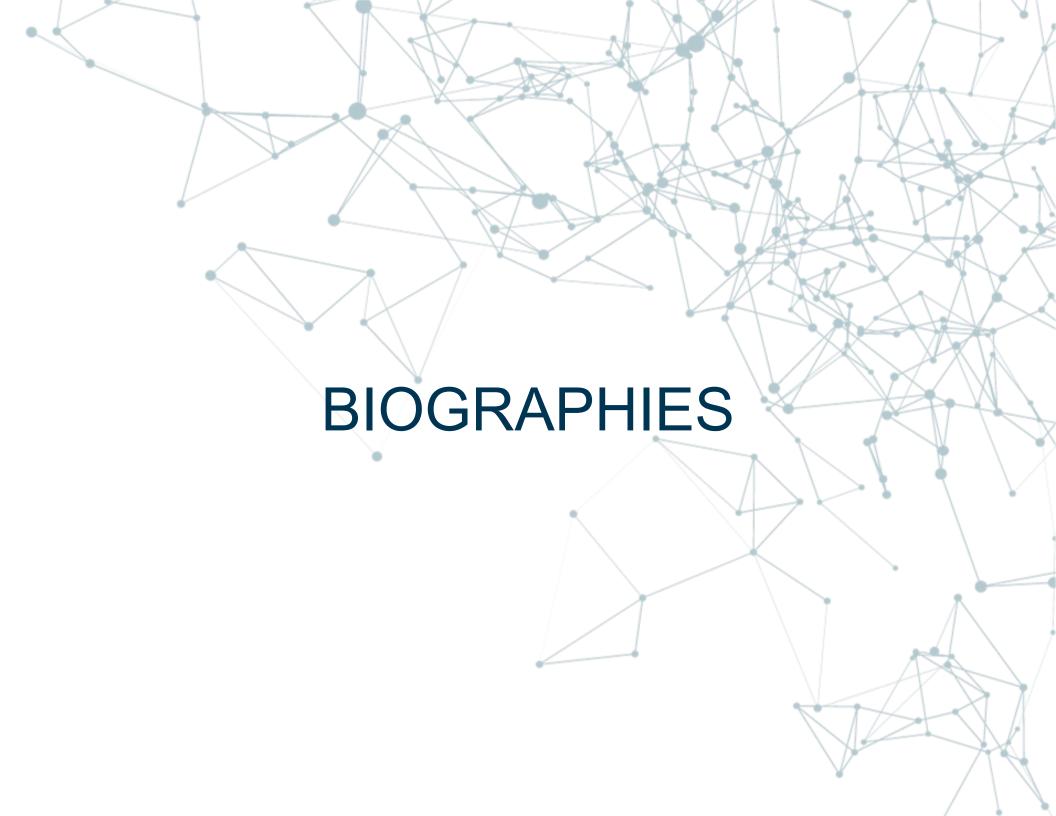
### **Global Data**

44,000 COMPANIES 100 COUNTRIES 620 MILLION DAILY OBSERVATIONS

61 TERABYTE DATABASE

Daily data from over 40 sources including regulatory authorities, company websites, media sources, and industry trade organizations not available in standard vendor offerings:







### Brendan Bradley, Ph.D. – Executive Vice President, Chief Investment Officer

- 27 years of investment experience
- Member of the Acadian Board of Managers, Executive Management Team, Executive Committee, Responsible Investing Committee
- Ph.D. in applied mathematics from Boston University
- B.A. in physics from Boston College

### Alexandre Voitenok – Executive Vice President, Deputy Chief Investment Officer

- 24 years of investment experience
- Member of Acadian's Executive Committee, Executive Management Team and Diversity & Inclusion Forum
- M.Sc. in software engineering from Minsk Radio Engineering Institute

#### Malcolm Baker, Ph.D. - Director, Research

- 23 years of investment experience
- Research consultant since 2006
- Robert G. Kirby Professor of Finance, Harvard Business School
- Ph.D. from Harvard University
- M.Phil. From Cambridge University
- B.A. from Brown University

#### Michael Gleason - Senior Vice President, Director, Equity Alternative

- 29 years of investment experience
- MSF from Northeastern University
- B.S. in management science from Bridgewater State University

### Andy Moniz Ph.D., CFA – Senior Vice President, Director of Responsible Investing

#### Acadian Asset Management (U.K.) Limited

- 25 years of professional experience
- Ph.D. in natural language processing and information retrieval from Erasmus University
- MSc. in applied statistics from the University of London
- M.A. in economics from Cambridge University
- B.A. in economics from Cambridge University
- CFA charterholder and member of CFA Society U.K.

### Ryan Taliaferro, Ph.D. – Senior Vice President, Director, Investment Strategies

- 23 years of professional experience
- Member of Acadian's Executive Committee
- Ph.D. in business economics (finance) from Harvard University
- M.B.A. in finance and economics from the University of Chicago
- A.M. in economics from Harvard University
- A.M. and A.B. in physics from Harvard University

### Fanesca Young, Ph.D., CFA – Senior Vice President, Director, Equity Portfolio Management

- 20 years of professional experience
- Ph.D. in statistics from Columbia University
- M.Phil. in statistics from Columbia University
- M.A. in statistics from Columbia University
- B.A. in mathematics from the University of Virginia
- CFA charterholder

### Vladimir Zdorovtsov, Ph.D. – Senior Vice President, Director, Global Equity Research

- 23 years of investment experience
- Member of the Acadian Executive Committee
- Ph.D. in finance from University of South Carolina
- M.B.A. from University of Arkansas
- B.A. in international economics from Sumy University, Ukraine

# Francis Seah, CFA – Senior Vice President, Portfolio Manager and Managing Director, Acadian Singapore Acadian Asset Management (Singapore) Pte Ltd

- 21 years of investment experience
- B.S. and M.S. from Nanyang Technological University
- CPA, Institute of Certified Public Accountants Singapore
- CFA charterholder and a member of CFA Singapore
- Computational Finance Certificate from Carnegie Mellon University

### Mark Birmingham, CFA – Senior Vice President, Head of Risk Modeling, Portfolio Manager

- 30 years of investment experience
- A.B. in computer science from Princeton University
- CFA charterholder and member of CFA Society Boston

### Doug Eisenstein – Senior Vice President, Head of Investment Data Solutions

- 25 years of professional experience
- Studied computer science at Suffolk University

#### Joel Feinberg – Senior Vice President, Head of Trading

- 19 years of investment experience
- MSIM from Boston University
- B.B.A. in finance from the University of Massachusetts

### Alexander Galakatos, Ph.D. – Senior Vice President, Head of Investment Data Engineering

- 6 years of professional experience
- Ph.D. in computer science from Brown University
- ScM in computer science from Brown University
- B.Sc. in computer engineering from Lehigh University



### Anton Kapliy, Ph.D., CFA – Senior Vice President, Head of Portfolio Analytics

- 11 years of professional experience
- Ph.D. in high energy physics from University of Chicago
- B.A. in physics from University of Pennsylvania
- CFA charterholder and a member of CFA Society Boston

#### Jian Pan, CFA - Senior Vice President, Head of Quantitative Systems

- 31 years of professional experience
- M.S. in computer science from the University of Massachusetts
- B.S. industrial automation control from Nanjing University of Technology, China

### Michael McCart, CFA – Senior Vice President, Investment Systems Architect

- 27 years of investment experience
- B.S. in engineering and economics, University of Pennsylvania
- CFA charterholder and a member of CFA Society Boston

### Javier Alcazar, Ph.D. – Senior Vice President, Portfolio Manager, Research Acadian Asset Management (U.K.) Limited

- 23 years of professional experience
- Ph.D. in mechanical engineering from the Universidad Pontificia Comillas, ICAI, Spain
- M.Sc. in advanced mathematics and theoretical Physics from the University of Cambridge
- M.Sc. in aeronautical engineering from the Universidad Politecnica de Madrid, Spain
- M.Sc. in parallel computing from Imperial College London
- B.Sc. in theoretical physics from Universidad Complutense de Ciencias Fisicas, Spain

### Daniel Adamson – Senior Vice President, Portfolio Manager, Implementation

- 22 years of professional experience
- M.B.A. from Boston College
- B.A. in accountancy and management information systems from Miami University

### Giuliano Amantini, Ph.D. – Senior Vice President, Portfolio Manager, Implementation

- 20 years of professional experience
- Ph.D. in engineering and applied sciences from Yale University
- M.S. in mathematical finance from Bocconi University
- M.S. in mechanical engineering from Yale University
- M.S. in aerospace engineering from La Sapienza University
- B.S. in mechanical engineering from Tor Vergata University

#### Ioannis Baltopoulos – Senior Vice President, Portfolio Manager

- 16 years of professional experience
- M.Sc. in advanced computing from Imperial College London
- B.Sc. in computer science from the University of Kent

### Pavel Bandarchuk, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 18 years of investment experience
- Ph.D. in international economics and finance from Brandeis University
- M.S. in finance from Brandeis University
- Diploma in international economics from Belarusian State University
- Certified FRM and CFA charterholder

#### Scott Brymer, CFA – Senior Vice President, Portfolio Manager

- 27 years of professional experience
- B.B.A. in finance from the University of Massachusetts Amherst
- CFA charterholder and a member of CFA Society Boston

#### Heidi Chen, CFA – Senior Vice President, Portfolio Manager

- 11 years of professional experience
- S.M. in computational science and engineering from Harvard University
- B.A. with Honors in mathematics from Williams College
- CFA charterholder and member of CFA Society Boston

### Zhe Chen, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

#### Acadian Asset Management (Australia) Limited

- 16 years of professional experience
- Ph.D. in empirical finance from Macquarie University
- Bachelor of Engineering (bioinformatics), First Class Honours and University Medal, from the University of New South Wales
- Bachelor of Commerce (finance) from UNSW
- CFA charterholder

### Chris Covington, CFA – Senior Vice President, Portfolio Manager

- 18 years of professional experience
- M.S. in investment management from Boston University
- B.A. in mathematical economics from Colorado College
- CFA charterholder

### Thomas Dobler, Ph.D. – Senior Vice President, Portfolio Manager

- 29 years of investment experience
- Member of Acadian's Diversity & Inclusion Forum
- Ph.D. in mathematics from Columbia University
- M.S. in mathematics from University of Illinois
- B.S. in mathematics from University of Vienna, Austria



### Timothy Ellerton, CFA – Senior Vice President, Portfolio Manager Acadian Asset Management (U.K.) Limited

- 25 years of professional experience
- M.Sc. in mathematical trading & finance from the Bayes Business School at City University
- B.A. in law & society from the University of Exeter
- CFA charterholder and member of CFA Society U.K

### Denys Glushkov, Ph.D. – Senior Vice President, Portfolio Manager, Research

- 19 years of professional experience
- Ph.D. in finance, University of Texas at Austin
- M.S. in economic cybernetics, Dnipropetrovsk State University (Ukraine)
- M.A. in economics, Central European University (Hungary)

### Katrina Khoupongsy, CFA – Senior Vice President, Portfolio Manager, Research

#### Acadian Asset Management (Australia) Limited

- 31 years of professional experience
- Bachelor in mathematics and finance (Hons) from the University of Technology, Sydney
- Graduate Diploma in applied finance and investments from the Securities Institute of Australia
- CFA charterholder

### Owen Lamont, Ph.D. - Senior Vice President, Portfolio Manager, Research

- 37 years of professional experience
- Ph.D. in economics from the Massachusetts Institute of Technology
- B.A. in economics from Oberlin College

#### Devin Nial - Senior Vice President, Portfolio Manager, ESG

- 20 years of professional experience
- M.S. in finance from Boston College
- M.A. in computer science from Boston University
- B.A. in English literature from SUNY Albany

### Brendan O'Leary, CFA – Senior Vice President, Portfolio Manager, Research

- 12 years of professional experience
- B.S.E. in mechanical & aerospace engineering from Princeton University
- CFA charterholder

#### Dmitry Olevsky, CFA – Senior Vice President, Portfolio Manager, Research

- 23 years of investment experience
- M.B.A. from Harvard Business School
- B.S. in structural engineering from Michigan Technological University
- FRM designation and CFA charterholder

### Matthew Picone, CFA – Senior Vice President, Portfolio Manager Acadian Asset Management (Australia) Limited

- 21 years of professional experience
- Member of Acadian's Responsible Investing Committee
- Bachelor of Commerce in finance and econometrics from the University of Sydney
- CFA charterholder
- Member of the PRI Australian Advisory Committee

#### Lukasz Pomorski, Ph.D. - Senior Vice President, Portfolio Manager

- 19 years of professional experience
- Ph.D. in finance from the University of Chicago
- M.A. in finance from Tilburg University
- M.A. and B.A. in economics from the Warsaw School of Economics

#### Mark Roemer - Senior Vice President, Portfolio Manager

- 29 years of professional experience
- M.S. in finance from London Business School
- M.S. in engineering from Stanford University
- B.S. in mechanical engineering from Virginia Polytechnic Institute & State University

#### Bin Shi, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 19 years of investment experience
- Ph.D. in industrial and systems engineering from Georgia Institute of Technology
- M.S. in operations research from Georgia Institute of Technology
- B.S. in mechanical engineering from Southeast University, China
- CFA charterholder

### Olivia Tang, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 15 years of professional experience
- Ph.D. in systems engineering, with a concentration in operations research, from Boston University
- B.S. in mathematics from Peking University (China)
- CFA charterholder

### Charles Augello, CFA – Senior Vice President, Lead Analyst, Integration, Multi-Asset Class Strategies

- 20 years of professional experience
- B.A. in engineering sciences and economics from Dartmouth College
- CFA charterholder



#### Rob Ricciarelli, CFA - Senior Vice President, Lead Analyst, IPD

- 29 years of professional experience
- M.B.A from Suffolk University
- B.S. in management and B.A. in psychology from the University of Massachusetts, Boston
- CFA charterholder

#### Jeffrey Sutthoff, CFA - Senior Vice President, Lead Analyst, Integration

- 30 years of professional experience
- M.B.A. in finance from Boston College
- B.S. in mathematics from Stetson University
- CFA charterholder

#### Mark Weissman - Senior Vice President, Lead Analyst, Research

- 19 years of investment experience
- B.S. in computer science, SUNY at Buffalo
- B.S. in chemical engineering from SUNY at Buffalo

### Xiaoting Zhang, CFA, FRM – Senior Vice President, Lead Analyst, Integration

- 21 years of investment experience
- M.B.A. from the University of Chicago
- M.S. in financial mathematics from the University of Chicago
- M.S. in computer science from Loyola University Chicago
- B.A. in architecture from Tianjin University, China
- Certified FRM and CFA charterholder

#### Deborah Waters - Senior Vice President, Senior Trader, Implementation

- 35 of years of professional experience
- B.S. in finance from Northeastern University

### Tom Bilbe – Vice President, Portfolio Manager Acadian Asset Management (U.K.) Limited

- 13 years of professional experience
- MSc in finance and investment from the University of Edinburgh Business School
- BEng in mechanical engineering with management from the University of Edinburgh

### Stephen Fang - Vice President, Portfolio Manager, Research

- 8 years of investment experience
- M.S. in computational science and engineering from Harvard University
- B.A. in mathematics and economics from Middlebury College

### Sean Geary, CFA – Vice President, Portfolio Manager

- 17 years of professional experience
- M.B.A. from Boston College
- M.S. in mechanical engineering from Boston University
- B.S. in physics from James Madison University
- CFA charterholder and member of CFA Society Boston

#### Charles Johnson – Vice President, Portfolio Manager

- 23 years of professional experience
- M.S. in finance from Northeastern University
- M.B.A. from Northeastern University
- B.S. in finance from the University of Massachusetts at Dartmouth

#### John King - Vice President, Portfolio Manager

- 24 years of professional experience
- Associate's degree in computer technology from Southern Maine Community College
- B.S. in analytics from Northeastern University

#### Dan Le, CFA – Vice President, Portfolio Manager

- 20 years of professional experience
- B.A. in psychology from Brown University
- CFA charterholder and a member of CFA Society Boston

#### Adhi Mallik, CFA - Vice President, Portfolio Manager

- 14 years of investment experience
- M.B.A. with a concentration in finance & accounting from Carnegie Mellon University
- B.A. in economics from University of CA San Diego
- CFA charterholder
- Holds the CQF designation from CQF Institute

#### Ken Masse, CFA – Vice President, Portfolio Manager

- 33 years of investment experience
- M.S. in finance from Boston College Carroll School of Management
- B.S. in finance from Bentley University
- CFA charterholder

### Kyle McCarthy, CFA – Vice President, Portfolio Manager, Implementation

- 19 years of professional experience
- B.S. in finance from Bentley University
- CFA charterholder and member of CFA Society Boston

## Louis Seng – Vice President, Portfolio Manager, Implementation Acadian Asset Management (Singapore) Pte Ltd

- 16 years of investment experience
- B.B.M in finance from Singapore Management University

### Linda Wang - Vice President, Portfolio Manager, Research

- 12 years of investment experience
- Master of Finance from MIT's Sloan School of Management
- B.S. in finance and accounting from Drexel University
- Certified FRM



### Steven Wong – Vice President, Portfolio Manager, Research Acadian Asset Management (Australia) Limited

- 14 years of professional experience
- Ph.D. in statistics from the University of Sydney
- Master of Finance from the University of New South Wales
- Bachelor of Commerce and Bachelor of Engineering (Hons, University Medal) from the University of New South Wales

#### Xunqi (Richie) Yu, CFA - Vice President, Portfolio Manager

- 17 years of professional experience
- Ph.D. in electrical and computer engineering from the University of Miami
- M.S. in computational finance from Carnegie Mellon University, Tepper School of Business
- B.S. in information engineering from Wuhan University, School of Remote Sensing and Information Engineering
- CFA charterholder

### Wesley Jeng, CFA – Vice President, Associate Portfolio Manager, Implementation

#### Acadian Asset Management (Australia) Limited

- 12 years of investment experience
- Dual Master's Degree from UT Austin and ESCP Europe
- BA (Hons) from University of Nottingham
- CFA charterholder

### Jeffrey Lobdell, CMT – Vice President, Associate Portfolio Manager, Implementation

- 17 years of professional experience
- M.B.A.in finance from the University of Massachusetts
- B.A. in communications from the University of Massachusetts
- CMT charterholder

### Anna Papush, Ph.D. – Vice President, Associate Portfolio Manager,

- 11 years of professional experience
- Ph.D. in operations research from Massachusetts Institute of Technology
- B.A. in mathematics from Cornell University

### Shivani Patnaik - Vice President, Associate Portfolio Manager

- 14 years of professional experience
- M.S. in mathematical finance from Boston University
- B.S. in chemical engineering from University of Maryland

#### Alexander Rikun - Vice President, Associate Portfolio Manager

- 15 years of professional experience
- Ph.D. in operations research from Massachusetts Institute of Technology
- B.S. in applied mathematics with a minor in economics from Columbia University

#### Vincent Tang – Vice President, Associate Portfolio Manager, Research

- 8 years of investment experience
- M. Eng. in financial engineering from Cornell University
- B. Econ in finance, with a minor in computer science, from Wuhan University

### James Toppa, CFA, CAIA –Vice President, Associate Portfolio Manager, Implementation

- 17 years of professional experience
- B.S. in business administration from Bryant University
- CAIA charterholder
- CFA charterholder

#### James Coder, CFA – Vice President, Lead Analyst, Integration

- 12 years of investment experience
- B.S. in finance from the University of Kansas
- CFA charterholder

#### Bhaskar Edara, CFA, FRM - Vice President, Lead Analyst, Implementation

- 30 years of professional experience
- M.S. in finance from Boston College
- B.Tech. in mechanical engineering from the National Institute of Technology, India
- Certified FRM and CFA charterholder

#### Lucas Manley, CFA - Vice President, Lead Analyst

- 21 years of investment experience
- M.S. in investment management from Boston University
- B.S. in business administration from Northeastern University
- CFA charterholder and a member of CFA Society Boston

#### Yevgen Revtsov, CFA - Vice President, Lead Analyst, Integration

- 12 years of professional experience
- B.S. in computer systems engineering from Boston University
- CFA charterholder

### Bernard Sim – Vice President, Lead Analyst, IPD Acadian Asset Management (Singapore) Pte Ltd

- 24 years of professional experience
- Bachelor of Commerce in finance from the Australia National University

### Michael Szrom, CFA - Vice President, Lead Analyst, Implementation

- 8 years of professional experience
- B.S. in computer science and computer engineering from Northeastern University
- CFA charterholder

### Michael Vashevko – Vice President, Lead Analyst, Implementation

- 29 years of professional experience
- M.S. in applied mathematics and computer science from Belarusian State University



#### Yu (Richard) Wang, CFA, FRM - Vice President, Lead Analyst, Integration

- 20 years of professional experience
- M.B.A. from the University of Chicago Booth
- M.S. in computer science from Cornell University
- B.S. in computer science from National University of Singapore
- FRM and CFA charterholder

#### Shin Zhao, CFA - Vice President, Lead Analyst, Integration

- 22 years of professional experience
- M.S. in electrical and computer engineering from the University of Massachusetts
- B.S. in physics from the University of Science and Technology of China
- CFA charterholder

### Matthew Calder – Vice President, Senior Analyst, Investment Data Engineering

- 27 years of professional experience
- Ph.D. in probability and mathematical statistics from Colorado State University
- B.S. in mathematics and statistics from the University of Wisconsin

#### Chong Chen - Vice President, Senior Analyst, Integration

- 10 years of professional experience
- M.A. in mathematics of finance from Columbia University
- M.S. in economics from Shanghai Jiao Tong University
- B.S. in finance and mathematics from Wuhan University

### Rei Cheong, CFA – Vice President, Senior Analyst, IPD Acadian Asset Management (Singapore) Pte Ltd

- 21 years of professional experience
- MSc in computer science from Georgia Institute of Technology
- Masters in Business Administration from the Singapore Management University
- Graduate Diploma in Financial Management from the Singapore Institute of Management
- Bachelor of Electrical Engineering from the National University of Singapore
- CFA charterholder

### Eric Guenterberg – Vice President, Senior Analyst, Implementation

- 26 years of professional experience
- M.S. in electrical engineering from University of Texas at Dallas
- B.S. in electrical engineering from University of California, Los Angeles

### Soichi Hayashi - Vice President, Senior Analyst, Implementation

- 24 years of professional experience
- B.S. in computer science and physics from Henderson State University

#### Shi He - Vice President, Senior Analyst, Integration

- 7 years of professional experience
- M.S. in data science from Worcester Polytechnic Institute
- B.S. in computer science from Hubei University of Police, China

#### Michael Kelsey - Vice President, Senior Analyst, Implementation

- 23 years of professional experience
- M.B.A. from Northeastern University
- B.S. from Babson College

#### Anthony King – Vice President, Senior Analyst, IPD

- 25 years of professional experience
- M.S. in computer science from Boston University
- B.S. in management science and information systems from The Pennsylvania State University

#### Anna Lang, CFA – Vice President, Senior Analyst, IPD

- 13 years of professional experience
- M.B.A. from Boston University
- B.S. in accounting from the International Slavic University
- CFA charterholder and a member of CFA Society Boston

#### Zhenan (Micky) Li, CFA - Vice President, Senior Analyst, IPD

- 14 years of investment experience
- M.S. in economics from Boston University
- B.S. in international business and trade from ShanDong University of Science & Technology
- B.S. in business management and administration from Cambridge College
- CFA charterholder and member of CFA Society Boston

#### **Guy Mann – Vice President, Senior Analyst, Implementation**

- 22 years of professional experience
- B.S. in computer science from Worcester Polytechnic Institute

#### David Meadows - Vice President, Senior Analyst

- 16 years of professional experience
- B.Sc. in computer science from Newcastle University

### Aashir Naqvi - Vice President, Senior Analyst, Implementation

- 6 years of professional experience
- B.S. in industrial engineering from Northeastern University

### Diego Torres Patino, Ph.D. – Vice President, Senior Analyst, Implementation

- 10 years of investment experience
- Ph.D. in economics from Stanford University
- B.S. degrees in industrial engineering and in economics from Instituto Tecnologico Autonomo de Mexico

### Sam Rogers - Vice President, Senior Analyst, Integration

- 8 years of professional experience
- B.A. in economics from The University at Buffalo



#### Alagappan Solaiappan - Vice President, Senior Analyst, Data Engineering

- 20 years of professional experience
- M.E. in engineering from Anna University
- B.E. in engineering from Madurai Kamaraj University

#### Carl Thunman - Vice President, Senior Analyst, Implementation

- 14 years of professional experience
- B.S. in engineering and computer science from Princeton University

#### Shikun (George) Xue, CFA - Vice President, Senior Analyst, Integration

- 16 years of professional experience
- M.A. in finance from Peking University
- B.A. in economics and B.S. in mathematics from Wuhan University
- CFA charterholder

#### Jason Withrow - Vice President, Senior Analyst, Integration

- 28 years of professional experience
- Member of Acadian's Diversity & Inclusion Forum
- B.A. in computer science from the University of Rhode Island

#### Ted Zhang, CFA – Vice President, Senior Analyst, IPD

- 19 years of professional experience
- M.S. in finance from Bentley University
- B.S. accounting from Bentley University
- CFA charterholder and a member of CFA Society Boston

### Jian Du- Vice President, Senior Trader, Implementation Acadian Asset Management (Australia) Limited

- 13 years of professional experience
- Masters in Finance from London Business School
- Bachelor of Engineering from The University of Melbourne

#### Benjamin Hutchens, CAIA - Vice President, Senior Trader, Implementation

- 18 years of professional experience
- M.S. in investment management from Boston University
- B.A. in international affairs and political science from Northeastern University
- CAIA charterholder

#### Jason Littlefield - Vice President, Senior Trader, Implementation

- 20 years of professional experience
- M.S. in finance from Northeastern University
- B.S. in business administration, with a dual concentration in accounting and marketing, from Northeastern University

### Udaiy Ogirala – Vice President, Senior Trader, Multi-Asset

- 25 years of professional experience
- B.A. in English from University of Rochester

#### Sean Paylor – Vice President, Senior Trader, Implementation

- 19 years of professional experience
- B.A. in sociology from Princeton University

### **Gregory Spyropoulos, CFA – Vice President, Credit Trader, Implementation**

- 22 years of professional experience
- B.S in finance from Bentley College
- CFA charterholder

### Jianing Duan – Assistant Vice President, Associate Portfolio Manager, Research

- 7 years of professional experience
- Ph.D. in mathematical finance from Boston University
- MSc in financial mathematics from University of Chicago
- BSc in applied mathematics from Peking University

## Eric Huang – Assistant Vice President, Associate Portfolio Manager

- 9 years of professional experience
- B.S. in operations research and financial engineering from Princeton University

### Jerry Yu, Ph.D., CFA – Assistant Vice President, Associate Portfolio Manager, ESG

- 5 years of investment experience
- Ph.D. in political science and scientific computing from the University of Michigan
- M.A. in statistics from the University of Michigan
- CFA charterholder and a member of the CFA Society Boston

#### Anh Huynh – Assistant Vice President, Senior Analyst, Integration

- 11 years of professional experience
- M.Sc. in mathematics from the University of Washington
- B.Sc. in mathematics from MIT

## Steven Wang – Assistant Vice President, Senior Analyst Acadian Asset Management (Australia) Limited

- 18 years of professional experience
- Bachelor of Engineering (software engineering), First Class Honours, from the University of New South Wales
- Bachelor of Commerce (finance) from the University of New South Wales

### Rajasekar (Raj) Karuppiah – Assistant Vice President, Data Engineer

- 19 years of professional experience
- B.E. in electrical and electronics engineering from Anna University, Chennai, India

### Siyu Chen - Assistant Vice President, Analyst, IPD

- 6 years of professional experience
- M.S. in management and finance from Case Western Reserve University
- B.S. in economics from Beihang University



### Ian Chong, CFA – Assistant Vice President, Analyst, IPD Acadian Asset Management (Singapore) Pte Ltd

- 8 years of professional experience
- Master of IT in business (artificial intelligence) from Singapore Management University
- M.S. in applied finance from Singapore Management University
- Specialist diploma in data science (artificial intelligence) from Singapore Polytechnic
- Bachelor of Business and Commerce from Monash University
- CFA charterholder

#### Jacob Hall - Assistant Vice President, Analyst, IPD

- 6 years of professional experience
- B.A. in business, entrepreneurship, and organizations from Brown University

#### Shirley Lu - Assistant Vice President, Analyst

- 9 years of investment experience
- M.S. in finance from MIT
- B.Econ. from Shanghai Jiao Tong University

#### Kunbo Wang - Assistant Vice President, Analyst, Research

- 4 years of investment experience
- Ph.D. in applied math and statistics from Johns Hopkins University
- M.Sc. in financial mathematics from Johns Hopkins University





## **Hypothetical Disclosure**

Acadian is providing hypothetical performance information for your review as we believe you have access to resources to independently analyze this information and have the financial expertise to understand the risks and limitations of the presentation of hypothetical performance. Please immediately advise if that is not the case.

Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual performance results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.



