INVESTMENT INVESTMENT

IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

Company	Aberdeen Standard Investments	d Acadian Asset	AGF Investments	AllianceBernstein	Allianz Global Investors (4)	Amundi	Ashmore Group	AXA Investment Managers	Baillie Gifford	Barings	BNP Paribas Asset Management
Total assets invested in Emerging & Frontier Market Equities (€m)	44.691.63	Management 24,165 [2]	1.199.45	9.787	1,600	22.300	4.000	Managers 999	49.660	5,972	19.468
As at	31/12/17	30/06/18	31/03/18	31/03/18	30/06/18	30/06/18	30/06/18	31/03/18	31/03/18	31/03/18	31/03/18
Total AUM worldwide (€m)	652.371.64	83.163	18.319.65	452,939	2.100 (44)	1.466.000	62.800	745,424	202.577	248.270	567.921
Assets invested in Emerging & Frontier Market Equities (€m):						.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Invested for Europe-based institutional clients	12,067.13	7,654	496.16	1,594	400		2.000	288	9,461	817	1,771
-Pension fund clients	5.748.82	3.246	496.16	1.351	125		_,	0	8.156	574	244
-Insurance company clients			0	215	0			288	0	0	532
-All other institutional clients			0	28	275			0	1,305	243	995
In segregated accounts	18.354.84		496.16	4.322	155			255	41.359	2.436	13.121
In investment funds			703.29	5,465	245			744	8,301	3,536	6,347
_Actively managed	44,691,63		1,199,45	9,559	1,600		4.000		49,660	5,972	18,903
Managed through specialist equity mandates	16		0		0				0	49	
If managed on an active basis:											
Targeted information ratio	1		(3)		0.6				(3)	NA	0.7 (9)
Achieved information ratio	-0.8 (1)		-0.3		0.55				NA	0.43 (6) (7)	0.75 (7)
Acceptable tracking error	4.99%		(3)		5%					2-8%	3-6%
Regions invested in within Emerging & Frontier Market equity funds -	-										
EMERGING EUROPE:	P				P		P/S/T		(5)	S (8)	S
The Balkans	<u>S</u>		N.		N.		P/S/T			<u>S</u>	S
The Baltics	S		N		N		P/S/T			S	S
Czech Republic	<u>S</u>		P		<u>I</u>		P/S/T			S	S
Hungary	<u>S</u>		<u>S</u>		<u>I</u>		P/S/T			<u>S</u>	<u>S</u>
Poland	S		S		<u>I</u>		P/S/T			S	<u>S</u>
Russia	S		<u>N</u>		<u>P</u>		P/S/T			S	<u>S</u>
Turkey	<u>S</u>		P				P/S/T			<u> </u>	<u> </u>
ASIA:	P				<u> </u>		P/S/T			<u> </u>	<u>P</u>
China	<u> </u>		P P		<u> </u>		P/S/T			<u> </u>	Р Р
_India	<u> </u>		Р		<u>P</u>		P/S/T			<u> </u>	P
Indonesia			P P				P/S/T			<u> </u>	
Malaysia	<u> </u>		<u> </u>				P/S/T			<u> </u>	
South Korea	S		P		P P		P/S/T			<u> </u>	P D
Taiwan			P P		P P		P/S/T P/S/T			<u>S</u>	P
Thailand LATIN AMERICA:	<u>S</u>		Р		<u> </u>		P/S/T P/S/T			<u> </u>	<u> </u>
	<u>P</u>		S		N N		P/S/T				<u>5</u>
Argentina Brazil			<u>5</u>		N		P/S/T			<u>S</u>	<u>5</u>
Chile			5				P/S/T			<u>S</u>	<u>5</u>
Mexico	<u>S</u>				+		P/S/T				<u>3</u>
MIDDLE EAST AND AFRICA:					÷		P/S/T			- c	<u>5</u>
Egypt			ς		Ť		P/S/T			<u> </u>	<u>5</u>
Jordan	Š		N N		N N		P/S/T			<u> </u>	Ň
Morocco	Š		N N		Ň		P/S/T			<u> </u>	S
Nigeria	<u> </u>		N N		Ň		P/S/T			Š	Š
South Africa	<u> </u>		P		P		P/S/T			Š	Š
FRONTIER MARKETS:	P		Ś		Ň		P/S/T			Š	
No. of countries in benchmark(s) invested in T/N	T & N: 0		T: 0: N: 1		T: 5; N: 5		.,,,,,			T & N: 0	N: 1
No of countries not in henchmark(s) invested in P/S/T	P: 0: S: 10: T: 0		P: 1: S: 3: T: 0		P: 0: S: 2: T: 2					P:0: S: 10: T: 0	
No. of countries not in benchmark(s) invested in P/S/T Approach to managing Emerging & Frontier Market Equities:	,,				,					,,	
Core			X	X	X		X	X			
Value	X			X			X	X			
Growth				X			X	X	Х		X
Large Cap				•			X	X		Х	X
Mid Cap/Small Cap							X	X		X	X
Top Down							X	X			
Bottom Up	X		X	X	X		X	X	Х	X	X
Thematic								X			
Sector								X			
Other								X			
% of Emerging & Frontier Market Equity research done in-house	90		70		90		70	85	100	100	100
Number of professionals involved in Emerging & Frontier Market Equition	es 62		30	30			38			32	

