INVESTMENT

IPE SURVEY US LARGE-CAP EQUITY MANAGERS

Company	Aberdeen Standard	AGF	AJ0	AllianceBernstein	Anima	Aristotle Capital	Artisan	AXA Inv.	Baillie	Barrow, Hanley,	BlackRock	BNP Paribas	Brandes Inv.
	Investments	Management [1]				Management	Partners	Managers	Gifford & Co	Mewhinney & Strauss		Asset Mngt.	Partners
Amount invested in US large cap equity (€m)	33,016.72	4,549	14,122	95,036	1,328.25 (3)	14,162	2,292	1,120	4,562 (6)	43,478	941,908	7,238	649
As at	31/03/19	31/03/19	03/06/19	31/03/19	30/04/19	31/03/19	30/04/19	31/03/19	31/03/19	31/03/19	31/03/19	31/03/19	31/03/19
Total AUM worldwide (€m)	660,199.35	26,250	17,275	493,968	178,801.04	15,731	99,706	749,274	224,821.44	67,427	5,802,507	565,252.69	23,065
Minimum market value at which stocks are regarded as US large cap equity (\$bn)	4	5	2		10	2			10	1		10	5
Amount of US large cap equity invested for (€m)													
Europe-based institutional clients	59.47	0	176	595	871.39	4,057	8	638.4	88	2,168	20,257	3,536	125
Pension fund clients	27.76	0		81			0	2.9	0	1,153	15,540	126	
Insurance company clients	14.35	0		302	84.12			75	0		643	363	
All other institutional clients	17.36	0	176	212	787.27	4,057		560.5	88	1,015	4,074	3,047	125
US large cap equity managed (€m)													
Passively or on an indexed basis				30,698					0		878,341	4,642	
On an enhanced indexed basis				114					0				
Market-neutral strategies				0					0				
Quant-type strategies		987	14,875	0					0			1,008	
Actively with 2-5% outperformance	33,016.72	3,563		62,193		14,162			0	43,478		1,588	125 (10)
Actively with 5% plus outperformance				0	308.25				4,562				
130/30 or similar strategy			415	2,031					0				
Other					1,020						63,567 ⁽⁸⁾		
If managed on an active basis													
Information ratio	0.26	0.4	0.6		1.23 [4]	1.06 (5)			0.97 (5)	0.25 (7)			-0.36
Acceptable tracking error	3-9%	5.6% (2)	4%		NA	3.09% (5)			NA	3-6%		3-6%	4.46% [11]
Description of approach to running US large cap equities													
Core	Χ											Χ	
Value			Χ			Χ				X		X	X
Growth		Χ			Χ				X			Χ	
Enhanced indexing													
Quant			Χ									Χ	
Top down													
_Bottom up	X	Χ	X		Χ	Χ			X	X		Χ	X
Thematic													
_Concentrated/focused	X												X
Sector													
Absolute return													
Other												(9)	
% of US large cap equities portfolio made up of													
Top 10 positions	38.01	40.07	23.9		33	32.6			49.29	31.6			29.2
Top 20 positions	63.35	67.49	37.1		49	57			73.96	56.6			49.9
Number of stocks normally held in portfolio	35-60	30-50	80+		80	35-45			30-50	45			35-75
% of US large cap research done in-house	90	80	100		0	90		<u> </u>	100	75		100	70
Number of investment professionals in US large cap equities team	22	10	28		6	17			8	27			4 (12)
Number of US large cap equities portfolio managers in team	22	1	6		6	2		<u> </u>	4	6			4 (12)