### **Annual Performance Disclosure**

### **Emerging Markets Equity Composite**

	Composite	Composite		Dispersion of		c-Post Standard Slute Gross Returns	Number of	Assets In	Total Firm Assets Under
	Return (%) Gross-of-Fees	Return (%) Net-of-Fees	Benchmark Return (%)	Returns Within	Composito	Danahmark	Portfolios in	Composite	Management
2015	-16.0	-16.8	-14.9	Composite (%)	Composite 13.6	Benchmark 14.1	Composite 28	(\$MMs) 13,803	(\$MMs) 66,834
2016	14.4	13.3	11.2	1.4 0.7	15.4	16.1	28	14,867	74,174
2017	39.3	38.0	37.3	1.6	15.2	15.4	28	20,910	96,765
2018	-17.4	-18.3	-14.6	0.8	15.0	14.6	28	17,421	85,338
2019	18.0	16.9	18.4	1.0	14.9	14.2	30	19,615	101,232
2020	13.5	12.4	18.3	1.2	19.6	19.6	29	19,336	107,229
2021	8.5	7.4	-2.5	1.6	18.3	18.3	28	19,386	116,160
2022	-19.8	-20.6	-20.1	1.7	20.9	20.3	25	13,589	92,796
2023	22.8	21.6	9.8	1.5	18.0	17.1	25	15,372	102,930
2024	14.9	13.8	7.5	0.7	17.6	17.5	22	14,254	115,836

Performance Inception: January 1, 1994. This composite was created on: February 1, 1994. All figures stated in USD.

Policies for valuing investments, calculating performance, and preparing GIPS reports are available upon request.

Acadian Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Acadian Asset Management has been independently verified for the periods January 1, 1994 through December 31, 20231. A copy of the verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Past performance is no quarantee of future returns. Acadian Asset Management is an investment adviser specializing in global equity management. Acadian Asset Management is defined to include assets managed by Acadian Asset Management LLC, an investment adviser registered with and regulated by the United States Securities and Exchange Commission, as well as assets managed by its wholly-owned affiliates, Acadian Asset Management (Australia) Limited (ABN 41 114 200 127), Acadian Asset Management Singapore Pte Ltd. (Registration Number: 199902125D) is licensed by the Monetary Authority of Singapore, and Acadian Asset Management (UK) Limited, authorized and regulated by the Financial Conduct Authority of the United Kingdom. On June 30, 2015, Acadian acquired the assets of Acadian's Australian office. Methodology: Returns are net of foreign withholding taxes on dividends, interest, and capital gains. Since January 1, 2010 Acadian's methodology was augmented to produce a more accurate gross return figure by eliminating modest cash flows such as securities lending income and custodial fees which are regarded as independent of the investment management process; the reinvestment of all income and trading expenses continue to be included. Monthly composite results are asset-weighted by beginning-of-month asset values of member portfolios which are geometrically linked to arrive at the annual composite return. Net-of-fee performance is calculated on a monthly basis by deducting a model management fee equal to 1/12 of the highest annual management fee listed in the standard fee schedule for accounts shown below. The standard fee schedule for accounts managed with this product is 1% on the first \$50 million, 0.75% on the next \$50 million, 0.65% on the next \$50 million thereafter. The standard fee schedule was changed on 10/1/2012, and the new fee has been used to calculate the net-of-fees performance for the entire history of the composite. The combined, all-in maximum fee that includes management and operating expenses for the Acadian Emerging Markets Equity CIT, which is included in the composite, is 0.85% on all assets. The standard management fee schedule and total expense ratio for the Acadian Emerging Markets Equity Fund, which is included in the composite, are 0.75% on all assets and 0.90%, respectively. The standard management fee schedule and total expense ratio for the Acadian Emerging Markets Equity II Fund, which is included in the composite, are 0.75% on all assets and 0.90%. respectively. Management fees may vary according to the range of services provided, investment performance, and the amount of assets under management. Constituent portfolios are included from the first full month after inception to the present or the last full month prior to cessation of the client relationship with the firm. For example, an account that opened January 15, 2019 will be included beginning February 1, 2019. An account that terminated February 12, 2019 will be included through January 31, 2019.

<u>Dispersion and Standard Deviation</u>: Acadian's broad definitions are mainly the product of a highly customized process that may result in modest differences with regards to portfolio characteristics among constituents. All accounts managed with directly comparable investment objectives are included, though it's possible for members to utilize slightly different benchmarks in optimization and reporting. Although at times dispersion among constituents may be high, the long-term forecast for each portfolio is consistent with the overall composite. The 'Dispersion' statistic presented above uses gross of fee returns and is an annual, asset-weighted standard deviation calculation performed only on those portfolios who have been members for the entire calendar year. These figures are not applicable if there is only one portfolio in the composite for the full year. Thirty-six months are required to calculate the 'Three Year ex-Post Standard Deviation' statistic. These figures are not applicable if thirty-six months of composite returns are not available.

Composite Description: This composite invests in emerging equity markets with no developed markets exposure. Complete lists of the firm's composite descriptions, limited distribution pooled fund descriptions, and broad distribution funds are available upon request.

Benchmark Description: The benchmark for the composite is MSCI Emerging Markets wherein a combination of gross and net (of dividends and withholding taxes) is used since the net version isn't publicly available until January 2001. The net version of MSCI Emerging Markets was retroactively applied effective July 1, 2012. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

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<sup>1</sup>Ashland Partners verified Acadian's GIPS Compliance claim through March 31, 2017. ACA Compliance Group acquired Ashland's GIPS Verification unit and provided subsequent verifications.

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### **RBC Global Asset Management**

# **Emerging Markets Equity**

December 31, 2024



## Centralized, diverse, research-focused



Philippe Langham Head of Emerging Markets Equity 33 years of experience



Laurence Bensafi
Deputy Head of Emerging Markets
Equity
27 years of experience



Guido Giammattei Portfolio Manager Taiwan & CEE<sup>1</sup> 27 years of experience



Veronique Erb Portfolio Manager Southeast Asia & Middle East 24 y ears of experience



Richard Farrell
Portfolio Manager
China
18 years of experience



Christoffer Enemaerke
Portfolio Manager
Latin America
14 years of experience



Ashna Yarashi-Shah Portfolio Manager India subcontinent 12 y ears of experience



James Bateson Portfolio Engineer 7 y ears of experience



Angel Su Senior Analyst 5 y ears of experience



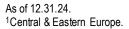
Will Hayes
Analyst
South Africa and South Korea
9 years of experience



Dijana Jelic Product Specialist 13 years of experience



Alissa Howard Institutional Portfolio Manager 14 years of experience





## Investment philosophy

Investing in quality companies with consistently high returns

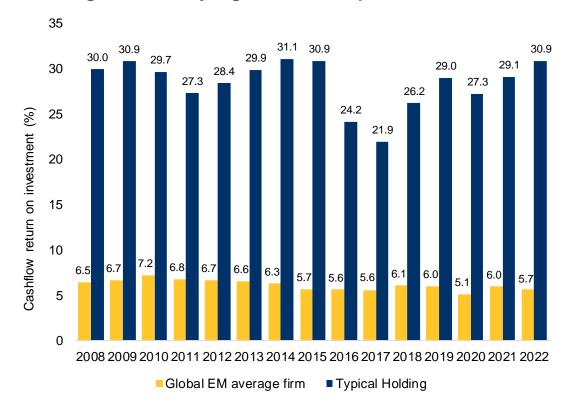




## Investment philosophy

### What drives long-term value creation?

### Seeking consistently high return companies



# Six steps to identify consistently high returns

Strong management team

Industry dominance

Strong balance sheet

High free cash flow generation

High profitability

ESG1 considerations

### Past performance is not indicative of future results.

Source: Credit Suisse HOLT®, RBC Global Asset Management. For illustration purposes only. Represents a figurative high annual CFROI company. CFROI® is an approximation of the economic return, or an estimate of the average real internal rate of return, earned by a firm on the portfolio of projects that constitute its operating assets. Supplemental information is derived from a representative account of this strategy. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy. CFROI® is a registered trademark in the United States and other countries (excluding the United Kingdom) of Credit Suisse Group AG or its affiliates.



## Investment process

## Integrated approach

Top-down overlay

Stock selection

Portfolio construction

- Thematic research
- 20 40% contribution
- Quality emphasis
- 60 80% contribution
- High conviction
- Typically 45 50 holdings



## Portfolio themes

## Long-term thematic research drives top-down views

Investment Themes	Ways to play
Domestic Consumption	<ul><li>Value Conscious</li><li>Local brands</li><li>Experiences</li></ul>
Financialization	<ul><li>Deposit franchises</li><li>Behavioral insurance</li><li>Capital markets</li></ul>
Digitalization	<ul><li>Software and services</li><li>Al</li><li>Smart manufacturing</li></ul>
Health & Wellness	<ul><li>Healthy living</li><li>Drugstores</li><li>Medical services</li></ul>
Green Infrastructure	<ul><li>Electric vehicles</li><li>Renewables</li><li>Transition materials</li></ul>



## Emerging Markets Equity Research process

Independent, in-house research

Research process supports our investment philosophy & process

### Long term

- Emphasis on long-term drivers of a business
- Majority of company value is determined by long-term factors

### Global

- Take a global perspective
- Identify investable themes that diversify across countries and sectors

### Management

- Focus on driven and trustworthy management
- Management meetings and investment checklist provide assessment of management quality

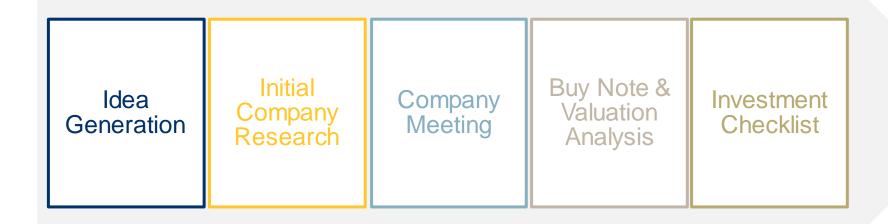
### ESG factors

- Seeking companies with durable business practices
- Focus on key aspects of a business that are often overlooked



## Investment process

## Detailed and repeatable process





## Research process

### Bottom-up fundamental research

### Checklist and scoring

Ticker: Company A Ticker
Name: Company A
Date: 30/09/2021
FYE:
Acc. Std.:
Filled by:

Overall Score Score S7.4 88

#### Engagement:

- Focused on board diversity and climate change.
- Progress made on diversity: 2 new female board members and increased portion of independent representatives.
- Follow up on GHG reductions targets and renewables progress.

2 Are t gene 3 Does 4 Wha poter 5 Wha adva	the company be around in 20 years time?  there any issues with the business model or risks in ral?  It is the company generate sector/industry leading returns?  It is the projected trajectory of returns? Is there any natial for return expansion or contraction?  It is the source and how sustainable is the competitive intage?	
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5 adva		
	ne company's products or services have a positive act on society?	
	ne product and services have a negative impact on the conment?	
	ne company's products and/or services represent good e for money to the consumer?	

33 questions

Man	agement quality	87
1	What is management's track record of integrity?	
2	What is the management's track in terms of creating shareholders value?	
3	What are the management KPIs? Are incentives aligned to support shareholder returns	
4	How have they handled negative issues in the past and how quickly have they identified and rectified challenges?	
5	What is management's execution track record through cycles?	
6	How innovative is the culture of the firm and management?	
7	Is the company addressing stakeholders in the business?	
8	How does the company engage employees?	
	Management quality (30% weighting)	
	15 questions	

Corporate governance 87				
Track Record		Red Flag?		
1	Short Track Record Less than 7 years of track record	No		
2	Short Listing History Less than 3 years	No		
3	Extreme Price Movement 1-day price fall of more than 15% in the last 5 years.	No		
Conflict of Interests		Red Flag?		
4	Concentration of Family Ownership Family control >30%	Yes		
	Change of Senior Management	No		
5	Recent or frequent change in CEO/CFO			
5 6	Recent or frequent change in CEO/CFO  Significant Related Party Transactions Related party transactions>10% of sales/COGs, or related party receivables>10% of assets	No		

Corporate governance (30% weighting)

30 questions

### Overall score

The information provided is to illustrate the investment process and is not a recommendation of any security or other financial instrument. The Overall and ESG Scores are proprietary measures that reflect the team's qualitative and quantitative assessments of a company. Scores range from 1 to 100, with higher scores reflecting more attractive investment opportunities in the team's discretion.



### Portfolio construction

## Robust and high conviction process

# Decision making process

- Strong emphasis on team communication
- Stocks analysed across both country and sector
- Long-term view

# Portfolio construction

- Concentrated portfolio (typically 45-50 holdings)
- Position sizes driven by
  - 1. Conviction level
  - 2. Valuation
  - 3. Overall strategy
  - 4. Fit with portfolio
- Sell discipline

# Risk management and portfolio engineering

- Alignment of investment philosophy and investment experience
- Detailed active risk decomposition and management
- Alpha capture and attribution analysis
- Downside risk mitigation



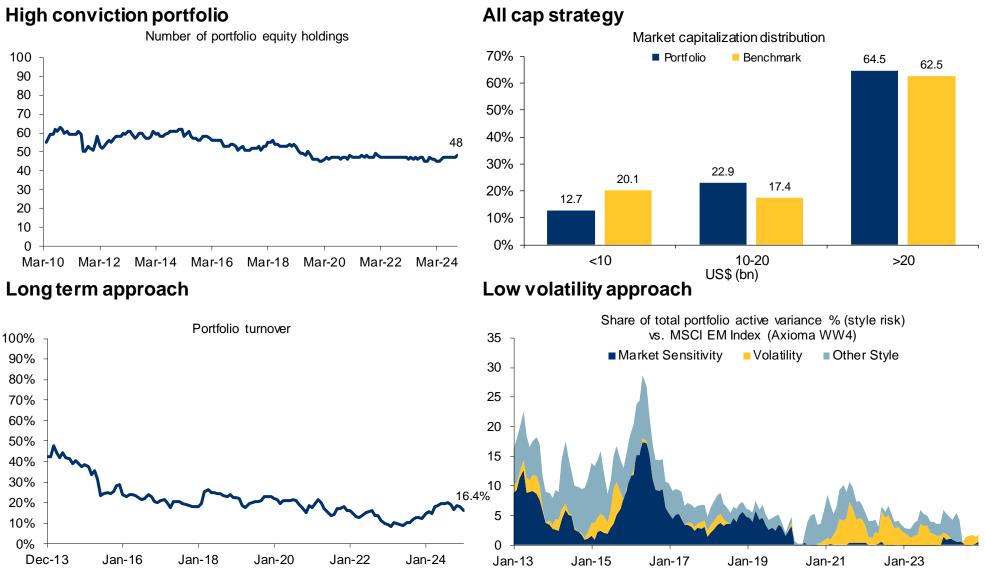
### **RBC Global Asset Management**

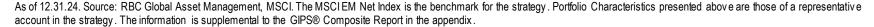
# Characteristics and performance



## Portfolio Snapshot

## **Emerging Markets Equity**

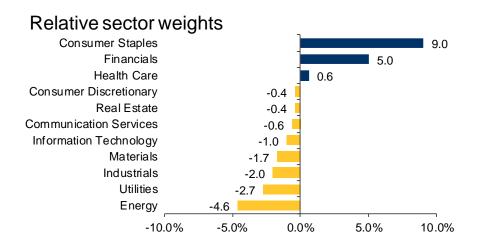


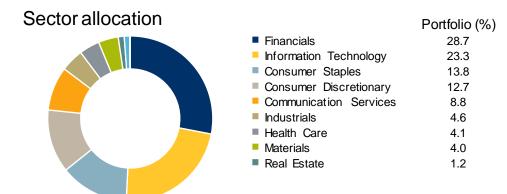


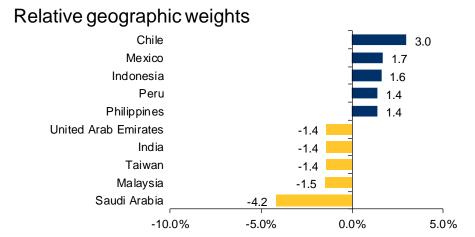


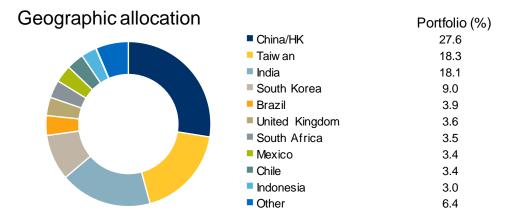
### Portfolio characteristics

### **Emerging Markets Equity**









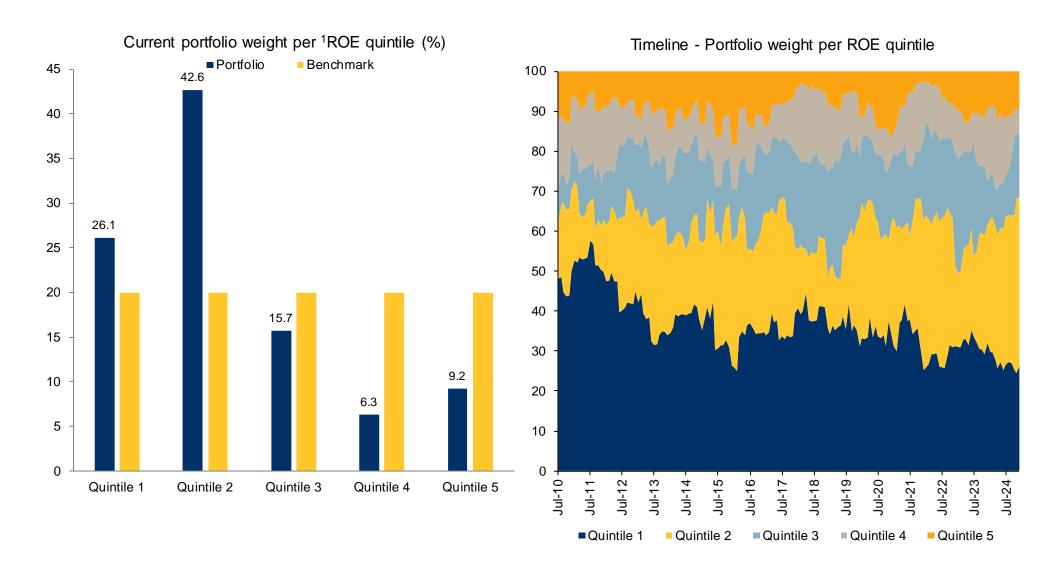
As at 12.31.2024

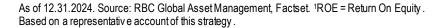
Source: RBC Global Asset Management, MSCI. The MSCIEM Net Index is the benchmark for the strategy. 'Other' represents remaining geographies for Geographic allocation. Figures may not sum to 100% due to rounding. Portfolio Characteristics presented above are those of a representative account in the strategy. The information is supplemental to the GIPS® Composite Report in the appendix.



## ROE exposure

## Focus on quality

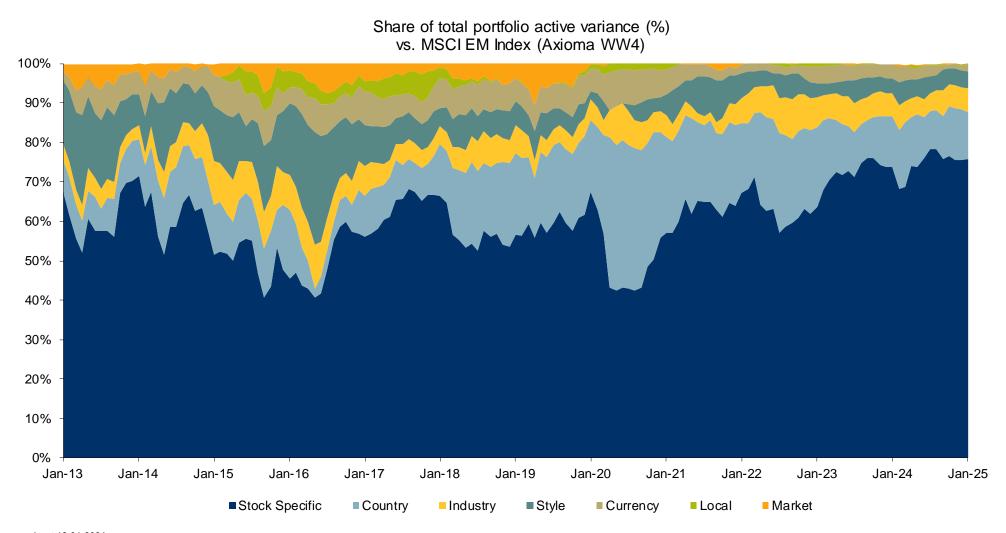


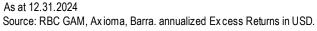




## Active risk breakdown

### Stock specific factors drive portfolio risk

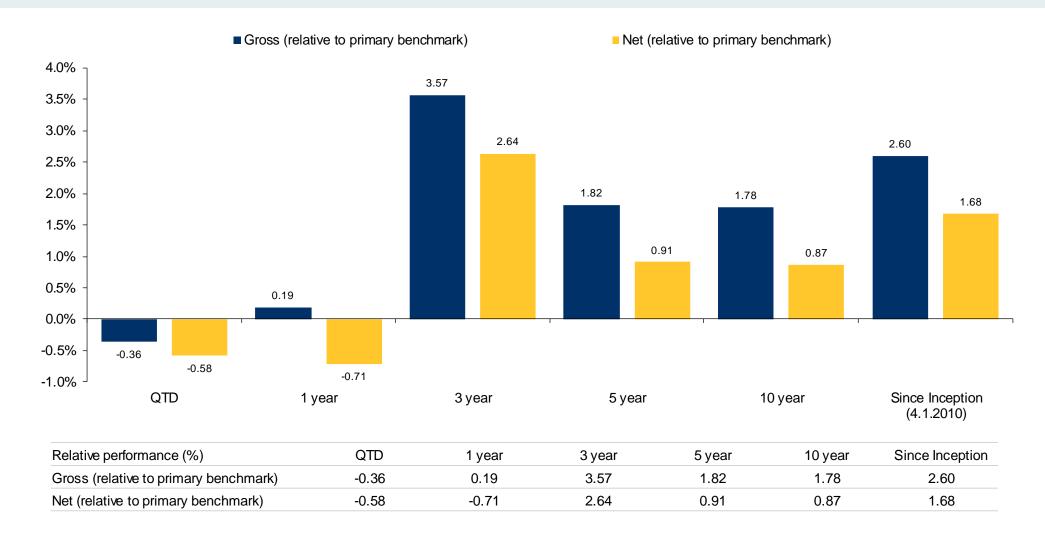






### Excess returns

### **Emerging Markets Equity**



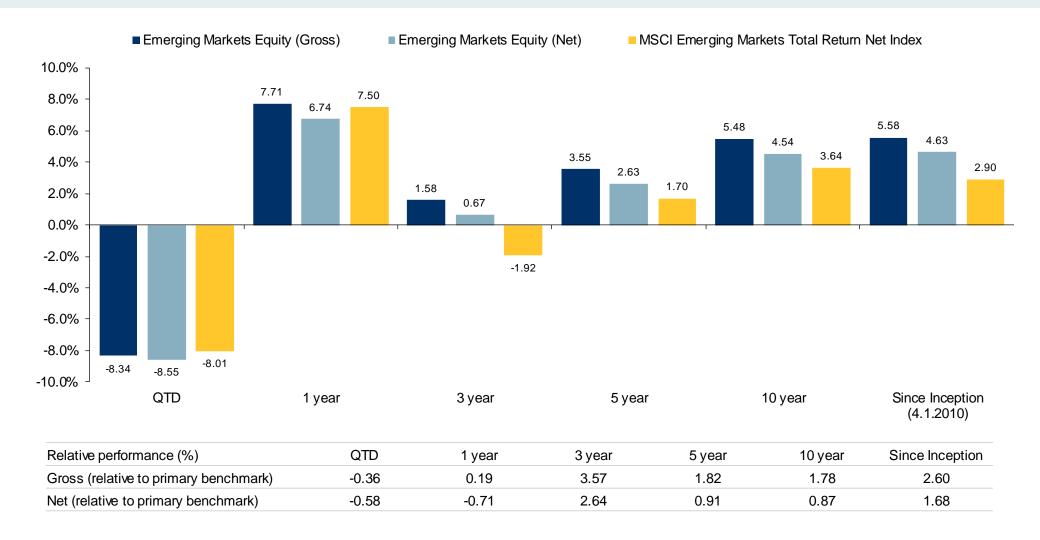
Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As at 12.31.2024

Source: RBC Global Asset Management, MSCI. Returns are presented gross and net of management fees and include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis. Net calendar returns can be viewed in the GIPS® Appendix. Performance is presented as supplemental to the "GIPS® Composite Report" which contains additional information regarding calculation of performance data.



### Annualized returns

## **Emerging Markets Equity**



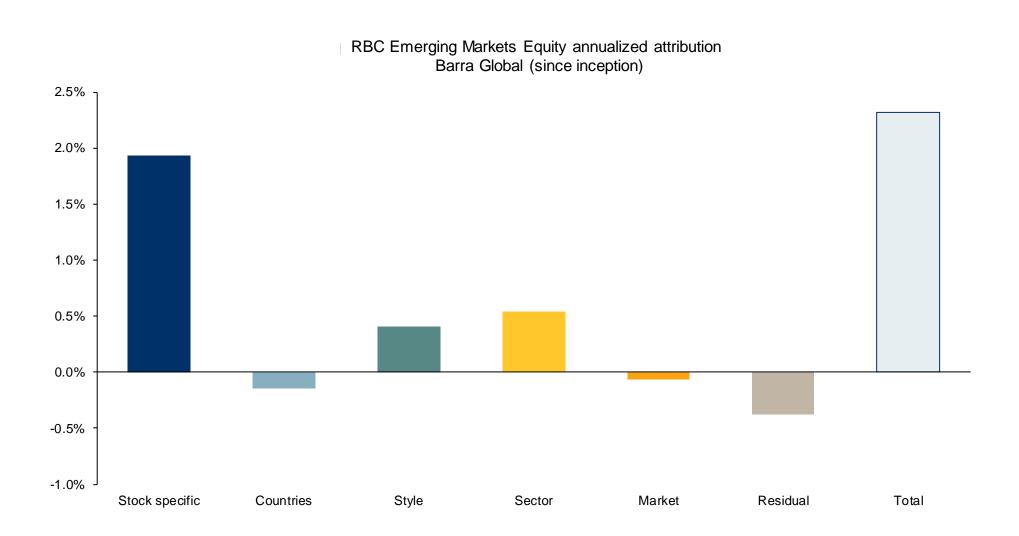
Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As at 12.31.2024

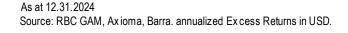
Source: RBC Global Asset Management, MSCI. Returns are presented gross and net of management fees and include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis. Net calendar returns can be viewed in the GIPS® Appendix. Performance is presented as supplemental to the "GIPS® Composite Report" which contains additional information regarding calculation of performance data.



## Performance attribution

### Stock selection is the main driver of relative returns

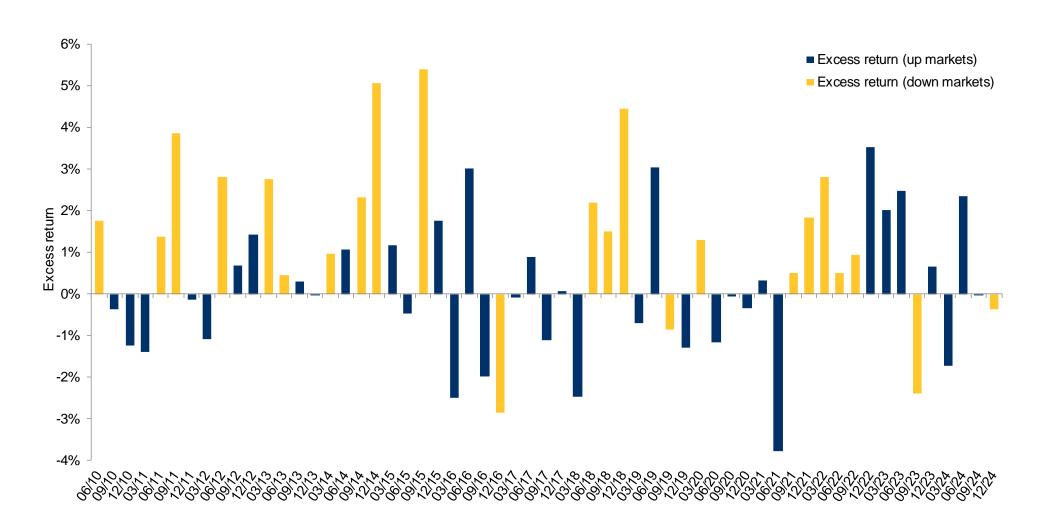






## Quarterly excess returns in up and down markets

### Outperformance in different market environments



Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As of 12.31.2024.

Source: RBC Global Asset Management. Since strategy inception, measured in net of fees. <sup>1</sup>Quarterly excess return in up and down markets' is the average (geometric mean) of excess returns observed during quarters when the return on the benchmark was positive (up market) or negative (down market). Inception of the GIPS performance record is 04.01.2010. Performance is presented as supplemental to the "GIPS® Composite Report" which contains additional information regarding calculation of performance data.



## Trailing 10-year risk statistics vs. peer group

### Strong risk-adjusted returns



As of 12.31.2024, generated on 01.27.2025; Source: eVestment Alliance, LLC. Peer rankings may not represent the full eVestment universe and are based on gross offee returns. eVestment universes are comparative peer groups based on qualitative and quantitative factors collected directly from investment managers firms and other sources believed to be reliable. eVestment and its affiliates do not guarantee or warrant the accuracy, timeliness, or completeness of information. Past performance is not indicative of future results. Returns are shown on an annualized basis. The information presented is supplemental to the "GIPS® Composite Report" appendix. Compared to MSCI EM-ND except Sharpe Ratio which is compared to the risk-free index, FTSE 3-Month T-Bill Index.



