84 INVESTMENT INVESTMENT 85

IPE SURVEY GLOBAL EQUITY MANAGERS

Company	Aberdeen Standard	Acadian Asset	Achmea Investment	AGF	AllianceBernstein	Allianz Global	American Century	Amundi	Aon	Artisan	Assenagon Asset	AXA Investment	Baillie
	Investments	Management	Management	Investments		Investors	Investments			Partners	Management	Managers	Gifford
As at	30/06/19	30/09/19	30/09/19	30/09/19	30/09/19	30/06/19	30/09/19	30/06/19	30/06/19	30/09/19	30/09/19	30/06/19	30/09/19
Total assets in global equity strategies (€m)	13,776.65	29,500	27,174	5,784.75	28,573	42,753	26,717	226,140	1,862	35,346	15,430.1	68,082	96,775
Total AUM worldwide (€m)	587,548	87,468	148,687	18,793.69	543,396	543,258	155,409	1,486,754	157,238	103,208	25,295.93	756,617	233,001
Global equity invested for (€m):													
Europe-based institutional clients	6,277.89	8,789	27,174	453.69	2,030	9,269	230		1,862	13,049	15,430.1	32,934	32,511
Pension fund clients	4,918.21 (1)		23,152	216.39		6,492	26		1,819	2,729		3,753	26,248
Insurance company clients	474.32		1,268			684	165					10,650	0
All other institutional clients	8,384.12		2,754	237.3		2,093	39		43			18,531	6,263
Through segregated account mandates	4,853.52		24,109	1,684.28	12,925	26,822	24,100		1,862		1,100.38	28,409	82,474
Through investment funds/pooled vehicles	8,923.13		3,065	4,100.47	15,648	15,931	2,617		0		14,329.72	39,673	14,301
Global equity managed (€m):													
Passively or on an indexed basis			6.664		1,975						2.028.05		0
On an enhanced indexed basis			3.141		51				286		12.065.92		0
Quant-type strategies	,		17.369	251.01	0	18.965					1.336.13		0
Active with 2-5% outperformance	13,776.65		,	5.533.75	26,547	10,719			1,576		.,		89,457
Active with 5% plus outperformance	10,770.00			0,000.70	0	13,069			1,070				n
Other						10,007							7,318
If managed on an active basis:													7,010
Targeted information ratio	NA					NA			NA		NA		NA
Achieved information ratio	-0.68					1.19			0.01		NA NA		0.54 (3)
Acceptable tracking error	3-9%					NA			1.8% (2)		NA NA		NA
Approach to running global equity:	3-770					INA			1.0 /0 · ·		INA		INA
	X	X		X	X	X	X				X		
Core	^			Λ					V				
Value		X		V	X	X	X		X		X		Y
Growth	V		V	X	X X	X	X		X		X		X
Large Cap	X		X	X	Х	X	X				,,		
Mid Cap	X			X		X	X				X		
Small Cap	X	X		X		X	X				X		
Enhanced indexing			Х						X		X		
Top down		X		X							X		
Bottom up	X	X		X	X	X	X		X				X
Concentrated/focused					X	X	X		X				Х
Sector				X		Χ					X		
Thematic				X	X	X							
Absolute return													
Quant/systematic		Χ	X	X		Χ			X		X		
Long/short		Χ									X		
130/30		Χ											
Other													
Average number of holdings on average in global equity portfolio	72			73		35	90-110		6				30-60
Targeted contribution to excess return (%):													
Stock	75			70		100							100
Sector	15												0
Country/region	10			30									0
Currency													0
Other													·
Minimum size of a segregated global equity mandate (€m)	50	50	50	17.31	50	25					40		80
% of global equity research done in-house	80	95	90	80	100	40					100		100
Number of investment professionals in global equity team	155	117	10	25	100	24	39		23		13		8
Transper or investment professionals in global equity leath	. 100	117	10	20		44	5/		20		10		<u> </u>

