IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

ompany	Aberdeen Standard Inv.	Acadian Asset Management 24,009	AGF Mngt.	AllianceBernstein	Allianz Global Investors	Amundi	Ashmore Group
otal assets invested in Emerging & Frontier Market Equities (€m)	30,309	24,009	1,217,3	12,307	1,600	127,605 (5)	4,200
s at	31/12/18	30/06/19	31/05/19	31/03/19	30/06/19	31/03/19	31/03/19
otal AUM worldwide (€m)	562,694	85,250	25,390	493,968	535,000 (4)	1,476,497	7,600
ssets invested in Emerging & Frontier Market Equities (€m):							
vested for Europe-based institutional clients	8,961	5,299	497.98	3,048	215		2,230
Pension fund clients	5,076		497.98	1,247	170		50
nsurance company clients	998			1,652			
All other institutional clients	2.872			149	45		2.180
segregated accounts	12,419	3,135	497.98	4,570	335		2,500
n investment funds	17.890	2.164	719.33	7.737	1.265		1.700
ctively managed	30.309	24.009	1.217.3	12.089	1.600		4.200
lanaged through specialist equity mandates	27,065				0		
managed on an active basis:	·						
argeted information ratio		>0.5	(2)		0.60		
chieved information ratio			0.02		0.55		
cceptable tracking error	4.74% [1]		(2)		4-5%		
egions invested in within Emerging & Frontier Market equity funds -	-17-170				4 0 /0		
MERGING EUROPE:	P				P	T	P/T/S
ne Balkans	S		N		N	Ť	P/T/S
ne Baltics	<u>S</u>		N N		N N		P/T/S
zech Republic	<u>S</u>		P		T		P/T/S
ungary	<u>S</u>		P		-		P/T/S
	<u>S</u>		P		5		P/T/S
oland	<u> </u>		N N		<u>5</u>		P/T/S P/T/S
ussia					<u> </u>		
urkey	S		Р				P/T/S
SIA:	P				<u>P</u>		P/T/S
hina	<u>S</u>		<u>P</u>		P		P/T/S
dia	S		P		P		P/T/S
ndonesia	S		P		P		P/T/S
1alaysia	S		S		S		P/T/S
outh Korea	S		P		P		P/T/S
aiwan	S		P		Р		P/T/S
hailand	S		P		Р		P/T/S
ATIN AMERICA:	P				Р		P/T/S
rgentina	S		S		N		P/T/S
razil	S		P		P		P/T/S
hile	Š		S		Ť		P/T/S
Mexico	Š		P		Ġ		P/T/S
IIDDLE EAST AND AFRICA:	P				D D		P/T/S
gypt	c		S		N	Р	P/T/S
gypt ordan	<u>S</u>				N N	Г	P/T/S
organ forocco	<u>5</u>		N N		N N	т	P/T/S P/T/S
ligeria	<u> </u>		N N		N N	5	P/T/S P/T/S
	<u> </u>		P		P		P/T/S P/T/S
outh Africa RONTIER MARKETS:	<u>S</u>		<u> </u>			P	P/T/S P/T/S
KUNTIER MARKETS:					N T O N Z		P/1/S
o. of countries in benchmark(s) invested in T/N	T & N: 0		T: 0, N: 1		T: 3; N: 7		
o. of countries not in benchmark(s) invested in P/S/T	P: 0; S: 10; T: 0		P: 1, S: 3, T: 0		P & S: 1		
pproach to managing Emerging & Frontier Market Equities:					.,		.,
ore		X		X	X		X
alue	X	X		X			X
rowth				X			X
arge Cap					X		X
arge Cap iid Cap/Small Cap		X			X		X
Down		X		X			X
ottom Up	X	X	Χ		X		X
hematic			••		X		
ector							
ther			[3]				
ue! .of Emerging & Frontier Market Equity research done in-house umber of professionals involved in Emerging & Frontier Market Equities.	90	95	70		90		70
or Emerging wir officer market Equity research done III-1100se	11	113	27	30			37