## **Emerging Markets Equity**

### A distinctive approach

- A focus on consistently high return companies
- Distinctive blend of top-down thematic and fundamental company research
- Centralized and diverse team dedicated to proprietary and differentiated research
- Durability is an integral part of the investment process
- Low volatility and downside protection
- A high conviction, quality-biased, long-term portfolio



### **RBC Global Asset Management**

# Appendix I

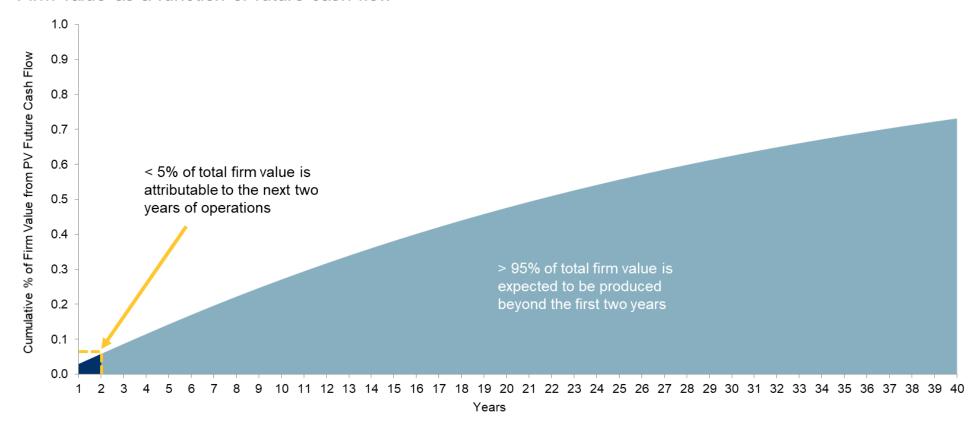
Philosophy & Process



# Investment process - valuation

### Only 5% of fair value typically attributable to next two years

#### Firm value as a function of future cash flow



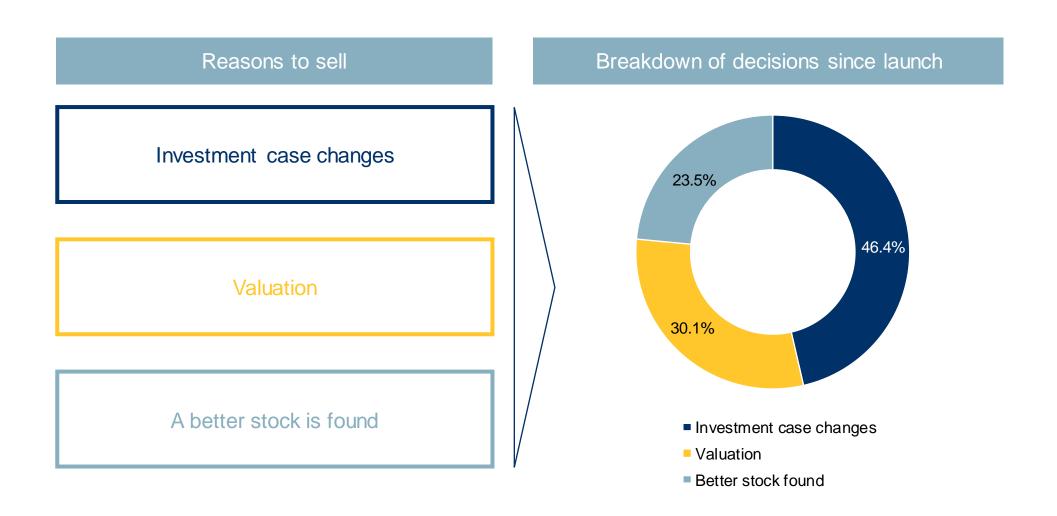
#### Source: Credit Suisse HOLT®

For information purposes only. Based on the average of 20,000 firms in the Credit Suisse HOLT® universe. Percent of firm value derived from the cash flow of a typical company from the Credit Suisse HOLT® universe with 25% working capital, asset life of 10 years, growth of 2.5% and CFROP equal to its cost of capital at 6%. CFROP is an approximation of the economic return, or an estimate of the average real internal rate of return, earned by a firm on the portfolio of projects that constitute its operating assets.



# Sell discipline – three reasons to sell

### **Emerging Markets Equity**

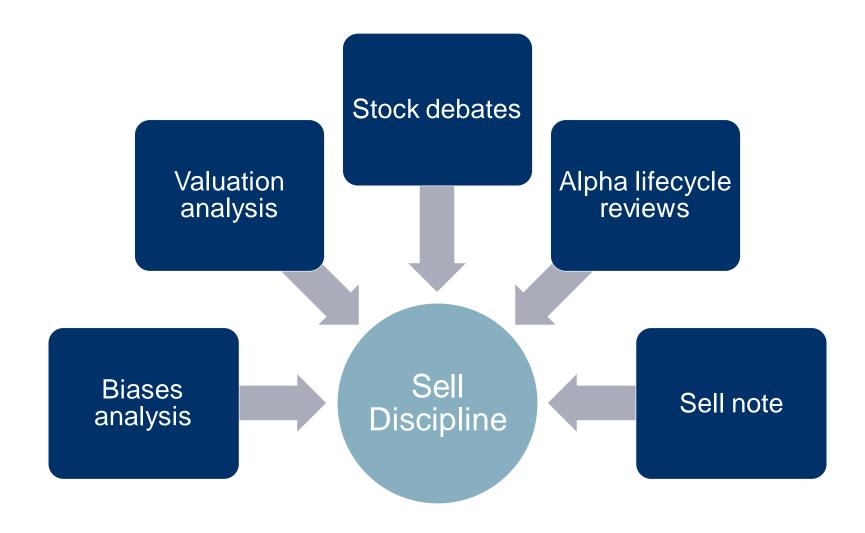


Since strategy inception through 12.31.24. Updated annually. Supplemental information on this page complements the Emerging Markets Equity composite and is derived from a representative account of this strategy.



# Sell Discipline

### Robust and disciplined process





### **RBC Global Asset Management**

# Appendix II

Defining our approach to ESG



# Defining our approach to ESG

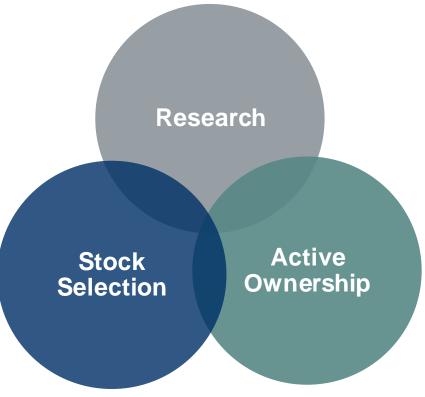
### Durability is core to our philosophy

#### Research

- Long-term thematic & ESG research; annual ESG report
- Climate change risks and opportunities
- Investing in future leaders

### **Stock Selection**

- Focus on companies with durable business practices
- ESG is embedded in the investment process
- Independent ESG analysis conducted by all team members



### **Active Ownership**

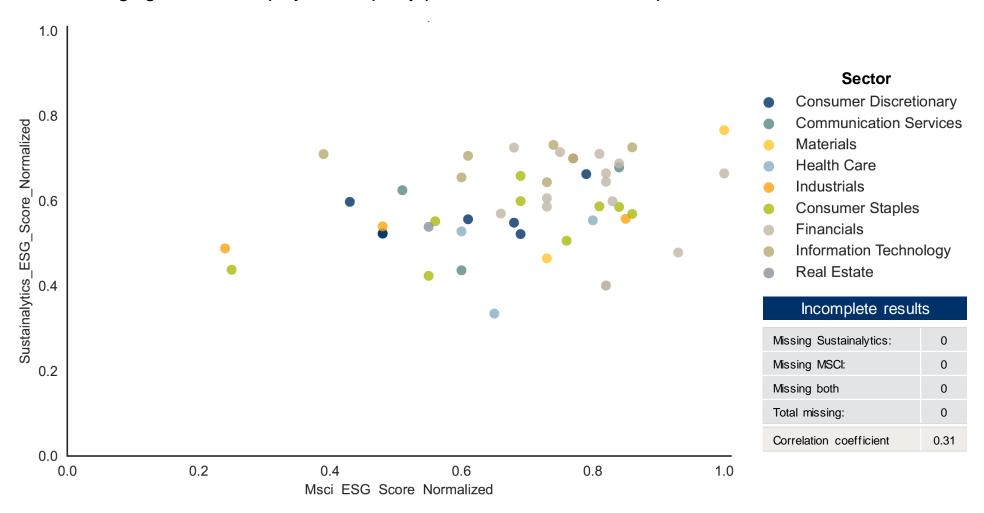
- Employing company-specific engagements allows the team to influence positive change that may lead to improved company performance
- Focus areas to supplement company-specific engagement
- Monitoring engagement outcomes



# Proprietary ESG research is essential

### ESG means different things to different people

RBC Emerging Markets Equity: Third party provider ESG score comparison correlation<sup>1</sup>



Source: RBC EM Equity, Sustainalytics, MSCI, as of 01.31.2024. Updated annually.

Normalized would be the term used to express that we've put both 3rd party providers' scores on the same scale. For example, Sustainaly tics might have a 1-100 score versus MSCI having 1-10. Incomplete results shows that there are companies missing from being scored by both 3rd party providers.



<sup>&</sup>lt;sup>1</sup>Correlation coefficient value ranges from 0-1; the closer the coefficient value to 1, the stronger the relationship. A value closer to 0 suggests limited relationship between the variables. Further detail on methodology is available upon request. Sectors are subject to change, and should not be considered a recommendation to buy or sell any security

### Stock selection

### Investment checklist and scoring

### Checklist and scoring

Company A Ticker Ticker: Name: Company A Date: 30/09/2021 FYE: Acc. Std.: Filled by:

Overall Score Score

87.4

88

**ESG** 

#### Engagement:

- Focused on board diversity and climate change.
- Progress made on diversity: 2 new female board members and increased portion of independent representatives.
- Follow up on GHG reductions targets and renewables progress.

Strength and sustainability of franchise				
1	Will the company be around in 20 years time?			
2	Are there any issues with the business model or risks in general?			
3	Does the company generate sector/industry leading returns?			
4	What's the projected trajectory of returns? Is there any potential for return expansion or contraction?			
5	What is the source and how sustainable is the competitive advantage?			
6	Do the company's products or services have a positive impact on society?			
7	Do the product and services have a negative impact on the environment?			
8	Do the company's products and/or services represent good value for money to the consumer?			

Strength and sustainability of the franchise (40% weighting)

33 questions

Mar	nagement quality	87
1	What is management's track record of integrity?	
2	What is the management's track in terms of creating shareholders value?	
3	What are the management KPIs? Are incentives aligned to support shareholder returns	
4	How have they handled negative issues in the past and how quickly have they identified and rectified challenges?	
5	What is management's execution track record through cycles?	
6	How innovative is the culture of the firm and management?	
7	Is the company addressing stakeholders in the business?	
8	How does the company engage employees?	
	Management quality	

(30% weighting)

15 questions

Corp	87		
Track	Track Record		
1	Short Track Record Less than 7 years of track record	No	
2	Short Listing History Less than 3 years	No	
3	Extreme Price Movement 1-day price fall of more than 15% in the last 5 years.	No	
Conflict of Interests		Red Flag?	
4	Concentration of Family Ownership Family control >30%	Yes	
5	Change of Senior Management Recent or frequent change in CEO/CFO	No	
6	Significant Related Party Transactions Related party transactions>10% of sales/COGs, or related party receivables >10% of assets	No	
7	Related Party M&A Activity	No	

Corporate governance (30% weighting)

30 questions

### Overall score

The information provided is to illustrate the investment process for the Emerging Markets Equity strategy and is not a recommendation of any security or other financial instrument. The Overall and ESG Scores are proprietary measures that reflect the team's qualitative and quantitative assessments of a company. Scores range from 1 to 100, with higher scores reflecting more attractive investment opportunities in the team's discretion.



# Investment checklist and scoring

# Focus on durable business practices

### Example ESG questions

	Franchise Strength		Franchise Strength Management Quality		Corporate Governance	
	Do the company's activities have a negative impact on the climate? What are the key climate change risks?		What is management's track record of integrity?		Related party transactions and M&A activity	
	What the policies being implemented to mitigate climate change risks?		How innovative is the culture of the firm and management?		Workplace and board diversity	
	Do the company's products and/or services represent good value for money to the consumer?		Is the company addressing stakeholders in the business?		Bloomberg governance disclosure score	
	Has there been any evidence of cutting corners? (e.g., cheap contractors, child labour, poorer quality materials to save money).		Are employees paid enough?		GMT Accounting screen	
	Is the franchise socially useful? And does the company think about changing product mix towards socially useful products?		Do management think about the long term? Are they prepared to sacrifice short term profit to lay the foundation for future growth?		Does the company work in the best interests of all shareholders?	



# Engagement

### Targeting positive change through engagement and proxy voting

### Focused engagement

### Current topics

- Climate change
- Employee engagement and corporate culture
- Shareholder focus

#### Historical topics

- Board diversity
- Executive remuneration
- Disclosure
- Plastics
- Supply chain integrity

### Engagement tracker to monitor progress

				PRC Emor	nina Marka	te - ESG Er	ngagement Information	Score	
Bloomberg Ticker	Company Engaged	Country	Industry	NDC EIIIEI	Date of	Engagement	Comments	0	Awaiting response
088980 KS Equity	Macquarie Korea Infrastructure	South Korea	Financials	Executive Compensation	Engagement 02/11/19	Status 1	Management fee reduced from 1.15% to 0.85%. Very satisfactory	1	Generally positive
	Hero MotoCorp Ltd	India	Consumer Discretionary	Diversity	04/29/19	2	Hero has traditionally been quite weak on diversity but now realizing the importance of it and making a big push; top focus for management is on improving diversity	2	Work in progress
HMCL IN Equity	Hero MotoCorp Ltd	India	Consumer Discretionary	Diversity	04/29/19	2	and inclusion in terms of hiring people with diverse exerpience, gender, nationality.	3	Improvement neede
TCS IN Equity	Tata Consultancy Services Ltd	India	Information Technology	Executive Compensation	05/01/19	1	No long-term incentive plans or ESOPs. Only fixed and variable pay, variable pay can be significant. It is based on: revenue growth, profitability (per business units) as well as soft targets, such as employee satisfaction, customer satisfaction, attrition level etc.		•
CNPF PM Equity	Century Pacific Food Inc	Philippines	Consumer Staples	ESG Disclosure	05/02/19	1	Engaged with the company about producing a sustainability report - the company plans to issue one later this year		
IMI PM Equity	Integrated Micro-Electronics I	Philippines	Information Technology	Diversity	07/04/19	1	Engaged with the company on diversity, 60-70% of the workforce is female which is impressive, however, only have 1 woman on the board currently. They are looking to increase this in the future. Outside of gender, the company does very well in terms of diversity, partially given its global geographical presence		
DRRD IN Equity	Dr Reddy's Laboratories Ltd	India	Health Care	Board Structure	07/12/19	1	Engaged with P. Reddy's no board composition. The company/had a number of changes is serior management over the last 11-15, years and also a number of changes is personnel to be board composition on the last all months. Fell resums, he board approsition on the last and months for the resum, he board approsition on the last company and to excuse continuity on the board. I new board members appointed recently. The company looks to bee demonstrated properties on the board appear from fellows, extending countries, if the monaged and but on the monaged and but on the monaged and but on the board and the looks are the board and as managed and the monaged and but on the board and the looks are the board and the looks are the board and as fell and the looks are the board and as fell and the looks are the board and the looks are the looks are the board and the looks are the looks		
ANTO LN Equity	Antofagasta PLC	Chile	Materials	Board Structure	06/25/19	1	We engaged with Antidigation about the composition of board members as our screens suggests room for improvement in the structure of the board. Having spoken to them, we felt comfortable with the level of experience and board composition. Furthermore they have strong succession plans for when a non-independent director referses, and now have two women on the board with this armade an antidatified inference in terms of the atmosphere.		
ULVR LN Equity	Uniferer PLC	Uk	Consumer Staples	Corporate Culture	06/21/19	1	We engaged with Uniteer on Altan Joyd's sustainability stategy and the impact on Uniteer's corporate cubine. Historically we first that the company's "Sustainable Likely plan was not decayable himpact and and all business facilities." We more felt the stategy has improved as and obligation in Uniteer's actional billy purpose. Sustainability's abox incorporated into remuneration and long term incomines. 30 out of the top-40 brands are sustainable products and the company's inactively encouraging and employees to ensure that the brands are productly impacting south.		
ULVR LN Equity	Unilever PLC	Uk	Consumer Staples	Plastic	06/21/19	1	Unlever have committed to 100% recycled plastic packaging by 2025. They have also reversed their membership at the Ellien Macketure Foundation for exambler three years and endorse and support their New Pastace Economy initiative. A part of this, kull poulbid he fail "plastic plastical used in its packaging by 2020 to help create a plastical protocol for the industry. They have also invested in proving, and then sharing with the industry, a technical solution to recycle multi-layered scarkes, particularly for costall areas which are most start kind plastics fastishing to the occasi.		
BBDC3 BZ Equity	Banco Bradesco SA	Brazil	Financials	Diversity	05/24/19	2	We felt there were not enough women in senior positions - only 15% of the executive committee are women. They now have a sustainability and diversity committee and have many initiatives that are being introduced to encourage women and provide flexibility for women with families.		
BBDC3 BZ Equity	Banco Bradesco SA	Brazil	Financials	Customers	05/24/19	1	Although Reduction's Net Promoter score is very high we wantest to engage with them on client relationships given the excitation of fetter in Brazil. We have ordined that the satingting with each hast changed be cross with a production and review of the production of the score in the section of the described and on the loss interested of the client, this is a change to the way they'de close business in the past. Bladders on owr conclude, polid for clients who purchase products be remain they understand exactly what they was boding and fifty was constituted in their purchase. This content control is control in the interest control in the companion of broadman and and the control in the companion of the companion of broadman and control in the companion of the companion of broadman and control in the companion of the companion of broadman and control in the companion of the control of the control of the companion of the control of the companion o		
MNDI LN Equity	Mondi PLC	South Africa	Materials	Plastic	08/19/19	1	Mord has been making spyllicane from bewards achieving more assistantially pickaligning. The company has an enterope derivementering at the Ellen MacAlthra. Foundation for sometine years and endors are subject to the Self-Bernal Endors from the Self-Bern		
MNDI LN Equity	Mondi PLC	South Africa	Materials	Diversity	08/19/19	1	We engaged with the company or desempty as set bound that Mech has only 22th of excellence on the board and the mind and only 21th of the Mechanism of the Mech		
KBANK TB Equity	Kasikombank PCL	Thailand	Financials	Customers	07/30/19	1	We engaged with the company on their approach to changing customers, particularly given the evolution of finished. Overall we were encouraged by the company's period to changing extractionable relaterableshes with its customers. They have a policy of not failed appealing god entral center or to jecquarde the results present the contractions. They stay assay from facine related to policies, anything that farms the environment and focus on positive assess (e.g. the CCC) Chairman has been very focused or restricting perfects (1). The object perfects (1) and object perfects (1) a		
SM PM Equity	SM Investments Corp	Philippines	Industrials	Other	06/20/19	1	We engaged with the company on their approach to disclosure as previously the company was struggling to implement sustainability reporting across various business verticals. They have made significant progress over the past few years and now produce 8 sustainability reports across the various businesses. They are also piloting on how to methed ESO entires into the management KPs with an intertrino to broaden across the group.		

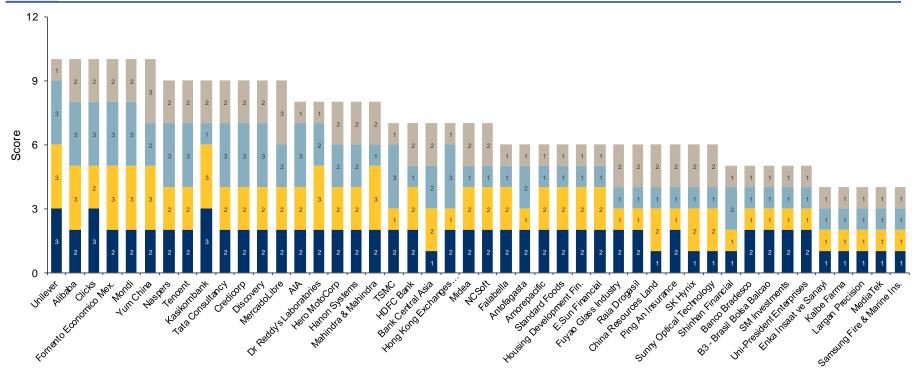


# **Board diversity**

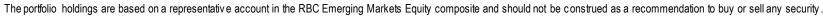
### Assessing our portfolio companies

### RBC Emerging Markets Equity board diversity scorecard

Score	Gender	Experience	Ethnicity	Age
1	No female representation	Very little experience diversity (sector specific + banking + accounting + law)	No ethnicity diversity (all from the home country)	No under 50 board members
2	At least one female member on the board	Some diverse experience to signal cognitive diversity	At least one member outside of the home country	At least one member under 50
3	>30% of board members are female	High level of experience diversity with more than 3 industries, qualifications and outside board membership experience	>3 different ethnicities or nationalities	More than 3 members under 50



Source: RBC Emerging Markets Equity, Team Offsite, September 2020. RBC Emerging Markets Equity Strategy
Based on Team's assessment of 470 board members. Each factor was given a score 1-3 (3 being the highest) and an overall score was given out of 12.



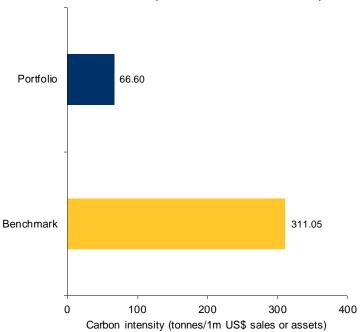


# Portfolio ESG profile

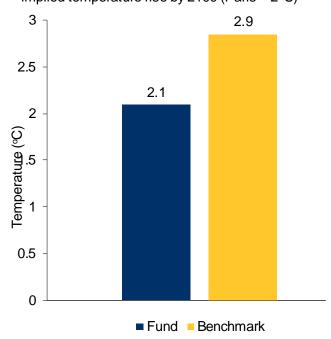
### Carbon intensity

To measure our carbon footprint metrics we use the MSCI Index Carbon Footprint, who report the weighted average carbon intensity of over 15,000 indexes allowing us to compare our portfolios to the Benchmark. The calculations are a measure of metric tons/£1million GBP in sales. Emissions data is the latest on record from MSCI ESG and in all cases comes from 2018 and 2019 including scope 1 and 2 emissions. Where a company does not reports its own emissions, MSCI ESG provides a proprietary estimate.

Portfolio carbon intensity versus MSCI EM benchmark (WACI as tons/\$1m in sales)



Portfolio temperature alignment versus benchmark: implied temperature rise by 2100 (Paris = 2°C)



As of 12.31.24

¹Based on the representative account in the RBC Emerging Markets Equity composite.

MSCIESG. Carbon Intensity is originally calculated by MSCIESG in tons/\$1million USD in Sales. Sales and intensity figures are calculated using implicit sales figure calculated by MSCIESG and converted to tonnes/£1million GBP in Sales using Bloomberg currency rates for the year corresponding to carbon emissions reported by MSCIESG. Emissions data year is latest on record from MSCIESG, and in all cases came from 2018 or 2019. Includes Scope 1 + 2 emissions. Where a company does not report its own emissions, MSCIESG provides a proprietary estimate. Weights have been normalized in cases where MSCIESG does not publish emissions data for a given security, where a given security is sales data are not available from Bloomberg for the emissions data year, implicit sales data from MSCIESG is negative or sales reported by Bloomberg were negative. Benchmark: MSCIEmerging Markets Index: UN PRI, "Coordinated Engagements" by Elroy Dimson, Oğuzhan Karakaş and Xi Li. As of May 2018. The United Nations' Principles for Responsible Investing (PRI) is one of the leading networks for investors with a commitment to responsible ownership and long-term returns. The study is based on a proprietary dataset of the PRI's collaborative engagements from 2007 to mid-2017. The study examines 1,671 engagement sequences undertaken by 252 investment organizations from 24 countries. They target 964 listed companies located in 63 countries globally.



# Key definitions

### Terms explained in detail

#### **ESG** factors

Environmental: Climate change, air and water pollution, biodiversity, natural resource management and use, water quality and availability, waste management, ecosystem integrity. Social: Labour practices, data privacy and security, gender and diversity, employee engagement, human rights, community relations, health and safety. Governance: Board structure and independence, executive compensation, shareholder rights, lobbying and political contributions, bribery and corruption, tax strategy and accounting standards.

The factors listed above include some of the categories we consider to be most important, however these do not encompass the full list of ESG factors that we may consider as part of our ESG integration approaches.

#### ESG checklist

Our Emerging Markets team has created an 'ESG checklist' and that is continuously updated. The checklist concentrates on areas of particular focus for the investment team given the asset class and regions and allows the team to rate companies and conduct cross-regional and sector comparisons.

#### Active ownership (Also referred to as active engagement)

We often talk about an ownership mindset and for our teams this means holding a long-term view with the aim of making a difference. Connecting with the companies we are invested in to present our findings and hear how they plan to address any issues. We provide time for a company to address change with the belief that if these changes are implemented the company with grow, presenting investor benefits.

#### Engagement

Engagement refers to direct communication between shareholders and the board or management of an issuer, depending on the nature of the issue. Its purpose may be to better understand a company's approach to ESG issues or it may be to encourage the company to adopt better practices, including improved ESG-related disclosure and/or more effective identification and management of ESG issues. Engagement may also include communicating with regulators and other stakeholders. In some cases, when appropriate, we may work together with like-minded investors, either directly or through organizations/coalitions, to allow us to have greater influence in our engagement activities.

#### **Proxy voting**

Voting our shares responsibly is part of our fiduciary duty and we make our voting decisions independently, in accordance with our custom Proxy Voting Guidelines. The Proxy Voting Guidelines are updated annually to reflect our views on emerging trends in corporate governance and responsible investment, providing an overview of the corporate governance principles we support and how we will vote on ESG-related issues. Our custom Proxy Voting Guidelines are used in Canada, the United States, the United Kingdom, Ireland, Australia, and New Zealand. In all other markets, we use the local proxy voting guidelines of a research provider. In all cases, we review every ballot item independently and make a voting decision based on the best interests of our clients.

#### Sustainable investment

An investment that contributes to an environmental or social objective. The investment should not significantly harm any social or environmental objective and the issuer must follow good governance practices.



### **RBC Global Asset Management**

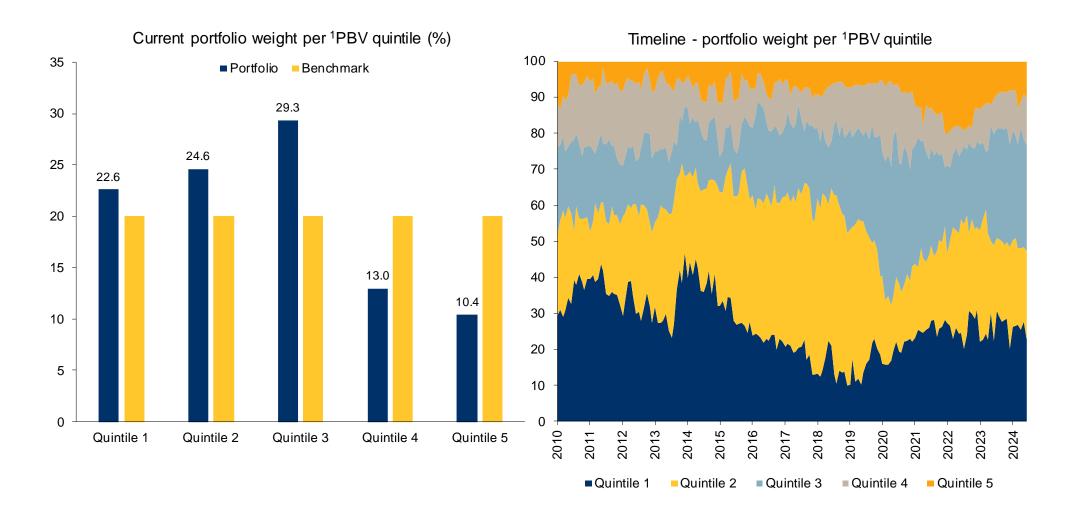
# Appendix III

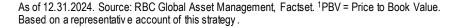
Characteristics & Performance



# Price-to-Book exposure

### Disciplined approach to valuation

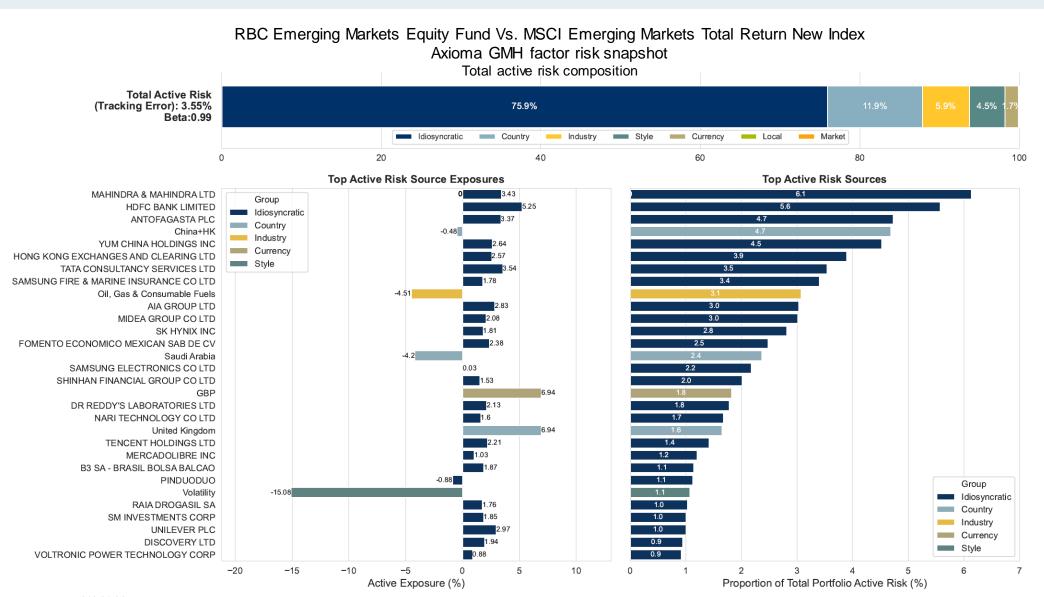






# Active Risk Decomposition

### **Emerging Markets Equity**



As of 12.31.24

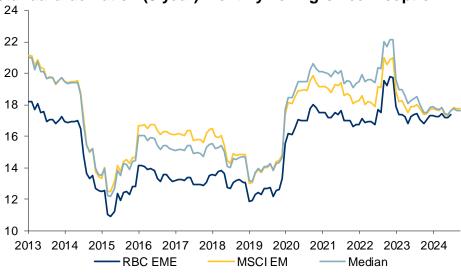
Source: RBC GAM, Axioma GMH Fundamental Risk Model. The securities listed above are portfolio holdings and are based on a representative account in the composite. This is not a solicitation to buy or sell any security or other financial instrument or to participate in any investment strategy. The information provided is supplemental to the "GIPS® Composite Report.



