Sandler O'Neill Investment Banking Group

Monthly Asset Management Report

October 2019

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Asset Management Market Pulse

		onth	Year-to								
	October 2019	September 2019	October 2019	October 2018							
Global Asse	et Management Tr	ansaction Activity									
Number of Transactions											
Traditional Managers	6	2	44	45							
Alternative Managers	5	5	52	84							
Private Wealth Managers	7	10	125	92							
Total Transactions	18	17	221	221							
AUM Transacted (\$Billions)	\$48	\$95	\$1,075	\$3,136							
Retail Fund Net Flows Activity (\$Billions)											
<u>Equity</u>											
Active Mutual Funds	(\$31.0)	(\$27.7)	(\$225.5)	(\$135.3)							
ETFs & Passive Mutual Funds	\$11.7	\$26.4	\$142.4	\$237.6							
<u>Fixed Income</u>											
Active Mutual Funds	\$22.4	\$16.4	\$203.7	\$76.1							
ETFs & Passive Mutual Funds	\$27.5	\$25.3	\$208.2	\$118.7							
Publicly	y-Traded Asset Ma	nager Metrics									
Median Stock Price Return											
U.S. Traditionals	(1.3%)	6.0%	13.8%	(21.8%)							
U.S. Alternatives	7.4%	(1.8%)	76.1%	2.8%							
Median Forward P/E Multiples											
U.S. Traditionals	10.2x	10.0x	10.2x	10.4x							
U.S. Alternatives	14.4x	13.9x	14.4x	10.1x							

Notes:

Mutual fund net flow information includes U.S. open-end funds and ETFs Performance is based on dividend-adjusted returns Source: Sandler O'Neill, Morningstar Direct, FactSet

Transaction Highlights

Asset Managers

- (10/10/19) Knights of Columbus Asset Advisors ("KoCAA")
 acquired the institutional management business (\$1.0B AUM) of
 Boston Advisors, a wealth manager and equities-focused
 investment manager. KoCAA previously owned an 18.8% stake in
 Boston Advisors
- (10/17/19) GSFM, the Australian subsidiary of Canada-based CI Financial, acquired a 49% stake in Redpoint Investment Management, an Australia-based global equities manager (\$6.7B AUM)
- (10/24/19) Stonyrock Partners, a newly-formed investment firm making strategic minority investments in alternative asset managers, acquired a minority stake in Oak Hill Capital Partners, a middle market-focused private equity firm (\$15B capital commitments since inception)
- (10/28/19) Mitsui USA, the U.S. subsidiary of Japan-based conglomerate Mitsui, acquired a minority stake in Capitala Group, an asset manager providing capital to lower middle market companies throughout North America (\$3.0B AUM)
- (10/29/19) Schroders agreed to sell its minority stake in RWC
 Partners, a U.K.-based asset manager (\$18B AUM), to
 management with support from Lincoln Peak Capital. RWC
 offers investment strategies in developed and emerging market
 equities, convertible bonds, and income solutions

Private Wealth Managers

- (10/9/19) **CAPTRUST Financial Advisors** acquired the wealth management business (\$1.5B AUM) of **Boston Advisors**, a wealth manager and equities-focused investment manager
- (10/29/19) **HighTower** made a strategic investment in **Schultz Collins**, a California-based wealth manager (\$1.0B assets)
- (10/29/19) Allworth Financial, formerly known as Hanson McClain Advisors, agreed to acquire RAA, a Texas-based wealth manager focused on serving airline industry employees (\$2.8B AUM)
- (10/31/19) Wealth Enhancement Group agreed to acquire RCL Advisors, a New York-based wealth manager (\$1.4B assets)