Company	AXA Inv. Managers	Baillie Gifford	Barings	Barrow, Hanley, Mewhinney & Strauss	BNP Paribas Asset Mngt.	Brandes Inv. Partners	Candrian
Total assets invested in Emerging & Frontier Market Equities (€m)	836	54,108	5,713	265.6	19,737	5,027	4,200.01
s at	31/03/19	30/03/19	31/03/19	30/06/19	31/03/19	31/03/19	31/05/19
otal AUM worldwide (€m)	749,561	224,821	283,397	67,209.5	565,253	23,065	122,105.8
Assets invested in Emerging & Frontier Market Equities (€m):	//0	00.070	700	20.0	1.0//	101	17//00
nvested for Europe-based institutional clients	460 2	28,362	730 595	28.8	1,866	484	1,744.38
Pension fund clients	345	8,686	595	0	85 628	0	
Insurance company clients All other institutional clients	113		135	28.8	1.153	484	
n segregated accounts	370	44.107	2.265	103.3	13.477	2.370	694.69
n investment funds	466	10.001	3,448	162.3	6,260	2,657	3,505,32
Actively managed	400	54.108	5.713	265.6	19.104	5.027	4.162.02
Managed through specialist equity mandates		0 0	38	0	17.104	5.027	4,102.02
f managed on an active basis:			30			3,027	
argeted information ratio		[2]	NA	≥0.6 ^[10]	0.7	NA	0.5
Achieved information ratio		[6]	N 22 (8)	-0.03 (11)	0.75 (12)	-0.12 (11)	0.56 (14)
Acceptable tracking error			3-8% (2)	3-6% [10]	3-6%	7.41 (11)	Max. 6%
Regions invested in within Emerging & Frontier Market equity funds –			J-070	3-070	J-0 /0	/.41	I*IQA. 0 /0
MERGING EUROPE:			S	Т	S	S	
The Balkans			Š	†	S	Š	N
The Baltics			Š	Ť	Š	S	N
Zzech Republic			Š	Ť	Š	S	Ť
Hungary			Š	Ť	Š	S	P
Poland			S	Ť	S	S	P
Russia			S	Ť	S	S	P
Turkey			S	T	S	S	Р
ASIA:			S	T	Р	S	
China			S	T	Р	S	Р
ndia			S	T	Р	S	Р
ndonesia			S	T	S	S	P
Malaysia			S	T	S	S	P
South Korea			S	T	P	S	P
			S	T	P	S	P
Thailand			S	T	S	S	P
ATIN AMERICA:			S	T	S	S	
Argentina			S	T	S	S	T
Brazil			S	T	S	S	P
Chile			S	T	S	S	T
Mexico			S	<u>T</u>	S	S	P
MIDDLE EAST AND AFRICA:			S	<u>I</u>	S	S	
gypt			<u>S</u>	<u>I</u>	S	S	<u>.</u>
lordan			S		N.	S	N.
Morocco			<u>S</u>	_	S	<u>S</u>	N
Nigeria			S	<u></u>	S	<u> </u>	N P
South Africa			<u>5</u>	<u> </u>	<u>S</u> S	<u>5</u>	<u> </u>
FRONTIER MARKETS: No. of countries in benchmark(s) invested in T/N		[7]	T:0: N: 0	T: 26: N: 0	S N: 1	5.2/	T: 5: N: 10
No. of countries in benchmark(s) invested in 1/N No. of countries not in benchmark(s) invested in P/S/T		(7)	P: 0: S: 10: T: 0	T: 23	IN: I	S: 24 S: 29	P. S & T: (
No. of countries not in benchmark(s) invested in P/S/1 Approach to managing Emerging & Frontier Market Equities:		(*)	P: U; 5: 1U; 1: U	1: 43		5: 27	P, 5 & 1: l
ore							Y
/alue				Y		X	^
Growth		Y		^	Y	^	Y
arge Cap		^			Ŷ	X	Ŷ
Aid Cap/Small Cap					Ŷ		Ŷ
op Down							
Sottom Up		X	Υ	Y	Y	X	Y
Thematic			^	^	^		Ŷ
Sector							
Other			(9)			(13)	
6 of Emerging & Frontier Market Equity research done in-house		100	100	90	100	70	
lumber of professionals involved in Emerging & Frontier Market Equities	4	8	31	5	100	46	,

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IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