mpany	Brandes	Candriam	CBL Asset	ClariVest Asset	Columbia	Comgest	Coronation	Danske Bank	Dimensional	East	Fidelity
	Inv. Partners	((45.0)	Management 50	Management	Threadneedle Inv.	4 / 5 / 4	Fund Managers	Asset Mngt.	Fund Advisors	Capital 2,518	Internationa
al assets invested in Emerging & Frontier Market Equities (€m)	5,274	4,415.84	<u> </u>	1,715	5,447	16,761	5,270.2	7,356	65,835	2,518	14,745.3
at (O)	31/03/18	31/05/18 112 565 88	30/06/18	30/06/18 7 027	31/03/18	31/03/18 27.806	30/06/18 43.792.7	30/09/17	30/06/18	30/06/18	30/06/17
al AUM worldwide (€m)	24,621	112,565.88	692	7,027	395,206	27,806	43,792.7	105,895	498,763.03	2,918	265,800
sets invested in Emerging & Frontier Market Equities (€m): ested for Europe-based institutional clients	489	1.618.35	17	222	356	11.386	1 700 0	1.524	4.868.27	740	2.022
ested for Europe-based Institutional clients	489 n		17	220	339	4.668	1,729.8 1,328.7			/4U	1.077.2
ension fund clients	U	304.74	1/	NA NA	339 17	1,366		225	2,547.41		
surance company clients	489	70.45 1.243.15	U 0	NA 200	1/ n	5.352	0 401.1	194 1 105			115.3 829.5
l other institutional clients			U	220						1 200	829.5
segregated accounts	2,932 2,342	767.84 3 648	17 ^[12]	1,588 127	1,526 3 921	4,376 12,385	1,534.6 3,735.6	1,683 5,673		1,280 1,238	
nvestment funds		3,648 4 370 4	58	1 715	3,921 5,371	12,385		5,673 7 194	65.835	1,238 2,518	47.705.5
tively managed	5.274				5,371		5,270.2	7,194	65,835	2,518	14,637.7
naged through specialist equity mandates	5,274	0	58	NA	U	0	589.3	U			
nanaged on an active basis:		(3)					[3]				(15)
geted information ratio	NA (10)			0.5-1.0	0.25-1.0	NA NA		0.5-0.75			(15)
hieved information ratio	6.79 (10)	1.03 (7)		0.769	0.88 (7)	0.14 (10)	0.52	0.24			(15)
ceptable tracking error	-0.03 [10]	Max. 6%		3-6%	3-9%	NA	5-10%	8-10%			(13)
gions invested in within Emerging & Frontier Market equity funds –			- /o /=								
ERGING EUROPE:	S	<u>I</u>	P/S/T	S	<u>P</u>	S	S	P		P	
e Balkans	<u>S</u>	<u>I</u>	P/S/T	N.	<u>I</u>	S	S	<u> </u>		P	
e Baltics	S	<u>I</u>	P/S/T	N		S	S	<u>T</u>		P	
ech Republic	S	<u>P</u>	P/S/T	S	S	S	S	<u>T</u>		P	
ngary	S	P	P/S/T	S	S	S	S	T		P	
land	S	P	P/S/T	S	P	S	S	S		P	
ssia	S	P	P/S/T	S	P	S	S	S		P	
rkev	S	P	P/S/T	S	S	S	S	S		P	
IA:	S	T	P/S/T	S	Р	S	S			Р	
ina	S	P	T	S	P	S	S	S		P	
lia	S	P	T	S	P	S	S	S		P	
onesia	S	P	T	S	P	S	S	S		P	
laysia	S	Р	T	S	S	S	S	T		P	
uth Korea	S	Р	T	S	P	S	S	T		P	
wan	S	Р	T	S	P	S	S	S		P	
ailand	S	Р	T	S	S	S	S	S		P	
TIN AMERICA:	S	T	Ť	S	S	S	S			P	
gentina	S	Ť	Ť	S	S	S	S	T		P	
azil	S	P	Ť	S	P	S	S	S		P	
ile	S	P	Ť	S	P	S	S	S		P	
xico	S	P	Ť	S	P	S	S	S		P	
DDLE EAST AND AFRICA:	Š	Ť	Ť	S	T	Š	Š			P	
ypt	Š	P	Ť	S	Ť	S	Š	S		P	
dan	Š	Ť	Ť	S	Ť	Š	Š	Ť		P	
rocco	Š	Ť	†	N N	Ť	Š	Š	Ś		P	
neria	Š	Ť	i	N	Ť	Š	Š	Ť		P	
uth Africa	Š	P	i	S	P	Š	Š	Ś		P	
ONTIER MARKETS:	Š	Ť	†	N N	Ť	Š	Š	P		P	
of countries in benchmark(s) invested in T/N	S: 24	T & N: 0		T & N: 0	T: 5: N: 0	T & N: 0	T & N: 0	T: 5; N: 0			(15)
of countries not in benchmark(s) invested in P/S/T	S: 29	T: 12			P: 0: S: 5-10: T: 10-20		P: 0: S: 16: T: 0	T: 8: S: 3			(15)
proach to managing Emerging & Frontier Market Equities:	J. 2/	1.14		1, 0, 0, 1, 0	. 0, 0. 0-10, 1. 10-20	1.0,0.0,1:0	1.0,0,10,1:0	1.0,0.0			
re			Y	Y	Y			Y			
ue	Y		^	^	^			^			
owth	^	Y			Y	Y		Y		Y	
rge Cap	Y	Ŷ		Y	Ŷ	Ŷ		^		^	
i Cap/Small Cap	^	Ŷ		Ŷ	- A	÷		٧			
Down		Λ		Λ	-	^					
	V		X	V	X V			X		V	
ttom Up	X	V	X	X	X	X	X	X		X	X
ematic ematic		Χ									
ctor	(11)				[13]		[14]				
ner of Emerging & Frontier Market Equity research done in-house	70	100		95	90	80	80	100		100	100