Company	Barrow, Hanley, Mewhinney & Strauss	BlackRock	BMO Global Asset Mngt.	BNP Paribas Asset Mngt.	BNY Mellon Investment Mngt.	Brandes Inv. Partners	Brookfield Asset Mngt. (Public Securities Group)	Brown Advisory	Calamos Investments	Candriam	Capital Group	Columbia Threadneedle Inv
As at	30/09/19	30/09/19	30/06/19	30/06/19	30/06/19	30/09/19	30/09/19	30/09/19	30/09/19	30/09/19	30/09/19	30/06/19
Total assets in global equity strategies (€m)	4,266	749,630	14,890.8	23,331.03	368,658	4,914	11,576	637	1,040	6,834.18	295,063	28,259.83
Total AUM worldwide (€m)	66,237	5,651,166	232,487.7	574,707.47	1,656,200	21,624	17,914	68,968	22,599	129,061.87	1,757,181	412,310.62
Global equity invested for (€m):	·		·			·	·					
Europe-based institutional clients	888	194,815		8,373.4	10,568	239	1,174	254	151	1,444.36	2,273	
Pension fund clients	0	86,692		612.42	5,380	0	398	0.5	151	151.11	2,273	
Insurance company clients	0			874.16	0	0	0	0.97		193.42		
All other institutional clients	888			6,886.82	5,188	239	776	252		1,099.84		
Through segregated account mandates	2,888	284,207		5,150.21 (6)	218,039	3,787	4,623	111		745.31		
Through investment funds/pooled vehicles	1,378	462,130		3,223.19	150,619	1,127	6,953	526		6,088.86		
Global equity managed (€m):												
Passively or on an indexed basis		674,210		3,654.69 (6)	238,559					576.14		
On an enhanced indexed basis					1,780					0		
Quant-type strategies		33,902		581.77	3,710					549.3		
Active with 2-5% outperformance	4,266			4,136.94		4,914	11,503	637		5,708.74		
Active with 5% plus outperformance							73			0		
Other		41,518			124,609							28,259.83
If managed on an active basis:					·							
Targeted information ratio	≥0.5 ⁽⁴⁾			0.5		NA	[8]					
Achieved information ratio	0.05 (5)			0.47 (3)		-0.73	[9]			0.369		0.78 (3)
Acceptable tracking error	3-6%			4-6%		4.44%	[10]			4%		3.0-6.0%
Approach to running global equity:												
Core				X						X		Х
Value	X					Х	Х					Х
Growth				Х						Χ		Х
Large Cap	X			X		Х				X		Х
Mid Cap						Х				Χ		Х
Small Cap						Х				Х		Х
Enhanced indexing												
Top down										Х		
Bottom up	X			X		Х	Х			Х		Х
Concentrated/focused				Х		Х						Х
Sector				Х			Х					Х
Thematic				Х						Х		Х
Absolute return												
Quant/systematic				Х								
Long/short				X								Х
130/30				•								X
Other						[7]				(11)		
Average number of holdings on average in global equity portfolio	50-70			30-40		50-85	30-60	30		70		60-90
Targeted contribution to excess return (%):										· -		
Stock	100			90		100	80	100		100		100
Sector	0			5		* *	10	0		0		
Country/region	0			5			10	0		0		
Currency	0			-			0	0		0		
Other							<u> </u>					
Minimum size of a segregated global equity mandate (€m)	46			100		\$10m	22	45				50
% of global equity research done in-house	90			100		75	100	100		100		80
Number of investment professionals in global equity team	26			12		46	42	100		100		37

IN SUMMARY

Survey overview

Total number of managers in survey	88
	€m
Total invested in global equities	5,752,307
Total European institutional assets*	981,433
Total pension fund assets*	543,624
Total insurance company assets*	40,325
Total other institutional assets*	254,645
Total in segregated accounts*	2,331,329
Total in investment funds/pooled vehicles*	2,574,633
Total invested passively or on an indexed basis*	2 4/2 100

*Where disclosed

Top 20: Global equity assets

Company 1 State Street Global Advisors 2 BlackRock 3 Northern Trust Asset Management 4 BNY Mellon Investment Management	€m 1,056,517 749,630 451,683 368,658	30/09/19 30/09/19 30/09/19
3 Northern Trust Asset Management	451,683	
		30/09/19
4 BNY Mellon Investment Management	240 450	
	300,000	30/06/19
5 Dimensional Fund Advisors	298,922	30/09/19
6 Capital Group	295,063	30/09/19
7 Amundi	226,140	30/06/19
8 Legal & General Investment Management	191,819	30/06/19
9 PGIM	168,977	30/09/19
10 Dodge & Cox	143,476	30/09/19
11 Baillie Gifford	96,775	30/09/19
12 Janus Henderson Investors	85,894	30/06/19
13 Wells Fargo Asset Management	82,347	30/06/19
14 First Eagle Investment Management	79,305	30/09/19
15 Invesco	78,924	30/06/19
16 MFS Investment Management	75,653	30/06/19
17 Lazard Asset Management	70,161	30/06/19
18 AXA Investment Managers	68,082	30/06/19
19 DWS Group	67,262	30/06/19
20 Russell Investments	63,978	30/09/19

Top 20: European institutional assets

Company	€m	As at
1 BlackRock	194,815	30/09/19
2 State Street Global Advisors	171,000	30/09/19
3 Legal & General Investment Management	109,208	30/06/19
4 Northern Trust Asset Management	48,273	30/09/19
5 AXA Investment Managers	32,934	30/06/19
6 Baillie Gifford	32,511	30/09/19
7 Achmea Investment Management	27,174	30/09/19
8 Morgan Stanley Investment Management	27,063	30/06/19
9 Russell Investments	20,834	30/09/19
10 Robeco	19,441	30/06/19
11 Swisscanto Invest (Zürcher Kantonalbank)	17,945	30/09/19
12 Credit Suisse Asset Management	17,011	30/06/19
13 Janus Henderson Investors	15,548	30/06/19
14 Assenagon Asset Management	15,430	30/09/19
15 DWS Group	13,708	30/06/19
16 Artisan Partners	13,049	30/09/19
17 BNY Mellon Investment Management	10,568	30/06/19
18 Union Investment	10,493	31/07/19
19 MFS Investment Management	9,524	30/06/19
20 Allianz Global Investors	9,269	30/06/19