Company	Brown	Carillon Tower	Columbia	Davis Selected	Degroof Petercam	Dimensional	Dodge	Epoch Inv.	Fisher	Franklin	Fred Alger	Goldman Sachs	
	Advisory	Advisers	Threadneedle Inv.	Advisers	Asset Management	Fund Advisors	& Cox	Partners	Inv. Europe	Templeton	Management	Asset Managemen	
Amount invested in US large cap equity (€m)	19,114	4,190	97,114	14,640.3	2,612	114,675	89,769	17,927	27,324.01	27,604.82	16,228.62	77,439	7,349.96
As at	30/04/19	31/03/19	31/12/18	31/03/19	30/04/19	31/12/18	31/03/19	31/03/19	03/03/19	31/12/18	31/12/18	31/12/18	30/04/19
Total AUM worldwide (€m)	64,447	53,352	377,499	22,714.92	35,645	452,536	274,248	33,654	95,968.66	567,165.71	20,770.11	1,167,273.09	8,681.99
Minimum market value at which stocks are regarded as US large cap equity (\$bn)	2	5		10	5	7.56	>5	10	21.5		10	15	4
Amount of US large cap equity invested for (€m)													
Europe-based institutional clients	3,023	9	396	0	2,612	3,336.91	3,103	851	878.49	0	334.39	1,860.4	863.74
Pension fund clients	1,261			0	217	40.66	1,261	290	214.52	0	334.39	351.6	252.51
Insurance company clients	0			0	42	123.11	0	0	0	0	0	86	0
All other institutional clients	1,762		396	0	2,353	3,173.14	1,842	561	663.97	0	0	1,422.8	611.23
US large cap equity managed (€m)													
Passively or on an indexed basis			4,164	0	1,480			0	0			9,238	0
On an enhanced indexed basis				0				0	0				0
Market-neutral strategies				0				0	0				55.98
Quant-type strategies				0	1,132			0	0			42,242.5	7,349.96
Actively with 2-5% outperformance		4,190	92,950	14,640.3				9,089	878.49 [10]			25,958.5	7,349.96
Actively with 5% plus outperformance				0				0	0				0
130/30 or similar strategy				0				0	0				3,386.58
Other							89,769	8,838					
If managed on an active basis													
Information ratio		0.5		-0.60 (7)	-15.00%		0.14 (5)	[16]	79.75%		0.06 (7)	(17)	[17]
Acceptable tracking error		200-400bps	2-6%	5.11% ⁽⁷⁾	6%		5.46% ⁽⁵⁾	[16]	2-6%		3-5%	(17)	(18)
Description of approach to running US large cap equities													
Core			X			X		Χ	Χ			X	Х
Value			Χ	Χ	Χ	X	X	Χ				Х	Χ
Growth		Χ	X								Χ	X	Х
Enhanced indexing												Х	
Quant		Χ			X							X	Χ
Top down			Χ						Χ				
Bottom up		Χ	Χ	Χ	Χ		X	Χ			Χ	Х	Χ
Thematic									Χ				
Concentrated/focused												Х	
Sector									Χ				
Absolute return													
Other			(13)		[14]								
% of US large cap equities portfolio made up of													
Top 10 positions		39.33		52.12	17.84		32	30.9	39.83		49	[17]	31.53
Top 20 positions		55.58		79.88	28.23		54	50.3	63.06		66	(17)	43.93
Number of stocks normally held in portfolio		70-90	60-80	46-110	140-150		60-100	50-60	40-76		75-100	(17)	≽125
% of US large cap research done in-house		95	80	100	100	90	80	100	85		95	(17)	100
Number of investment professionals in US large cap equities team		13		9	8	107	49 [15]	10	73		6	[17]	32
Number of US large cap equities portfolio managers in team		4		2	3	41	10	4	5		4	[17]	2

IN SUMMARY

Survey overview

Total number of managers in survey	51
Total assets invested in US large cap equity (€m)	3,474,961
Total invested for European institutional clients (€m)*	76,406
Total invested for European pension fund clients (€m)*	25,211
Total invested for European insurance company clients (€m)*	3,877
Total invested for all other European institutional clients (£m)*	/1 910