Company	CBL Asset Mngt., IPAS 21.7	ClariVest Asset Management	Columbia Threadneedle Inv.	Comgest	Coronation Fund Managers	Dimensional Fund Advisors	East Fidelity Capital Internation	Fisher Inv. Europe	Franklin Templeton
Total assets invested in Emerging & Frontier Market Equities (€m)	21.7	1,423 31/05/19	4,863 31/03/19	12,606 31/03/19	5,536.26 31/03/19	68,363	3,152 42,767 ¹¹⁵ 30/06/19 30/06/19	15,072.08 31/03/19	42,856 30/06/19
_As at	30/06/19	31/05/19	31/03/19	31/03/19	31/03/19	30/06/19	30/06/19 30/06/19	31/03/19	30/06/19
Total AUM worldwide (€m)	780.7	5,649	410,132	29,378	36,222.56	515,326	3,715 271,728	95,968.66	629,131
Assets invested in Emerging & Frontier Market Equities (€m): Invested for Europe-based institutional clients									
Invested for Europe-based institutional clients	1.8	41	355	10,859	1,798.59	5,382.64	1,195 4,633	5,527.61	677
-Pension fund clients	1.8	NA.	287	4,778	1,385.52	2,287	2,604	3,591.6	226
-Insurance company clients		NA	18	1,629	0	0.64		0.09	148
-All other institutional clients		41	50	4,452	413.07	3,095	000	1,935.92	304
_In segregated accounts	21.7	1,347	1,893	4,034 8,572	1,626.95 3,909.31	7,687.45	900	11,304.54 3,767.54	36,232
In investment funds	21.7		2,970 4.334		5.536.26	60,675.4 68,363	295 3 152	3,767.54 15.072.08	6,624 42,713
Actively managed	21./		4,334	12,606			3,152	15,U72.U8 N	42,/13
Managed through specialist equity mandates		NA		U	531.49	68,363		U	U
If managed on an active basis: Targeted information ratio	NA	0.5-1.0	0.25-1.0	[2]	[2]			1	
_ largeted information ratio _ Achieved information ratio	NA NA	0.5-1.0	0.25-1.0	0.1% (11)	0.51 [16]			22.52 (11)	
Acceptable tracking error	NA NA	0.59 3-6%	2-8%	<8%	5-10% (16)			4-8%	
Regions invested in within Emerging & Frontier Market equity funds –	NA	3-070	2-070	NO 70	3-10/0			4-078	
EMERGING EUROPE:	P	S	P	S	S		P	S	
The Balkans	T	N N	T	Š	Š		D	Š	
The Baltics	P	N N	†	Š	Š		P	Š	
Czech Republic	5	Š	Š	Š	Š		P	Š	
Hungary	Š	Š	Š	Š	Š		P	Š	
Poland	P	Š	P	Š	Š		P	Š	
Russia	P	Š	P	S	Š		P	S	
Turkey	S	S	S	S	S		P	S	
ASIA:	Ť	S	P	S	S		P	S	
China	Ť	S	P	S	S		P	S	
India	Ť	Š	P	S	Š		P	Š	
Indonesia	T	S	P	S	S		P	S	
Malaysia	T	S	S	S	S		Р	S	
South Korea	T	S	Р	S	S		Р	S	
<u>Taiwan</u>	T	S	P	S	S		P	S	
<u>Thailand</u>	T	S	S	S	S		P	S	
LATIN AMERICA:	T	S	S	S	S		P	S	
Argentina	<u>T</u>	S	S	S	S		P	T	
Brazil	<u>T</u>	<u>S</u>	P	S	<u>S</u>		<u>P</u>	S	
_Chile	<u>T</u>	<u>S</u>	P	<u>S</u>	<u>S</u>		Р	<u>S</u>	
Mexico	<u>T</u>	<u> </u>	<u>P</u>	<u> </u>	<u> </u>		<u>P</u>	<u> </u>	
MIDDLE EAST AND AFRICA:	N	<u>\$</u>			<u>\$</u>		<u> </u>	<u>§</u>	
_Egypt	N	<u>S</u>	<u></u>	<u> </u>	S		<u>P</u>	<u></u>	
_Jordan	N	<u>S</u>	<u></u>	<u> </u>	S		<u>P</u>		
Morocco	N.	N N	<u></u>	<u>S</u>	<u>S</u>		<u>P</u>		
Nigeria South Africa	N N	N		<u>S</u>	<u>S</u>			<u> </u>	
South Africa FRONTIER MARKETS:	N	S	<u> </u>	<u> </u>	<u> </u>		<u>P</u>	<u> </u>	
No. of countries in benchmark(s) invested in T/N	NA NA	N TONLO		T & N: 0	T & N: 0		P	[20]	
No. of countries in benchmark(s) invested in 1/N No. of countries not in benchmark(s) invested in P/S/T	P: 3: S: 3: T:16	T&N: 0 P, S & T: 0		P: 0: S: 4: T: 0	P: 0; S: 21; T: 0			[21]	
Approach to managing Emerging & Frontier Market Equities:	F: 3; 3: 3; 1:10	P, 3 & 1: U		P: 0; 3: 4; 1: 0	F: 0; 3: 21; 1: 0			10-17	
Core		V	V			V			
Value	v	^				v v		^	
Growth	Ŷ		Y	Y		^	Y		
Large Cap	X	X	X	X		X	Λ		
Mid Cap/Small Cap	Ŷ	X	X	Ŷ		Ϋ́			
Top Down	X		X	^		^		X	
Bottom Up	X	X	X	X	X		X	Α	
Thematic	X						, , , , , , , , , , , , , , , , , , ,	X	
Sector	, , , , , , , , , , , , , , , , , , ,							X	
Other			[15]		(17)	[18]		Α,	
% of Emerging & Frontier Market Equity research done in-house	100	95	90	80	80	95	100	85	
% of Emerging & Frontier Market Equity research done in-house Number of professionals involved in Emerging & Frontier Market Equities	5 2	13	,,,	20	42	249	20	73	
						E-1/			