Top 20: European pension fund assets

_			
	Company	€m	As at
1	State Street Global Advisors	126,637	30/09/19
2	Legal & General Investment Management	101,960	30/06/19
3	BlackRock	86,692	30/09/19
4	Baillie Gifford	26,248	30/09/19
5	Northern Trust Asset Management	25,644	30/09/19
6	Achmea Investment Management	23,152	30/09/19
7	Credit Suisse Asset Management	14,995	30/06/19
8	Robeco	12,034	30/06/19
9	Russell Investments	11,152	30/09/19
10	MFS Investment Management	7,390	30/06/19
11	Janus Henderson Investors	7,345	30/06/19
12	Allianz Global Investors	6,492	30/06/19
13	Man Numeric	5,735	31/08/19
14		5,661	30/09/19
15	BNY Mellon Investment Management	5,380	30/06/19
16	DWS Group	5,297	30/06/19
17	Lazard Asset Management	5,208	30/06/19
18	Aberdeen Standard Investments	4,918	30/06/19
19	Marathon Asset Management	4,277	30/09/19
20	AXA Investment Managers	3,753	30/06/19

IPE SURVEY GLOBAL EQUITY MANAGERS

Company	Comgest	Connor, Clark & Lunn Investment Mngt.	Credit Suisse Asset Mngt.	Davis Selected Advisers	Dimensional Fund Advisors	Dodge & Cox
As at	30/09/19	30/09/19	30/06/19	30/09/19	30/09/19	30/09/19
Total assets in global equity strategies (€m)	4,476	4,562.3	26,726	1,859.67	298,922	143,476
Total AUM worldwide (€m)	31,309	34,076.5	372,193	22,747.07	531,004	287,375
Global equity invested for (€m):						
Europe-based institutional clients	3,312	3,359.1	17,011	0	7,928	5,798
Pension fund clients	1,590	3,359.1	14,995	0	1,739	2,678
Insurance company clients	566	0	320	0	859	0
All other institutional clients	1,156	0	1,696	0	5,330	3,120
Through segregated account mandates	2,551	3,667.9	13,518	485.79	40,763	21,345
Through investment funds/pooled vehicles	1,925	894.4	13,208	1,373.88	258,159	122,131
Global equity managed (€m):	,			•		,
Passively or on an indexed basis			17,512			
On an enhanced indexed basis			17,012			
Quant-type strategies						
Active with 2-5% outperformance	4,476	4,562.3	9,214	1,859.67	298,922.3	
Active with 5% plus outperformance	4,470	4,502.5	/,414	1,037.07	270,722.0	
Other						
If managed on an active basis:						
Targeted information ratio	NA	0.7-1.0		(8)	[8]	[8]
Achieved information ratio	0.8 ⁽³⁾	1.9			NA NA	-0.50 ⁽⁵⁾
Acceptable tracking error	NA	2.5-3.5%		NA	NA NA	4.71% (5
	NA	2.5-3.5%		NA	NA	4./1%
Approach to running global equity:				· · · · · · · · · · · · · · · · · · ·		
Core		X	X	X	X	X
Value			X	X	X	X
Growth	X		X		X	
Large Cap	Χ		X	Х	X	X
Mid Cap					X	X
Small Cap					X	
Enhanced indexing						
Top down						
Bottom up	Χ		X	X		X
Concentrated/focused	Χ					
Sector			Χ			
Thematic			Χ			
Absolute return	X					
Quant/systematic						
Long/short		X				
130/30						
Other			(12)			
Average number of holdings on average in global equity portfolio	35	1,674		56		84
Targeted contribution to excess return (%):		-3				
Stock	100	70		100		70
Sector		20				20
Country/region		10				5
Currency		10				5
Other						J
Minimum size of a segregated global equity mandate (€m)	70	34.64	20	9.18	100	NA
% of global equity research done in-house	80	100	100	100	90	80
Number of investment professionals in global equity team	80 5	35	100	1	70	65