IN SUMMARY

Survey overview

Total number of managers in survey	61
	€m
Total emerging and frontier market equity assets	912,076
Total European institutional assets*	188,379
Total pension fund assets*	96,230
Total insurance company assets*	10,187
Total other institutional assets*	48,859
Total in segregated accounts*	382,107
Total in investment funds*	439,882
Total actively managed*	742,455
Total in specialist mandates*	23 708

Top managers: total emerging and frontier market equity assets

	Company	€m	As at
1	J.P. Morgan Asset Management	77,287	30/06/
2	Dimensional Fund Advisors	65,835	30/06/
3	State Street Global Advisors	58,370	31/03/
4	Baillie Gifford	49,660	31/03/
5	Aberdeen Standard Investments	44,692	31/12/
6	Lazard Asset Management	43,545	31/03/
7	Mirae Asset Global Investments	26,470	30/06/
8	Northern Trust Asset Management	25,416	31/03/
9	HSBC Global Asset Management	25,272	31/03/
10	Acadian Asset Management	24,165	30/06/
11	Robeco	22,537	31/05/
12	UBS Asset Management	22,305	31/03/
13	Amundi	22,300	30/06/
14	Legal & General Investment Management	20,907	31/12/
15	Vontobel Asset Management	19,725	31/12/
16	BNP Paribas Asset Management	19,468	31/03/
17	Franklin Templeton Investments	18,777	30/06/
18	Investec Asset Management	17,625	30/06/
19	Goldman Sachs Asset Management	17,067	31/03/
20	Comgest	16,761	31/03/

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

	Company	€m	As at
1	State Street Global Advisors	14,495	31/03/
2	Robeco	14,421	31/05/
2 3 4 5 6	Aberdeen Standard Investments	12,067	31/12/
4	Legal & General Investment Management	11,848	31/12/1
5	Comgest	11,386	31/03/
6	Baillie Gifford	9,461	31/03/1
7	Northern Trust Asset Management	8,917	31/03/
8	Acadian Asset Management	7,654	30/06/
9	J.P. Morgan Asset Management	6,623	30/06/1
10	Russell Investments	6,610	30/06/1
11	Vontobel Asset Management	6,469	31/12/1
12	Fisher Investments	5,935	31/03/1
13	Pictet Asset Management	5,738	31/05/
14	Goldman Sachs Asset Management	5,566	31/03/1
15	Lazard Asset Management	5,141	31/03/1
16	Dimensional Fund Advisors	4,868	30/06/1
17	Hermes Investment Management	3,087	31/03/
18	Quoniam	3,009	30/05/1
19	Man Group	2,719	31/03/
20	Nordea Asset Management	2,474	31/08/

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

	Company	€m	As at
1	State Street Global Advisors	12,035	31/03/18
2	Legal & General Investment Management	10,637	31/12/17
3	Baillie Gifford	8,156	31/03/18
4	Aberdeen Standard Investments	5,749	31/12/17
5	Robeco	5,240	31/05/18
6	Northern Trust Asset Management	4,969	31/03/18
7	Comgest	4,668	31/03/18
В	Fisher Investments	4,060	31/03/18
9	Lazard Asset Management	3,691	31/03/18
10	Acadian Asset Management	3,246	30/06/18
11	Russell Investments	2,851	30/06/18
12	Hermes Investment Management	2,764	31/03/18
13	Pictet Asset Management	2,629	31/05/18
14	Vontobel Asset Management	2,569	31/12/17
15	Dimensional Fund Advisors	2,547	30/06/18
16	J.P. Morgan Asset Management	2,390	30/06/18
17	TKP Investments	1,587	30/06/18
18	Man Group	1,428	31/03/18
19	AllianceBernstein	1,351	31/03/18
20	Coronation Fund Managara	1 220	20/04/10

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

Footnotes:

(1) 5-year, based on the flagship Aberdeen Global - Emerging

Market Equity Fund

(2) Includes only dedicated strategies
(3) No target

(4) Systematic team, San Diego

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

(6) Data relates to the Baring Global Emerging Markets Fund Class A EUR share class

(8) The firm's approach is primarily bottom up, considering companies based on their own merits. Sector and country allocation results from fundamental company research, rather than from any pre-determined preferences. The firm expects investments to deliver the expected return within a 3-5 year investment horizon, so do not generally tactically asset allocate
(9) The following data relates to the Global Emerging Equity

(10) 5-year

(11) Long-term, Graham & Dodd

(12) Relates to Europe-based institutional clients

[13] GARP (Growth at a Reasonable Price)

(14) Long term valuation driven

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

(17) 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

[18] The firm strategically invests in all countries within the $\,$ MSCI Emerging Markets Index and MSCI Frontier Markets