Company	Hermes Inv. Management	HSBC Global Asset Mngt. 24,445.78	Lazard Asset Management 37,614 ^[5]	Legal & General Investment Mngt.	Macquarie Asset Management	MFS Investment Management 3,697	Mirae Asset Global Inv.	Mondrian Inv. Partners	Morgan Stanley Investment Mngt.	Neuberger Berman	Northern Trus Asset Mngt.
Total assets invested in Emerging & Frontier Market Equities (€m)	11,751	24,445.78	37,614 (5)	21,703	10,106.63	3,697	22,482	7,533 (31)	13,792.97	6,451	28,386
As at	31/03/19	31/03/19	30/06/19	31/12/18	30/03/19	31/05/19	31/05/19	30/06/19	30/06/19	31/03/19	31/03/19
Total AUM worldwide (€m)	37,940	415,546.22	187,543	1,131,342	343,576.23	418,125	120,100	44,930	436,674.81	287,303	851,153
Assets invested in Emerging & Frontier Market Equities (€m): nvested for Europe-based institutional clients		·									
nvested for Europe-based institutional clients	2,942 2,668	1,339.28	4,779	9,344	828.97	691		845	1,295.02	1,605	13,541
Pension fund clients	2,668	348.49	3,772	8,831		414		740	929.93	1,166	4,653
nsurance company clients	150	821.74	263	421		199		2	90.31	0	678
-Insurance company clients -All other institutional clients	124	169.05	744	92	828.97	78		103	414.43	439	8.210
n segregated accounts	1.839	4.926.63	22,449	10.569	1.795.43	911		5.291	6,413.33	3,478	8.352
n investment funds Actively managed	1,103	19.519.15	15.165	11,134 50	8.311.2	2.786		2.242	7.379.64	2.973	20.034
ctively managed	11.751	22 218 09	37.614	50	9 590 61	3.697		7.533	13.792.37	6.451	2.225
Janaged through specialist equity mandates	n	NA NA	n n	n	10.106.63	n n		7,000	n	0,-10	12.032
lanaged through specialist equity mandates managed on an active basis:		146		Ů	10,100.00	Ů		- U			12,002
argeted information ratio	>0.5	[2]	NA		[2]	[2]		(2)	(2)		0.5-1.0
chieved information ratio	≥0.5 0.74% ^[22]	0.62 (25)	0.38		0.79 (29)						0.3-1.0 0.12 (29)
acceptable tracking error	4-6%	3-8%	4-7% (2)		4-6% (2)	3-8%		4-7%			2-4%
Regions invested in within Emerging & Frontier Market equity funds —	4-070	3-070	4-770		4-070	3-676		4-770			Z-470
MERGING EUROPE:		т		D		D		ς	c		D
he Balkans	N			P P		<u>P</u>		<u>5</u>	<u>5</u>		P D
ne Balkans		<u>+</u>		P		_		<u>5</u>			P P
he Baltics	<u>N</u>	<u>_</u>		P P		_		<u>S</u>	<u>S</u>		<u>Р</u>
zech Republic	I	<u></u>		P D		<u> </u>		<u>S</u>	S		
Hungary											<u>P</u>
Poland				P				S	P		P
lussia	S	P		P		S		S	P		P
Turkey	S	P		P		T		S	P		P
ASIA:	P			P		P		S	P		P
China	P	P		P		P		S	P		P
ndia	P	P		Р		P		S	P		P
ndonesia	P	T		P		T		S	P		P
Malaysia	P	T		P		T		S	P		P
South Korea	P	P		P		Р		S	P		Р
laiwan la	P	P		P		S		S	P		P
Thailand	P	P		P		Ť		ς	P		P
ATIN AMERICA:				P		Þ		ζ	P		P
Argentina	S	T		P		T		Š	P		P
Brazil	P	P		D		P		<u> </u>	P		P
Chile				Ь		T		<u> </u>	Ь		P
Mexico		<u>+</u>		P					D		P
MIDDLE EAST AND AFRICA:		l e		<u>F</u>				<u>3</u>	P		P
				<u>P</u>		_			<u>P</u>		P P
Egypt		<u> </u>		P D		<u> </u>			<u>P</u>		P P
ordan	N	<u></u>		P P		<u></u>					
Morocco	N			P P				S	<u>Р</u>		P
Nigeria								<u>\$</u>			
South Africa	S	P		Р		T		S	P		P
RONTIER MARKETS:	T	T		P		T		S	P		P
lo. of countries in benchmark(s) invested in T/N	T: 19 [23]; T: 1 [24]	T: 30; N:0	[26]		(30)	T: 20+; N: 0		T: 0; N: 0	T: 1; N: 0		(33)
lo. of countries not in benchmark(s) invested in P/S/T	T: 5 [23]; T: 2 [24]		[26]	P, S & T: 0	(30)	P: 0; S: 0; T: 4		S: 1	P: 0; S: 2: T: 0		
Approach to managing Emerging & Frontier Market Equities:				<u> </u>					<u> </u>		
Core	X	X	X		X	X				X	X
alue			X					X			X
Growth			X						X		
Large Cap	X		X		X	X		X		X	X
Mid Cap/Small Cap	Ŷ		X		, , , , , , , , , , , , , , , , , , ,	X		X		X	X
Top Down	Ŷ		X			X		Ϋ́	Y	Λ	
Bottom Up	Ŷ	Y	Y		Y	Y	Υ	Ŷ	Ŷ	Y	
Thematic	^	^	^		^	^	^	^	^	^	
Sector											^
				(28)						[32]	
ither	100	100	(27)		00.00	100		100	25		100
% of Emerging & Frontier Market Equity research done in-house Number of professionals involved in Emerging & Frontier Market Equities	100	100		100	80-90	100		100	85	100	100
Number of professionals involved in Emerging & Frontier Market Equities	9	68	>50	32	4	75		8	28	5	53