*Where disclose

Top managers: US large cap equity assets

	Company	€m	As at
	BlackRock	941,908	31/03/19
2	State Street Global Advisors	648,935	31/03/19
3	T. Rowe Price	337,682	31/12/18
	Nuveen	161,802	31/12/18
5	MFS Investment Management	134,196	30/04/19
5	Dimensional Fund Advisors	114,675	31/12/18
7	PGIM	110,932	31/03/19
3	Columbia Threadneedle Investments	97,114	31/12/18
7	AllianceBernstein	95,036	31/03/19
0	Dodge & Cox	89,769	31/03/19
1	Goldman Sachs Asset Management	77,439	31/12/18
2	Legg Mason	65,832	31/12/18
3	Janus Henderson Investors	56,885	31/03/19
4	Principal Global Investors	54,301	31/03/19
5	Barrow, Hanley, Mewhinney & Strauss	43,478	31/03/19
6	Loomis, Sayles & Company	42,699	31/03/19
7	Aberdeen Standard Investments	33,017	31/03/19
	Macquarie Asset Management	32,136	31/03/19
9	Franklin Templeton	27,605	31/12/18
	Fisher Inv. Europe	27,324	03/03/19
	UBS Asset Management	24,351	30/03/19
22	Wells Fargo Asset Management	23,851	31/03/19
23		23,690	31/03/19
	Manulife Investment Management	20,321	31/03/19
	Brown Advisory	19,114	30/04/19
	Winslow Capital Management	18,553	31/03/19
27	Epoch Investment Partners	17,927	31/03/19
	Fred Alger Management	16,229	31/12/18
29	Los Angeles CM & Equity Research	14,755	31/03/19
30	Davis Selected Advisers	14,640	31/03/19

Top managers: Assets invested for European institutional clients

	•		
	Company	€m	As at
	BlackRock	20,257	31/03/19
	T. Rowe Price	4,999	31/12/18
	Swiss Life Asset Managers	4,762	31/12/18
	Aristotle Capital Management	4,057	31/03/19
	State Street Global Advisors	3,625	31/03/19
	BNP Paribas Asset Management	3,536	31/03/19
,	Dimensional Fund Advisors	3,337	31/12/18
П	Dodge & Cox	3,103	31/03/19
	Brown Advisory	3,023	30/04/19
0	Degroof Petercam Asset Management	2,612	30/04/19
1	Wells Fargo Asset Management	2,598	31/03/19
2	Barrow, Hanley, Mewhinney & Strauss	2,168	31/03/19
3	Vontobel Asset Management	2,007	31/12/18
4	Goldman Sachs Asset Management	1,860	31/12/18
5	MFS Investment Management	1,410	30/04/19
6	Loomis, Sayles & Company	1,249	31/03/19
7	Robeco	1,205	31/03/19
8	Fisher Investments Europe	878	03/03/19
9	Anima	871	30/04/19
0	Jacobs Levy Equity Management	864	30/04/19
1	Epoch Investment Partners	851	31/03/19
2	Ossiam	787	28/05/19
3	Morgan Stanley Investment Management	643	31/03/19
4	Macquarie Asset Management	640	31/03/19
5	AXA Investment Managers	638	31/03/19
6	AllianceBernstein	595	31/03/19
7	Legg Mason	590	31/12/18
8	Schroders Investment Management	525	29/03/19
9	PanAgora Asset Management	505	30/04/19
0	Unigestion	497	30/04/19