Index (19) 1-year

(20) Hermes Global Emerging Markets Equity Strategy: Tactically, 19; Hermes Asia ex Japan Equity Strategy: Tactically, 1 (21) Hermes Global Emerging Markets Equity Strategy: Tactically, 5; Hermes Asia ex Japan Equity Strategy: Tactically, 2

(22) The firm's product architecture is based on running measured risks against its benchmark, which is the MSCI Emerging Markets Index, allowing +/-10% country positions against the benchmark

(23) The only "non-benchmark" stocks the firm will invest in are those companies that may be listed in a non-emerging market, but have at least 50% of their businesses in an emerg-

(24) This and subsequent data relates to Janus Henderson's Global Emerging Markets team specifically

[25] The firm's primary measurement of active risk is active share, rather than tracking error [26] Excludes the firm's Japan equity investment professionals

[27] The firm invests in the countries represented in the MSCI Emerging Markets Index, as well as other emerging market

(28) Majority (29) Index

(30) AUM of institutional clients invested in flagship pooled

(31) The M&G Global Emerging Markets Fund invests at least 80% in stocks in the MSCI Emerging Markets index (32) The firm doesn't make tactical short-term decisions on

asset allocation, but strategically looks at all countries in the Emerging Markets benchmark, as well as some outside the benchmark

(33) Quantitative

(34) Relates to total AUM worldwide

(35) Relates to emerging and frontier market strategies only

[36] Quality at a Reasonable Price[37] The firm adopts a passive approach, seeking to replicate

the risk/return characteristics of the benchmark (38) QMA

[40] The following data relates to Pictet's Global Emerging Markets fund

(41) Relates to the Fundamental Emerging Markets Equities

(42) The firm is allowed to invest up to 50% of the portfolio in companies listed outside of emerging markets

[43] Momentum

(44) Total AUM worldwide, €524bn

(45) As at 31/12/17

IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

Company	Fisher Investments	Franklin Templeton Inv.	Goldman Sachs Asset Management	Hermes Investment Management 10,505	HSBC Global Asset Management	Investec Asset Management 17,625
Total assets invested in Emerging & Frontier Market Equities (€m)	15,916,42	18,777.3	17,066.88	10,505	25,272.32	17,625
As at	31/03/18	30/06/18	31/03/18	31/03/18	31/03/18	30/06/18
Total AUM worldwide (€m)	78,914.84	619,773.59	1,051,762.79	38,359	391,651.78	120,849
Assets invested in Emerging & Frontier Market Equities (€m):						
nvested for Europe-based institutional clients	5,935.38	2,182.4	5,565.75	3,087	1,487.35	960
-Pension fund clients	4,059.87	122.64	206.54	2,764	445.68	443
-Insurance company clients	70.74	0		155	978.88	63
-All other institutional clients	1,804,77	2,059,76		168	62.79	454
n segregated accounts	11,882.13	3,221.27	2,858.55	3,660	4,632.27	6,386
n investment funds	4.034.29	15,556.03	14.208	6.845	20,640.05	11,239
Actively managed	15,916.42	18,777.3	17.066.88	10.505	22.982.15	17,625
Managed through specialist equity mandates	0	0	NA	0	NA	36
f managed on an active basis:			(-)		421	
Targeted information ratio	11	NA	(15)	0.5	[3]	1
Achieved information ratio	0.72	NA	(15)	2.18 (19)	0.50-1.08 ⁽⁷⁾	1
Acceptable tracking error	4-8%	NA	(15)	4-6%	3-8%	3%
Regions invested in within Emerging & Frontier Market equity funds –						
MERGING EUROPE:	S	S	(15)	N	T	
he Balkans	S	S		N	T	S
he Baltics	S	S		N	T	S
zech Republic	S	S		T	T	S
lungary .	S	S		S	T	S
Poland	S	S		T	T	S
Russia	S	S		S	P	S
urkev	S	S		S	P	S
SIA:	Š	S		P	'	P
China	Š	S		P	P	P
ndia	Š	Š		P	P	P
ndonesia	Š	Š		P	T	S
Malaysia	<u> </u>	Š		P	÷	<u> </u>
South Korea		Š		P	P	
aiwan	<u>S</u>	<u>S</u>		P	P	P
hailand	- S	<u>S</u>			P	c
ATIN AMERICA:				<u>г</u> Р		
rgentina	<u>J</u>	<u>></u>		5	т	
Brazil	c			<u>э</u> Р	P	
Chile		<u>5</u>		<u> </u>		
	<u> </u>	<u> </u>		I	+	
Mexico MIDDLE EAST AND AFRICA:	<u>></u>	3		<u> </u>		
	<u> </u>	<u> </u>		<u></u>	T	
gypt	<u>_</u>	<u></u>			<u></u>	5
ordan				N	<u></u>	N
Morocco				<u>N</u>		N
Nigeria	5	<u>S</u>				<u>N</u>
outh Africa	S	S		<u> </u>	<u>P</u>	P
RONTIER MARKETS:	S	<u>S</u>	(45)	(00)		N (na)
lo. of countries in benchmark(s) invested in T/N	(16) (17)	(18)	(15)	(20)	T: 30; N: 0	(22)
No. of countries not in benchmark(s) invested in P/S/T	[17]		[15]	[21]		[23]
pproach to managing Emerging & Frontier Market Equities:	.,		(45)			
ore	X		(15)	X	X	
/alue		X				
Growth						
arge Cap		X		X		
1id Cap/Small Cap		X				
Top Down	X					
Bottom Up		Χ		X	Χ	X
hematic	Χ					
Sector						
ther						
of Emerging & Frontier Market Equity research done in-house	85	90	NA	100	100	100
	66	87		9	81	108