IN SUMMARY

Survey overview

Total number of managers in survey	51
	€m
Total emerging and frontier market equity assets	898,334
Total European institutional assets*	178,386
Total pension fund assets*	71,436
Total insurance company assets*	12,273
Total other institutional assets*	49,641
Total in segregated accounts*	299,481
Total in investment funds*	327,054
Total actively managed*	582,478
Total in specialist mandates*	131,434

*Where disclosed

Top managers: total emerging and frontier market equity assets

	Company	€m	As at
1	Amundi	127,605	31/03/
2	Dimensional Fund Advisors	68,363	30/06/
3	State Street Global Advisors	66,329	31/03/
4	Baillie Gifford	54,108	30/03/
5	Franklin Templeton	42,856	30/06/
6	Fidelity International	42,767	30/06/
7	Lazard Asset Management	37,614	30/06/
8	Aberdeen Standard Investments	30,309	31/12/
9	Northern Trust Asset Management	28,386	31/03/
10	UBS Asset Management	26,826	31/03/
11	Robeco	24,780	31/05/
12	HSBC Global Asset Management	24,446	31/03/
13	Acadian Asset Management	24,009	30/06/
14	Mirae Asset Global Investments	22,482	31/05/
15	Legal & General Investment Management	21,703	31/12/
16	Vontobel Asset Management	21,288	31/12/
17	BNP Paribas Asset Management	19,737	31/03/
18	Fisher Investments Europe	15,072	31/03/
19	Morgan Stanley Investment Management	13,793	30/06/
20	Comgest	12,606	31/03/

Top managers: European institutional **EM** equity assets

	Company	€m	As at
1	Baillie Gifford	28,362	30/03/
2	State Street Global Advisors	16,198	31/03/
3	Robeco	15,625	31/05/
4	Northern Trust Asset Management	13,541	31/03/
5	Comgest	10,859	31/03/
6	Legal & General Investment Management	9,344	31/12/
7	Aberdeen Standard Investments	8,961	31/12/
8	Vontobel Asset Management	8,930	31/12/
9	Pictet Asset Management	8,060	30/06/
10	Fisher Investments Europe	5,528	31/03/
11	Dimensional Fund Advisors	5,383	30/06/
12	Acadian Asset Management	5,299	30/06/
13	Lazard Asset Management	4,779	30/06/
14	Fidelity International	4,633	30/06/
15	AllianceBernstein	3,048	31/03/
16	Hermes Investment Management	2,942	31/03/
17	Quoniam Asset Management	2,372	31/05/
	Ashmore Group	2,230	31/03/
19	BNP Paribas Asset Management	1,866	31/03/
20	Coronation Fund Managers	1,799	31/03/