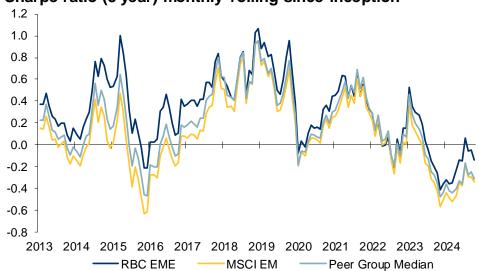
# Low volatility and downside protection

### Outcome of philosophy and process

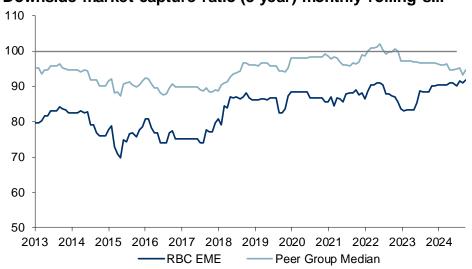
#### Standard deviation (3 year) monthly rolling since inception



#### Sharpe ratio (3 year) monthly rolling since inception



#### Downside market capture ratio (3 year) monthly rolling s.i.\*



#### Information ratio (3 year) monthly rolling since inception



Source: RBC GAM, Barra, eVestment. As of 12.31.2024. Updated annually .

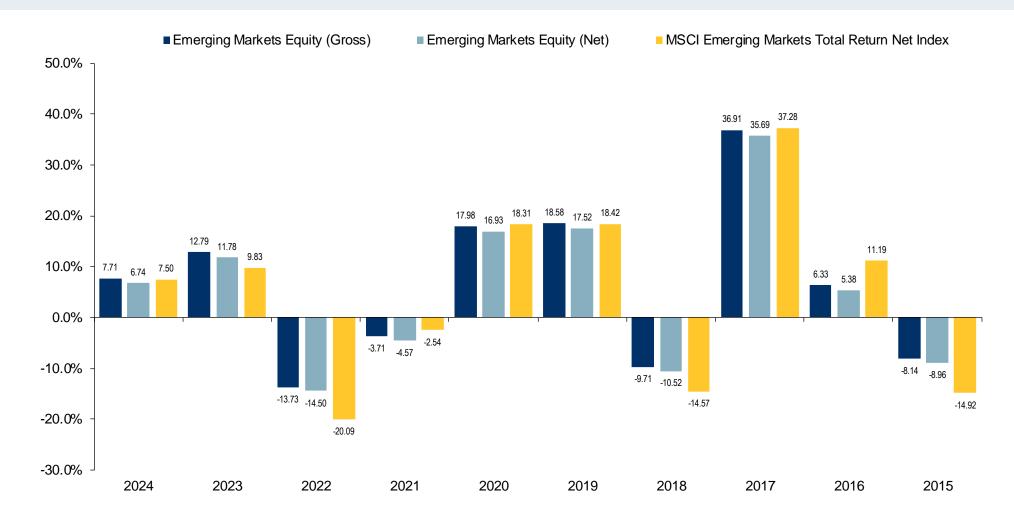
Downside market: eVestment data as of 12.31.2024. N.B. Peer Group defined as eVestment Global Emerging Markets All Cap Equity Peer Group. Based on a representative account in the composite. The information provided is supplemental to the "GIPS® Composite Report.





# Calendar year returns

### **Emerging Markets Equity**



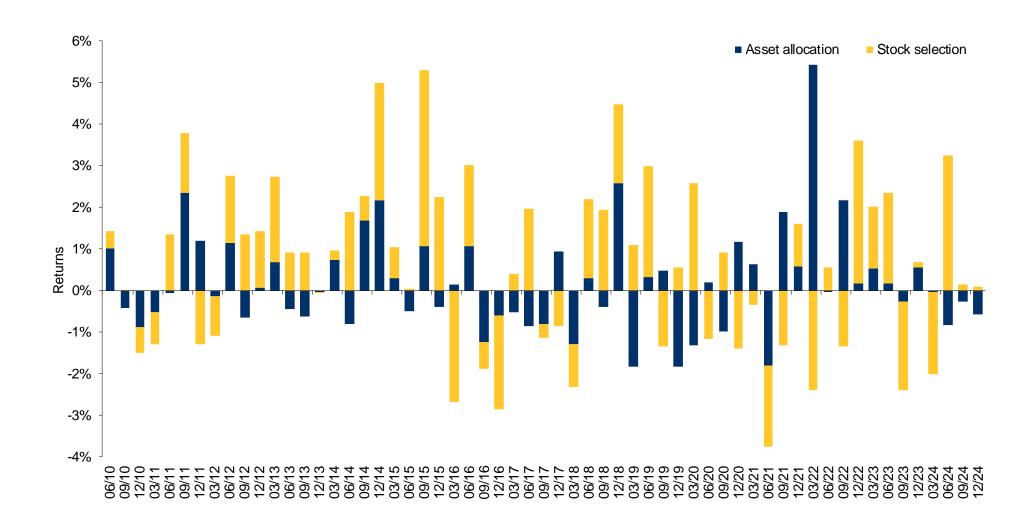
Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As at 12.31.2024

Source: RBC Global Asset Management, MSCI. Returns are presented gross and net of management fees and include the reinvestment of all income. Net calendar returns can be viewed in the GIPS® Appendix. Inception of the GIPS® performance record is 04.01.2010. Performance is presented as supplemental to the "GIPS® Composite Report" which contains additional information regarding calculation of performance data.



### **Attribution**

### Quarterly by country



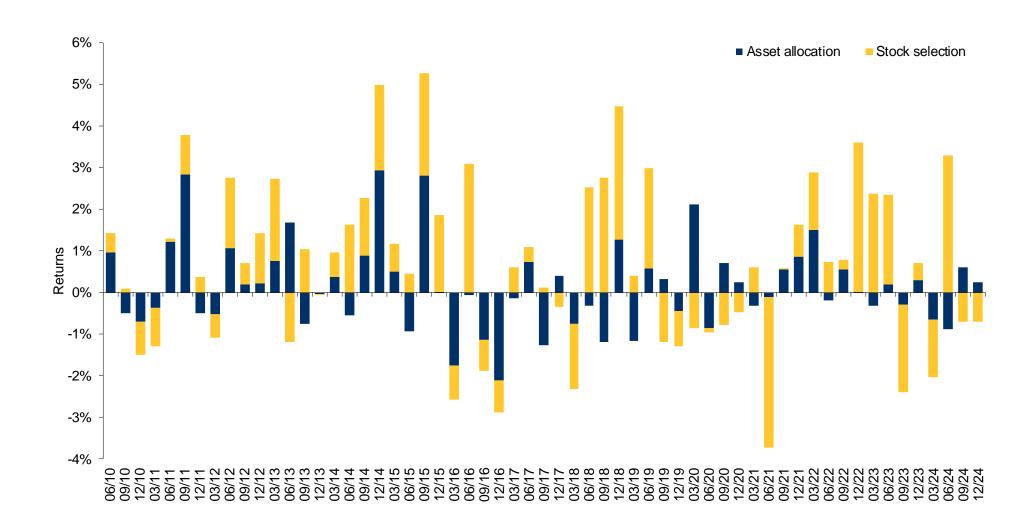
Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As of 12.31.2024.

Source: RBC Global Asset Management. Since strategy inception. Returns are presented gross of management fees. Net calendar returns can be viewed in the GIPS Appendix. Inception of the GIPS performance record is 01.04.2010. Performance is presented as supplemental to the "GIPS® Composite Report" which contains additional information regarding calculation of performance data. Sectors are subject to change, and should not be considered a recommendation to buy or sell any security.



### **Attribution**

### Quarterly by sector



Past performance is not indicative of future results and is calculated in USD. Returns may increase or decrease as a result of currency fluctuations. As of 12.31.2024.

Source: RBC Global Asset Management. Since strategy inception. Returns are presented gross of management fees. Net calendar returns can be viewed in the GIPS Appendix. Inception of the GIPS performance record is 01.04.2010. Performance is presented as supplemental to the "GIPS ® Composite Report" which contains additional information regarding calculation of performance data. Sectors are subject to change, and should not be considered a recommendation to buy or sell any security.



# Top ten holdings

## **Emerging Markets Equity**

Issuer	Country	Sector	Portfolio	Benchmark <sup>1</sup>
TSMC	Taiwan	Information Technology	10.1	10.5
Tencent	China/HK	Communication Services	6.8	4.5
HDFC Bank	India	Financials	6.8	1.5
Tata Consultancy Services	India	Information Technology	4.1	0.6
Mahindra & Mahindra	India	Consumer Discretionary	3.7	0.4
Antofagasta	Chile	Materials	3.4	0.0
Unilever	United Kingdom	Consumer Staples	3.0	0.0
Yum China	China/HK	Consumer Discretionary	3.0	0.2
AIA	China/HK	Financials	2.9	0.0
SK Hynix	South Korea	Information Technology	2.7	0.8
Total (%)			46.6	18.7

As at 12.31.2024

Source: RBC Global Asset Management. Based on a representative account of this strategy. Weights reflect actual positions, cash positions not shown. Some of the holdings may be listed in developed markets but their primary source of revenue and/or business is located in Emerging Markets. Supplemental information on this page complements the "GIPS® Composite Report" appendix to these materials. ¹The MSCI EM Net Index is the benchmark for the strategy.



# Holdings by sector

## **Emerging Markets Equity**

Issuer	Sector
NetEase	Communication Services
Telkom Indonesia Persero	Communication Services
Tencent	Communication Services
Alibaba	Consumer Discretionary
Mahindra & Mahindra	Consumer Discretionary
Meituan	Consumer Discretionary
MercadoLibre	Consumer Discretionary
Midea	Consumer Discretionary
Yum China	Consumer Discretionary
Clicks	Consumer Staples
Dino Polska	Consumer Staples
Fomento Economico Mexicano	Consumer Staples
Marico	Consumer Staples
President Chain Store	Consumer Staples
Raia Drogasil	Consumer Staples
Unilev er	Consumer Staples
Uni-President Enterprises	Consumer Staples
Wal-Mart de Mexico	Consumer Staples
AIA	Financials
Ax is Bank	Financials

Issuer	Sector
B3 - Brasil Bolsa Balcao	Financials
Bank Central Asia	Financials
Credicorp	Financials
Discovery	Financials
E.Sun Financial	Financials
HDFC Bank	Financials
Hong Kong Exchanges & Clearing	Financials
Kasikornbank	Financials
Kotak Mahindra Bank	Financials
Ping An Insurance	Financials
Samsung Fire & Marine Insurance	Financials
Shinhan Financial	Financials
Dr Reddy's Laboratories	Health Care
Kalbe Farma	Health Care
Shenzhen Mindray Bio-Medical Electronics	Health Care
NARI Technology	Industrials
SM Investments	Industrials
Voltronic Power Technology	Industrials
Advantech	Information Technology
Delta Electronics	Information Technology

Issuer	Sector
MediaTek	Information Technology
Samsung Electronics	Information Technology
SK Hynix	Information Technology
Tata Consultancy Services	Information Technology
TSMC	Information Technology
Antofagasta	Materials
Mondi	Materials
China Resources Land	Real Estate



# Holdings by country

## **Emerging Markets Equity**

Issuer	Country
MercadoLibre	Argentina
B3 - Brasil Bolsa Balcao	Brazil
Raia Drogasil	Brazil
Antofagasta	Chile
AIA	China/HK
Alibaba	China/HK
China Resources Land	China/HK
Hong Kong Exchanges & Clearing	China/HK
Meituan	China/HK
Midea	China/HK
NARI Technology	China/HK
NetEase	China/HK
Ping An Insurance	China/HK
Shenzhen Mindray Bio-Medical Electronics	China/HK
Tencent	China/HK
Yum China	China/HK
Ax is Bank	India
Dr Reddy's Laboratories	India
HDFC Bank	India
Kotak Mahindra Bank	India

Issuer	Country
Mahindra & Mahindra	India
Marico	India
Tata Consultancy Services	India
Bank Central Asia	Indonesia
Kalbe Farma	Indonesia
Telkom Indonesia Persero	Indonesia
Fomento Economico Mexicano	Mexico
Wal-Mart de Mexico	Mexico
Credicorp	Peru
SM Inv estments	Philippines
Dino Polska	Poland
Clicks	South Africa
Discov ery	South Africa
Samsung Electronics	South Korea
Samsung Fire & Marine Insurance	South Korea
Shinhan Financial	South Korea
SK Hy nix	South Korea
Advantech	Taiw an
Delta Electronics	Taiw an
E.Sun Financial	Taiw an

Issuer	Country
MediaTek	Taiwan
President Chain Store	Taiw an
TSMC	Taiw an
Uni-President Enterprises	Taiw an
Voltronic Power Technology	Taiw an
Kasikornbank	Thailand
Mondi	United Kingdom
Unilev er	United Kingdom



# Holdings by theme

## **Emerging Markets Equity**

Issuer				
Advantech	Digitalization			
Delta Electronics	Digitalization			
MediaTek	Digitalization			
MercadoLibre	Digitalization			
NetEase	Digitalization			
Samsung Electronics	Digitalization			
SK Hy nix	Digitalization			
Tata Consultancy Services	vices Digitalization			
Telkom Indonesia Persero	onesia Persero Digitalization			
Tencent	Digitalization Digitalization			
TSMC	Digitalization			
_ · · ·				
Dino Polska	Domestic Consumption			
Fomento Economico Mexicano	Domestic Consumption			
Mahindra & Mahindra	Domestic Consumption			
Meituan	Domestic Consumption			
Midea	Domestic Consumption			
President Chain Store	Domestic Consumption			
SM Investments	Domestic Consumption			
Unilever	Domestic Consumption			

Issuer				
Uni-President Enterprises	Domestic Consumption			
Wal-Mart de Mexico	Domestic Consumption			
Yum China	Domestic Consumption			
AIA	Financialization			
Ax is Bank	Financialization			
B3 - Brasil Bolsa Balcao	Financialization			
Bank Central Asia	Financialization			
Credicorp	Financialization			
Discovery	Financialization			
E.Sun Financial	Financialization			
HDFC Bank	Financialization			
Hong Kong Exchanges & Clearing	Financialization			
Kasikornbank	Financialization			
Kotak Mahindra Bank	Financialization			
Ping An Insurance	Financialization			
Samsung Fire & Marine Insurance	Financialization			
Shinhan Financial	Financialization			
Antofagasta	Green Infrastructure			
China Resources Land	Green Infrastructure			
Mondi	Green Infrastructure			

Issuer	
NARI Technology	Green Infrastructure
Voltronic Power Technology	Green Infrastructure
Clicks	Health & Wellness
Dr Reddy's Laboratories	Health & Wellness
Kalbe Farma	Health & Wellness
Marico	Health & Wellness
Raia Drogasil	Health & Wellness
Shenzhen Mindray Bio-Medical Electronics	Health & Wellness

As at 12.31.2024

Source: RBC Global Asset Management. Based on a representative account of this strategy. Any holding less than 0.05% is not stated. Supplemental information on this page complements the "GIPS® Composite Report" appendix to these materials. Themes are determined by the portfolio manager as part of the top-down overlay of the fundamental research process. They are subject to change at any given time.



### **RBC Global Asset Management**

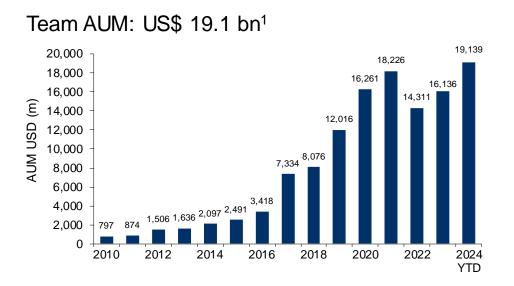
# Appendix IV

**Business Update** 

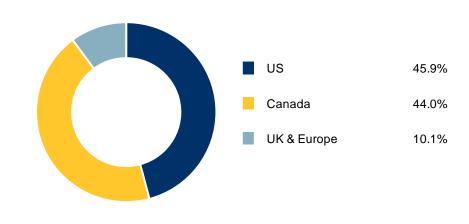


# **Emerging Markets Equity capabilities**

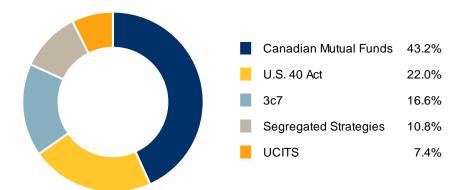
### Assets under management



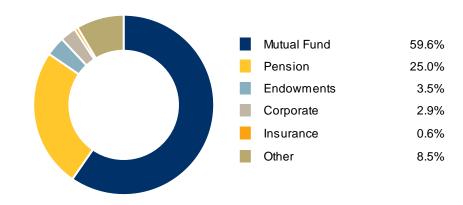
### By investor region<sup>2</sup> (AUM %)



By vehicle type<sup>1</sup> (AUM %)



By investor type<sup>2</sup> (AUM %)



As of 12.31.24 Source: RBC Global AssetManagement



<sup>&</sup>lt;sup>1</sup>AUM includes all accounts managed by the RBC Emerging Markets Equity team. This includes accounts which do not appear in the composite. A portion of assets from the Multi-Strategy Equity composite are already accounted for in EME, Small Cap, and Value composites. <sup>2</sup>Graphs provided exclude EM Multi-strategies, EM concentrated and EM SRI strategies.

# RBC Global Asset Management

## **Emerging Markets Equity capabilities**

	EM Equity	EM Small Cap Equity	EM Value Equity	EM Equity Focus	EM ex-China Equity
Lead manager	Philippe Langham	Guido Giammattei	Laurence Bensafi	Philippe Langham Christoffer Enemaerke	Philippe Langham Veronique Erb Ashna Yarashi-Shah
AUM	\$13,780m	\$520m	\$1,182m	\$1,760m	\$472m
Benchmark	MSCI Emerging Markets Net Index	MSCI Emerging Markets Small Cap Net Index	MSCI Emerging Markets Net Index	MSCI Emerging Markets Net Index	MSCI Emerging Markets ex-China Net Index
Objectives	3% outperformance of benchmark before fees	3% outperformance of benchmark before fees	3% outperformance of benchmark before fees	3.5% outperformance of benchmark before fees	3% outperformance of benchmark before fees
Strategy launch	April 2010	July 2013	July 2013	December 2018	March 2020
Team location	London	London	London	London	London
Vehicles	Segregated Account, SICAV, US '40 Act Fund, US 3C7, Canadian Mutual Fund	Segregated Account, SICAV, Canadian Mutual Fund	Segregated Account, SICAV, US '40 Act Fund, Canadian Mutual Fund	Segregated Account, SICAV, US 3C7, CIT, Canadian Mutual Fund	Segregated Account, SICAV, US 3C7, US '40 Act Fund, Canadian Mutual Fund

RBC

### **RBC Global Asset Management**

# Appendix V

Firm Slides



# Our clients' challenges, concerns and requirements



- Paying active management fees for alpha—not beta
- Less-volatile strategies for more aggressive asset classes
- Consolidating relationships without sacrificing specialization
- Avoiding steep drawdowns that can derail performance
- Strategies that exploit opportunities in today's markets



# Specialized teams around the globe offering access to multiple investment capabilities



As of 12.31.24



<sup>&</sup>lt;sup>1</sup> AUM includes US\$5.2B+ in portfolio assets managed by unaffiliated investment advisers based on models provided by RBC Global Asset Management (RBC GAM) entities. Figures updated quarterly

# Our value proposition

**Specialized teams** Acute awareness of risk **High-conviction portfolios Differentiated portfolios** Focus on meeting or beating **Potential for higher** based on the benchmark while seeking to alpha-generation with skill-based security selection avoid steep drawdowns lower portfolio volatility



# Key investment strategies



### Key equity investment strategies

#### **US** equity

#### Core

- · US Small Cap Core
- US Microcap Core

#### Value

- · US Small Cap Value
- US Microcap Value

#### Growth

- · US Small Cap Growth
- · US SMID Cap Growth

#### **Non-US equity**

#### **Emerging Markets**

- Emerging Markets Equity
- · Emerging Markets Focus Equity
- Emerging Markets Small Cap Equity
- · Emerging Markets Value Equity
- · Emerging Markets ex-China

#### International/Global

- · International Equity
- · International Focus
- · International Small Cap Equity
- Global Focus
- Global Leaders
- · Fossil Fuel-Free

#### Asia & Pacific

- · Asia ex-Japan
- · China Equity
- · Japan Equity



### Key BlueBay fixed income investment strategies

#### **US Fixed** Income

- · High Yield
- · Short Duration
- Ultra Short Duration
- Money Markets
- Core Plus
- Unconstrained
- Access Capital
- Impact Bond

#### **Emerging Market Debt**

- · Hard Currency
- Select
- Unconstrained
- · Credit Alpha
- · Illiquid Credit

#### **Global Leveraged** Finance

- · Event Driven Credit
- · Developed Market Special Situation

### Grade

- · Global Credit Alpha

### **Global Investment**

- Long Short
- · Global Sovereign Opportunities

#### Securitized Credit

· Global Securitized Credit

Convertibles

 Global Convertibles

#### Multi Asset Credit

- · Multi Asset Credit
- · Diversified Alternative Credit





Phil Langham
33 years of experience
Managing Director and Senior Portfolio Manager, Head of Emerging Markets Equities

Phil is a managing director, and a senior portfolio manager heading the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Ltd. Prior to joining the firm in 2009, he was head of Global Emerging Markets at the asset management division of a large European bank. Phil was previously based at another global financial services firm in Zurich for four years as director and head of Emerging Markets and Asia in their multi-asset class division. His experience also includes managing global emerging markets, Asian, Latin American, and U.S. portfolios for nine years at a sovereign wealth fund. Phil started his career in the investment industry in 1992. Phil holds a Bachelor of Science in Economics from the University of Manchester. He is also a Chartered Professional Accountant and a Chartered Accountant.



Laurence Bensafi, CFA
27 years of experience
Managing Director & Portfolio Manager, Deputy Head of Emerging Markets Equities

Laurence is a managing director, and a portfolio manager and deputy head on the RBC Emerging Markets Equities team at RBC Global Asset Management (UK) Limited. Prior to joining the firm in 2013, she headed the Emerging Markets team of a leading U.K. asset manager. In this role, Laurence was responsible for managing Asian and global emerging market income strategies, and developing quantitative stock selection and environmental analysis models. She began her career in the investment industry in 1998 as a quantitative analyst at a major financial services company, where she supported European and global equity portfolio management by developing quantitative models to assist in the portfolio construction and security selection process. Laurence holds a Magistère d'Économiste Statisticien and a D.E.S.S. Statistique et Économétrie from Université de Toulouse. She is also a CFA® charterholder.





Guido Giammattei 27 years of experience Portfolio Manager

Guido is a portfolio manager and head of research on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited. In this role he is responsible for research on Taiwan and Central and Eastern Europe. Prior to joining the organization in 2010, Guido worked as an emerging markets portfolio manager and also as an equities analyst at a U.K.-based asset management firm, specializing in global emerging market strategies. He had previously worked at a global asset management firm as a securities analyst, where he progressed to become a junior portfolio manager. Guido began his career in the investment industry in 1998 as an equity and derivatives trader in Italy. Guido holds an MBA from Boston College's Carroll Graduate School of Management and a Bachelor of Science in Economics from Universita' Cattolica Del Sacro Cuore.



Veronique Erb
24 years of experience
Portfolio Manager

Veronique is a portfolio manager on the RBC Emerging Markets Equity team at RBC Global As

Veronique is a portfolio manager on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited and focuses on research on Southeast Asia and Saudi Arabia. Prior to joining the firm in 2015, Veronique was at a large independent brokerage and investment group in Asia, where she was responsible for Asian ex-Japan equities for 15 years. During this time, she developed significant expertise in Asian equities, as well as a deep understanding of the region's corporate culture and economic development. Veronique began her career in the investment industry in 2000. Veronique holds a Master of Science in Finance from the University of London's Cass Business School, as well as a Bachelor of Science in Economics and German from the University of Surrey.





Richard Farrell, CFA
18 years of experience
Portfolio Manager

Richard is a portfolio manager on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited and is responsible for research on China. Prior to joining the firm in 2013, he spent three years at a major U.K. asset manager providing fundamental equity analysis in the energy and materials sectors within global emerging markets. Richard began his career in the investment industry in 2005 as an equity analyst in the mergers and acquisitions team of a large multinational bank. Richard holds a Master of Science in Investment Management from the University of London's Cass Business School, as well as a Bachelor of Science in Business and Finance from King's College London, in the U.K. He is also a CFA® charterholder.



Christoffer Enemaerke, CFA
14 years of experience
Portfolio Manager

Christoffer is a portfolio manager on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited. In this role, he is responsible for research on Latin America. During his tenure at the organization, Christoffer has also specialised on India, China, and Taiwan. He assumed this role in 2018, having earlier worked as an associate portfolio manager on the same team for two years. Prior to joining the firm in 2013 as an investment analyst, he worked as a graduate trainee and research associate at the investment management division of a Nordic-based financial services group in Copenhagen. Christoffer started his career in the investment industry in 2010. Christoffer holds a Master of Science in Finance and Accounting and a Bachelor of Science in Business Administration and Economics from the Copenhagen Business School. He is also a CFA® charterholder.





Ashna Yarashi-Shah, CFA
12 years of experience
Portfolio Manager

James Bateson 7 years of experience

Ashna is a portfolio manager on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited. In this role, she is responsible for research on the Indian subcontinent. Prior to joining the firm in 2017 as an emerging markets equity product specialist, she worked in equity sales at a large global financial institution, covering the Asia Pacific region. During her time there, Ashna was also a member of the content development team for the European, and Europe, Middle East and Africa (EMEA) regions. She began her career in the investment industry in 2012. Ashna holds a Bachelor of Science in Statistics, Economics and Finance from University College London.



Portfolio Engineer

James is a portfolio engineer on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited, responsible for enhancing the team's data analysis, portfolio construction and risk management capabilities. He initially joined RBC in 2017, which is when he started his career in the investment industry, for the Graduate Rotational Program. Over the two years of the program, James completed

rotations with RBC Wealth Management, BlueBay Asset Management, and the RBC Global Equities team before joining his current team in



2019. James holds a Master of Science in Geography with Quantitative Research Methods from the University of Bristol.



Angel Su
5 years of experience
Associate Portfolio Manager

Angel is an associate portfolio manager on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited, assuming this role in 2023. She works closely with portfolio managers to support both top-down and bottom-up research. Before joining the organization in 2019, Angel completed a number of internships in Hong Kong, which included roles at a global assurance, tax, and consulting services firm, a U.S. management consulting firm, and a major Chinese firm offering investment banking and securities brokerage services. She started her career in the investment industry in 2019. Angel holds a Global Masters in Management with a focus on International Management from the London School of Economics and the University of St. Gallen. She also holds an MA (Hons) in Finance and Business from the University of Edinburgh.



Will Hayes
9 years of experience
Senior Analyst

Will is a senior analyst on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited, working closely with portfolio managers to support both top-down and bottom-up research. He assumed this role in 2023 after working as an analyst and earlier as a cover for the team's product specialist. Will joined the firm in 2019 as a client services manager, where he was responsible for managing and developing relationships with existing institutional clients. Will was previously a client relations manager at a U.K. pension pool, where he looked after the pool's relationships with local authority clients. He had earlier worked as a senior analyst at an asset management research firm, where he worked closely with institutional investors and alternative funds. Will started his career in the investment industry in 2015. Will holds a Bachelor of Arts in French and Latin from University College London, U.K.