Company	DWS	Eaton	Epoch Investment	Fidelity	First Eagle	First Private	Fisher Inv.
	Group	Vance Corp.	Partners	Int.	Investment Mngt.	Investment Mngt.	Europe
As at	30/06/19	30/09/19	30/09/19	30/09/19	30/09/19	30/09/19	30/09/19
Total assets in global equity strategies (€m)	67,262	10,324	18,133	20,964	79,304.91	560 (23)	7,525.62
Total AUM worldwide (€m)	719,419	440,329	30,357	284,851	90,811.7	2,803	103,344.02
Global equity invested for (€m):							
Europe-based institutional clients	13,708	848	1,604	1,107	1,967.68	560	4,488.22
Pension fund clients	5,297	848	722	745	0	119	9.67
Insurance company clients	2,109		0	10	0	340	0
All other institutional clients	6,302		882	352	1,967.68	101	4,478.55
Through segregated account mandates	15,404	213	16,557		5,597.34	459	2,370.76
Through investment funds/pooled vehicles	51,858	10,111	1,576		73,707.57	101	5,154.86
Global equity managed (€m):							
Passively or on an indexed basis	15,291				0		0
On an enhanced indexed basis	1,314				0		0
Quant-type strategies	693	2,329			0	560	0
Active with 2-5% outperformance		7,995	6,256		0		0
Active with 5% plus outperformance					0		0
Other	49,964 [14]		11,877 [16]		79,304.91 [22]		7,525.62 124
If managed on an active basis:							
Targeted information ratio	(8)		NA	(8)	(8)	1	1
Achieved information ratio	0.44 [3]		0.26 [17]	0.61	0.71	0.2	0.6
Acceptable tracking error	2-4%		NA	3-8%	NA	<10%	
Approach to running global equity:							
Core	Х	Х		X			Х
Value					Х	X	
Growth		Х				X	Х
Large Cap	Х	Х	X		Х	X	Х
Mid Cap	X	X	X		X	X	X
Small Cap		X	•		X	X	X
Enhanced indexing							
Top down		Х					Х
Bottom up	X	X	X	X	X	X	
Concentrated/focused		X				X	Х
Sector		Λ				X	
Thematic		Х					
Absolute return		Λ.	Х				
Quant/systematic		Х	Α			X	Х
Long/short		Λ					X
130/30							
Other		(15)	[18]	[19]			
Average number of holdings on average in global equity portfolio	141		90-120	96	140	100-120	
Targeted contribution to excess return (%):	141		70-120	70	140	100-120	
Stock	60		80	70	[8]	(8)	33.3
Sector	30		20	70			33.3
Country/region	5		0				33.4 (25)
Currency	J		0				33.4 (-5)
Other	5 (13)		U	30 (20)			
	50	25	50	50	91.73	20	10
Minimum size of a segregated global equity mandate (€m)							10
% of global equity research done in-house	100	100	100	90	90	100	85
Number of investment professionals in global equity team	82	30	55	238 [21]	29	3	80

IPE SURVEY GLOBAL EQUITY MANAGERS

Company	Hermes Investment Management	Invesco	Investec Asset Management	Irish Life Inv. Managers	Janus Henderson Investors	J O Hambro Capital Mngt
As at	30/06/19	30/06/19	30/09/19	30/09/19	30/06/19	30/09/19
Total assets in global equity strategies (€m)	6,549	78,924	32,428 [29]	32,000	85,894.33	18,042
Total AUM worldwide (€m)	40,255	1,051,837	136,552	82,600	315,960.65	33,113
Global equity invested for (€m):		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Europe-based institutional clients	4,216	2,936	1,145		15,548.34	5,364
Pension fund clients	2,373	1,283	359		7.345.08	1,330
Insurance company clients	1,835	204	37		3,476.48	148
All other institutional clients	8	1,449	749		4,726.78	3,886
Through segregated account mandates	5,558	12,649	20,843		44,580.99	7,001
Through investment funds/pooled vehicles	991	66,275	11,585		41,313.34	11,041
Global equity managed (€m):		00,270	11,000		41,010.04	11,041
Passively or on an indexed basis		4,287			0	0
On an enhanced indexed basis		4,207			7,459.61	0
Quant-type strategies		4,982			23,216.3	0
Active with 2-5% outperformance	6,549	4,702	32,428		20,210.0	18,042
Active with 5% plus outperformance	0,047		02,420			10,042
Other		69,655			55.218.42 (30)	
If managed on an active basis:		07,000			33,210.42	
Targeted information ratio	≥0.5 ⁽²⁶⁾	1 (28)	0.5		[8]	(8)
Achieved information ratio	-1.92	0.70	0.5 (17)		0.54 (5)	
Acceptable tracking error	2-4%	1%	2-4%		(8)	(8)
Approach to running global equity:	2-470	1 /0	2-4 /0			
Core	Χ	X	X		X	Х
Value		^	X		X	X
Growth			^		X	X
Large Cap	Χ	X			X	X
Mid Cap	^	^			X	X
Small Cap	X				X	X
Enhanced indexing		X			X	Λ
Top down		۸			^	X
Bottom up	X	X	V		Х	X
	^	Λ	X		X	X
Concentrated/focused					X	Х
Sector						
Thematic					X	
Absolute return						
Quant/systematic		X			X	
Long/short					X	
130/30		(27)			(31)	
Other Charles and	105.000		100.100			00 (0 (00)
Average number of holdings on average in global equity portfolio	125-200	400	100-120		42	30-60 (33)
Targeted contribution to excess return (%):	400	400	100		400	(E (20)
Stock	100	100	100		100	67 [33]
Sector		0	0		0	11
Country/region		0	0		0	11
Currency		0	0		0	11
Other						
Minimum size of a segregated global equity mandate (€m)	50	50	50		50	230
% of global equity research done in-house	100	100	100		100	70
Number of investment professionals in global equity team	6	53	57		228 (32)	2