Company	Janus Henderson	J.P. Morgan	Lazard Asset	Legal & General	M&G	Macquarie Asse
Filed and the first of the Fermi and Franking Mandata Franking (One)	Investors	Asset Management 77.287	Management	Investment Mngt. 20,907	Investments	Management 8.123.54
otal assets invested in Emerging & Frontier Market Equities (€m)	7,077 31/03/18	30/06/18	43,545 31/03/18	31/12/17	11,790 30/06/18	31/03/18
As at	31/03/18	1,439,311	183.875	1,107,666	30/06/18	31/03/18
Total AUM worldwide (€m) Assets invested in Emerging & Frontier Market Equities (€m):	302,415	1,437,311	183,875	1,107,666	336,170	301,527.22
Assets invested in Emerging & Frontier Market Equities (Em):	2.170	/ /22	F 1/1	11.0/0	291 (30)	754.64
nvested for Europe-based institutional clients		6,623	5,141	11,848		
Pension fund clients	712	2,390	3,691	10,637	NA.	0
Insurance company clients	8	3,239	275	527	NA.	0
All other institutional clients	1,450	994	1,175	684	NA NA	754.64
n segregated accounts	2,393	20,409	23,061	8,754	1,728	2,447.06
n investment funds	4.684	56.878	20.484	12,153	10.062	5,676.48
Actively managed	7.077	77,287	43,545	45	11,790	8,123.54
Managed through specialist equity mandates	0	3,031	0	0	0	0
f managed on an active basis:						
Fargeted information ratio	NA (24)	0.5+	NA	NA	NA	(3)
Achieved information ratio	-0.33 ⁽⁷⁾	0.92 [7]	0.23 [7]	NA NA	-0.10	1.02 (7)
Acceptable tracking error	3-7%	[25]	4-7%	NA NA	NA NA	(3)
Regions invested in within Emerging & Frontier Market equity funds –						
EMERGING EUROPE:	S	P		P	T	
The Balkans	S	T		Р	T	
The Baltics	S	Ť		P	Ť	
Czech Republic	Š	P		P	Ť	
Hungary	Š	P		P	Ť	
Poland	Š	P		P	÷	
Russia	č	P		D	± ±	
Turkev	<u>S</u>	P		P	_	
ASIA:	<u>S</u>	P		P	- +	
	<u>S</u>	<u>P</u>		P P	_	
China		P P		P P	<u>+</u>	
ndia .		Р Р			<u> </u>	
ndonesia		<u>Р</u>		<u>Р</u>	<u></u>	
Malaysia						
South Korea	<u>S</u>	<u>P</u>		P		
[aiwan	S	<u>P</u>		P		
<u>Fhailand</u>	S	T		P	T	
_ATIN AMERICA:	S	P		P	T	
Argentina	S	T		P	T	
Brazil	S	P		Р	T	
Chile	S	P		P	T	
Mexico	S	Р		Р	T	
MIDDLE EAST AND AFRICA:	S	P		Р	T	
gypt	S	T		P	T	
Jordan	S	Ť		P	Ť	
Morocco	S	P		P	Ť	
Nigeria	Š	P		P	Ť	
South Africa	Š	P		P	Ť	
FRONTIER MARKETS:	<u> </u>	ς .			- t	
No. of countries in benchmark(s) invested in T/N	T & N: 0	T: 0: N: 10	(27)	T & N: 0	(31)	[32]
No. of countries not in benchmark(s) invested in P/S/T	P. S & T: 0	S: 8	(27)	P. S & T: 0	[31]	S: 7
Approach to managing Emerging & Frontier Market Equities:	F, 3 & 1: 0	3.0		F, 3 & 1: 0		J. /
Core			V			V
	V		- A		V	
/alue	<u>X</u>					
Growth	X	V	X Y			V
arge Cap	X	X	<u>X</u>			X
Mid Cap/Small Cap	X	X	X			
Top Down		X				
Bottom Up	X	X	X			X
Thematic						
Sector						
Other				(29)		
% of Emerging & Frontier Market Equity research done in-house	100	90	(28)	100	90	80-90
Number of professionals involved in Emerging & Frontier Market Equities	17	85 (26)	77	28	6	10

IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

Company	Man Group	MFS Investment Management	Mirae Asset Global Investments	Mondrian Inv. Partners	Morgan Stanley Investment Mngt.	Neuberger Berman
Total assets invested in Emerging & Frontier Market Equities (€m)	6,259	3,279	26,469.53	8.769 (35)	12,289	6.224
As at	31/03/18 91.458	31/05/18 407.338	30/06/18 105.612.28	30/06/18 47.797	30/06/18 381.424	31/03/18 243.195
Total AUM worldwide (€m) Assets invested in Emerging & Frontier Market Equities (€m).	91,458	407,338	105,612.28	47,797	381,424	243,195
Assets invested in Emerging & Frontier Market Equities (€m): Invested for Europe-based institutional clients	2.719	579	632.42	982	2.402	1.606
-Pension fund clients	1.428	394	65.18	714	1.224	1,139
-Insurance company clients	0	119	114.59	2	106	0
-Insurance company clients -All other institutional clients	1.291	66	452.65	266	1.072	467
In segregated accounts	2,415	1,007	66,756.07 (34)	5,693	5,144	3,581
In investment funds	304	2,272	38.856.22 (34)	3.076	7.145	2.643
Actively managed	6.259	3.279	20.825.83	8.769	12,289	6.224
Managed through specialist equity mandates	0	0	NA NA	0	00	
If managed on an active basis: Targeted information ratio	0.8-1.0	[3]		(3)	(3)	
Achieved information ratio	2.4	1-7		1-7	0.2	
Acceptable tracking error	3-5%	3-8%	5-10%	5-7%	3-5%	
Regions invested in within Emerging & Frontier Market equity funds -		0 0 /0	0 1070	V / /V	0 0 /0	
EMERGING EUROPE:	S	Р	Р	S	Р	
The Balkans	N	T	T	S	P	
The Baltics	N	<u>I</u>	<u>T</u>	<u>S</u>	P	
Czech Republic	S	<u>I</u>	<u>Р</u>	<u>S</u>	P P	
Hungary	S S	<u></u>	<u>Р</u>	<u>S</u>	P B	
Poland Russia	<u>S</u>		P P	<u>5</u>	P P	
Turkey	<u> </u>	<u>J</u>	P	<u> </u>	P	
ASIA:	Š	P	P	Š	P	
China	P	P	P	S	P	
India	Р	Р	P	S	P	
Indonesia	S	T	P	S	P	
Malaysia	<u>S</u>	<u>I</u>	P	S	P	
South Korea	<u>Р</u> Р	P	<u>Р</u>	<u>S</u>	P	
Taiwan Thailand	<u> </u>	<u>5</u>	P P	<u>S</u>	P P	
LATIN AMERICA:	<u>S</u>	I	P P	<u>S</u>	P	
Argentina	N N	T	P	Š	P	
Brazil	P	P	P	S	P	
Chile	S	Ť	P	S	P	
Mexico	S	P	P	S	P	
MIDDLE EAST AND AFRICA:	S	T	Р	S	P	
<u>Egypt</u>	S	<u>I</u>	P	<u>S</u>	P	
Jordan	N.	<u>_</u>	P P	<u>S</u>	P P	
Morocco	N N	<u> </u>	P P	<u>S</u>	P P	
Nigeria South Africa	P	-	<u>г</u> Р	<u>3</u>	P	
FRONTIER MARKETS:	N	†	T	Š	P	
No. of countries in benchmark(s) invested in T/N	T: 24: N: 0	T: 20+: N: 0	NA.	T: 0: N: 0	T: 0; N: 0	
No. of countries not in benchmark(s) invested in P/S/T	P. S & T: 0	P: 0: S: 0: T: 5	NA	S: 7	P: 1: S: 1: N: 0	
Approach to managing Emerging & Frontier Market Equities:						
Core	X	X	X			X
Value			X	X		
Growth	V	V	X	V	X	V
Large Cap Mid Cap/Small Cap	X	X V	X	X V	X	X V
Top Down	^	^	Ŷ	Ŷ	Ŷ	
Bottom Up	Χ	Χ	Ŷ	Ŷ	Ŷ	Χ
Thematic	Λ	^	x	Λ	^	/\
Sector			X			
Other	[33]					[36]
% of Emerging & Frontier Market Equity research done in-house Number of professionals involved in Emerging & Frontier Market Equities	95	100	70	100	85	100
Number of professionals involved in Emerging & Frontier Market Equities	6	80	48	8	26	5