# Biographies



Dijana Jelic
13 years of experience
Product Specialist

Dijana is a product specialist on the RBC Emerging Markets Equity team at RBC Global Asset Management (UK) Limited. Prior to joining the firm in 2018, she worked as a vice president at an international bank, where she spent six years in the managed investments and investment marketing businesses, focusing on the positioning of investment capabilities and thought leadership, having earlier worked in an investment advisory role at a global accounting firm. Dijana began her career in the investment industry in 2011. Dijana holds a Bachelor of Arts in Art History from the University of Warwick, as well as an Investment Management Certificate.



Alissa Howard
14 years of experience
Institutional Portfolio Manager

Alissa is an institutional portfolio manager at RBC GAM specializing in emerging market equity strategies. In this role, she leads product management efforts for our emerging market equity suite while serving as a product specialist for our client service efforts. Alissa works closely with the portfolio management teams to help ensure the integrity of the investment philosophy and process and adherence to client objectives. Prior to joining RBC GAM in 2020, she was a research consultant at a Boston-based investment consulting firm, responsible for conducting manager due diligence on hedge fund and multi-asset strategies for institutional investors while aiding in thematic research and client portfolio construction. She began her career in the investment industry in 2011. Alissa holds a Bachelor of Arts in Economics from Hobart and William Smith Colleges, in the U.S.



# GIPS® Composite Report

# **Emerging Markets Equity**

Composite name: RBC GAM Emerging Markets Equity (USD)

Inception date: April 1, 2010

Benchmark: MSCI Emerging Markets Total Return Net Index

Currency: USD

#### **Annual returns**

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Year end	Composite gross return (%)	Composite net return (%)	Benchmark return (%)	Composite 3 yr std dev (%)	Benchmark 3 yr std dev (%)	Number of portfolios	Internal dispersion (%)	Composite assets (millions)	Firm assets (millions)
2024	7.71	6.74	7.50	17.30	17.50	12	0.29	13,608.8	479,853.0
2023	12.79	11.78	9.83	16.55	17.14	12	0.16	12,175.7	427,022.8
2022	-13.73	-14.50	-20.09	18.93	20.26	12	0.17	10,711.9	385,022.7
2021	-3.71	-4.57	-2.54	16.76	18.33	14	0.50	14,196.0	481,049.3
2020	17.98	16.93	18.31	17.75	19.60	14	0.51	13,532.5	424,813.8
2019	18.58	17.52	18.42	12.36	14.17	13	0.44	10,321.9	361,400.0
2018	-9.71	-10.52	-14.57	13.05	14.60	10	0.62	6,795.5	305,983.2
2017	36.91	35.69	37.28	12.66	15.35	10	0.76	6,175.8	331,885.2
2016	6.33	5.38	11.19	13.35	16.07	5	0.30	2,702.9	289,538.6
2015	-8.14	-8.96	-14.92	12.11	14.06	5	0.82	1,913.7	276,979.3

### Annualized returns (%)

Composite or benchmark	QTD	YTD	1 year	3 year	5 year	7 year	10 year
Composite – Gross of fees	-8.34	7.71	7.71	1.58	3.55	3.53	5.48
Composite – Net of fees	-8.55	6.74	6.74	0.67	2.63	2.60	4.54
Benchmark	-8.01	7.50	7.50	-1.92	1.70	1.38	3.64

The GIPS® Composite Report is incomplete without the full disclosures, continued on the next page n/a = not applicable, Std dev = Standard deviation



# GIPS® Composite Report

# **Emerging Markets Equity**

Composite name: RBC GAM Emerging Markets Equity (USD)

Inception date: April 1, 2010

Benchmark: MSCI Emerging Markets Total Return Net Index

Currency: USD

Description of the Firm: For the purposes of Global Investment Performance Standards (GIPS®), RBC Global Asset Management (RBC GAM) is the asset management division of Royal Bank of Canada (RBC) that has responsibility for managing discretionary assets, and includes the following separate but affiliated subsidiaries: RBC Global Asset Management Inc. (including PH&N Institutional), RBC Global Asset Management (U.S.) Inc., RBC Indigo Asset Management Inc., RBC Global Asset Management (UK) Limited, and RBC Global Asset Management (Asia) Limited (outside of North America, RBC GAM conducts business under the brand RBC BlueBay Asset Management). RBC purchased Phillips, Hager & North Investment Management Ltd., including the assets of BonaVista Asset Management Ltd., on May 1, 2008, BlueBay Asset Management LLP on December 17, 2010, and HSBC Global Asset Management (Canada) Limited on March 28, 2024. RBC GAM's lists of composite descriptions, limited distribution pooled fund descriptions and broad distribution pooled funds are available upon request. As of December 31, 2023, the RBC GAM group of companies manages more than C\$566 billion (US\$427 billion) in a full spectrum of asset classes and strategies.

Compliance Statement: RBC GAM claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this reportin compliance with the GIPS® standards. RBC GAM has been independently verified for the periods January 1, 2002 through December 31, 2023. The verification report(s) is/are available upon request. A firm that claims compliance with the GIPS® standards must establish policies and procedures for complying with all the applicable requirements of the GIPS® standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS® standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. The Emerging Markets Equity (USD) composite has been examined for the periods April 1, 2010 - December 31, 2023. The verification and performance examination reports are available upon request.

Composite Description: The Emerging Market Equity (USD) Composite includes all portfolios that invest in Emerging Market equities managed by RBC GAMdirectly. Reported in \$USD. Starting June 1, 2017 portfolios in this composite cannot hold more than 90% investment in another RBC Mutual Fund.

**Benchmark:** The benchmark is the MSCI Emerging Market net index. The Index is designed to measure the equity market performance of emerging markets. Index returns are provided for comparison purposes to represent the investment environment existing during the time periods shown. An index is fully invested, includes the reinvestment of dividends and capital gains, but does not include any transaction costs, management fees, or other costs. Holdings of each separately managed account in a composite will differ from the index. An investor may not invest directly in an index.

Gross of Fees: Gross of fees performance is presented gross of all fees, but after all trading expenses. Returns are presented net of withholding taxes on dividends, interest income and capital gains where applicable.

Net of Fees: Net of fee performance is calculated using the maximum stated annual fee of 0.90% calculated and applied monthly.

Performance Calculations: Results are based on all fully discretionary accounts meeting the composite definition, including those accounts no longer with the firm. Returns are shown in U.S. Dollars, and include the reinvestment of all income. Performance shown for the Emerging Markets Equity Composite is based on information generated by RBC Global Asset Management's internal performance systems, which may differ from the performance shown in official books and records of certain investment funds which form a part of the composite. Official books and records for certain investment funds which form a part of the composite include the impact of a fair value for market timing that is applied to certain securities as of the close of trading for the fund. For the purposes of calculating the Emerging Markets Equity Composite, we prepare a separate performance stream for such funds that eliminates the impact of this fair value adjustment. This second performance stream is used to calculate performance of the composite in an effort to better align the methodology for calculating composite performance with the methodology applied to calculate the benchmark. Additional information regarding policies for valuing investments, calculating performance, and preparing GIPS® Report is available upon request. Past performance is not indicative of future results.

Composite Dispersion: The composite dispersion of annual returns is indicated by the performance of individual accounts representing the equal weighted standard deviation of returns. Dispersion of returns is calculated for portfolios included in the composite for the full year. Calculations are based on gross portfolio returns if gross composite returns are presented, then net portfolio returns are used in the composite dispersion calculation.

3-Year Standard Deviation: Periods with less than 3 years of data will show "n/a". Calculations are based on gross composite returns, if gross composite returns are presented. If only net composite returns are presented, then net composite returns are used in the calculation.

**Derivatives, Leverage and Short Positions:** The portfolios may use derivatives for hedging purposes, and may also use derivatives such as options, futures, forwards and swaps for non-hedging purposes as a substitute for direct investment, as long as the portfolio's use of derivatives is consistent with its investment objectives. Currency hedging is used primarily as a risk management tool to limit the volatility of portfolio returns and may be used tactically to enhance returns. Currency hedge ra tios can range between 0-100%, depending on asset class and mandate. No leverage has been used in any of the portfolios contained in the composite.

Fee Schedule: The standard management fee schedule for the portfolios in this composite: 0.90% per annum on the first \$25 million, 0.80% per annum on the next \$25 million, 0.75% per annum on the next \$50 million and 0.70% per annum on amounts over \$100 million. This may not represent the actual fee charged to the client. The fee schedule is subject to change.

Minimum Account Size: Currently there is no minimum account size in order to be included in this composite. Prior to January 01, 2012 an account must be at least \$25,000,000 to be included.

Creation Date: This composite was created on July 30, 2013 and has an inception date of April 1, 2010.

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Portfolio holdings and characteristics are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy. Please see the attached GIPS® Composite Report for more information.

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# **Boston Public Library**

# **Emerging Markets Growth**

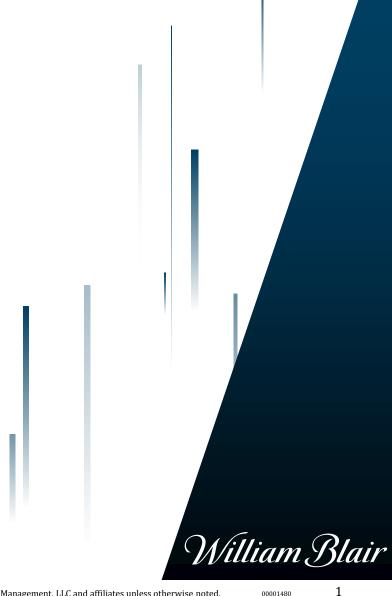
April 01, 2025

### Vivian Lin Thurston, CFA, Partner

Portfolio Manager vthurston@williamblair.com

### Madelyn Schiller, CFA

**Business Development** mschiller@williamblair.com



# The William Blair Mission: Empower. Deliver. Engage.

### **Empower Colleagues**

- Entrepreneurial investment-led culture encourages diverse viewpoints
- Cross-sectional teams answer key questions and drive strategic imperatives
- Mentorship, professional development, generous educational assistance program reinforce intellectual curiosity
- BrightScope® has ranked the William Blair 401(k) and Profit-Sharing Plan in the top 10-15% of its peer group over the last two years

### **Deliver Client Success**

- Private partnership structure aligns interests with clients
- Demonstrated track record of value-added performance
- Clients engage directly with decision makers, developing customized solutions to meet their specific objectives





### **Engage In Our Communities**

- Our firm has a culture of global philanthropy and volunteerism, and our colleagues are actively engaged in the community through leadership and volunteer roles
  - The firm, foundation, and employees supported over 800 global nonprofit organizations
- Our employees are empowered to engage in our communities through volunteer rewards, a volunteer paid day off program, and a nonprofit board placement program
- Nearly half of the firm's U.S.-based partners serve on non-profit boards, demonstrating leadership through their actions
- Each employee may receive matching gifts on an annual basis: \$1,500 via employee match program and \$10,000 in board match program for those who serve on non-profit boards

### In 2024, Our Colleagues:

- Contributed over 500 hours of skills-based volunteerism with nextgen wealth earners and entrepreneurs via the William Blair Capital Collective
- Volunteered over 14,000 hours through Volunteer Paid Day Off, nonprofit board service, and other personal volunteering
- Exhibited leadership and commitment to service, with twenty-four colleagues joining non-profit boards in their communities

William Blair Investment Management was listed among investment management firms with 100 to 499 employees. The list was published in the December 11th issue of P&I and was based on employee surveys and an employer questionnaire. Pensions & Investments partners with Best Companies Group to conduct the survey and to tabulate the survey's rankings. William Blair Investment Management pays a licensing fee for unlimited rights to use the Pensions & Investments digital reprint and the multiyear logo badge.



# Holistic, Investment-Led Integration of Financially Material ESG Factors

### Commitment

- William Blair Investment Management has been a PRI signatory since 2011
- Member of the International Corporate Governance Network; signatory of stewardship codes in UK, Japan, and Korea
- ESG Leadership Team comprises investment professionals across our global equity, U.S. equity, and Emerging Markets Debt teams
- Natural alignment with our quality-focused investment philosophies

### Integration

- Investment opportunities and risks holistically incorporate financially material ESG factors
- Proprietary framework focuses analysis on most relevant industry- or country-specific factors
- Proprietary Summit research platform facilitates seamless integration and analysis

#### Signatory of:



# William Blair ESG Materiality Framework Topic Structure

#### Environmental

- · Climate Change
- Natural Resources Stewardship
- Pollution & Waste

#### Social

- Human Capital
- · Customer Well-Being
- · Supply Chain Mgmt.
- Community Relations

#### Governance

- Corporate Governance
- Corporate Culture

#### **Country ESG Factors**

- · Political stability and Institutional strength
- Regulatory effectiveness, level of corruption, and rule of law
- Health, safety, education, technology and rights
- Climate change performance, environmental health, and ecosystem vitality

Our full ratings and more information on our ESG resources are available at <a href="https://active.williamblair.com/esg/">https://active.williamblair.com/esg/</a> or by using the QR code below.

William Blair Investment Management integrates financially material environmental, social, and governance (ESG) factors alongside traditional financial metrics in our fundamental research as part of the holistic assessment of a company's risks and opportunities. ESG integration alone does not change a strategy's investment objective, exclude specific types of companies or constrain a strategy's investable universe. ESG integration requires qualitative determinations and is often subjective by nature, and there can be no assurance that the analysis will produce its intended results.





# **Diverse Thought Drives Strong Outcomes**

### **Recruiting Strategy**

- Diverse candidate and interviewer slates
- · Gender-neutral job descriptions
- · Always Be Recruiting networking casts a wide net
- Asset Management Diversity Accelerator (AMDA)

### **Industry Outreach**

- Purposefully partner with Diverse Professional Organizations for networking, recruiting and to raise awareness
- · Collaborate with other industry participants to promote D&I

#### **Internal Initiatives**

- Business Resource Groups lead initiatives and support colleagues
- Mentoring program provides 1x1 networking and feedback

#### Results

- Diverse Leadership Teams: IM led by women for over 20 years
- From 12/31/17 to 12/31/24:1
  - 29.2% of new hires are racially/ethnically diverse (R/ED) and 45.2% are women
  - Women represent 40.0% of IM
  - R/ED talent increased from 15.2% to 25.3%
- Of 8 Mutual Fund board members, 5 are women and 1 is R/ED
- Received 100% score on the Human Rights Campaign's 2025 Corporate Equality Index.<sup>2</sup> This is the fourth consecutive year William Blair has received a top score.









<sup>&</sup>lt;sup>2</sup>Human Rights Campaign's Corporate Equality Index is the national benchmarking survey and report measuring company policies and practices related to LGBTQ workplace equality.



<sup>&</sup>lt;sup>1</sup>Includes dedicated resource groups. R/ED excludes non-US employees. Mutual fund board member data effective October 2024.

# William Blair Investment Management: Active Never Rests

### **Investment Management**

- 100% active-employee owned
- Entrepreneurial, investment-led and client-focused culture
- Long-term expertise across asset classes globally
- Holistic, investment-led ESG integration
- 333 employees (55 partners)\*
- 106 investment professionals
- \$71.6 billion under management

### **Tenured & Experienced Teams**

Average Years of Experience:

### Portfolio Managers

26 In the industry

12 At WB

### **Analysts**

18 In the industry

10 At WB

### Sophisticated Global Investor Base



### **Core Investment Tenets**



Active Management



Long-Term Focus



Orientation

Fundamental Disc

**☑←**☐

Disciplined

Process

Research Intensive

Data as of December 31, 2024. \*Partners as of January 13, 2025.

<sup>1</sup>Wo Bai Business Consulting (Shanghai) Co., Ltd. is an affiliated company solely providing research to other William Blair affiliates on a consultative basis.

<sup>2</sup>In Singapore, this material is provided for your use only by William Blair International (Singapore) Pte. Ltd. (Registration Number 201943312R). William Blair International (Singapore) Pte. Ltd. is regulated by the Monetary Authority of Singapore under a Capital Markets Services License to conduct fund management activities. By accepting this material, you represent that you are a non-retail investor and that you will not copy, distribute or otherwise make this material available to any person.

Alpha

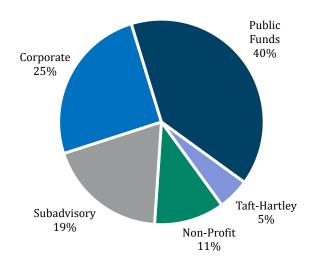
Seeking

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# Sophisticated Investor Base

# Balanced Mix of Institutional Clients Representing \$71.6 Billion In Assets



#### Corporate

- AT&T
- Boeing Company
- Caterpillar Inc.
- Fortune Brands
- · Liberty Mutual Insurance
- Major League Baseball Office of the Commissioner
- PGA TOUR, Inc.
- · VBV-Pensionskasse AG

#### **Endowment/Foundation**

- Carleton University
- The College of William and Mary Foundation
- McGill University
- Toledo Museum of Art
- · Truth Initiative
- · University of California, Irvine Foundation
- University of Ottawa

#### Healthcare & Not-for-Profit

- · Advocate/Aurora Healthcare
- Bronson Healthcare
- · The Carle Foundation
- · Clerics of St. Viator
- · Intermountain Healthcare
- Munson Healthcare
- OhioHealth
- · Rush University Medical Center

#### Sub Advisory

- · BMO Private Investment Counsel Inc.
- Cazenove Capital
- Charles Schwab
- · Columbia Threadneedle Investments
- Fidelity
- GuideStone Capital Management, LLC
- Hargreaves Lansdown Asset Management (HLFM)
- · Lombard Odier Darier Hentsch
- Northern Trust
- Prudential
- SEB Group
- UBS

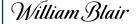
#### Public Plans & Taft-Hartley

- Alameda County Employees Retirement System
- Bearspaw First Nation
- City of Lansing ERS & PFRS
- · City of Orlando Pension Plans
- Civil Service Superannuation Board of Manitoba
- Colorado Public Employees Retirement Association
- Contra Costa County Employees' Retirement Association
- County Employees' Annuity & Benefit Fund of Cook County • El Paso Firemen & Policemen's Pension Fund
- Employes' Retirement System of the City of Milwaukee
- Firemen's Annuity & Benefit Fund of Chicago
- Florida State Board of Administration
- IAM Labour-Management
- · Illinois Firefighters' Pension Investment Fund
- Illinois Municipal Retirement Fund
- Illinois Police Officers' Pension Investment Fund
- · Iowa Judiciary

- · IWA-Forest Industry Pension Plan
- Laborers' Annuity & Benefit Fund of Chicago
- Municipal Police Employees' Ret. System of Louisiana
- · North Dakota State Retirement Board
- Nova Scotia Health Employees' Pension Fund
- Orange County ERS
- Oregon State Treasury
- Policemen's Annuity & Benefit Fund of Chicago
- Richmond Retirement System
- Sacramento County ERS
- San Diego City Employees' Retirement System
- Teachers' Retirement System of Louisiana
- · Toronto Transit Commission
- Tulare County Employees' Retirement Association
- United Association Local 46 Toronto
- Washington State Investment Board

As of December 31, 2024.

This list is comprised of representative clients that have either given William Blair express permission to use their names or for whose services we provide have been made part of the public domain. Inclusion indicates the scope of clients served but is not to be construed as an approval or disapproval of William Blair or its advisory services.



# Global Portfolio Strategies

Our single, integrated investment platform is directed toward achieving portfolio objectives across all of our strategies

		Global	International	<b>Emerging Markets</b>
		Global Leaders \$2.0 billion	International Leaders \$10.3 billion	Emerging Markets Leaders \$2.6 billion
Leaders	High quality portfolios of leading companies across the corporate life cycle	Global Leaders Concentrated \$6 million	International Leaders Concentrated \$65 million	Emerging Markets Leaders Concentrated \$112 million
		Global Leaders Sustainability \$92 million	International Leaders ADR \$170 million / \$362 million AUA <sup>1</sup>	\$112 million
All Cap	Broad exposure across all market caps		International Growth	Emerging Markets Growth \$8.1 billion
Ан сар	Broad exposure across an market caps		\$9.6 billion	Emerging Markets Ex China Growth \$416 million
Small Cap	Broad exposure to small cap companies		International Small Cap Growth I	Emerging Markets Small Cap Growth \$1.1 billion
China	Broad exposure to high quality China-			China A-Shares Growth \$7 million
	domiciled companies			China Growth \$2 million

Assets as of December 31, 2024.

<sup>1</sup>Assets Under Advisement (AUA) consists of assets managed by third parties in accordance with model portfolios provided by William Blair. William Blair does not have investment discretion or trading authority over these assets.

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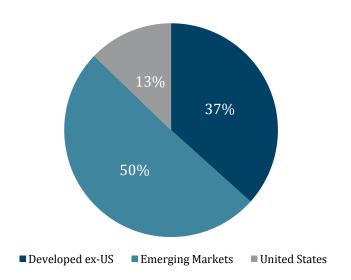
# William Blair Emerging Markets

### **Deep-Rooted Experience**

- Managing Emerging Markets strategies since 1996 with the same philosophy and process
- Involved in China A shares since 2012 with research presence in Shanghai
- Currently manage \$12.0 billion in dedicated Emerging Markets strategies and \$16.2 billion in Emerging Markets securities across Global Equity Team's strategies

### Emerging Markets' Significant Role in Eligibility List<sup>1</sup>

Emerging Markets make up a disproportionate percentage of our quality growth universe



As of December 31, 2024.

<sup>&</sup>lt;sup>1</sup>Based on number of companies in the Global Eligibility List. Eligibility List data source: William Blair and MSCI ACWI IMI Index. Calculated in FactSet. Strategy availability may be limited to certain investment vehicles; not all investment vehicles may be available to all investors. Assets shown in U.S. dollar.



# **Emerging Markets Growth**

Broad emerging markets portfolio of 120-175 stocks diversified across market cap, region, industry and corporate lifecycle with a structural weight to small cap companies

### **Portfolio Managers**



Todd M. McClone, CFA, Partner Portfolio Manager
32 years industry experience
24 years with William Blair
B.B.A. and B.A., University of
Wisconsin-Madison



Casey Preyss, CFA, Partner
Portfolio Manager
25 years industry experience
24 years with William Blair
M.B.A., University of Chicago
B.S.B.A., The Ohio State University



Vivian Lin Thurston, CFA, Partner Portfolio Manager
29 years industry experience
10 years with William Blair
M.A. & M.S., University of Illinois
LL.B., Peking University

	<b>Emergent Growth</b>	<b>Expanding Growth</b>	<b>Sustained Growth</b>
	Exposure Range 0-40%	Exposure Range 40-80%	Exposure Range 20-40%
	Trent  MercadoLibre  BYD	Trip.com Tencent TSMC	Mahindra & Mahindr Yum China Hon Hai Precision
Earnings Growth	34.5%	21.7%	14.0%
Reinvestment Rate	18.8%	11.2%	9.4%
CFROIC	18.3%	22.1%	12.2%

#### As of December 31, 2024.

The data shown above is based on the strategy's representative portfolio. Characteristics reflect medians. Holdings include cash. Individual securities listed in this report are for informational purposes only. Holdings are subject to change at any time. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities listed. The above securities do not represent all of the securities purchased, sold or recommended for all William Blair clients. Lifecycle category assignments are based on analysts' opinions of companies using both qualitative and quantitative characteristics. Lifecycle categories are provided for illustrative purposes only and are not intended as investment advice or as projections of future returns. Top three holdings by weight are listed for each lifecycle category. Characteristics calculated by William Blair.

# Global Investment Team — One Integrated Global Platform

#### Portfolio Management<sup>1</sup>



Alaina Anderson, CFA, Partner (19/24) International Leaders/ADR



Paul Birchenough, Partner (1/21) **Emerging Leaders** 



Simon Fennell, Partner (14/32) International Leaders, International Growth International Small Cap Growth



Hugo Scott-Gall, Partner (6/31)3 Global Leaders, Emerging Leaders



Ken McAtamney, Partner (20/35) Global Leaders, International Leaders International Growth



Todd McClone, CFA, Partner (24/32) Emerging Markets Growth, Emerging Markets ex China Growth, **Emerging Markets Small Cap** 



D.J. Neiman, CFA, Partner (23/26)<sup>3</sup> International Small Cap Emerging Markets Small Cap



Casev Prevss, CFA, Partner (24/25) Emerging Markets Growth,



Andrew Siepker, CFA, Partner (19/20) International Growth



Ian Smith, Partner (1/24) **Emerging Leaders** 

**Emerging Markets Small Cap** 



Vivian Lin Thurston, CFA, Partner (10/29)

Emerging Markets Growth, Emerging Markets ex China Growth, China

#### Global Fundamental Research Analysts<sup>2</sup>

#### Consumer







Daria Fomina (2/15) Adam Dettmer, CFA (8/11) Michael Patchen, CFA (6/13) Emily Moore, CFA (7/10) Grant Parsons, CFA, CPA (5/9) Hongjia Chen (1, 1)

#### **Financials**





Daniel Hill, CFA (20/20) Esteban Gonzalez-Rosell (5/15) Kalpit Shah, CFA (5/10) Paul O'Toole, CFA (4/7) Madeline Lunn (1/1)

#### Healthcare







Thomas Sternberg, CFA, Partner (20/22) Richard Ravenwood, Ph.D. (14/14) Ionathan Kaufman, CFA, CPA (9/9) Justin Lin, CFA (4/4)

#### Industrials, Energy & Materials











Monika Budyn (12/16) Pierre Horvilleur (3/23)4 Anil Daka, CFA, Partner (14/17) Ben Loss, CFA (13/14) **Brvan Shea** (16/16) Stephen Van Buren, CFA (2/5) Koray Yesilli, CFA (3/3) John Heilenbach (1/3)

#### Information Technology









**Kyle Raver** (<1/26) Greg Scolaro, CFA, CPA (11/11) Drew Buckley, CFA, CPA, Partner (16/18) Jayesh Kannan, CFA (6/12) Anshuman Anand (<1/6) Nupur Balain, CFA (4/4) Haley Gaffner (1/1)

#### U.S. Specialist



Gurvir Grewal (6/10)

#### China Specialist



Sophie Gao, CFA (4/12)

#### Strategy Research









Hugo Scott-Gall, Partner (6/31)<sup>3</sup> Olga Bitel, Partner (15/22) Andrew Wickman, CFA (10/14) Alexa Davis (7/10)

#### Systematic Research









Spiro Voulgaris, Partner (17/34) Andrew Kominik, CFA (22/25) Darragh Grogan (17/19) Caroline Karanu (1.8) Scott Akeson (10/10) Kathy Matos (18/18)

#### Sustainability Research





Blake Pontius, CFA  $(19/27)^5$ Greg Bragg, CFA (<1/5)

#### Portfolio Specialists









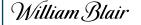


Ryan Dimas, CFA, CAIA, Partner (25/30) Romina Graiver, Partner (13/26) Jeremy Murden, CAIA (14/20)<sup>6</sup> Emily George (13/14) Kyle Concannon, CFA, CAIA (9/17) Jennifer Stange (10/14) Amanda Schwartz (10/16)

Global Trading — Based In Chicago & London

Italics indicate Associate role. As of February 2025. (Years at William Blair/Years in Industry)

<sup>1</sup>Portfolio Management team average 15 years at William Blair and 27 years in the industry. <sup>2</sup>Global Fundamental Research Analysts average 10 years at William Blair and 15 years in the industry. 3D.J. Neiman and Hugo Scott-Gall also serve as Co-Directors of Research. 4 3 years of experience at William Blair from 2010 to 2013. Rejoined the firm in November 2024. 5Blake Pontius is Director of Sustainable Investing for Investment Management. 610 years of experience at William Blair from April 2007 to 2016. Rejoined the firm in July 2021.



# **Investment Philosophy**

We believe an integrated investment platform directed towards identifying companies with strong corporate performance will drive superior long-term investment returns

### Sustainable Value Creation

Strong corporate performance is the driver of superior investment returns



# Holistic Perspective

Evaluating the competitive landscape within a global and inclusive framework

# Systematic Research & Tools

Integrating the art and science of investing



### Sustainable Value Creation



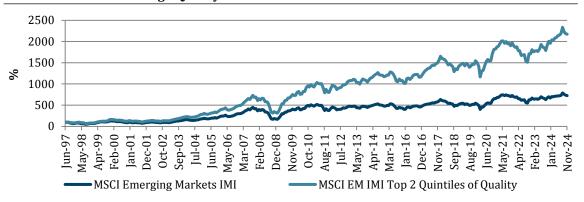
## Strong corporate performance is the driver of superior investment returns

### **Benefits of Quality Investing**

Companies with industry leading returns on capital and sustainable competitive advantages have:

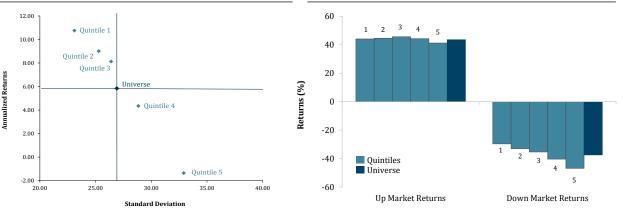
- Produced strong relative returns
- Generated attractive risk/adjusted returns
- Helped protect capital in down markets

#### **Cumulative Returns of High Quality**



### **Emerging Markets Universe by Quality Quintiles**

# **Emerging Markets Quality Universe Up/Down Market Performance**



Source: William Blair Emerging Markets Universe. Data shown for period between June 30, 1997– December 31, 2024 (Quality line chart updated through November 30, 2024). Securities are equally weighted to create hypothetical portfolios based on the criteria shown. The hypothetical portfolios are rebalanced monthly.