Company	KBI Global	Kempen Capital	La Française	Lazard Asset	Legal & General	Lombard Odier	M&G
	Investors	Management	Asset Mngt.	Management	Investment Mngt.	Inv. Managers	Inv.
As at	30/09/19	30/06/19	30/09/19	30/06/19	30/06/19	30/09/19	30/06/19
Total assets in global equity strategies (€m)	10,687	2,937	193	70,160.9	191,819	7,665.95	8,607.9
Total AUM worldwide (€m)	11,456	72,668	67,875	187,557.95	1,267,970	47,813.03	309,209
Global equity invested for (€m):							
Europe-based institutional clients	3,472	815	193	6,417.83	109,208	4,052.98	1,420
Pension fund clients	1,142	444		5,207.94	101,960	1,979.73	1,200
Insurance company clients	0	59			1,422	181.68	
All other institutional clients	2,330	312			5,826	1,891.57	
Through segregated account mandates	8,871	587 ⁽⁶⁾		26,184.7	84,578	1,743.08	
Through investment funds/pooled vehicles	1,816	228		43,976.2	107,241	5,922.86	
Global equity managed (€m):							
Passively or on an indexed basis				0	190,381	635.12	
On an enhanced indexed basis				0	0	879.66	
Quant-type strategies				11,788.97	0		
Active with 2-5% outperformance	10,687	2,937		58,371.93	1,438	2,227.78	
Active with 5% plus outperformance				0	0	83.7	
Other						3,839.68	
If managed on an active basis:						.,	
Targeted information ratio	0.5	>0.5		(8)			
Achieved information ratio	0.2	0.82		0.67			
Acceptable tracking error	2-4%	3-8%		2-4%			
Approach to running global equity:				= :::			
Core	X	X	Х	Х			
Value	X	X		X			
Growth	**	**		X			
Large Cap	X	X	Х	**			
Mid Cap	X	X	X				
Small Cap	X	X		X			
Enhanced indexing	**	**		**			
Top down							
Bottom up	Х	Х	Х	Х			
Concentrated/focused			X	X			
Sector							
Thematic			Х	Х			
Absolute return			**	**			
Quant/systematic	X			Х			
Long/short				X			
130/30				X			
Other			(34)				
Average number of holdings on average in global equity portfolio	187	90-110		150-250			
Targeted contribution to excess return (%):							
Stock	100	80	70	80			
Sector	0	20	10	10			
Country/region	0		15	10			
Currency	0		5	0			
Other	U		J	U			
Minimum size of a segregated global equity mandate (€m)	20	50	15	21.95			
% of global equity research done in-house	100	100	66	90			
	16	6	14	164 (35)			
Number of investment professionals in global equity team	16	6	14	164 (00)			

IPE SURVEY GLOBAL EQUITY MANAGERS

Company	Macquarie Asset	Maj	Man	Marathon Asset	Martin Currie	MFS Investmen
A	Management	Invest	Numeric	Management 30/09/19	Investment Mngt.	Management
As at	30/06/19 31,329.39	30/09/19 5,975.78	31/08/19 9.799 ⁽³⁶⁾		30/09/19 1,124.6	30/06/19
Total assets in global equity strategies (€m) Total AUM worldwide (€m)	31,329.39	8,787.66	28,757	10,860 52,771	14,510.7	75,653 428,367
Global equity invested for (€m):	341,288.38	8,787.00	28,757	52,771	14,310.7	428,367
	0.000.77	0.007.77	/ 500	/ 272	773	0.50/
Europe-based institutional clients	2,202.77	2,897.67	6,530	4,370		9,524
Pension fund clients	319.98	1,407.83	5,735	4,277	0	7,390
Insurance company clients	0	0	0	0	NA	
All other institutional clients	1,882.79	1,489.84	789	93	773	2,134
Through segregated account mandates	13,149.49	3,478.04	9,643	8,441	383.9	49,366
Through investment funds/pooled vehicles	18,179.9	2,497.73	156	2,419	740.7	26,287
Global equity managed (€m):						
Passively or on an indexed basis	0	0	0	0		
On an enhanced indexed basis	0	0	0	0		
Quant-type strategies	0	0	9,799	0		
Active with 2-5% outperformance	31,329.39	5,975.78	8,158	0	703.5	72,544
Active with 5% plus outperformance	0	0	276	0		
Other			1,365	10,860	421.1	3,109
If managed on an active basis:						
Targeted information ratio						
Achieved information ratio	0.39 (5)	0.66	0.60			0.59 (17)
Acceptable tracking error	5-7%	5-10%		3-8%		2-8%
Approach to running global equity:						
Core			X	X	X	Х
Value	Χ	Χ				Х
Growth						Х
Large Cap	Χ				Х	Х
Mid Cap					Х	Х
Small Cap						Х
Enhanced indexing						
Top down						
Bottom up	X		X	X	Х	
Concentrated/focused					Х	Х
Sector						X
Thematic						
Absolute return						
Quant/systematic			Х			
Long/short		Х				
130/30						
Other						[39]
Average number of holdings on average in global equity portfolio	30-50		217	501	20-40	80-100
Targeted contribution to excess return (%):	00 00		217	561	20 40	00 100
Stock	100	100	90		100	80
Sector	100	0	5		0	20
Country/region		0	5		0	20
Currency		0	0		0	
Other		U	o o	(37)	U	
Minimum size of a segregated global equity mandate (€m)	25		36	150	50	50
% of global equity research done in-house	100	100	95	95	100	100
% of global equity research done in-nouse Number of investment professionals in global equity team	100	100	3		7 (38)	147
Number of investment professionals in global equity team			ა ა	15	/ (30)	14/