U.S. Long-Term Retail Active & Passive Net Flows

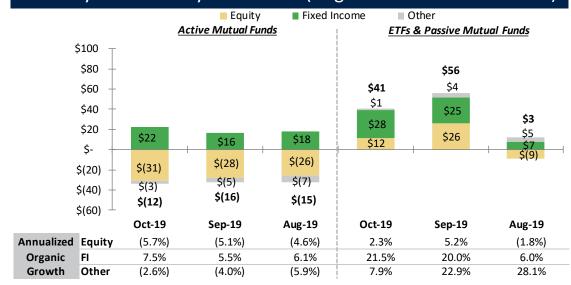


Net Flows by Category (October 2019)

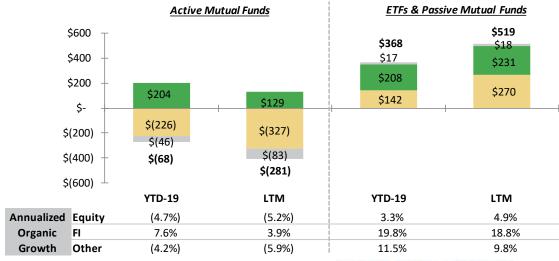


Note: "Other" includes Allocation, Alternative, Commodities Source: Morningstar Direct, Sandler O'Neill analysis

Monthly Net Flows by Asset Class (August 2019 – October 2019)



YTD and LTM Net Flows by Asset Class (October 2019)



U.S. Long-Term Retail Active & Passive Net Flows (cont'd)

(\$Billions)

Top Active Categories

			Net Flows		Annualize	d Organic	ic Growth		
	Oc	t '19	YTD	LTM	Oct '19	YTD	LTM		
1. Intermediate Core-Plus Bond	\$	6.6	\$ 62.3	\$ 46.8	11%	12%	7%		
2. Intermediate Core Bond		5.2	22.4	16.0	20%	10%	6%		
3. Ultrashort Bond		4.0	30.8	44.9	22%	20%	26%		
4. Muni National Interm		3.1	32.7	30.0	16%	20%	15%		
5. Short-Term Bond		2.5	23.3	26.2	9%	10%	9%		

Top Passive Categories

			Net	t Flows	;	Annualized Organic Grow				
	Oc	Oct '19		YTD	LTM	Oct '19	YTD	LTM		
1. Intermediate Core Bond	\$	9.6	\$	70.0	\$ 68.0	18%	16%	13%		
2. Large Value		4.5		12.8	30.1	15%	5%	10%		
Foreign Large Blend		3.3		38.0	59.5	5%	6%	8%		
4. Intermediate Government		3.3		28.3	30.5	50%	68%	65%		
5. High Yield Bond		2.2		15.7	12.8	54%	55%	33%		

Bottom Active Categories

		Net Flows		Annualized Organic Growth					
	Oct '19	YTD	LTM	Oct '19	YTD	LTM			
1. Large Growth	\$ (7.7)	\$ (57.9)	\$ (69.6)	(6%)	(6%)	(5%)			
2. Foreign Large Blend	(4.1)	(13.1)	(25.5)	(16%)	(5%)	(8%)			
3. Bank Loan	(3.7)	(32.0)	(50.9)	(45%)	(32%)	(35%)			
4. Mid-Cap Growth	(2.2)	(7.6)	(12.4)	(8%)	(3%)	(4%)			
5. Large Value	(2.2)	(34.2)	(45.1)	(3%)	(5%)	(5%)			

Bottom Passive Categories

	1	Net Flows		Annualized Organic Growth					
	Oct '19	YTD	LTM	Oct '19	YTD	LTM			
1. Small Blend	\$ (1.1)	\$ 1.3	\$ 3.2	(5%)	1%	1%			
2. Large Growth	(1.1)	5.6	6.9	(4%)	2%	2%			
3. TradingLeveraged Equity	(0.8)	(7.4)	(7.1)	(39%)	(38%)	(26%)			
4. Natural Resources	(0.7)	(1.8)	(2.9)	(46%)	(12%)	(14%)			
5. Health	(0.6)	(6.0)	(5.7)	(12%)	(12%)	(9%)			