Past performance is not indicative of future returns. Hypothetical performance is provided for illustrative purposes only. The above performance information is based on quality scores from William Blair's proprietary model and does not in any way relate to actual results of any account or strategy. The strategy may or may not hold the companies included in the Quality quintiles shown. Hypothetical performance has inherent limitations. Specifically, hypothetical results do not reflect actual trading or the effect of material economic and market factors on the decision-making process. There is no assurance that the models will remain the same in the future. Quality is defined as those companies with good balance sheet metrics, efficiency, and higher returns. Up/down market returns based on MSCI Emerging Markets IMI Index, annualized returns using a monthly frequency.

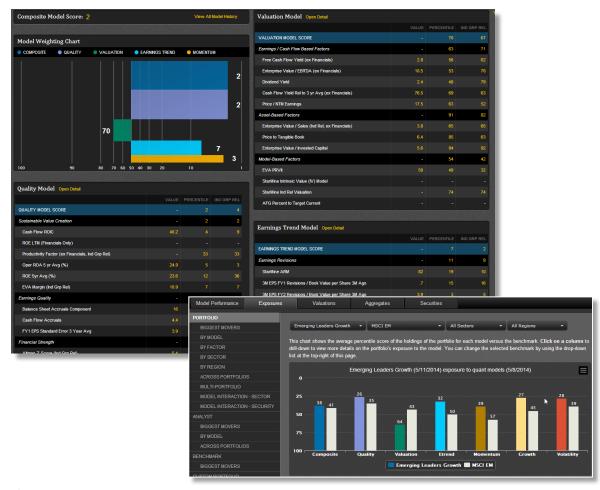


## Systematic Research & Tools

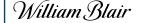
# Systematic Research & Tools

# We believe that integrating the art and science of investing is the best way to achieve desired outcomes

Quantitative models, portfolio analytics, and fundamental research are integrated within Summit, dynamically connecting all elements of our investment process.



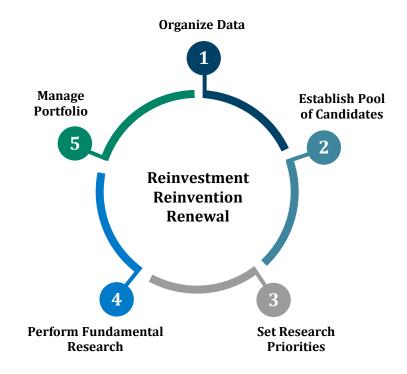
For illustrative purposes only. Not intended as investment advice.



### **Investment Process**

### Integrated Fundamental, Systematic and Strategy Research Throughout the Investment Process

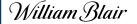
- Organize Data
  Rank order global universe of equities by fundamental and technical attributes and utilize systematic research to analyze information
- 2 Establish Pool of Candidates
  Create Eligibility List of 2,000- 2,500 companies through quantitative screens and fundamental analysis
- Set Research Priorities
  Establish Research Agenda of 30-60 companies by identifying opportunities and risks through bottom up research, top down strategy, and portfolio objectives
- 4 Perform Fundamental Research
  Analyze sustainable value creation and determine if fundamentals appear poised to change
- Manage Portfolio
  Weigh risk/reward of buy/sell decision to seek desired outcomes



# Emerging Markets Growth Portfolio Attributes As of February 28, 2025

	Emerging Markets Growth	MSCI Emerging Markets IMI Index	Difference
Quality	diowen	IMI IIIUCA	
WB Quality Model (Percentile)	26	35	
Return on Equity (%)	22.2	16.3	36%
Cash Flow ROIC (%)	24.6	19.6	25%
Debt/Equity (%)	49.9	72.5	-31%
Growth			
WB Growth Model (Percentile)	32	45	
EPS 3Y Forward CAGR (%)	21.1	16.5	28%
5-Year Historic EPS Growth (%)	16.4	11.7	40%
Reinvestment Rate (%)	15.5	10.7	44%
Earnings Trend			
WB Earnings Trend Model (Percentile)	30	44	
EPS Est Rev Breadth (%)	11.2	0.7	10.5
Valuation			
WB Valuation Model (Percentile)	73	56	
P/E (next 12 months)	16.6	12.2	35%
Dividend Yield (%)	1.6	2.6	-40%

The data shown above is based on the strategy's representative portfolio. Calculated by William Blair. Aggregate scores shown above based on William Blair's quantitative model. For individual and composite ranks, 1 is best and 100 is worst. Yield is only one component of expected performance and is not and should not be viewed as a statement of the future performance of the strategy. Please refer to the performance summary for complete performance information. The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Not intended as investment advice. The MSCI Emerging Markets IMI Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.



# **Emerging Markets Growth Composition Snapshot**

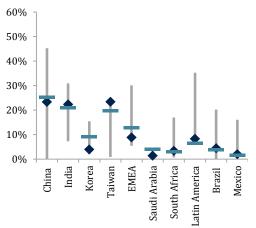
Broad emerging markets portfolio of 120-175 stocks diversified across market cap, region, industry and corporate lifecycle with a structural weight to small cap companies.

Top 10 Holdings	Sector	Country	Position Size (%)
Taiwan Semiconductor Manufacturing Co Ltd	IT	Taiwan	12.9
Tencent Holdings Ltd	Communication Svcs.	China	5.3
Alibaba Group Holding Ltd	Discretionary	China	3.6
Mercadolibre Inc	Discretionary	Brazil	3.0
Meituan	Discretionary	China	3.0
Xiaomi Corp	IT	China	2.6
Sk Hynix Inc	IT	S. Korea	2.6
Byd Co Ltd	Discretionary	China	2.3
Sea Ltd	Communication Svcs.	Indonesia	2.2
Mediatek Inc	IT	Taiwan	2.2

Benchmark	
MSCI Emerging I	Markets IMI
Maximum Position Size	7.5% or 1.5x benchmark weight
Active Share	68.9%
Number of Holdings	131
Weighted Avg. Mkt Cap (\$b)	\$129.1

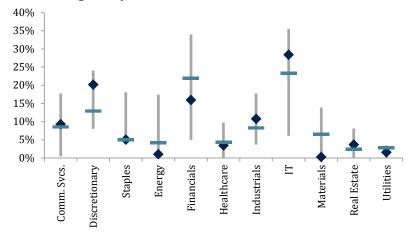
#### Regions

# Exposure to major countries typically ranges from 0.5 to 2x the benchmark weight



#### Sectors

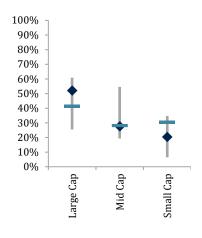
# Exposure to major sectors typically ranges from 0.5 to 2x the benchmark weight Maximum weight to any individual sector is 40%



#### Market Cap

Historic Range<sup>1</sup>

Exposure to small cap typically >10%



Current Portfolio Weight
 Current Benchmark Weight



 $<sup>^{1}</sup> Historic \, range \, dates \, back \, to \, 7/1/2005. \, Data \, as \, of \, February \, 28, \, 2025. \, Region, \, Sector \, and \, Market \, Cap \, data \, as \, of \, December \, 31, \, 2024.$ 

Sector diversification calculated in Eagle by William Blair based on Global Industry Classification Sectors (GICS). Market capitalization and geographic distribution are calculated in Eagle by William Blair. Weights may vary over time as benchmark index weights shift. Individual securities listed in this report are for informational purposes only. Holdings are subject to change at any time. The data shown above is based on the strategy's representative portfolio excluding cash. Small cap is defined as \$0-\$5 billion, mid cap \$5 billion to \$20 billion, and large cap over \$20 billion. The MSCI Emerging Markets Investable Market Index (IMI) Net is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities listed.

# Emerging Markets Growth Performance Summary As of February 28, 2025

					Annua	lized									
		•					Strategy I	nception							
Composite Performance (%)	QTD	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr	(Oct 1	96)							
Emerging Markets Growth (Gross of Fees)	-5.01	3.08	-3.12	4.93	4.87	7.63	9.5	6							
Emerging Markets Growth (Net of Fees)	-5.15	2.16	-3.99	3.95	3.85	6.55	8.4	.3							
MSCI Emerging Markets IMI Index	1.17	8.29	0.72	4.89	3.64	5.82	4.5	4							
Relative Performance (Gross of Fees)	-6.18	-5.21	-3.84	0.04	1.23	1.81	5.0	2							
Relative Performance (Net of Fees)	-6.32	-6.13	-4.71	-0.94	0.21	0.73	3.8	9							
Annual Composite Performance (%)	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Emerging Markets Growth (Gross of Fees)	12.41	12.18	-32.72	5.15	41.85	29.61	-21.05	51.19	2.93	-14.17	5.73	3.83	22.17	-15.89	24.7
Emerging Markets Growth (Net of Fees)	11.40	11.17	-33.34	4.10	40.44	28.32	-21.84	49.69	1.90	-15.02	4.68	2.80	20.95	-16.73	23.40
MSCI Emerging Markets IMI Index	7.09	11.67	-19.83	-0.28	18.39	17.64	-15.04	36.83	9.90	-13.86	-1.79	-2.20	18.68	-19.49	19.90
Relative Performance (Gross of Fees)	5.31	0.51	-12.89	5.43	23.46	11.97	-6.01	14.36	-6.97	-0.31	7.52	6.03	3.49	3.60	4.83
Relative Performance (Net of Fees)	4.30	-0.50	-13.51	4.38	22.04	10.68	-6.80	12.86	-8.00	-1.16	6.47	4.99	2.27	2.76	3.50
Annual Composite Performance (%)	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996 ¹	
Emerging Markets Growth (Gross of Fees)	79.09	-60.54	40.26	39.27	49.10	37.93	58.66	-2.70	13.75	-29.81	90.73	-18.90	5.91	1.07	
Emerging Markets Growth (Net of Fees)	77.13	-61.01	38.77	37.79	47.53	36.46	57.00	-3.77	12.52	-30.60	88.76	-19.80	4.76	0.79	
MSCI Emerging Markets IMI Index	82.36	-53.78	39.83	31.70	33.47	26.62	53.97	-6.49	-2.02	-35.31	62.63	-29.67	-19.74	-1.45	
Relative Performance (Gross of Fees)	-3.27	-6.76	0.44	7.57	15.63	11.31	4.69	3.78	15.77	5.50	28.11	10.77	25.65	2.52	

14.06

2.72

26.13

February 2025 performance is preliminary.

Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A. The benchmark that best reflects the composite's investment strategy is the MSCI Emerging Markets Investable Market Index (IMI) Net, which is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic, and political risk. Please see GIPS Composite Report in appendix for a complete description of the composite. The Emerging Markets Growth Composite included carve-out portfolios from inception through 2006.



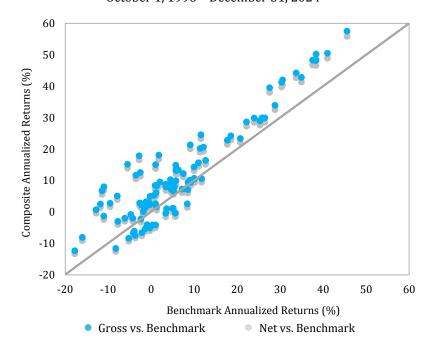
Relative Performance (Net of Fees)

2.25

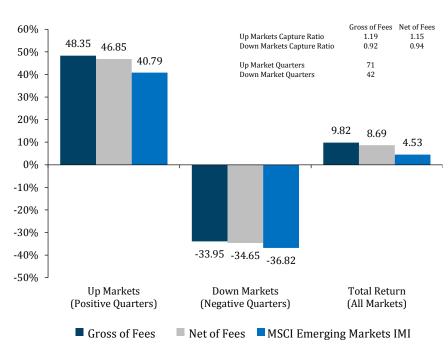
<sup>&</sup>lt;sup>1</sup>Partial year performance from October 1 to December 31, 1996.

# **Emerging Markets Growth Strategy Performance**

Rolling 3-Year Annualized Periods Since Inception (Quarterly Data)
Emerging Markets Growth Composite (USD) vs.
MSCI Emerging Markets IMI Index
October 1, 1996 – December 31, 2024



#### Composite Annualized Up/Down Market Returns (% USD) October 1, 1996 – December 31, 2024



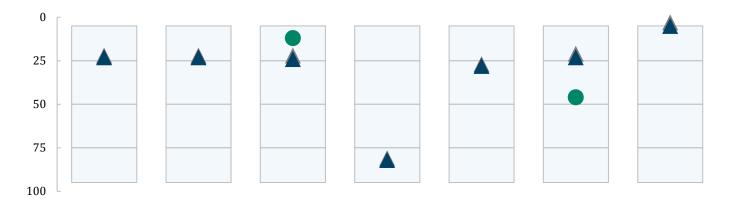
Composite Inception October 1, 1996.

Up/down market returns calculated using quarterly, annualized data.

Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A. The benchmark that best reflects the composite's investment strategy is the MSCI Emerging Markets Investable Market Index (IMI) Net, which is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic, and political risk. Please see GIPS Composite Report in appendix for a complete description of the composite. Please refer to the performance summary slide for complete performance information.



# Emerging Markets Growth Strategy Performance Statistics – Five Years Ending December 31, 2024



	Annualize	i			Annualized		Annualized						% Positive	
Nasdaq eVestment Emerging Markets All Cap Equity	Excess	Percentile	Annualized	Percentile	Standard	Percentile	Tracking	Percentile	Information	Percentile		Percentile	Excess	Percentile
Universe	Return	Rank	Alpha	Rank	Deviation	Rank	Error	Rank	Ratio	Rank	Sharpe Ratio	Rank	Returns	Rank
EM Growth Composite (Gross of fees)	2.31	23	2.62	23	18.96	24	7.96	82	0.29	28	0.12	23	61.67%	5
EM Growth Composite (Net of fees)	1.32	22	1.65	22	18.95	22	7.95	81	0.17	27	0.07	21	60.00%	3
MSCI Emerging Markets IMI Index					18.39	12					0.00	46		
Number of gross of fees constituents	40													
Number of net of fees constituents	38													

Composite inception 10/1/96. Performance shown is calculated in U.S. dollar, unless otherwise noted.

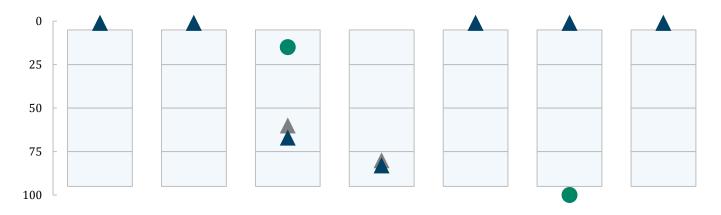
eVestment Emerging Mkts All Cap Equity – Equity products that invest primarily in small, middle, and/or large capitalization stocks in emerging market countries. The expected benchmarks for this universe include the MSCI Emerging Market Free, or IFC Investable. Managers in this category will typically indicate a "Primary Capitalization Emphasis" equal to Small, Mid, or Large Cap and a "Primary Style Emphasis" equal to Growth, Value, or Core. Peer universe performance data run for separate account vehicles only. Gross of fees performance metrics are compared against peers gross of fees data only. Net of fees performance metrics are compared against peers net of fees only.

Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. The benchmark is the Morgan Stanley Capital International (MSCI) Emerging Markets IMI Index which is an unmanaged index that includes only emerging markets. Please see GIPS Composite Report in appendix for a complete description of the composite. The Emerging Markets Growth Composite included carve-out portfolios from inception through 2006. Please refer to the performance summary slide for complete performance information.



# **Emerging Markets Growth Strategy**

# Performance Statistics - Since Inception Through December 31, 2024



	Annualized				Annualized		Annualized						% Positive	
Nasdaq eVestment Emerging Markets All Cap Equity	Excess	Percentile	Annualized	Percentile	Standard	Percentile	Tracking	Percentile	Information	Percentile		Percentile	Excess	Percentile
Universe	Return	Rank	Alpha	Rank	Deviation	Rank	Error	Rank	Ratio	Rank	Sharpe Ratio	Rank	Returns	Rank
EM Growth Composite (Gross of fees)	5.29	1	5.30	1	26.17	67	7.21	83	0.73	1	0.29	1	61.61%	1
EM Growth Composite (Net of fees)	4.16	1	4.21	1	26.11	60	7.18	80	0.58	1	0.25	1	60.18%	1
MSCI Emerging Markets IMI Index					24.51	15					0.10	100		
Number of gross of fees constituents	7													
Number of net of fees constituents	6													

Composite inception 10/1/96. Performance shown is calculated in U.S. dollar, unless otherwise noted.

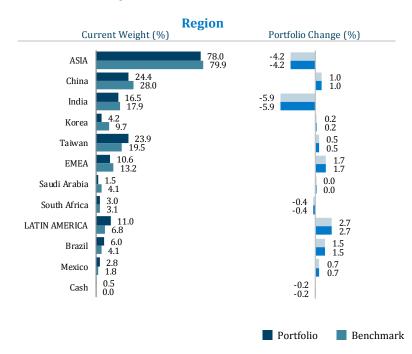
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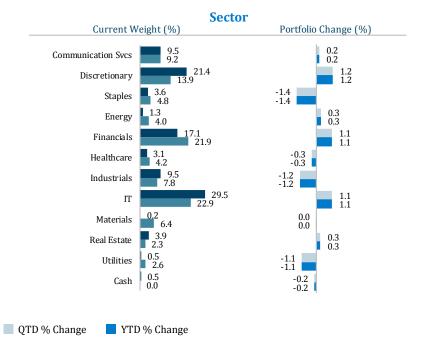
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# Portfolio Positioning – Emerging Markets Growth

# As of February 28, 2025





#### Top Portfolio Additions During the Quarter1

Security	Country	Sector	Corp Lifecycle	Trans
Alibaba Group Holding Ltd	China	Discretionary	Expanding	Buy
Bajaj Finance Ltd	India	Financials	Emergent	Buy
Netease Inc	China	Communication Svcs.	Expanding	Buy
Byd Co Ltd	China	Discretionary	Emergent	Add
Mediatek Inc	Taiwan	ΙΤ	Expanding	Add

#### Top Portfolio Reductions During the Quarter<sup>1</sup>

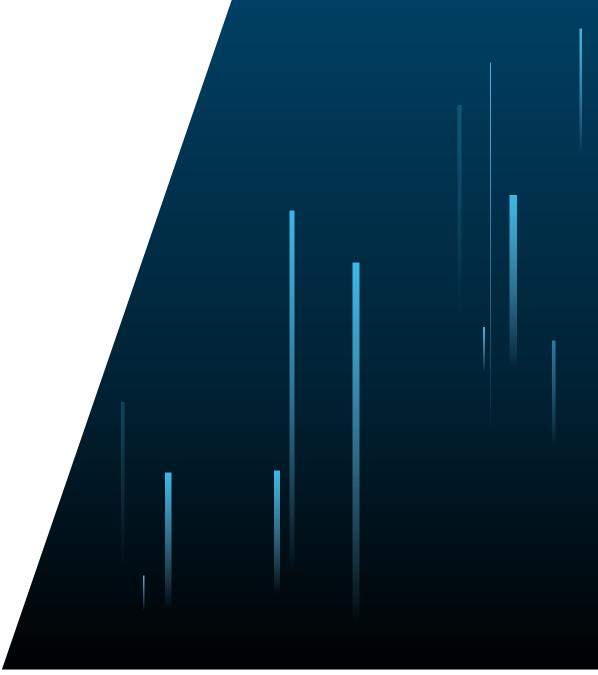
Security	Country	Sector	Corp Lifecycle	Trans
Trip.Com Group Ltd	China	Discretionary	Expanding	Trim
Tencent Holdings Ltd	China	Communication Svcs.	Expanding	Trim
Hon Hai Precision Industry Co Ltd	Taiwan	IT	Sustained	Sell
Bank Mandiri Persero Tbk Pt	Indonesia	Financials	Expanding	Sell
Meituan	China	Discretionary	Expanding	Trim

The data shown above is based on the strategy's representative portfolio. Transaction data may be limited to trades related to strategy decisions and not inclusive of trades performed due to cash flows. Sector diversification calculated in Eagle by William Blair based on Global Industry Classification Sectors (GICS). Geographic distribution is calculated in Eagle by William Blair. Cash incorporates cash equivalents and accruals. Weights may vary over time as benchmark index weights shift. Not intended as investment advice. The MSCI Emerging Markets IMI Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.



<sup>&</sup>lt;sup>1</sup>Reflects largest purchases and sales during the quarter.

Market Outlook



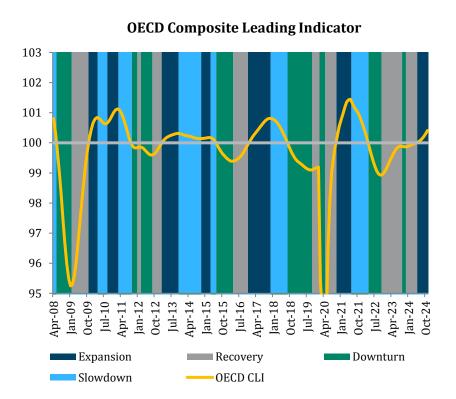
William Blair

# Around the World: Medium Term Themes

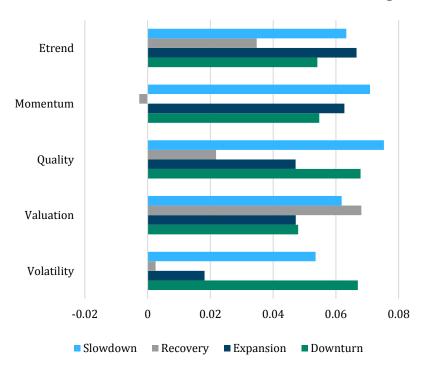


Data as of December 31, 2024.

# Favorable Style Backdrop in Economic Expansion



#### **MSCI EM IMI Information Coefficient Across Regimes**



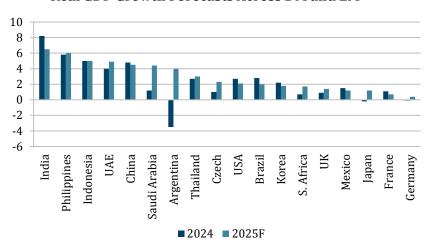
Data as of December 2024. Source: William Blair, MSCI.

Past performance is not indicative of future returns. Fundamental model performance is provided for illustrative purposes only. Information is based on William Blair's proprietary quantitative models and does not in any way relate to actual results of any account or strategy. Information Coefficient – represents the Spearman ranked correlation between factor score and future performance. A positive IC suggests that a given factor has exhibited predictive power of future performance during the backtest period.



# Macroeconomic Fundamentals

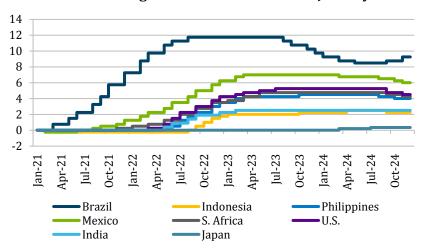
#### Real GDP Growth Forecasts Across DM and EM



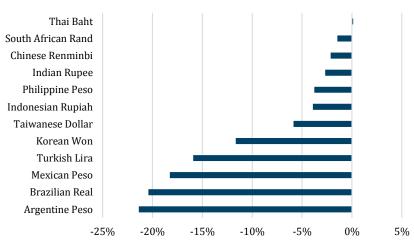
### US 10 yr Yield and Value vs Growth in Emerging Markets



#### **Cumulative Changes in Interest Rates Since January 2021**



### **Currency Performance in 2024**



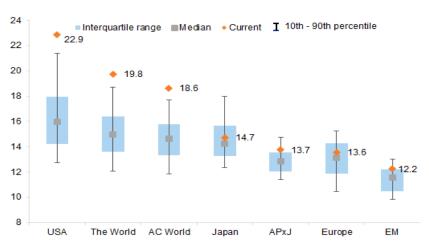
Data as of December 2024. Source: CLSA, Credit Suisse.

Past performance is not indicative of future returns. Index performance is provided for illustrative purposes only. A direct investment in an unmanaged index is not possible.

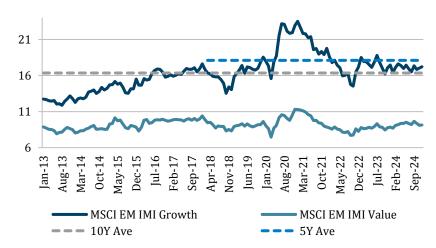


# EM: Attractive Valuations Relative to Developed Markets

P/E NTM Ranges Over 20 Years

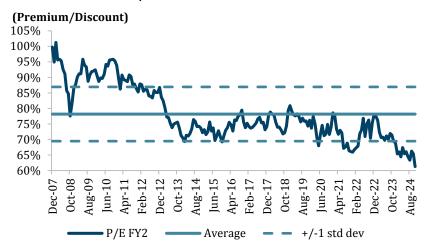


MSCI EM IMI Growth vs Value P/E NTM

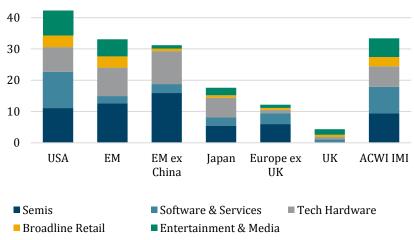


Data as of December 2024. Source: MSCI, FactSet, Goldman Sachs.

#### MSCI EM P/E FY2 - Relative to MSCI World



### **Tech+ Market Share by Region**





## China Outlook

## **POSITIVE**

- Easing of regulatory pressure refocus on growth
- Increased monetary stimulus with further reduction of RRR and policy rates
- Increased support for property market with mortgage rate cuts, reduced downpayment and other purchase restrictions
- Additional fiscal spending to support consumption
- Large and growing excess savings
- Attractive valuations

### MSCI China - Forward P/E

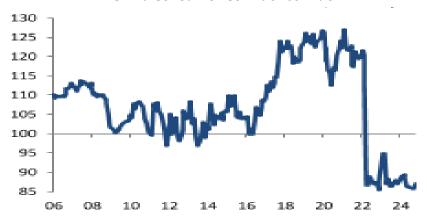


#### Data as of December 2024. Source: Goldman Sachs, Autonomous.

### **NEGATIVE**

- · Continued consumer weakness
- · Property sector weakness continuing
- Weak employment and income outlook
- Geopolitical and trade war risks

#### **China Consumer Confidence Index**



# China's Recent Monetary and Fiscal Measures

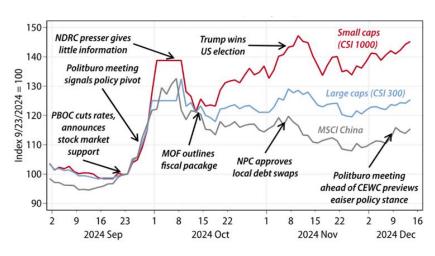
#### **Recent Announcements**

Date	Announced Measures	Areas
8-Jan	State Council extended and expanded "trade-in" and equipment upgrade susidies in 2025 to support domestic consumption and manufacturing	Growth
12-Dec	The Central Economic Work Conference reiterated pro-growth stance and focused more on boosting domestic demand and consumption	Growth
8-Nov	NPC standing committee meeting scaled up the local gov't debt resolutions and provided guidance on future policy support	Monetary & Growth
17-0ct	The Ministry of Housing and Urban-Rural Development unveiled more policy stimulus to help stabilize the property sector	Property
12-Oct	The MOF unveiled a package of incremental fiscal stimulus	Fiscal
27-Sep	PBOC announced a 50bp RRR cut and 20bps OMO rate cut	Monetary
24-Sep	PBOC announced a combination of policy easing, including new monetary policy tools to support the equity market	Capital Market
15-Sep	State Council issued a guideline to boost employment	Growth

#### **Prior Stimulus Measures**

#### Five big rallies since 2005, three of them stimulus-fueled 600-13m 8m 11m 22m 109% 65% 33% 500% 125% 33% 2309 500 100 and 2005 and 2005 and 2000 RMB4.6trn fiscal stimulus 100 165 bp rate cuts, RMB2-3trn 50 bp rate cuts RMB4trn fiscal stimulus, slum reconstruction 220 bp rate cuts 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024

### The Rise and Fall of Policy Expectations



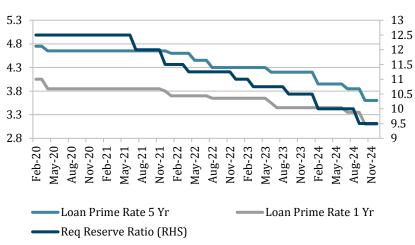
Data as of December 2024.

Source: Government websites, data compiled by Goldman Sachs Global Investment Research, Gavekal. Past performance is not indicative of future returns. Index performance is provided for illustrative purposes only. A direct investment in an unmanaged index is not possible.