Company	Mondrian Inv. Partners	Morgan Stanley Investment Mngt.	Nikko Asset Management Co.	Nordea Asset Management	Northern Trust Asset Mngt.	Oddo BHF Asset Mngt.	Olz
As at	30/09/19	30/06/19	30/09/19	30/09/19	30/09/19	30/09/19	30/06/19
Total assets in global equity strategies (€m)	1,852	60,433	1,356	44,484	451,683	676	755.4
Total AUM worldwide (€m)	45,257	436,675	196,758	228,295	901,339	54,400	2,966.43
Global equity invested for (€m):			·		·		
Europe-based institutional clients	294	27,063	83.9	7,035	48,273	263	606.96
Pension fund clients	0	1,181	83.5	1,818	25,644	0	540.71
Insurance company clients	0	566		721	0	0	16.09
All other institutional clients	294	25,316	0.4	4,495	22,629	263	50.16
Through segregated account mandates	1,727	28,699	697		253,614	263	0
Through investment funds/pooled vehicles	125	31,734	659		198,069	413	755.4
Global equity managed (€m):					.,		
Passively or on an indexed basis	0				439,243	0	
On an enhanced indexed basis	0				0	0	
Quant-type strategies	0				12,075	263	755.4
Active with 2-5% outperformance	1,852		1.356		365	0	,
Active with 5% plus outperformance	0		1,000		0	676	
Other	<u>_</u>	60,433				0,0	
If managed on an active basis:		50,400					
Targeted information ratio	(8)	(8)	(8)		NA	0.5 (5)	
Achieved information ratio	0.01 (5)		1.27 [17] [26]		NA	0.28	
Acceptable tracking error	4-6%		3-8%		NA NA	NA	
Approach to running global equity:	4-070		3-070		INA	INA	
Core		Х			X		
Value	Х	X			X		
Growth	^	X	Х		X		
Large Cap	X	^ X	^ X		^ X		X
Mid Cap	X	^ X	^		X		^
Small Cap	^	X			X		
Enhanced indexing		^			^ X		
	X	X			Λ		
Top down			V		V	V	
Bottom up	X	X	X		X	X	X
Concentrated/focused		X	Х				
Sector		X					
Thematic							
Absolute return							
Quant/systematic					X	X	X
Long/short							
130/30							(10)
Other		4-1					(43)
Average number of holdings on average in global equity portfolio	43	(40)	40		1,660 [42]	200	152
Targeted contribution to excess return (%):							
Stock	60		80			70	100
Sector	0					15	0
Country/region	40					15	0
Currency	0						0
Other			20 (41)				
Minimum size of a segregated global equity mandate (€m)	80	\$50-100m ⁽⁴⁰⁾	50		100	35	20
% of global equity research done in-house	100	85-90	100		100	100	100
Number of investment professionals in global equity team	7	50	7		84	5	8

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IPE SURVEY GLOBAL EQUITY MANAGERS