JULY/AUGUST 2019 INVESTMENT & PENSIONS EUROPE JULY/AUGUST 2019

INVESTMENT **INVESTMENT**

IPE SURVEY US LARGE-CAP EQUITY MANAGERS

Company	Janus Henderson	Legg	Loomis, Sayles	Los Angeles CM	Macquarie Asset	Manulife Inv.	MFS Investment	Morgan Stanley	Nuveen	0ssiam	PanAgora Asset	PGIM	Principal Global
	Investors	Mason	& Company	& Equity Research	Management	Management	Management	Investment Mngt.			Management		Investors
Amount invested in US large cap equity (€m)	56,885	65,831.8	42,699	14,755	32,136	20,320.55 (21)	134,196 (22)	23,689.64	161,801.66	2,128	7,542	110,932	54,301
As at	31/03/19	31/12/18	31/03/19	31/03/19	31/03/19	31/03/19	30/04/19	31/03/19	31/12/18	28/05/19	30/04/19	31/03/19	31/03/19
Total AUM worldwide (€m)	318,189	635,339.7	234,877	22,420	343,576	343,535.75	432,256	427,500.11	811,428.45	3,577	40,993	1,087,751	394,052
Minimum market value at which stocks are regarded as US large cap equity (\$bn)	30	5-10	0.5	1	10	10	10	10	(25)	4	8	3 (27)	10
Amount of US large cap equity invested for (€m)													
Europe-based institutional clients	19	590.2	1,249	0	640	187.23	1,410	642.58	54	787	505	0	0
Pension fund clients	15			0		187.08	428	11.54		29	398	0	0
Insurance company clients	3			0		0	603	92.73		27	0	0	0
All other institutional clients	1	590.2	1,249	0	640	0.15	379	538.31		731	107	0	0
US large cap equity managed (€m)													
Passively or on an indexed basis	0	211.4		0		8,174.98				182	0	13,777	31,726
On an enhanced indexed basis	0			283		0				1,789	0	0	
Market-neutral strategies	0			0		0					0	0	
Quant-type strategies	19,191	650		13,997		0		670		1,946	7,542	18,789	
Actively with 2-5% outperformance	37,694		42,699	0	32,136	12,145.57					0	96,675	22,575
Actively with 5% plus outperformance	0			0		0					0	0	
130/30 or similar strategy	0			475		0					0	876	
Other		64,970.4					134,196 ^[23]	23,019 (8)				479 (28)	
If managed on an active basis													
Information ratio	0.33	NA	0.54	0.45	0.39	NA	NA	0.79			0.75-1.00	0.63 [26]; 0.61 [27]	1.11 (5)
Acceptable tracking error	3-7%	NA	(20)	3-5%	3-5%	3-6%	2-5% (24)	5-10% [16]			1-4%	2.0% (26)	<6%
Description of approach to running US large cap equities													
Core		Χ				X	X (24)				Χ	Χ	
Value		Χ			X	X	X			X		Χ	
Growth	Χ	Χ	Χ	Χ		Χ	X	Χ				Χ	Χ
Enhanced indexing										Х			
Quant		X		X						Χ	Χ	Χ	
Top down													
Bottom up	X	Χ	Х	X	Х	X	Х				Х	Х	X
Thematic													
Concentrated/focused	X					X	Х					Х	X
Sector										X		Х	
Absolute return													
Other		[19]											
% of US large cap equities portfolio made up of													
Top 10 positions	41.2	21-38	49.77	35	31.86	40-45	26.62 [24]	48		33	25	22.17 [26]; 38.65 [27]	56.25
Top 20 positions	67.3	32-60	77.37	47	62.18	60-65	45.03 [24]	NA		47	39	35.88 [26]; 61.35 [27]	
Number of stocks normally held in portfolio	30-40	45-166	30-40	150-300	30-35	45-65	70-100 (24)	NA		250	100-200	150-275 (26); 50-70 (2	
% of US large cap research done in-house	90+	80-100	90	100	75	100	100				100	100 (26); 85 (27)	100
Number of investment professionals in US large cap equities team	47	67	8	36	7	8	63	16		5	23	24 (26); 28 (27)	11
Number of US large cap equities portfolio managers in team	2	31	1	7	4	4	21	6		5	23	12 (26); 10 (27)	1
				· · · · · · · · · · · · · · · · · · ·		•						,	