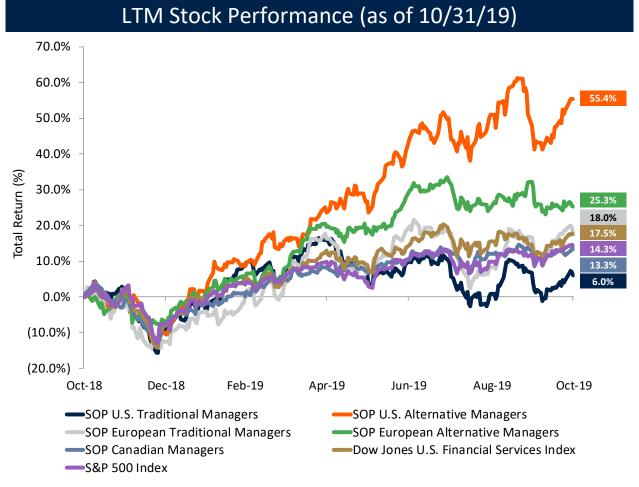
Largest Active Categories

	1	Net Flows		Annualize	Growth	
	Oct '19	YTD	LTM	Oct '19	YTD	LTM
1. Large Growth	\$ (7.7)	\$ (57.9)	\$ (69.6)	(6%)	(6%)	(5%)
2. Large Blend	(2.0)	(20.7)	(24.7)	(2%)	(3%)	(3%)
3. Large Value	(2.2)	(34.2)	(45.1)	(3%)	(5%)	(5%)
4. Intermediate Core-Plus Bond	6.6	62.3	46.8	11%	12%	7%
5. Allocation50% to 70% Equity	(0.2)	(6.1)	(12.1)	(0%)	(2%)	(2%)

Largest Passive Categories

			Net Flows		Annualized Organic Growth					
	Oct	t '19	YTD	LTM	Oct '19	YTD	LTM			
1. Large Blend	\$	1.4	\$ 93.1	\$169.9	1%	5%	7%			
2. Foreign Large Blend		3.3	38.0	59.5	5%	6%	8%			
3. Intermediate Core Bond		9.6	70.0	68.0	18%	16%	13%			
4. Large Value		4.5	12.8	30.1	15%	5%	10%			
5. Mid-Cap Blend		(0.3)	5.0	7.3	(1%)	2%	2%			

Publicly-Traded Asset Manager Performance



Biggest Movers

October 2019									
Top Performers									
1. Cohen & Steers, Inc.	19.1%								
2. Anima Holding SpA	11.2%								
3. Ares Management Corporation	10.3%								
4. The Blackstone Group, Inc.	8.8%								
5. Apollo Global Management, Inc.	8.8%								

Bottom Performers									
1. Man Group Plc	(17.9%)								
2. GAM Holding AG	(17.8%)								
3. Focus Financial Partners Inc.	(8.1%)								
4. Manning & Napier, Inc.	(8.1%)								
5. Sculptor Capital Management, Inc.	(7.8%)								

YTD October 2019	
Top Performers	
Azimut Holding SpA	111.3%
2. Sculptor Capital Management, Inc.	104.9%
3. Cohen & Steers, Inc.	95.0%
4. The Blackstone Group, Inc.	84.8%
5. The Carlyle Group, L.P.	82.3%

Bottom Performers	
1. WisdomTree Investments, Inc.	(22.0%)
2. Affiliated Managers Group, Inc.	(17.2%)
3. Focus Financial Partners Inc.	(16.9%)
4. GAM Holding AG	(14.7%)
5. Silvercrest Asset Management Group, Inc.	(6.1%)

Notes:

SOP U.S. Traditional Managers companies: AMG, AB, APAM, BLK, BSIG, CNS, EV, FII, FOCS, BEN, IVZ, JHG, LM, MN, PZN, SAMG, TROW, VRTS, WDR, WETF