Company	Nordea Asset Management	Northern Trust Asset Management	PanAgora Asset Management	Parametric Portfolio Associates	PGIM	Pictet Asset Management	PineBridge Investments
otal assets invested in Emerging & Frontier Market Equities (€m)	9,166	25,416	1,650	14,149.03	6,986	10.470	10.648
sat	31/08/17	31/03/18	31/05/18	31/03/18	31/03/18	31/05/18	31/03/18
otal AUM worldwide (€m)	220,116	800,644 [45]	44,284	184,077.62	939,799	165,480	73,399
ssets invested in Emerging & Frontier Market Equities (€m):							
nvested for Europe-based institutional clients	2,474	8,917	295	1,045.72	0.32	5,738	352
Pension fund clients		4,969	215	0		2,629	46
Insurance company clients		0	0	0		71	71
All other institutional clients	0.000	3,948	80	1,045.72	0.32	3,038	235
n segregated accounts	3,232	8,870	1,650	3,947.44	4,476	3,004	949
n investment funds	5,934	16,546 1,152	0 1 (50	10,201.59	2,510	7.466	9,699
ctively managed		10,203	1,650 245	11,497.84 2,651,19	6,900 0	4,277 0	10,648 0
Managed through specialist equity mandates managed on an active basis:		10,203	Z45	2,651.19	U	U	
argeted information ratio		0.5-1.0	0.75-1.0	NA	1 (38)	0.43-1 (40)	(15)
chieved information ratio		0.23 (7)	1.0627	0.52	0.72-2.47 (38): 0.31 (39)	0.43-11	(15)
cceptable tracking error		2-4%	2.0-5.0%	3.50-5.50%	1-5% (38)	3-7%	(15)
egions invested in within Emerging & Frontier Market equity funds –		∠-4/0	2.0-3.070	J.JU-J.JU /0	1-370	J-7/0	
MERGING EUROPE:		Р	P	P	P	P	P
he Balkans		P	N	S	N		N
he Baltics		P	Ň	S	Ň		Ť
zech Republic		P	P	S	P/T		İ
ungary		P	P	Š	P/T		T
oland		P	P	P	P/T		T
lussia		P	P	P	P/T		T
urkey		P	P	P	P/T		T
SIA:		P	P	P	P/T	P	Р
hina		P	P	P	P/T		P
ndia		P	P	P	P/T		P
ndonesia		P	P	P	P/T		P
Malaysia		<u>Р</u>	P	P P	P/T		<u>P</u>
outh Korea		Р Р	P		P/T		Р Р
aiwan		P P	P D	P P	P/T P/T		P P
hailand		P P	P	P P		D	<u>P</u>
ATIN AMERICA:		P	N P	<u> </u>	P/T	Р	P P
Argentina Prozil		P P	D D	<u>5</u>	P/T		P P
Brazil Chile		<u>F</u>		<u>F</u>	P/T		
Mexico		P	P	P	P/T		Þ
MIDDLE EAST AND AFRICA:		P	D D	D D	P/T	P	- F
gypt		P	Ť	P	P/T		- P
ordan		P	Ň	S	N		P
forocco		P	Ň	S	Ň		P
ligeria		P	Ň	S	Ň		P
outh Africa		P	P	P	P/T		P
RONTIER MARKETS:		P	N	P	Ň	Р	N
lo. of countries in benchmark(s) invested in T/N		[37]	T: 1; N: 0	T: 0; N: 0	T & N: 0 (38)	N: 0	(15)
lo. of countries not in benchmark(s) invested in P/S/T		(37)	P, S & T: 0	P: 1; S: 26; T: 0	P, S & T: 0 (38)		(15)
pproach to managing Emerging & Frontier Market Equities:							
ore			X		X	X	X
alue						X	
rowth		**			X		
arge Cap		X			X		X
tid Cap/Small Cap		X			X		X
op Down			· · · · · · · · · · · · · · · · · · ·	X			X
ottom Up			X		X	X	X
hematic							
ector							
ther of Emerging & Frontier Market Equity research done in-house		100	100	O.F.	100 [38] OF [39]	00	00.00
A DI EMPERING A FRONTIER MARKET FRIITV RESEARCH RONE IN-HOUSE		100	100	95	100 (38); 85 (39) 18 (38); 15 (39)	80	80-90

IPE SURVEY EMERGING & FRONTIER MARKET EQUITIES

empany	Principal Global Investors	Putnam Investments	Quoniam	RBC Global Asset Mngt. (UK)	Robeco	Russell Investments	Skager Funds
tal assets invested in Emerging & Frontier Market Equities (€m)	9,860	446	4,771	7,133	22,537	10,270	2,270
at	31/03/18	31/05/18	30/05/18	31/03/18	31/05/18	30/06/18	30/06/1
tal AUM worldwide (€m)	361,979	148,037	30,212	268,371	168,555	248,300	7,114
sets invested in Emerging & Frontier Market Equities (€m):							
vested for Europe-based institutional clients	1.397	6	3.009	506	14.421	6.610	1.356
ension fund clients	1.192		482	133	5.240	2.851	227
surance company clients	0		0	72	-,-	728	276
ll other institutional clients	205	6	2.527	301		3.031	853
segregated accounts	2.141	-	2.616	U (15)	11.746	398	n
nvestment funds	7.719	6 (12)	2.155	506 [12]	10.791	9.872	2.270
ively managed	9.859	446	4.771	7.133	22.537	10,270	2 270
naged through specialist equity mandates	1.556	<u>440</u>	1.771	7.135	0	NA	2.270
nanaged on an active basis:	1,000					NA	
geted information ratio	0.50-0.75	(3)	NA	(3)	(15)	(3)	NA
		0.71		-0.05-0.72	(15)	-0.3-0.4	NA 0.7
nieved information ratio	0.64	U./I	0.6		(15)	-0.3-0.4	
ceptable tracking error	<7%	3-7%	4-8%	4-8%	(13)	2.1-5.7% (7)	NA_
gions invested in within Emerging & Frontier Market equity funds –					- 4:0		
ERGING EUROPE:	P		P	S	P (41)	S	S_
Balkans	T	T	N	S	N	S	S_
Baltics	T	T	N	S	N	S	S
ch Republic	T	P	P	S	S	S	S
ngary '	T	Р	Р	S	S	S	S
and	T	Р	Р	S	S	S	S
ssia	S	P	P	S	P	S	S
kev	Ť	P	P	Š	Ś	Š	Š
A:	P		P	Š	P	Š	<u> </u>
na .	D	C		c c	D	Š	
ia	D		D	<u>S</u>	P	<u>5</u>	
	ς		P		5	<u>s</u>	
onesia		P P	P P	5	<u>S</u>	<u>S</u>	
laysia	S	P P	P P	<u> </u>	S		
ıth Korea						S	
wan	P	<u>P</u>	<u>P</u>	<u> </u>	P	<u>S</u>	
niland	S	P	P	S	S	S	S
TIN AMERICA:	P		P	S	P	S	S
entina	T	P	S	S	S	S	S
zil	P	Р	P	S	P	S	S
le	T	P	P	S	S	S	S
cico	Ś	P	P	Š	Š	Š	S
DLE EAST AND AFRICA:	P	·	P	Š	P	ς .	<u> </u>
pt	Ť	P	ς	Š	Ť	Š	Š
dan	Ť	T	N N	C C	+	Š	
COCCO	-	-	N N	<u>S</u>	-	<u>5</u>	
eria	+	<u>+</u>	N N	<u>S</u>	+	<u> </u>	
	P		P		P	<u> </u>	
Ith Africa	<u> </u>	<u> </u>	N P	5	<u> </u>	5	
ONTIER MARKETS:				5	T (N 0 (1)	5	
of countries in benchmark(s) invested in T/N	T:12; N: 0	T: 3; N: 9	T & N: 0		T: 4; N: 0 (41)	T & N: 0	[42]
of countries not in benchmark(s) invested in P/S/T	P: 0; S: 0; T: 5	P: 1; S: 0; T: 4	P, S & T: 0	S: 5	T: 3; S: 1 [41]	NA	[42]
roach to managing Emerging & Frontier Market Equities:							
e	X	X		X	X		
Je				X	X	X	X
wth				X			
ge Cap	X	X	X	X	X	X	
Cap/Small Cap	X	X	X	X	X	X	
Down		X		Ŷ	Ŷ		
tom Up	٧	Ÿ	V	Ý	Ÿ	٧	
	^	^	^			^	
ematic					^		
ctor				X		[43]	
er							
of Emerging & Frontier Market Equity research done in-house	>90	90	100	100	90	100	100
mber of professionals involved in Emerging & Frontier Market Equities	9	Q	17	8	52	/,	3