Top managers: European pension fund **EM** equity assets

	Company	€m	As at
1	Legal & General Investment Management	8,831	31/12/1
2	Baillie Gifford	8,686	30/03/1
3	Robeco	5,943	31/05/1
4	Aberdeen Standard Investments	5,076	31/12/1
5	Comgest	4,778	31/03/1
6	Northern Trust Asset Management	4,653	31/03/1
7	Lazard Asset Management	3,772	30/06/1
8	Fisher Investments Europe	3,592	31/03/1
9	Pictet Asset Management	2,748	30/06/1
10) Hermes Investment Management	2,668	31/03/1
1	1 State Street Global Advisors	2,608	31/03/1
12	2 Fidelity International	2,604	30/06/1
10	3 Vontobel Asset Management	2,588	31/12/1
14	4 Dimensional Fund Advisors	2,287	30/06/1
15	Coronation Fund Managers	1,386	31/03/1
16	6 AllianceBernstein	1,247	31/03/1
1.	7 Neuberger Berman	1,166	31/03/1
18	B Morgan Stanley Investment Management	930	30/06/1
19	9 Mondrian Investment Partners	740	30/06/1
20) Unigestion	649	31/05/1

Key:NA= Not available; P= Permanently; T= Tactically; S= Strategically; N= Never

Footnotes:

(1) Aberdeen Global Emerging Markets Equity (2) No target

(3) Style-neutral and top-down approach to coun-

try allocation

(4) As at 31/03/19

(5) Does not include those assets held in global, balanced or other non-specialist products or

(6) Varies by strategy

(7) As bottom-up stock pickers, country allocation is a direct result of the firm's conviction in

(8) Relates to the Baring Global Emerging Markets

Fund Class A EUR (9) Growth at a Reasonable Price (GARP), all

capitalisation (10) 3-5 years

individual stocks

(11) 5-year (12) 2-year

(13) Long-term, Graham & Dodd

(15) Growth at a Reasonable Price (GARP)(16) Global Emerging Market strategies

(17) Long term valuation driven

(18) Increased emphasis on higher expected return securities: lower relative price, lower market

capitalisation, higher profitability (19) Includes emerging market country specific

(20) The firm may strategically or tactically consider investing in all 24 countries in the MSCI Emerging Markets Index and all 22 countries in the MSCI Frontier Markets Index

(21) The firm may strategically or tactically invest in countries not in the MSCI Emerging Markets Index and the MSCI Frontier Market Index when

they complement higher-level portfolio themes [22] 1-year[23] Hermes Global Emerging Markets Equity

[24] Hermes Asia ex Japan Equity Strategy [25] HSBC Global Emerging Markets Equity com posite vs. the MSCI Emerging Markets Free (net) index, 3 years to 31/03/19

(26) The firm invests in the countries represented in the MSCI Emerging Markets Index, as well as

other emerging market countries (27) Majority

(28) Index

(30) The firm do not make tactical short-term decisions on asset allocation. Strategically look at all countries in the Emerging Markets benchmark, even if do not currently have holdings in a particular country

(31) Relates to Emerging Market and Frontier

Market strategies only (32) Quality at a Reasonable Price

[33] The firm's passive approach seeks to replicate the risk/return characteristics of the benchmark, including all the countries (34) Jennison

(35) QMA (36) Low volatility multi factor (37) RBC EM Equity, 3-year

(38) The firm's exposure to emerging market

Europe tends to be minimal especially on the core and small cap strategies, so the exposure is typically zero

(39) Quantitative core and low volatility, and ETF

(40) The firm do not make short-term bets and have an unconstrained mandate, so all countries

(41) The firm are allowed to invest up to 50%

of the portfolio in companies listed outside of emerging markets
[42] The subsequent data relates to the firm's Ac-

tive Emerging Market strategies [43] The firm offers multiple emerging markets equity funds, both actively and passively managed

(45) Relates to European institutional assets

(46) Quality Growth

[47] The subsequent data relates to the Berkeley Street Emerging Markets strategy