Company	PanAgora Asset Management	PGIM	Pictet Asset Management	PineBridge Investments	Principal Global Investors	Pyrford Int.	Quoniam Asset Management	RBC Global Asset Mngt. (UK)	Robeco	Russell Inv.	Sarasin & Partners	Schroders Investment Management
As at	30/09/19	30/09/19	31/08/19	30/06/19	30/09/19	30/09/19	30/08/19	30/06/19	30/06/19	30/09/19	30/09/19	30/09/19
Total assets in global equity strategies (€m)	14.890	168.977.18	46.431	1.103	24.962	6.135	5.692	9.345	50.612	63.978	3,249	7.207
Total AUM worldwide (€m)	39.570	1.177.621.64	173.319	85,446,2	421.378	10.246	30.493	307.492	183.822	268.453	16.218	509.548
Global equity invested for (€m):	,	.,,==	,	,	.=.,		,	,			,	22.,22
Europe-based institutional clients	6,425	1,990.34	2,429	165	438	327	5,667	1,519	19.441	20,834	665	3,372
Pension fund clients	5,661	465.43	1,498	131	438	325	1,528	448	12,034	11,152	229	-,
Insurance company clients	0	0	238	1			1,826	492	1,282	627		
All other institutional clients	764	1,524.91	693	33			2,313	579	6,125	9,055	436	
Through segregated account mandates	13,831	35,372.88	6,172	684	7,038		4,988 (6)	943	31,035	35,269	2,123	5,133
Through investment funds/pooled vehicles	1,059	133,604.3	40,459	419	17,924		679	8,402	19,577	28,709	2,120	2,074
Global equity managed (€m):	1,007	100,004.0	40,407	717	17,724		5.7	0,402	17,077	20,707		Ejo, -
Passively or on an indexed basis	0	21,433.62	0							665		
On an enhanced indexed basis	0	n	0						7,552	000		
Quant-type strategies	14.890	0	3.175	451			5,692		27.072			
Active with 2-5% outperformance	0	147.543.56	39.842	652			0,072	9.345	21,012	63.313	3.249	7,207
Active with 5% plus outperformance	0	n	37,042	032				7,040	15.988	00,010	3,247	7,207
Other		0	3,414						13,700			
If managed on an active basis:			5,414									
Targeted information ratio		0.75 (45)	1 (48)				0.5	NA	(40)			(8)
Achieved information ratio	0.97	0.53 (45); 0.83 (46)	1.11 (48)				0.2	1.5	(40)	-0.1% (3)		0.6 (5)
Acceptable tracking error	1.0-3.25%	1-3% (45); 6-9% (46)	6% [48]	3-6%			 ≤10%	3-5%	(40)	350bps	<8%	1.5-3.5%
Approach to running global equity:	1.0-3.2370	1-370 ****; 6-770 ***	8 70 ***	3-6%			¥10.76	3-370	1/	SJUDPS	₹0 70	1.5-3.5%
	X	X		X	X				X		X	X
Core Value	Λ		V		X				X	X	Λ	^
Growth		X	X X		X				X	X		
Large Cap		X	X		X		X		^ X	X	X	
Mid Cap		X			X		X		X	X	Λ	
Small Cap			V				X		**	X		
Enhanced indexing			X		X		Χ		X x	X		
			V		X			V	X	X	Х	
Top down			X					X		**		
Bottom up	X	X	X	X	X		X	X	X	X	X	X
Concentrated/focused				X	X				X		X	
Sector												
Thematic			X		X				X	X	X	
Absolute return									X			
Quant/systematic	X	X	X	X	X		X		X	X		
Long/short			X	X	X							
130/30			[47]				(2)		()	()		
Other							(50)	(51)	(52)	(53)		
Average number of holdings on average in global equity portfolio	200-300 [44]	346 ^[45] ; 39 ^[46]	150 [48]				200	33	(40)	716	40-60	143
Targeted contribution to excess return (%):												
Stock	90	84	100 (48)	90	90		100	100	(40)	80	100	75
Sector	5	13	0	5				0		5		15
Country/region	5	3	0	5				0		15		10
Currency	0	0	0					0				
Other					10							
Minimum size of a segregated global equity mandate (€m)	100	46	50	25	25		100	50	[40]		1	50
% of global equity research done in-house	100	93	70	85	90		100	100	90	100	100	80
Number of investment professionals in global equity team	22	11 ⁽⁴⁵⁾ ; 18 ⁽⁴⁶⁾	50	8 (49)			24	12	78	44	13	14

Company	Setanta Asset Management	Skagen Funds	State Street Global Advisors	Swisscanto Invest (Zürcher Kantonalbank)	Thornburg Inv. Management	Unigestion	Union Investment	VanEck	Vontobel Asset Management	Walter Scott & Partners	Wells Fargo Asset Mngt.	William Blair
As at	30/09/19	30/09/19	30/09/19	30/09/19	30/09/19	31/08/19	31/07/19	30/09/19	30/06/19	30/09/19	30/06/19	30/09/19
otal assets in global equity strategies (€m)	4,636	3,389	1,056,517	19,327	14,853	4,860	37,820	20,866.21	12,917	36,474	82,347.34	2,721
otal AUM worldwide (€m)	12,063	6,428	2,708,351	154,284	38,394	20,224	354,941	45,410.68	115,557	62,933	360,588.49	49,741
Blobal equity invested for (€m):												
urope-based institutional clients	3,416		171,000	17,945	56	2,132	10,493	1,457.67	5,008	6,896	2,797.73	374
Pension fund clients	108		126,637	2,762		1,545	2,642		1,222	2,324	2,157.34	183
nsurance company clients	3,285		3,740	0		216	1,091		347	0		
All other institutional clients	23		40,623	15,183	56	371	6,760	1,457.67	3,439	4,572		191
hrough segregated account mandates	266	0	697,896	2,938	506	2,876	7,698	1,239.79	9,787	30,263		2,392
Through investment funds/pooled vehicles	4,370	3,389	358,621	16,339	14,347	1,984	30,122	19,626.42	3,130	6,211		329
Global equity managed (€m):		·		·		·	·			•		
assively or on an indexed basis	7	0	995,603	12,490				17,885.14				
In an enhanced indexed basis		0	13,480	0								
luant-type strategies		0	14,871	3,452								
Active with 2-5% outperformance	4,629	0	,	3,385		4,860	37,820	2,981.07	12,917			2,721
Active with 5% plus outperformance	,	0		0		****	* *	,	•	36.474		,
Other		3.389 (54)	32.563	<u>-</u>	14.853 (30)							
managed on an active basis:		0,007	02,000		14,000							
argeted information ratio		NA		0.5	NA	(8)	0.5			(8)		
schieved information ratio	1.8	0.269 (3)		0.45	0.23 (57)	0.60 (26)	0.64 (5)			1.44 (3)		-0.04 (26)
cceptable tracking error	1.0	NA	(8)	1%	NA NA	(8)	2.5-6.0%			1.44		0.04
approach to running global equity:		11/5		170	INA.		2.3-0.070					
Core			X	X	X	X	X		X			
/alue	Х	X	X	X	X	Λ	X		X			
Growth	Λ	Λ	X	^	^		X		X	X		X
arge Cap	X	X	X	X	X		X		X	X		^
Mid Cap	X	X	X	X	X		X		X	X		
Small Cap	X	X	X	X	X		X		Α	^		
Enhanced indexing	^	^	X	^	^		Λ					
Top down			X	X		X	X					
Bottom up	X	X	X	X	X	X	X		X	Х		X
Concentrated/focused	X	X	^		X	^	X		X X	X		Λ
		X			Х		**		X	X		
Sector Thematic	X			X			X X		X			
Absolute return		X		Λ			٨		^			
		X										
Quant/systematic				X			V					
_ong/short 130/30				X			X					
				(56)			[58]	[59]	(60)			[61]
Other	2/	0.5	00.40		[60]	100		[57]	(6U)	10.10		
werage number of holdings on average in global equity portfolio	86	37	30-40	345	(40)	128	40-60			40-60		60-100
argeted contribution to excess return (%):	400	400	100	100	100	00	00			100		
ock	100	100	100	100	100	20	80			100		85
ector		0		0		20	10					15
ountry/region		0		0		10	10					
urrency		0		0		10						
ther						40 (20)						
linimum size of a segregated global equity mandate (€m)	25	50	50	10	\$10-100m	50	40	(40)	<u> </u>	50		37
of global equity research done in-house	100	100	100	100	100	90	100	(40)	90	90		100
Number of investment professionals in global equity team	8	2 (55)	185	9	39	25	45	17	45	20		31