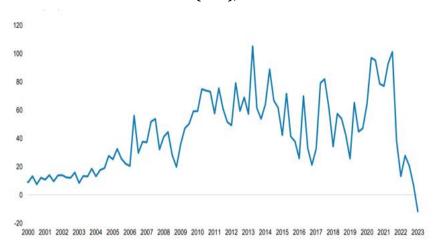


## China Macro Trends

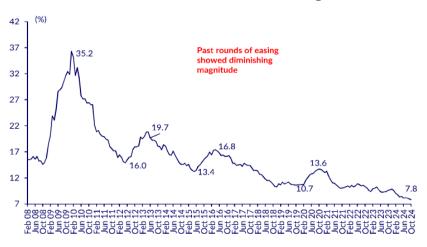
### **China Policy Rates Trend**



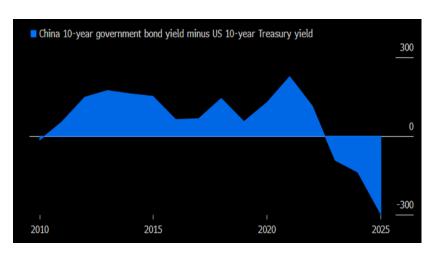
### China FDI (BoP), US \$bn



#### **China Total Social Financing**



#### China's Yield Discount to U.S. Widens to All-Time Low



Data as of December 2024. Source: Bloomberg, CEIC, UBS, People's Bank of China, Wind, SWS, Autonomous, Morgan Stanley, William Blair. **Past performance is not indicative of future returns.** 



## China Macro Trends

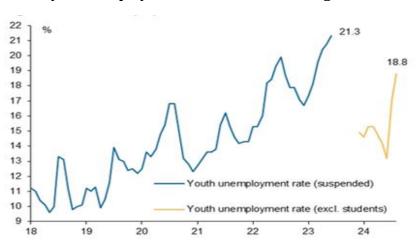
#### **China Property Still Falling**



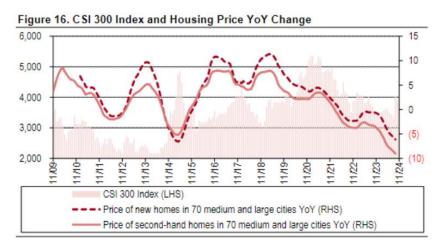
### **China Nominal GDP Growth and Property FAI Growth**



#### **Surveyed Unemployment Rate for Urban Young Generation**



**CSI 300 Index Correlated with Housing Prices** 



Data as of December 2024.

Source: UBS, CEIC, Autonomous Research, CLSA, Shanghai Stock Exchange, NBS, BOCI Research.

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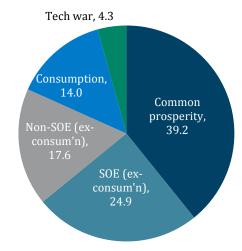


# China: Regulatory and Geopolitical Backdrop

### Stabilized and Improved Regulatory Backdrop

	Recent Policy/Regulatory	cent Policy/Regulatory Impacted and potentially		Recent Policy
No.	Developments & Agenda	impacted Industries	Direction of Impact	Trends
1	Anti-Monopoly	e-Commerce, online gaming, social media, fintech	Negative Improving	
2	Data Protection/Cybersecurity	e-Commerce, online gaming, social media, fintech		Improving
3	Reduce financial/social costs to citizens	After School tutoring, generic drugs, medical devices, liquor Negative		Stabilizing to improving
4	Improve wellbeing of citizens	After school tutoring, online gaming, liquor, sports	Negative for first three, positive for last one	Improving
5	Financial risks management	Fintech	Negative/positive	Stabilizing
6	Support to self-independence in high-end manufacturing	Semiconductor, automation, high-end manufacturing	Positive	Ongoing
7	Carbon Neutrality	EV supply chain, green energy	Positive	Ongoing

### **MSCI China Breakdown by Policy Baskets**



#### **Risk of Western Governments Action**

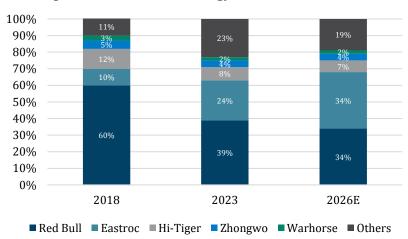
Key Risks	Available Tools to Restrict China	Risk Level	Comments
	Import Bans	Limited Impact	Expect import ban usage to be limited to industries linked to human rights abuses and national security
Import/Usage	Existing 301 Tariffs	Positive Impact	Expect a reduction/elimination of the 2018 tariffs with a more strategic replacement
Controls	Potential Tariffs	Moderate Impact	Expect a new and more strategic list of tariffs aligned with focus industry exports to replace the 2018 list
	Personal Data Concerns	Moderate Impact	Risk of a broaden senate bill passing giving the President ability to ban Chinese companies with access to personal data from operating in the U.S.
Export Controls	Export License Required	Moderate Impact	Expect Commerce to increase usage of unverified and entity lists in focus industries
Export controls	Export Bans	High Impact	Expect an increase in export bans for cutting edge technology aligned with focus industries from U.S. allies, and a broadening of the U.S. list.
	ADR/VIE Delisting	Unlikely Impact	Success in trial audits greatly reduces the risk of ADR delisting
Investment Restrictions	Treasury Blacklist	Unlikely Impact	Only expected in industries directly linked to national security, minimal exposure in public equities
	Outbound Investment Ban	Limited Impact	Outbound investment bans expected to be narrow and limited to FDI and private capital
Foreign Subsidiary Risk	Industry of Geopolitical Focus	High Impact	Expect other aligned economies to follow the U.S. in stimulus programs similar to CHIPs and IRA to increase domestic capabilities in focus industries

Data as of March 2023. Source: Goldman Sachs Research, UBS.

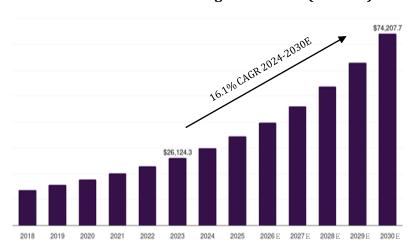


### Consumer Driven Themes in China

Top 5 Value Shares in Energy Drink Market in China



#### China Online Advertising Market Size (USD mn)



#### Passenger Traffic in China - International Flight



#### China Online Travel Agencies' Market Size (RMB bn)



Source: Goldman Sachs, Horizon Research, iResearch, Visible Alpha, DBS, China Aviation Administration, Bloomberg, BOCI Research. References to specific companies are provided for illustrative purposes only and should not be interpreted as investment advice or recommendations to buy or sell any security.



### India Outlook

### **POSITIVE**

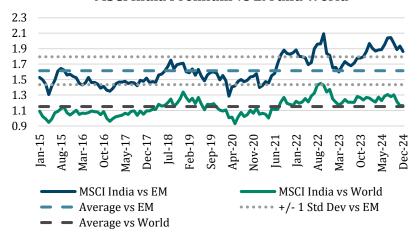
- Favorable demographics and well-educated population
- Strong economic growth
- Consumer spending at an inflection point to disposable income (2,000 USD)
- · Secular growth and innovative trends in financials
- Pro-business, pro-growth government
- Western ally
- Strong Capex Investment Cycle Make in India/PLI
- · Inclusion in Global Bond Indices

#### **India EPS Outperformance** (Rebased to 100 as of Jan 2003) 230 600 500 180 400 300 130 200 100 2018 2014 2015 2016 2009 2012 2013 India vs EM MSCI India Trailing EPS (Rebased to Jan 2003=100, RHS) ----- MSCI EM Trailing EPS (Rebased to Jan 2003=100, RHS)

### **NEGATIVE**

- · Net commodity importer
- · Current account deficit
- Higher valuation vs. Emerging Markets
- · Growth normalizing near term

#### MSCI India Premium vs EM and World



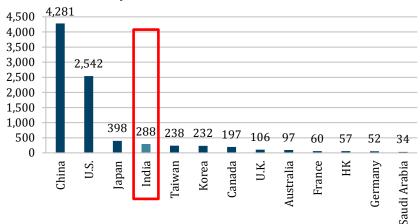
Data as of December 2024.
Source: Morgan Stanley, Bloomberg. **Past performance is not indicative of future returns.** A direct investment in an unmanaged index is not possible.



### **Indian Equity Market Attractive Characteristics**

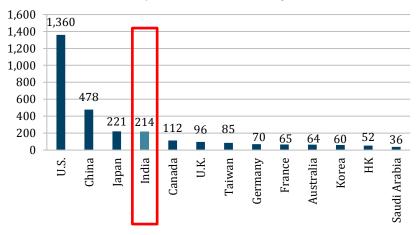
#### Indian Market: 288 Stocks Trading over U.S. \$10M

Markets by no. of stocks with ADTV> U.S. \$10M



#### India Ranks 4th Globally in terms of Large-Caps

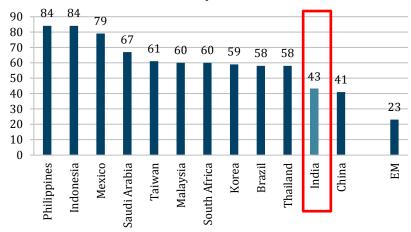
Markets by no. of stocks with mcap>\$5BN



Data as of December 2024. Source: CLSA, Bloomberg.

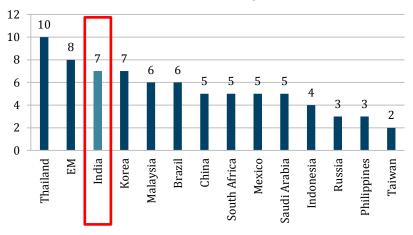
#### India is the Most Diverse Market within EM's

Concentration of top 10 constituents in EM's



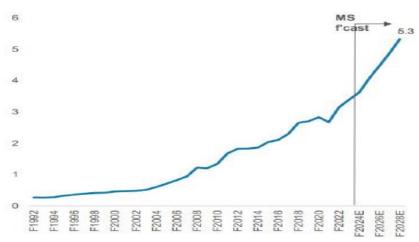
#### Sector Concentration not so Skewed in India

No. of sectors with over 5% weight in each EM

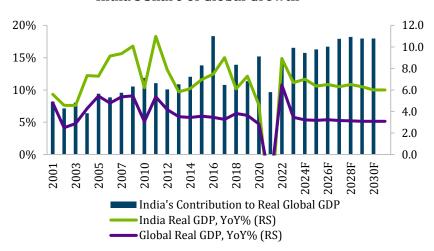


## India to be Key Driver of Global Growth

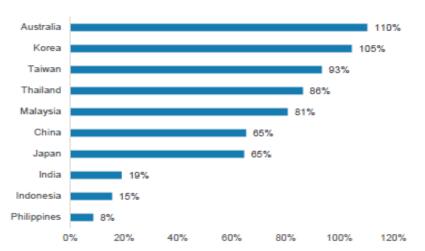




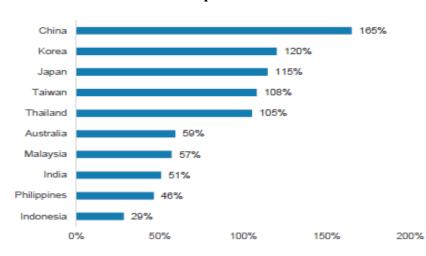
#### India's Share of Global Growth



#### **Household Debt to GDP Ratio**



#### **Non-Financial Corporate Debt to GDP**

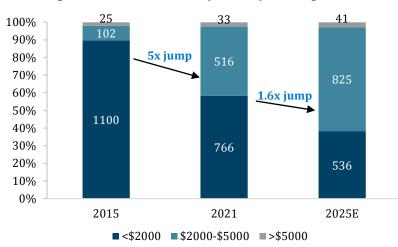


Data as of September 2024. Source: Morgan Stanley.

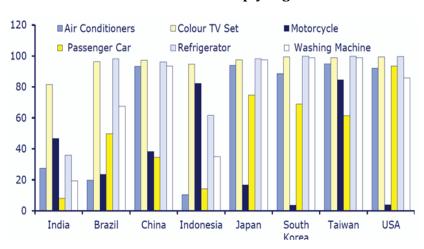


## India's Rising Middle-Class Consumption

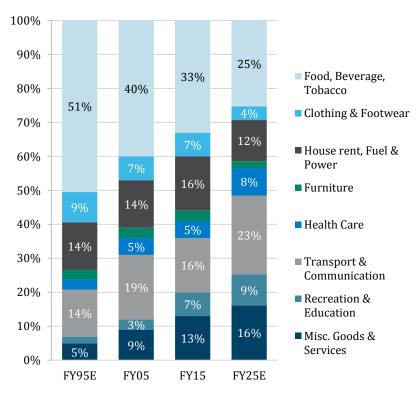
#### Population Distribution (million) Per Capita Income



#### **Low Penetration Levels Imply High Potential**



### **Discretionary Spending Shift**



Data as of December 2022. Source: Spark Capital.

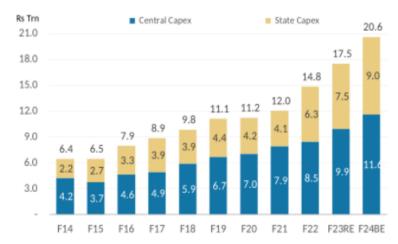


## India's Strong Capex Cycle to Drive Infrastructure Growth

#### **Public Capex Targets for 2025**

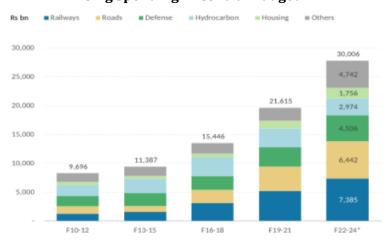


#### **Consistent Rise in Public Capex**

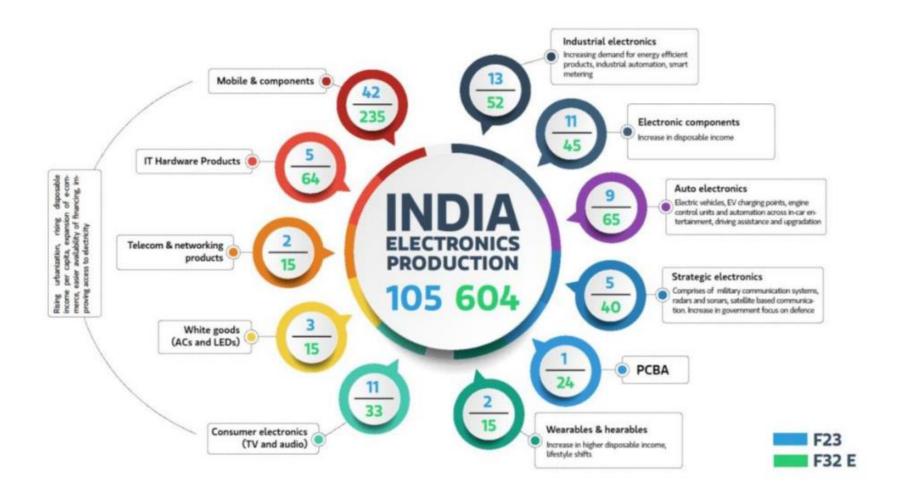


Data as of September 2023. Source: Morgan Stanley.

#### **Rising Spending in Central Budget**



### Make in India Initiatives

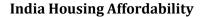


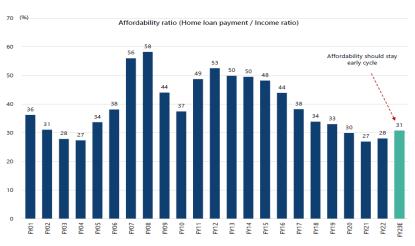
Data as of September 2023.

Source: Morgan Stanley. Figures represent the market size for each industry in USD billion.

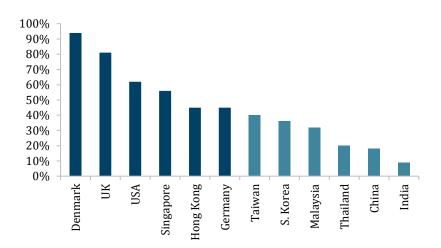


## Improving Trends and Long-Term Growth Opportunity Indian Financials

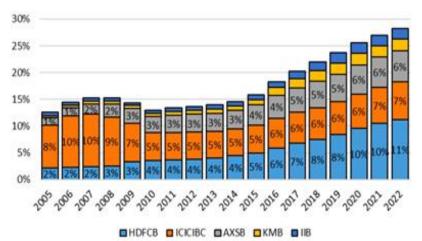




**Low Mortgage Penetration** 

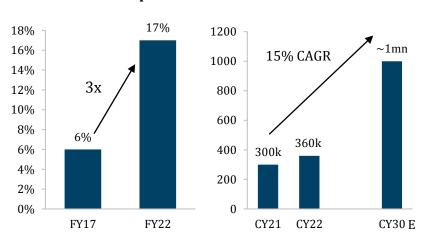


**India Private Banks Market Share** 



Market Share Gains for Listed Developers

**Housing Sales in Top Cities** 

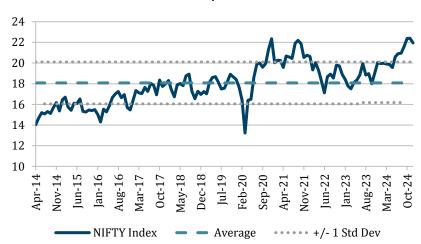


Data as of March 2024. Source: Jefferies, European Mortgage Federation, HDFC, Citi.
References to specific securities are provided for illustrative purposes only and should not be interpreted as investment advice or recommendations to buy or sell any security.



### India Valuation and Flows

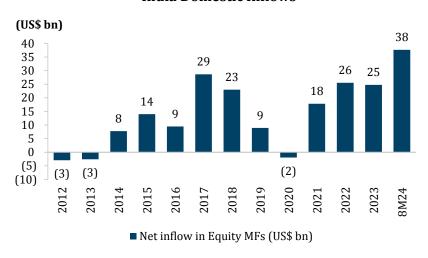
#### NIFTY P/E NTM



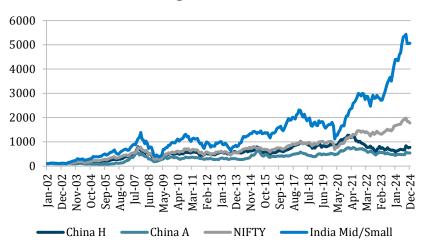
#### **GEM Funds positioning in India**



#### **India Domestic Inflows**



#### **India Long Term Performance**



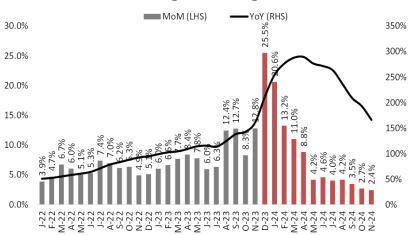
Data as of December 2024.

Source: Bloomberg, AMFI, Jefferies. **Past performance is not indicative of future returns.** Index performance is provided for illustrative purposes only. A direct investment in an unmanaged index is not possible.

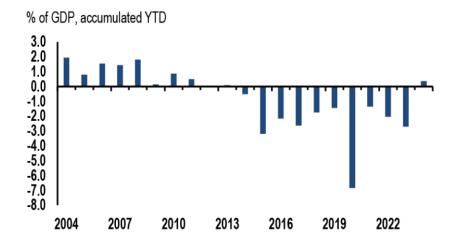


## Argentina Improved Macroeconomic Backdrop

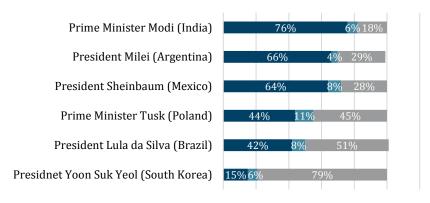




#### Fiscal Balance in Surplus in 2024



#### **Approval Levels of Emerging Markets Leaders**

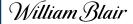


■ Approve ■ No opinion ■ Disapprove

#### 1 Year CDS Spread

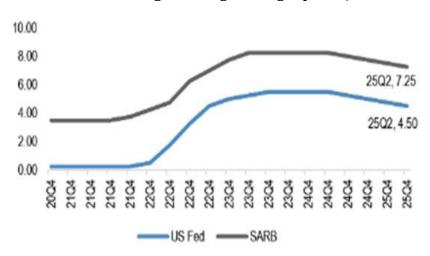


Data as of December 2024 Source: Santander, Statista, JP Morgan, Ministry of Treasury, FactSet, Jefferies. **Past performance is not indicative of future returns.** 

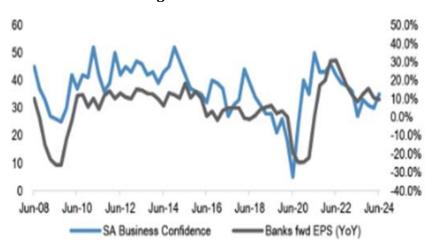


## South Africa Improving Macro Backdrop

#### South Africa to Begin Cutting Starting Sept '24-June'25

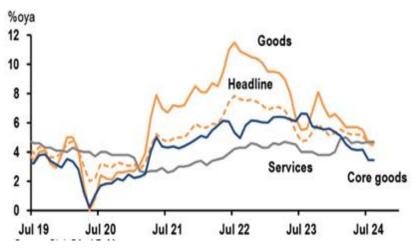


**Financials Earnings vs Business Confidence Index** 

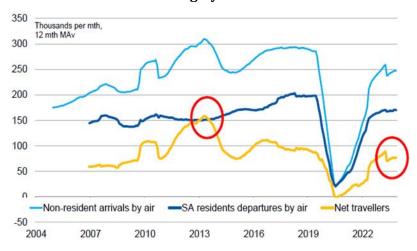


Data as of September 2024. Source: JP Morgan, Morgan Stanley.

#### **Headline, Services, Core Goods Inflation**

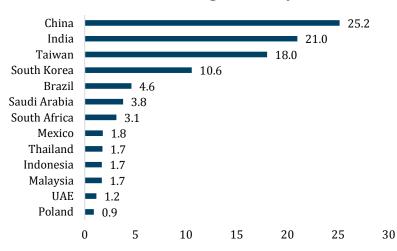


Tourist Arrivals Roughly Half the Rate of 2013

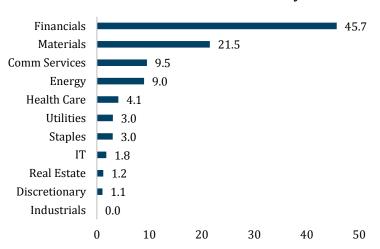


### Saudi Arabia Market

#### Saudi Arabia: Now the 6th Largest Country in MSCI EM IMI

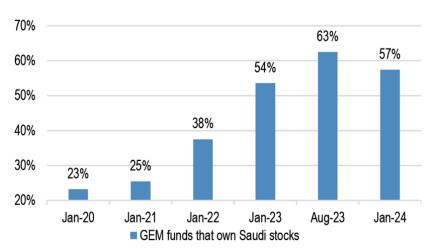


#### MSCI Saudi Arabia Breakdown by Sector



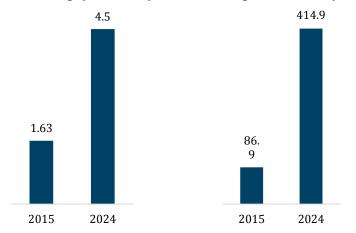
Data as of September 2024. Source: MSCI, Goldman Sachs.

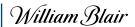
#### **GEM Funds That Own Saudi Stocks**



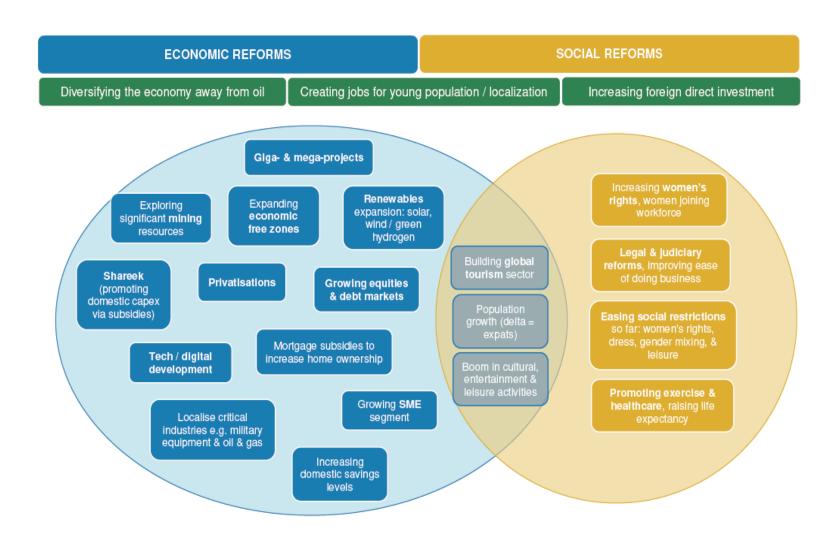
Tadawul All Share Index Market Cap (in SAR Tr)

Foreign Ownership in Saudi Capital Market (In SAR Bn)

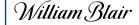




### Saudi Arabia 2030 Vision

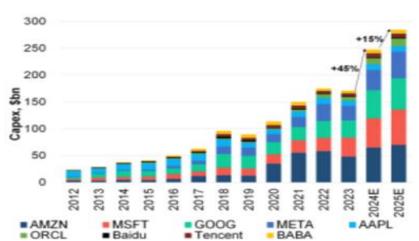


Data as of March 2024. Source: Goldman Sachs, Morgan Stanley



### Increased Growth Opportunities in Tech Hardware

#### **Global Core Hyperscale Capex**



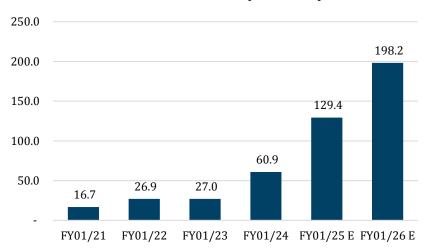
Bill of Materials (\$USD): Regular Server vs AI Server

ВОМ	Regular	DGXH100	Content Value DGX H100 vs Regular
GPU	-	\$157,420	n.m.
CPU	\$1,540	\$4,859	216%
Memory/Storage	\$3,150	\$9,050	187%
Network	\$523	\$8,726	1568%
PCB	\$350	\$3,254	830%
Power Supply	\$240	\$960	300%
Assembly/Test	\$550	\$1,652	200%
Design	\$826	\$2,478	200%
Total	\$7,714	\$189,219	2353%

#### **Capex Revisions**



#### **NVIDIA Revenue (in USD Bn)**



Data as of December 2024.

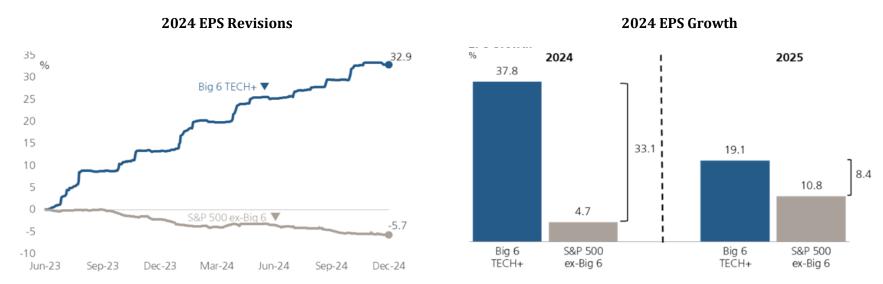
Source: Morgan Stanley. References to specific securities are provided for illustrative purposes only and should not be interpreted as investment advice or recommendations to buy or sell any security.



### US Tech Bellwether for EM Tech

Change in Price, Next 12 Months P/E and Next 12 Months EPS in 2024

	Pr	ice	P	/E	EPS		
	Big 6 TECH+	S&P 500 ex-Big 6	Big 6 TECH+	S&P 500 ex-Big 6	Big 6 TECH+	S&P 500 ex-Big 6	
12/31/23	100	100	27.6	17.6	\$608	\$57	
Current	147	114	29.2	19.1	\$845	\$60	
	47.0%	14.0%	5.8%	8.6%	38.9%	5.0%	

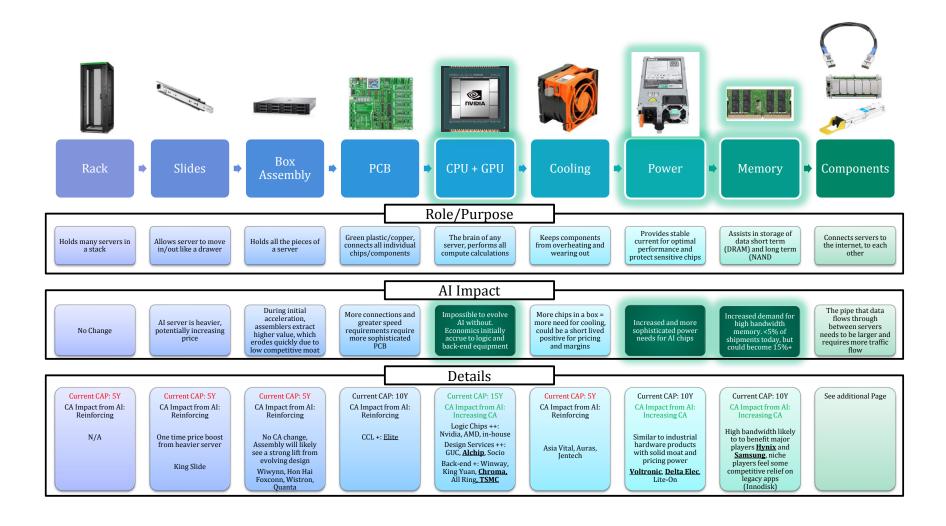


Data as of December 2024.

Source: UBS. **Past performance is not indicative of future returns.** Index performance is provided for illustrative purposes only. A direct investment in an unmanaged index is not possible. Big 6 is composed of Microsoft, Apple, Nvidia, Google, Amazon and Meta. Consensus expectations for Big 6 EPS growth versus rest of the S&P 500.