SEPTEMBER 2019 INVESTMENT & PENSIONS EUROPE

IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

Company	PanAgora Asset Management	PGIM	Pictet Asset Management	PineBridge Investments	Principal Global Inv.	Quoniam Asset Management	RBC Global Asset Mngt. (UK)	Robeco
Total assets invested in Emerging & Frontier Market Equities (€m)	1,109.31	6,027	10,283	12,165	9,649	3,974	8,955	24,780
As at	31/05/19	31/03/19	30/06/19	31/03/19	31/03/19	31/05/19	31/03/19	31/05/19
Total AUM worldwide (€m)	38,940.38	1,087,751	167,121	83,260	394,052	30,640	298,037	178,941 [4
Assets invested in Emerging & Frontier Market Equities (€m): nvested for Europe-based institutional clients	151.11	n	8.060	420	593	2.372	773	15.625
Pension fund clients	151.11	<u> </u>	2,748	32	534	302	373	5,943
Insurance company clients	0	0	2,740	35	334	0	0	3,743
-All other institutional clients	n n	n n		353	59	2.070	400	
n segregated accounts	722	3.862		805	4,575	2.234	858	13,647
n investment funds	387.31	2.165		11.359	5.074	1.740	8.097	11.133
Actively managed	1.109.31	6.027		12.165	9.562	3.974	8.955	24.781
Managed through specialist equity mandates	465.03	1.598		0	2,413	1.589	0	0
f managed on an active basis:	-100.00	1,070			2,-10	1,007		
Targeted information ratio	0.5-1.0	1 (35)		(6)	0.50-0.75	NA	[2]	[6]
Achieved information ratio	0.4416	0.13 (34), 0.61 (35)		(6)		0.56	-0.05 (37)	[6]
Acceptable tracking error	2-5%	1-3% (35)		(6)	<7%	4-7%	4-8% (2)	[6]
Regions invested in within Emerging & Frontier Market equity funds -							• • • • • • • • • • • • • • • • • • • •	
EMERGING EUROPE:	Р			Р		Р	S	Р
The Balkans	Ň	T/N		Ň	T	Ň	Š	Ň
The Baltics	N	T/N		T	T	N	S	N
Czech Republic	Р	P/T	· · · · · · · · · · · · · · · · · · ·	T	T	Р	S	S
Hungary '	P	P/T		T	T	P	S	S
Poland	P	P/T		T	S	P	S	S
Russia	P	P/T		T	T	P	S	P
Turkey	P	P/T		T	T	P	S	S
ASIA:	P			P		P	S	P
China	P	P/T		P	P	P	S	P
ndia	P	P/T		P	P	P	S	P
ndonesia	P	P/T		P	<u>S</u>	P	S	S
Malaysia	P	P/T		<u>P</u>	<u>S</u>	<u>P</u>	S	<u>S</u>
South Korea	<u>Р</u> Р	P/T		<u>Р</u> Р	<u>Р</u>	P	S	<u>P</u>
<u>Taiwan</u>	<u>Р</u> Р	P/T		P P	P c	<u>Р</u> Р	<u>S</u>	<u>Р</u> S
Thailand AMERICA	P	P/T			5	P	<u> </u>	
ATIN AMERICA:	Р N	P/T		P P		P N	<u> </u>	P
Argentina				P P	IP	N P	5	<u>5</u>
Brazil	<u>Р</u> Р	P/T P/T		<u>Р</u>	<u> </u>	P P	<u>S</u>	<u> </u>
Chile	<u>Р</u> Р	P/T		P P	<u> </u>	P P	<u>S</u>	5
Mexico MIDDLE EAST AND AFRICA:	<u>Р</u> Р	P/1		P P	5	P P	<u>S</u>	<u> </u>
	<u> </u>	P/T		P P	т -	P	<u>5</u>	<u> </u>
Egypt Jordan	N	T/N		P P	<u> </u>	N N	S S	<u> </u>
Morocco	N N	T/N		P	+	N N	ς ς	+
Nigeria	N N	T/N		P	-	N N	Š	+
South Africa	P	P/T		P	P	P	Š	
FRONTIER MARKETS:	N			N		N	S	-
No. of countries in benchmark(s) invested in T/N	T: 1: N: 0	T: 27: N: 0 (34)		(6)	T: 12: N: 0	T & N: 0	(38)	T: 3: N: 0
No. of countries not in benchmark(s) invested in P/S/T	P. S & T: 0	P: 26 (35)		(6)	P: 0: S: 0: T: 5	P. S & T: 0	S: 5	S: 0: T: 2
Approach to managing Emerging & Frontier Market Equities:	F, 3 00 1: 0	F. 20 · ·			F: 0; J: 0; 1: J	F, 3 0x 1: 0	J: J	3:0;1:2
Core	Y	Υ		Y	Y		Y	Y
/alue		Λ		Λ			Ϋ́	Ŷ
Growth		Υ					Ϋ́	
Large Cap		X		Υ	Υ	Υ	Ϋ́	X
Mid Cap/Small Cap		X		X	Α	X	X	X
Top Down		Α		X			X	X
Bottom Up	X	Χ		X	Χ	Χ	X	X
Thematic		^			Α		X	X
Sector							^	
Other						[36]	[39]	
Wo of Emerging & Frontier Market Equity research done in-house Number of professionals involved in Emerging & Frontier Market Equities	100	90 (34): 100 (35)		80-90	>90	100	100	90
A ST ELLER BUT BE TOURIST FINE INC. ENGINE TO SEAL STEAD OF THE HOUSE				24	- / / /	20	8	57
Number of professionals involved in Emerging & Frontier Market Equities	22	20 (34): 21 (35)		/4		/11	N N	