Key: NA= Not available

Footnotes: (1) Client breakdown relates to total assets in global equity

strategies
(2) Achieved tracking error over 3 years

(3) 3-year (4) 3-5 years

(5) 5-year(6) Breakdown relates to European institutional AUM

(7) Long-term, Graham & Dodd

(8) No target (9) Global REITs, 0.63; Global Infrastructure Securities, 0.69

(10) While the firm do not manage to tracking error, it is the intention to limit an actual tracking error at a maximum of 4%

for its infrastructure strategies, and approximately 5% or less over a 3-year period for its real estate strategies

[11] ESG factors

[12] Dividend strategies

[13] Style, market timing

(14) Includes Active Global Equity strategies (15) ESG, options

(16) Aspirational return objective of 9% p.a.

(17) Since inception (18) Free cash flow

(19) All cap

(20) Style/factor

(21) Includes all equity portfolio managers, analysts, trader

and divisional managers
(22) Active, value, bottom-up

[23] Includes €21m in emerging markets
[24] Active with 2-6% expected excess return per annum on average over a full market cycle relative to the benchmark

(25) Includes currency

(26) 1-year

(27) Factor investing
(28) Invesco Global Enhanced Strategy

[29] Data has been provided for all Global Equity strategies managed across the firm's 4Factor, Quality and Value investment capabilities

(30) Active (31) Blend

(32) Based on all analyst, associate analysts, client portfolio managers, investment professionals, portfolio managers and research associates working within equity focused depart-

(33) JOHCM Global Select Equities strategy

(34) Quality
(35) Includes all global and international portfolio managers (equity and fixed income) and all equity analysts within the

(36) Firm AUM as of 30/09/19. Excludes approximately \$2.3bn

in leveraged assets
(37) Over the longer term, approximately 90% of the firm's

outperformance is attributable to a combination of stock

and sector selection historically. The remainder comes from country and regional allocation while the currency effect tends

to be neutral (38) Relates to investment professionals responsible for the

firm's Global Long-Term Unconstrained strategy. Overall, the

firm has 45 investment professionals

(39) Blended research/low volatility

(40) Dependent on strategy/portfolio (41) Top-down

(42) Relates to the Northern Trust World Equity Index Fund (43) Minimum variance

(44) Dynamic Global Equity strategy

(45) QMA

(46) Jennison

[47] Low volatility
[48] Global Defensive Equities strategy
[49] Represents the team for PineBridge Global Focus Equity,

the flagship global equity product (50) Multi-factor investing

(51) The performance of the portfolio is determined by stock-picking and not by any unintended bias towards a particular

region, size of company, beta or investment style

(52) Sustainability integration (53) Quality/momentum

(54) Managed with unconstrained (benchmark agnostic) active

(55) Relates to the flagship fund Skagen Global

(56) Factor based approach based on value, quality and mo-

(57) Thornburg Global Opportunities Strategy vs. MSCI ACWI Index, 5-year

(58) Sustainability (ESG)
(59) The firm offers multiple global equity funds, both actively

(60) Quality Growth

(61) Fundamental, All Cap

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