ompany	State Street Global Advisors	TKP Investments	UBS Asset Management	Unigestion	Vontobel Asset	Wells Fargo Asset Mngt.	William Blair
otal assets invested in Emerging & Frontier Market Equities (€m)	58,370	1,617.9	22,305	1.045	Management 19,725	10,270	12,552
s at	31/03/18	30/06/18	31/03/18	30/06/18	31/12/17	30/06/17	30/06/18
tal AUM worldwide (€m)	2.218.863	27.834	674.281	21.334	105.346	426,747.26	52,731
ssets invested in Emerging & Frontier Market Equities (€m):	2,210,000	27,004	074,201	21,004	100,040	420,747.20	02,701
vested for Europe-based institutional clients	14.495	1.617.9		924	6.469	511.1	1.750
Pension fund clients	12.035	1.586.95		670	2.569	126.5	375
nsurance company clients	54	0.31		52	406	0.5	
All other institutional clients	2,406	30.64		202	3.484	384.1	1.375
segregated accounts	34.046	1.617.9	11.040	253	6,167	6.072.6	7,666
investment funds	24.324	.,	11.265	792	13.558	4.197.4	4,886
tively managed	8.554	1.617.9	22.305	1.045	19.725	10.270	12.552
anaged through specialist equity mandates		0	,	0	,	0	0
managed on an active basis:							
rgeted information ratio	NA	0.5		(3)	NA	NA	NA
chieved information ratio	NA	0.5		(3)	NA	0.76 (7)	(3)
ceptable tracking error	3.0-5.0%	6%		(3)	NA	NA	(3)
gions invested in within Emerging & Frontier Market equity funds -							
MERGING EUROPE:	P	S		S		S	T
e Balkans		T	N	N			T
e Baltics		T	N	N			T
ech Republic		T	S	S			T
ungary '		T	S	S			T
pland ´		T	S	S			T
ussia		Ť	S	S		S	Ť
irkey		Ť	S	S		S	Ť
SIA:	P	S		S		S	P
nina		Ť	S	S		S	S
dia		Ť	S	S		S	S
donesia		Ť	S	S		S	S
alaysia		Ť	S	S		S	S
outh Korea		Ť	S	S		S	S
niwan		Ť	S	S		S	S
nailand		Ť	S	S		S	S
ATIN AMERICA:	P	S		S		S	P
rgentina	·	Ť	N	Ň		S	T
razil		Ť	S	S		S	S
hile		Ť	S	S		S	S
exico		Ť	S	S		S	S
IDDLE EAST AND AFRICA:	P	S		S		S	P
ypt	·	Ť	N	S			T
ordan		Ť	N	Ň			Ť
orocco		Ť	N	S			Ť
igeria		Ť	N	Ň			Ť
outh Africa		T	S	S		S	S
RONTIER MARKETS:	S	T		N		S	T
o, of countries in benchmark(s) invested in T/N	NA NA	T: 24: N: 0		T & N: 0		T & N: 0	NA
o. of countries not in benchmark(s) invested in P/S/T	NA	T: 13		P. S & T: 0		S: 3	NA
pproach to managing Emerging & Frontier Market Equities:				· · · · · · · · · · · · · · · · · · ·			
ore .	X		X		X	X	
lue	X						
owth					X		X
rge Cap			X	X			
id Cap/Small Cap							
p Down	X			X			
ottom Up	X	X	X	X	X	X	X
ematic	•	• •					
ector							
her							
of Emerging & Frontier Market Equity research done in-house umber of professionals involved in Emerging & Frontier Market Equities	90	0	100	100	90	80	(28)
	106	105	25	26	37	15	27