### Server Supply Chain Map

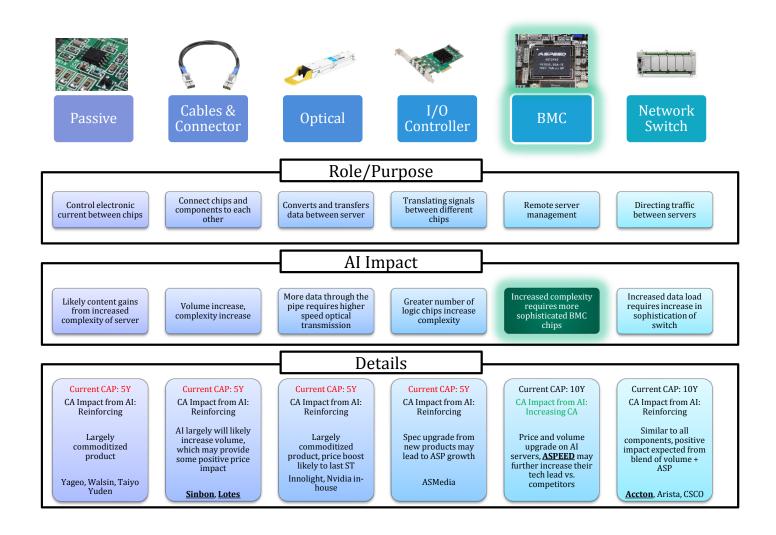


Data as of December 2024.

Source: William Blair. References to specific securities are provided for illustrative purposes only and should not be interpreted as investment advice or recommendations to buy or sell any security. Information is subject to change without notice. Due to a variety of factors, actual events may differ significantly from the estimates or outlooks presented.



## **Components Details**

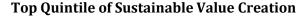


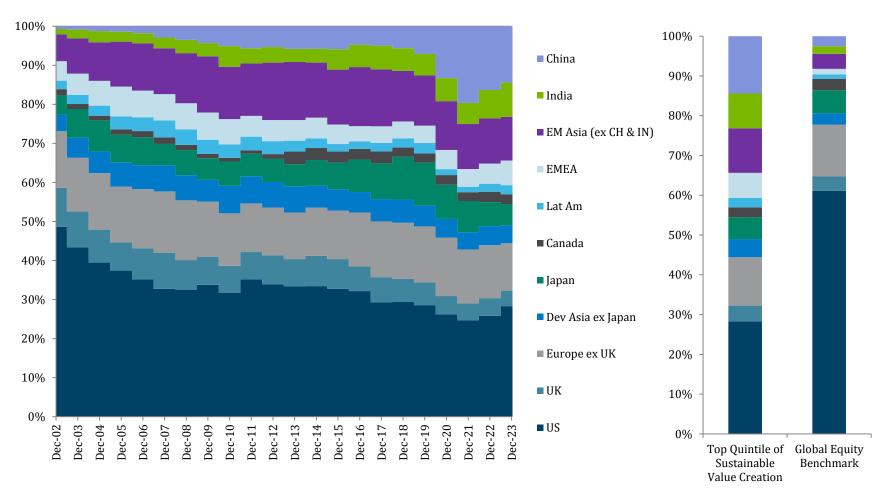
Data as of December 2024.

Source: William Blair. References to specific securities are provided for illustrative purposes only and should not be interpreted as investment advice or recommendations to buy or sell any security. Information is subject to change without notice. Due to a variety of factors, actual events may differ significantly from the estimates or outlooks presented.



### **Expanding High Quality Opportunity Set in Emerging Markets**



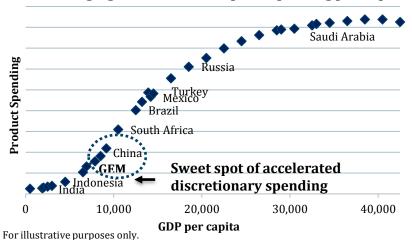


Data as of December 2023. Source: MSCI ACWI IMI. Top quintile of sustainable value creation is equal weighted. Sustainable value creation is an aggregate measure of corporate returns on capital. Several quantitative financial statement factors are used to measure total corporate profit/cash flow relative to total invested capital, corporate equity profit/cash flow relative to invested equity capital, as well as operating efficiency.

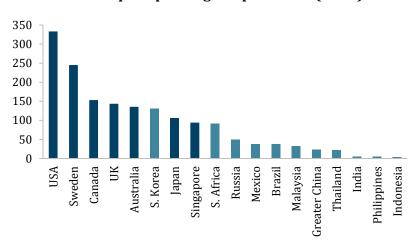


## Secular Growth Potential in Emerging Markets

#### Global Emerging Markets Consumption Spending per Capita



#### Per Capita Spending on Sportswear (\$USD)

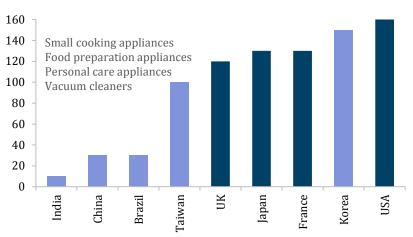


### Per Capita Spending on Staple Products

(as % of G7 Capital Spending 2025)

	Brazil	China	Indonesia	India	EM	
Instant Coffee	15%	5%	30%	2%	19%	1
Beer	46%	16%	1%	1%	12%	
Carbonated Drinks	40%	6%	3%	1%	12%	More
Baked Goods	42%	8%	4%	1%	10%	e.
Spirits	14%	3%	0%	3%	9%	Mai
Yogurt	29%	14%	1%	1%	9%	Mature
Savory Snacks	12%	8%	3%	2%	6%	le.
Chocolate	17%	2%	3%	1%	5%	
<b>Consumer Health</b>	12%	10%	5%	1%	5%	
Pet Food	21%	1%	0%	0%	3%	
Ready Meals	4%	1%	0%	0%	1%	

#### Per Capita Spending on Household Appliances (\$USD)

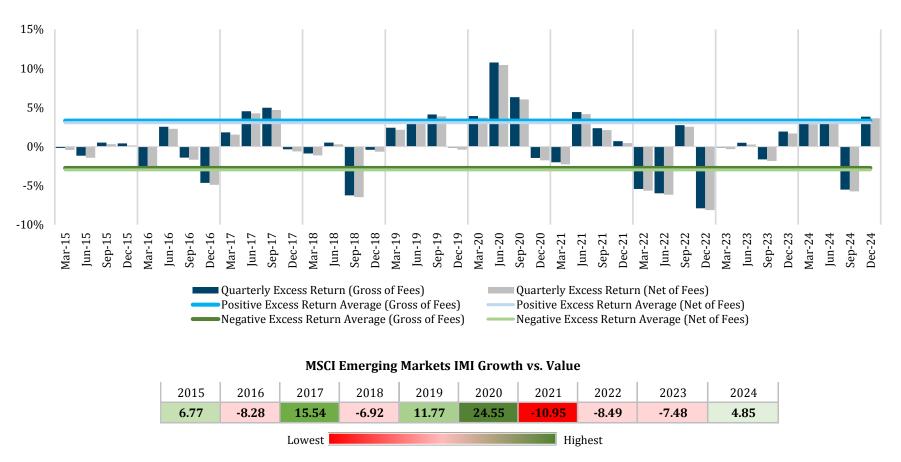


Data as of October 2019. Source: Credit Suisse, Goldman Sachs, Deutsche Bank, CSLA.



### **Emerging Markets Growth Ten-Year Performance Analysis**

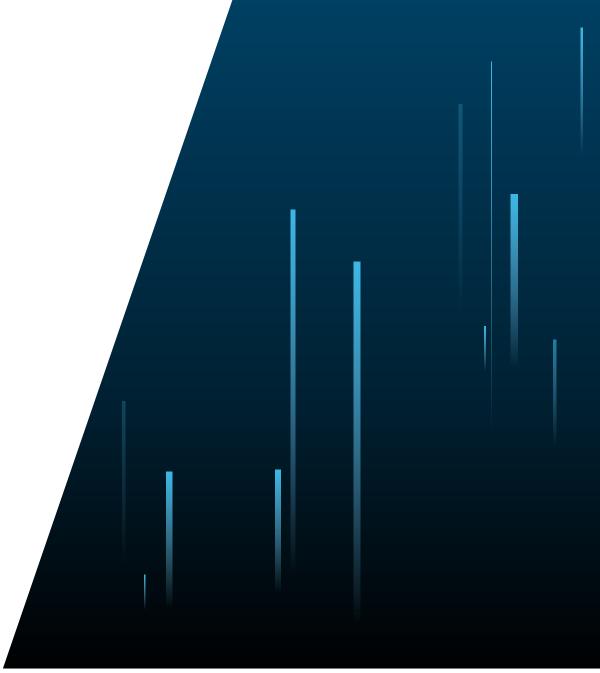
#### Quarterly Relative Performance - Emerging Markets Growth Composite vs. MSCI Emerging Markets IMI Index



Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A. The benchmark that best reflects the composite's investment strategy is the MSCI Emerging Markets Investable Market Index (IMI) Net, which is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic, and political risk. Please see GIPS Composite Report in appendix for a complete description of the composite. The Emerging Markets Growth Composite included carve-out portfolios from inception through 2006. Please refer to the performance summary slide for complete performance information.

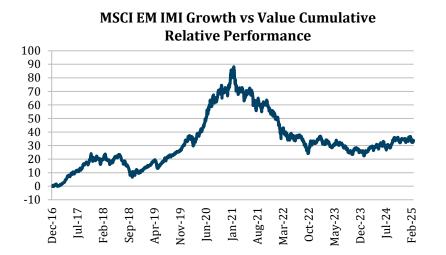


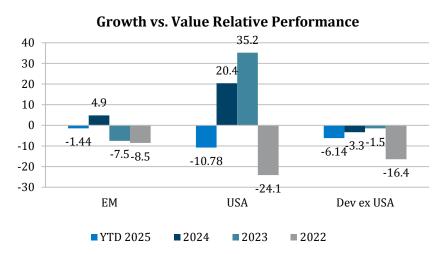
Appendix

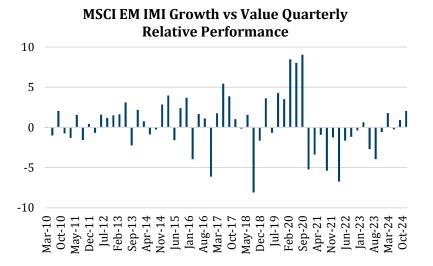


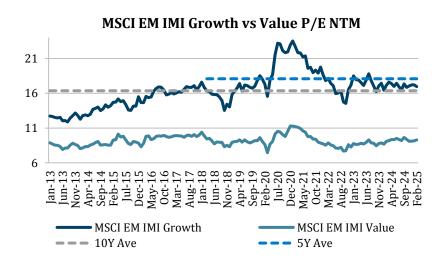
William Blair

## Emerging Markets Growth vs. Value









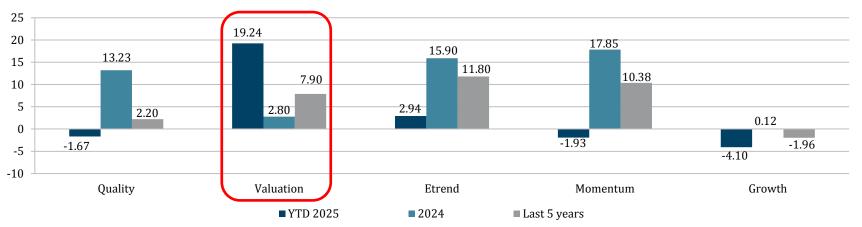
Data as of February 2025. Source: William Blair, MSCI.

Past performance is not indicative of future returns. The MSCI Emerging Markets IMI is a free float-adjusted market capitalization index designed to measure equity market performance in the global emerging markets. Value and Growth style characteristics are defined by MSCI's index construction methodology. A direct investment in an unmanaged index is not possible.

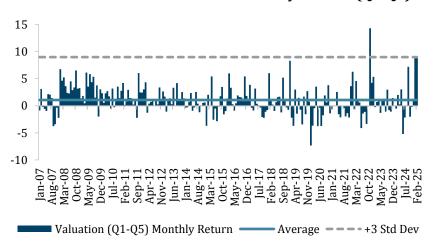


### **Emerging Markets Growth Style Reversal**

#### MSCI EM IMI Style Performance (Q1-Q5)



#### MSCI EM IMI Valuation Factor Monthly Returns (Q1-Q5)



#### MSCI EM IMI Style Performance (Q1-Q5)



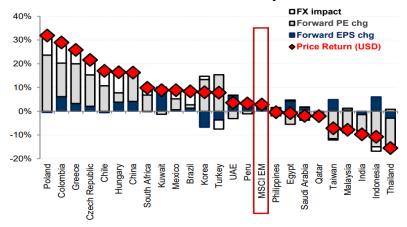
Data as of February 2025. Source: William Blair, MSCI.

Past performance is not indicative of future returns. The MSCI Emerging Markets IMI measures equity market performance in the global emerging markets. Value and Growth style characteristics are defined by MSCI's index construction methodology. A direct investment in an unmanaged index is not possible. Factor returns reflect the quintile 1 minus quintile 5 spread of William Blair's proprietary quantitative models.

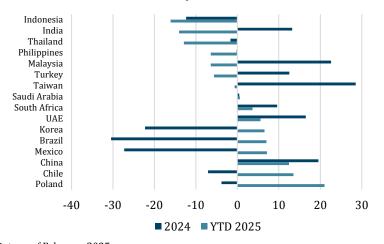


### India Drawdown Has Reached Extreme Levels

#### MSCI EM Performance Breakdown by Market YTD



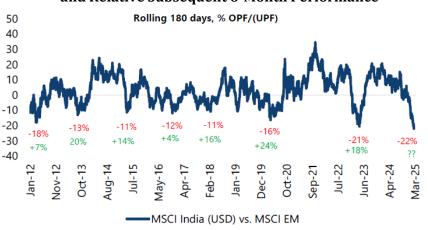
#### **MSCI EM IMI - Country Performance Reversal**



#### **Historical Major Drawdowns in Each Index**

	Peak	Trough			Nifty Midcap	Nifty Smallcap
	Date	Date	No of Days	Nifty-50	100	100
	14-Jan-04	17-May-04	124	-29.9	-27.8	-28.4
	10-May-06	14-Jun-06	35	-29.9	-37.3	-34.7
<b>GFC Crises</b>	8-Jan-08	27-Oct-08	293	-59.9	-65.4	-72.8
	5-Nov-10	20-Dec-11	410	-28.0	-37.9	-41.5
	3-Mar-15	25-Feb-16	359	-22.5	-14.1	-24.9
DeMon Nov 2016	29-Jan-18	19-Aug-19	567	-0.7	-25.4	-39.5
Covid 19	14-Jan-20	23-Mar-20	69	-38.4	-37.7	-45.3
	18-Oct-21	17-Jun-22	242	-17.2	-21.3	-29.4
Current	26-Sep-24	4-Mar-25	159	-15.8	-20.6	-23.4
	<b>Overall Averag</b>	е		-26.9	-31.9	-37.8
	<b>Overall Averag</b>	e (ex Outliers (	FC & Covid)	-20.6	-26.3	-31.7
	<b>Overall Averag</b>	e since 2015		-18.9	-23.8	-32.5
	Overall Averag DeMon & Covid	•	x Outliers	-18.5	-18.7	-25.9

# Rolling 6-Month Relative Performance MSCI India vs MSCI EM and Relative Subsequent 6-Month Performance



Data as of February 2025.

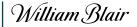
Source: Bloomberg, DAM Capital Research, Jefferies Research, MSCI, BNP Paribas Exane. **Past performance is not indicative of future returns.** The Nifty 50, Nifty Midcap 100, and Nifty Smallcap 100 indices measure the performance of the large, mid, and small cap segments of the Indian equity market, respectively. The MSCI Emerging Markets Index measures large and mid cap performance across emerging markets. The MSCI India Index measures the performance of the large and mid cap segments of the Indian market. A direct investment in an unmanaged index is not possible.



## Holdings: Emerging Markets Growth February 28, 2025

	Portfolio Weight		Portfolio Weight		Portfolio Weight
EM Asia (continued)	Weight	EMEA (continued)	Weight	Latin America (continued)	Weight
Taiwan (continued)		Saudi Arabia (continued)		Brazil (continued)	
Alchip Technologies Ltd	0.64	Dr Sulaiman Al Habib Medical	0.26	Nu Holdings Ltd/Cayman Isl-A	0.48
Lotes Co Ltd	0.61	Jamjoom Pharmaceuticals Fact	0.25	Banco Btg Pactual Sa-Unit	0.34
Elite Material Co Ltd	0.54	Aldrees Petroleum And Transp	0.18	Mexico	2.77
Ememory Technology Inc	0.50	South Africa	3.03	Vista Energy Sab De Cv	0.69
King Slide Works Co Ltd	0.50	Capitec Bank Holdings Ltd	1.28	Fomento Economico Mex-Sp Adr	0.52
Aspeed Technology Inc	0.48	Shoprite Holdings Ltd	0.41	Bbb Foods Inc-Class A	0.44
Quanta Computer Inc	0.44	Clicks Group Ltd	0.40	Grupo Financiero Banorte-O	0.32
Chroma Ate Inc	0.41	Mr Price Group Ltd	0.40	Arca Continental Sab De Cv	0.31
Fortune Electric Co Ltd	0.33	Bid Corp Ltd	0.30	Prologis Property Mexico SA	0.26
Winway Technology Co Ltd	0.32	Bidvest Group Ltd	0.25	Corp Inmobiliaria Vesta Sab	0.23
Asia Vital Components	0.30	Turkey	0.75	Peru	0.31
Jentech Precision Industrial	0.26	Bim Birlesik Magazalar As	0.38	Credicorp Ltd	0.31
<b>Gudeng Precision Industrial</b>	0.25	Turkiye Garanti Bankasi	0.37	Cash	0.45
All Ring Tech Co Ltd	0.25	United Arab Emirates	2.46	Total	100.00
Asmedia Technology Inc	0.24	Emaar Properties Pjsc	1.15		
Grand Process Technology Cor	0.19	Aldar Properties Pjsc	0.83		
EMEA	10.57	Salik Co Pjsc	0.49		
Czech Republic	0.15	Latin America	10.99		
Komercni Banka As	0.15	Argentina	1.86		
Greece	1.70	Grupo Financiero Galicia-Adr	0.65		
Eurobank Ergasias Services A	0.92	Ypf S.ASponsored Adr	0.62		
Piraeus Financial Holdings S	0.51	Banco Macro Sa-Adr	0.39		
Opap SA	0.27	Grupo Supervielle Sa-Sp Adr	0.20		
Hungary	1.01	Brazil	6.05		
Otp Bank PLC	1.01	Mercadolibre Inc	3.01		
Saudi Arabia	1.47	Weg SA	0.89		
Elm Co	0.45	Embraer SA	0.78		
Riyadh Cables Group Co	0.33	Itau Unibanco H-Spon Prf Adr	0.55		

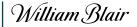
The data shown above is based on the strategy's representative portfolio. Individual securities listed in this report are for informational purposes only. Holdings are subject to change at any time. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities listed. Cash incorporates cash equivalents and accruals.



## Holdings: Emerging Markets Growth February 28, 2025

	Portfolio		Portfolio		Portfolio
Pacific Ex Japan	Weight 2.28	EM Asia (continued)	Weight	EM Asia (continued)	Weight
Hong Kong	2.28	India (continued)		India (continued)	
Hong Kong Exchanges & Clear	1.05	Mahindra & Mahindra Ltd	0.86	Rec Ltd	0.25
Aia Group Ltd	0.91	Bharat Electronics Ltd	0.66	Cummins India Ltd	0.23
Futu Holdings Ltd-Adr	0.33	Sun Pharmaceutical Indus	0.61	Pidilite Industries Ltd	0.23
EM Asia	<b>75.70</b>	Apollo Hospitals Enterprise	0.56	Oberoi Realty Ltd	0.23
China	24.39	Dixon Technologies India Ltd	0.51	Triveni Turbine Ltd	0.18
Tencent Holdings Ltd	5.30	Ntpc Ltd	0.50	Indonesia	4.52
Alibaba Group Holding Ltd	3.60	Makemytrip Ltd	0.50	Sea Ltd-Adr	2.21
Meituan-Class B	2.98	Max Healthcare Institute Ltd	0.49	Bank Central Asia Tbk Pt	1.94
Xiaomi Corp-Class B	2.61	Macrotech Developers Ltd	0.41	Grab Holdings Ltd - Cl A	0.37
Byd Co Ltd-H	2.27	Hindustan Aeronautics Ltd	0.38	Malaysia	0.81
Trip.Com Group Ltd	1.25	Central Depository Services	0.37	Cimb Group Holdings Bhd	0.48
Yum China Holdings Inc	1.11	Blue Star Ltd	0.36	Gamuda Bhd	0.33
Netease Inc	0.98	Interglobe Aviation Ltd	0.35	Philippines	1.30
Fuyao Glass Industry Group-A	0.55	Phoenix Mills Ltd	0.34	Bdo Unibank Inc	0.64
Pop Mart International Group	0.53	Hdfc Asset Management Co Ltd	0.34	Intl Container Term Svcs Inc	0.47
East Money Information Co-A	0.52	Divi's Laboratories Ltd	0.33	Ayala Land Inc	0.18
Atour Lifestyle Holdings-Adr	0.51	Tvs Motor Co Ltd	0.31	South Korea	4.21
Yutong Bus Co Ltd-A	0.49	Zomato Ltd	0.31	Sk Hynix Inc	2.56
Sieyuan Electric Co Ltd-A	0.47	Godrej Properties Ltd	0.30	Hanwha Aerospace Co Ltd	0.67
Midea Group Co Ltd	0.44	Abb India Ltd	0.29	Samsung Biologics Co Ltd	0.57
Kweichow Moutai Co Ltd-A	0.27	Trent Ltd	0.29	Hd Hyundai Electric Co Ltd	0.42
Eastroc Beverage Group Co -A	0.27	Coforge Limited	0.28	Taiwan	23.95
Foshan Haitian Flavouring -A	0.26	Cg Power And Industrial Solu	0.27	Taiwan Semiconductor-Sp Adr	10.72
India	16.52	Uno Minda Ltd	0.27	Mediatek Inc	2.19
Icici Bank Ltd	1.49	Amber Enterprises India Ltd	0.27	Taiwan Semiconductor Mfg	2.14
Bajaj Finance Ltd	1.04	Computer Age Management Serv	0.27	Delta Electronics Inc	1.01
Bharti Airtel Ltd	0.99	Kfin Technologies Ltd	0.26	Accton Technology Corp	0.94
Indian Hotels Co Ltd	0.96	Ge Vernova T&D India Ltd	0.25	Wiwynn Corp	0.68

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### **Boston Public Library**

### **Emerging Markets Growth Fee Schedule**

#### **Mutual Fund**

William Blair Emerging Markets Growth Fund (Class R6)

Gross Expense Ratio: 1.08% Net Expense Ratio: 0.94%<sup>1</sup>

Ticker: BIEMX

<sup>1</sup>There is no revenue sharing in our R6-share class. The Fund's Adviser has contractually agreed to waive fees and/or reimburse expenses to limit fund operating expenses until 4/30/25.

Please carefully consider the Fund's investment objectives, risks, charges, and expenses before investing contained in the Fund's prospectus and summary prospectus, which you may obtain by calling +1 800 742 7272. Read the prospectus and summary prospectus carefully before investing. Distributed by William Blair & Company, L.L.C., member FINRA/SIPC.



### **Composite Presentation Report**

### **Emerging Markets Growth**

Calendar	Composite Gross	<b>Composite Net</b>	MSCI Emerging Mkts	Composite 3-Yr	Benchmark 3-Yr	Number of		Composite Assets	Total Firm
Year	Return (%)	Return (%)	IMI (net) Return (%)	Std Dev (%)	Std Dev (%)	Portfolios	Dispersion (%)	End of Period \$(mm)	Assets \$(mm)
2015	-14.17	-15.02	-13.86	13.57	13.84	12	0.21	4,103.22	64,777.78
2016	2.93	1.90	9.90	15.01	15.72	13	0.20	4,369.80	64,872.51
2017	51.19	49.69	36.83	14.88	15.11	12	0.34	6,004.52	73,549.85
2018	-21.05	-21.84	-15.04	15.35	14.43	11	0.39	3,961.08	48,880.26
2019	29.61	28.32	17.64	14.11	13.94	13	0.77	4,923.42	58,446.29
2020	41.85	40.44	18.39	20.89	19.86	13	1.87	5,883.80	69,739.61
2021	5.15	4.10	-0.28	19.23	18.48	14	N/A**	6,554.85	79,683.54
2022	-32.72	-33.34	-19.83	21.73	20.36	13	0.17	5,136.38	56,036.64
2023	12.18	11.17	11.67	15.90	16.68	13	0.27	7,388.89	67,246.03
2024	12.41	11.40	7.09	15.75	16.97	11	0.16	7,964.27	71,590.16

#### Disclosures:

William Blair Investment Management claims compliance with the GIPS standards. William Blair Investment Management has been independently verified for the periods January 1, 1993 through December 31, 2023. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The Emerging Markets Growth Composite has had a performance examination for the periods from composite inception through December 31, 2023.

For purposes of compliance with GIPS, the Firm is defined as all portfolios managed by William Blair Investment Management, a distinct operating unit within William Blair. William Blair Investment Management currently operates as William Blair Investment Management, LLC, an investment adviser registered with the United States Securities and Exchange Commission ("SEC") which is a separate legal entity that is distinct from William Blair & Company, L.L.C. Registration with the SEC does not imply a certain level of skill or training.

The Emerging Markets Growth strategy invests in a broad range of well managed, quality growth companies based in emerging markets. A portfolio manager change occurred effective 5/1/2015, 3/1/2018, and 7/1/2021. The investment strategy was not materially altered by the personnel change.

The benchmark that best reflects the composite's investment strategy is the MSCI Emerging Markets Investable Market Index (net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance, net of withholding taxes, in the global emerging markets.

Portfolios must have an initial market value greater than or equal to \$1 million to be included in the composite. New portfolios are added to the composite at the beginning of the month following the first full calendar month under management. Portfolios that change investment strategies are transferred between composites in the first full monthly reporting period the portfolio is managed under the new style. Portfolios will be excluded from the composite the first month immediately following the last complete month of authorized management by the Firm. Portfolios are removed from this composite, in the event of a significant cash flow, for the month during which the flow occurs. Portfolios are typically added back into the composite the following month. A portfolio is determined to have a significant cash flow if the accumulated net external flows of cash and/or securities during a month exceed the significant cash flow threshold, which was 25% of the beginning of month portfolio market value through December 31, 2020 and 10% thereafter. Additional information regarding the treatment of significant cash flows is available upon request.

Performance includes the reinvestment of dividends and other earnings. Portfolio and composite returns are calculated daily. Valuations and returns are denominated in U.S. Dollars. Accrual accounting is used for dividends. The dividend accruals included in portfolio valuations are net of applicable withholding taxes. Pending withholding tax reclaims are not accrued for in the portfolio valuations. Composite dispersion measures represent the consistency of a firm's composite performance with respect to the individual portfolio returns within a composite. The dispersion of annual returns is measured by the asset-weighted standard deviation of the gross returns in the composite. Dispersion includes only those portfolios that have been included in the composite over the preceding 36-month period. This statistic is not presented until there are 36 months of performance available.

Performance results are stated gross of management fee as of the time the composite return was calculated, applied by dividing that annual fee by the count of the annual calculation periods for the composite and then subtracting that quotient from the periodic gross composite returns. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. The current separate account management fee schedule is as follows: up to \$25,000,000: .90%, next \$50,000,000: 0.85%, next \$50,000,000: 0.70%, next \$50,000,000: 0.65%, next \$50,000,000: 0.60%, next \$25,000,000: 0.85%, next \$50,000,000: 0.70%, next \$50,000,0

The strategy is available via one or more pooled funds, which may have alternate fee schedules. The limited distribution pooled funds are: William Blair Emerging Markets Growth Collective Investment Fund, which has a highest management fee of 0.90% and a highest expense ratio of 0.95%; and William Blair Emerging Markets Growth Fund LLC, which has a highest management fee of 0.90% and a highest expense ratio of 0.95%. The information presented above is for informational purposes only and is not an offer to sell or solicitation of an offer to buy securities or otherwise make an investment in any private fund managed by William Blair Fund"). Any offer to sell or a solicitation of an offer to purchase Interests in a William Blair Fund will only be made by means of a confidential private placement memorandum or similar document (a "Memorandum"); no offer to purchase an Interest will be accepted prior to receipt by the offerce of a Memorandum and the completion of all appropriate documentation.

The Emerging Markets Growth Composite was created in March 2005. The composite performance inception date is October 1, 1996.

A complete list and description of firm composites and pooled funds is available upon request. Additional information regarding valuing investments, calculating performance, and preparing GIPS reports is also available upon request. Past performance is not indicative of future results. GIPS® is a registered trademark of CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. The data and other information included herein has been provided for the intended recipient's review only and may not be copied, reproduced, redistributed, published, retransmitted, or otherwise shared with any third-party without written permission from William Blair. Please refer to the 'Index Disclosures' in this document for further information.

\*\*Five or fewer portfolios were included in the composite for the entire year.



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#### **Quality Models - Definitions**

The William Blair Quality Model attempts to put into quantitative terms one of the cornerstones of the firm's investment philosophy: identifying high quality companies. The score combines measurements of sustainable value creation, earnings quality, and financial strength.

The William Blair Growth Model builds a long-term growth estimate based on a combination of realized and forecast growth rates. The inputs and results of this model are not limited to earnings, but instead cast a broader net to include measures of a firm's overall growth. In addition to providing a Growth Model score, the growth rate generated by the model is used as an input into other models.

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