otal assets invested in Emerging & Frontier Market Equities [€m] s at otal AUM worldwide [€m] ssets invested in Emerging & Frontier Market Equities [€m]: nvested for Europe-based institutional clients Pension fund clients	Funds 1,865 31/05/19 6,252	Global Advisors 66,328.86 31/03/19	Management 26,826			Management	Asset Mngt.	Blair
s at otal AUM worldwide (€m) ssets invested in Emerging & Frontier Market Equities (€m): nvested for Europe-based institutional clients	31/05/19	31/03/19		981	4,631	21,288	11,458.53	12,257
ssets invested in Emerging & Frontier Market Equities (€m): nvested for Europe-based institutional clients	6,252		31/03/19	31/05/19	31/03/19	31/12/18	31/03/19	31/03/19
nvested for Europe-based institutional clients		2.498.440.31	734,536	19,985	42.208	104,138	342.528.33	47.854
nvested for Europe-based institutional clients				•	<u> </u>			
Paneion fund cliente	224	16,197.97		844	62	8,930	811.23	1,716
		2,607.96		649		2,588	0	416
Insurance company clients		3,383.53		31		780	0	0
All other institutional clients		10.206.48		164	62	5,562	811.23	1,300
n segregated accounts	0	39,298.07		254	382	1,484 [45]	5,752.03	7,715
n investment funds	1,865	27,030.79		727	4.249	7,446 (45)	5,706.5	4,542
ctively managed	1,865	8,857.93	26,826	981	2,424	21,288	11,458.53	12,257
lanaged through specialist equity mandates	00	00		0	2,206	0	00	0
managed on an active basis:		1 (42)		(2)			A.I.A. (/2)	
argeted information ratio	NA	1 (42)		(2)			NA (47)	NA [2]
chieved information ratio	0.65	-20/		(2)			0.46 (29)	(2)
cceptable tracking error legions invested in within Emerging & Frontier Market eguity funds –	NA	≤2%		(2)			NA	(2)
legions invested in within Emerging & Frontier Market equity funds –	S	S		S	S		S	т т
he Balkans	S	S N	N	S N	5		<u> </u>	+
he Baltics	<u>S</u>	N N	N N	N N			<u> </u>	_
zech Republic	<u> </u>	S	S	S			<u>S</u>	+
lungary	<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>	
oland	<u> </u>	<u> </u>	<u> </u>	<u> </u>	P		<u>`</u>	+ _
russia	Š	Š	Š	Š	P		Š	Ť
urkey	Š	Š	Š	Š			Š	
SIA:	Š	Š		ς	ς		Š	P
thina	Š	Š	ς	Š	P		Š	5
ndia	Š	S	Š	Š	P		Š	Š
ndonesia	S	S	S	S	P		S	S
Malaysia	S	S	S	S			S	S
outh Korea	S	S	S	S			S	S
aiwan	S	S	S	S			S	S
hailand	S	S	S	S			S	S
ATIN AMERICA:	S	S		S	S		S	Р
rgentina	S	S	N	N			S	T
razil	S	S	S	S	Р		S	S
hile	S	S	S	S			S	S
1exico	S	S	S	S			S	S
MIDDLE EAST AND AFRICA:	S	S		S	P/S		S	P
gypt	S	S	N	S	P		S	T
ordan	S	N	N	N			S	T_
forocco	<u> </u>	N.	N	<u>S</u>			S	<u>T</u>
ligeria	<u>S</u>	<u>N</u>	<u>N</u>	<u>N</u>			<u>S</u>	
outh Africa	S	S	S	S			S	<u> </u>
RONTIER MARKETS:	S (40)	N N		N N	S (43)		S	
lo. of countries in benchmark(s) invested in T/N	[41]	T & N: 0		T & N: 0	[43]		T & N: 0	NA_
lo. of countries not in benchmark(s) invested in P/S/T	[41]	P, S & T: 0		P, S & T: 0	(43)		S: 2	NA_
pproach to managing Emerging & Frontier Market Equities:		V			V		X	
ore	X	X	Y		X	Y	X	
alue	X	X	Χ		X	X.		
rowth		<u>\</u>	X	Y				
arge Cap		-	Λ	Λ		Λ		
Mid Cap/Small Cap				V				
		- X	V	X	V	V	V	
lottom Up	X	- X	X	X	X	X	X	X
hematic		X						
ectorther					[44]	(46)		
	100	90	100	100	50	90	80	[27]
6 of Emerging & Frontier Market Equity research done in-house Jumber of professionals involved in Emerging & Frontier Market Equities	100	90 22	25	25	5U 8	90 39	8U 15	26