Amount invested in US large cap equity (€m) As at Total AUM worldwide (€m) Minimum market value at which stocks are regarded as US large cap equity (\$bn) Amount of US large cap equity invested for (€m) Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis Market-neutral strategies	4,261 31/03/19 178,745 5 1,205 644 33 528	Management 1,749 29/03/19 492,470 20 525 49.04	Global Advisors 648,934.5 31/03/19 2,498,440.32 10 3,625.44 661.55 675.42 2,288.47	Asset Managers 4,762 31/12/18 206,697 4,762	Price 337,682 31/12/18 841,801 23.1 4,999 69 499 4,431	Management 24,351 30/03/19 734,536	502 30/04/19 20,262 12 497 60 56 381	98 23/05/19 40,663 5	Management 2,226 31/12/18 104,157 10 2,007	Asset Mngt. 23,851 31/03/19 424,646.5 10 2,598.3 1,505.8 155.5 937	Blair 1,325 31/03/19 48,533 5 87 0 0	Management 18,553 31/03/19 18,846 4 71 0 0 71
As at Total AUM worldwide [€m] Minimum market value at which stocks are regarded as US large cap equity (\$bn) Amount of US large cap equity invested for [€m] Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed [€m] Passively or on an indexed basis On an enhanced indexed basis	31/03/19 178,745 5 1,205 644 33 528	29/03/19 492,470 20 525	31/03/19 2,498,440.32 10 3,625.44 661.55 675.42 2,288.47	31/12/18 206,697	31/12/18 841,801 23.1 4,999 69 499 4,431	30/03/19 734,536	30/04/19 20,262 12 497 60 56 381	23/05/19 40,663 5 98	31/12/18 104,157 10 2,007	31/03/19 424,646.5 10 2,598.3 1,505.8 155.5	31/03/19 48,533 5 87 0	31/03/19 18,846 4 71 0
Total AUM worldwide (€m) Minimum market value at which stocks are regarded as US large cap equity (\$bn) Amount of US large cap equity invested for (€m) Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis	178,745 5 1,205 644 33 528	492,470 20 525	2,498,440.32 10 3,625.44 661.55 675.42 2,288.47	206,697	841,801 23.1 4,999 69 499 4,431	734,536	20,262 12 497 60 56 381	40,663 5 98	104,157 10 2,007	2,598.3 1,505.8 155.5	48,533 5 87 0	71 0 0
Minimum market value at which stocks are regarded as US large cap equity (\$bn) Amount of US large cap equity invested for (€m) Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis	5 1,205 644 33 528	20 525	3,625.44 661.55 675.42 2,288.47	•	23.1 4,999 69 499 4,431		497 60 56 381	5 98	2,007	2,598.3 1,505.8 155.5	5 87 0	71 0 0
Amount of US large cap equity invested for (€m) Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis	1,205 644 33 528	525	3,625.44 661.55 675.42 2,288.47	4,762	4,999 69 499 4,431	20.383	497 60 56 381	98	2,007	2,598.3 1,505.8 155.5	87 0 0	71 0 0
Europe-based institutional clients Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (Em) Passively or on an indexed basis On an enhanced indexed basis	644 33 528		661.55 675.42 2,288.47	4,762	69 499 4,431	20.383	60 56 381		,	1,505.8 155.5	0	0
Pension fund clients Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis	644 33 528		661.55 675.42 2,288.47	4,762	69 499 4,431	20.383	60 56 381		,	1,505.8 155.5	0	0
Insurance company clients All other institutional clients US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis	33 528	49.04	675.42 2,288.47		499 4,431	20.383	56 381		2,007	155.5	0	0
All other institutional clients US large cap equity managed (Em) Passively or on an indexed basis On an enhanced indexed basis	528		2,288.47		4,431	20,383	381		2,007			
US large cap equity managed (€m) Passively or on an indexed basis On an enhanced indexed basis			,		·	20.383			2,007	937	87	71
Passively or on an indexed basis On an enhanced indexed basis	4,261		637,476.42			20.383	0					
On an enhanced indexed basis	4,261		637,476.42			20.383	n					
	4,261						U	98			0	0
Market-neutral strategies	4,261				1,405		0				0	0
	4,261						0				0	0
Quant-type strategies	4,261		832.88				0			569.9 (10)	0	0
Actively with 2-5% outperformance					289,101	3,702	502		2,007	1,184.2 [10]	1,325	18,553
Actively with 5% plus outperformance							0				0	0
130/30 or similar strategy						266	0				0	0
Other			10,625.2							844.2 (10)		
If managed on an active basis												
Information ratio	0.26	-0.3	0.29			0.3	-0.83 (5)		NA	1.06	0.65 (7) (11)	0.89
Acceptable tracking error	3-5% (16)	2-7%	+/- 0-5bps			3-5%	4.39% (5)	0.50%	NA	3-6%	3-4%	3-6%
Description of approach to running US large cap equities												
Core		X	X			X	Х	X				
Value	X					Χ						
Growth									X	X	X	X
Enhanced indexing								Χ				
Quant												
Top down												
Bottom up	X	X				X	X	X	X	X	X	X
Thematic						· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	•		
Concentrated/focused								X	X	X	X	
Sector									**		**	
Absolute return												
Other		[29]										
% of US large cap equities portfolio made up of												
Top 10 positions	32.88	35-40	21.11			27.3	20.89	27.8		47.7	46.35	42.89
Top 20 positions	52.34	60-70	31.36			51.1	39.81	52.8		73.1	73.4	63.69
Number of stocks normally held in portfolio	70-100	50-70	500		[31]	60-90	120	40-50	30-50	30-40	30-40	45-55
% of US large cap research done in-house	100	80	90			90	100	NA NA	90	85	(32)	90
Number of investment professionals in US large cap equities team	30	10	[30]		173	12	26	INA	17	15	11	10
Number of III Starge cap equities portfolio managers in team	/.	2			Ω	2	10	1	17	2	2	3

NA= Not available

Footnotes:

(1) The firm's flagship strategy is the AGF U.S. Large Cap Growth Equity Strategy

(2) 5.6% is the current tracking error. The firm does not have a targeted tracking error
(3) Relates to pure US equity funds only

(4) 1-year

(5) 3-year(6) Does not include US large cap equity assets held across all strategies in the firm. The figure provided is based on the US Equity strategy, which primarily invests in mid to large cap companies
(7) 5-year

(8) Active

(10) Relates to Europe-based institutional clients

(11) Actual

(12) All equity investment professionals may work with all equity

strategies. There are 11 equity portfolio managers and 24 equity research personnel based in San Diego, all potentially involved with the U.S. Value Equity strategy

(13) Core Plus
(14) Investment process and valuation model are based on behav-

ioural finance science

(15) Excludes client servicing investment professionals

(16) No target

(17) Varies by product (18) Long-Only Strategies, 2-4%; 130-30 Strategies, 3-6% (19) Fundamental

(20) The firm do not manage the portfolio to a tracking error target at any point during the investment process. Since inception, the average tracking error measured over rolling 12-month periods is 4.49% [21] Represents monies only in dedicated US Large Cap strategies.

Does not include US large cap equity holdings across all strategies managed
(22) Refers to all of the firm's US large cap product offerings

(23) Varying outperformance targets between 1% and 3%

(24) Relates to the firm's US Core Equity strategy
(25) US large caps minimum size varies among the firm's affiliates.

\$15bn, 81.37%; \$10bn, 6.05%; \$4bn, 12.58% [26] QMA

(28) Asset allocation

(29) GARP Bias

(30) The firm uses a team approach in managing equity portfolios: Global Equity Beta Solutions team for indexed strategies; Active Quantitative Equity team for quant and enhanced strategies; Fundamental Value Equity Team, Ireland for fundamental equity investing. The firm has 128 equity portfolio manager globally as at 31/12/18 [31] US LC Value, 70-80; US LC Equity Income, 100-125; US LC Core Equity, 50-60; US LC Core Growth Equity Strategy, 100-140 (32) Majority

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