SOP U.S. Alternative Managers companies: APO, ARES, BX, CG, HLNE, KKR, SCU

SOP European Traditional Managers companies: AMUN, ANIM, AZM, GAM, JUP, SDR, SLA

SOP European Alternative Managers companies: III, ASHM, ICP, EMG, PGHN, POLR

SOP Canadian Managers components: AGF, BAM, CIX, FSZ, GCG, IGM, SII

SOP composites are equal-weighted, non-investable indices that seek to reflect the performance of traditional and alternative publicly-traded asset management companies in the U.S., Europe, and Canada. The composites were developed by Sandler O'Neill

Performance is based on dividend-adjusted returns

Source: FactSet, Sandler O'Neill analysis

U.S. Publicly-Traded Asset Managers (as of 10/31/19)

Part	(\$Millions, except per share data)																				
Company Name				% of			Fully	Total													2018
Part			Closing	52 Week	% Ret	urn	Diluted	Enterprise	Cı	urrent	LTM AUM	Growth	Price ,	/ EPS	Implied EP	S Growth	TEV / R	evenue	TEV / E	BITDA	
Marting Amangers Group, Inc. AMG 79.88 67% 17% 12% 23% 93% 93% 14% 12% 23% 93% 93% 14% 12% 23% 9	Company Name	Ticker	Price	High	YTD	1-Year	Market Cap	Value		AUM	Organic	Total	2019E	2020E	18-19	19-20	2019E	2020E	2019E	2020E	Margin
AllanceBernstein Holding, I.P. AB 23 8 93% 14% 10% 8.122 6.842 592,400 4% 8% 12.57 11.26	Traditional Asset Managers																				
Arisan Partners Asset Management, Inc. BPAM 273 591 M 389 1449 2,128 2,157 112,492 (b) (b) (b) (b) (b) 10,48 100,4 100,4 100,6 1191) 49 2,78 2,78 2,89 389 1848 1848 1848 1848 1848 1848 1848 18	Affiliated Managers Group, Inc.	AMG S	\$ 79.88	67%	(17%)	(29%)	\$ 3,936	\$ 5,295	5 \$	750,700	(8%)	(10%)	5.7x	5.6x	(3%)	1%	2.4x	2.5x	6.2x	6.2x	40%
BlackRock n.c. Bl.K 461,70 95% 20% 16% 71,812 71,207 6,963,302 5% 8% 16.7k 15.2k 2% 10% 5.0k 4.6k 12.6k 11.3k 40% 60% 60% 11.8k 11.8k 40% 60% 60% 11.8k 11.8k 40% 60% 60% 60% 11.8k 11.8k 40% 60%	AllianceBernstein Holding, L.P.	AB	29.36	93%	14%	10%	8,122	6,842	2	592,400	4%	8%	12.5x	10.3x	(12%)	21%	2.3x	2.1x	8.1x	6.9x	26%
Brightsphere Investment Group Inc. Check Start	Artisan Partners Asset Management, Inc.	APAM	27.35	91%	38%	14%	2,128	2,157	7	112,492	(6%)	(4%)	10.4x	10.0x	(11%)	4%	2.7x	2.6x	7.6x	7.4x	38%
Cohe No.	BlackRock, Inc.	BLK	461.70	95%	20%	16%	71,812	71,207	7 (6,963,932	5%	8%	16.7x	15.2x	2%	10%	5.0x	4.6x	12.6x	11.3x	40%
Eston Name Corp. Eston Name Name Precise Tell Name Name Name Name Precise Name Process Name Name Precise Name Process Name Name Precise Name Process Name Name Precise Name Name Process Name Name Name Process Name Name Name Name Name Name Name Name	BrightSphere Investment Group Inc.	BSIG	9.82	66%	(6%)	(11%)	901	1,436	5	225,000	(8%)	(9%)	5.6x	5.2x	(5%)	7%	1.7x	1.7x	5.8x	5.8x	31%
Federated Investors, Inc. Fil. 31.94 89% 24% 34% 3.20 3.285 527,362 (5%) 2.1% 1.2% 1.2% 1.1% 1.7% 9% 2.5% 2.3% 9.1% 8.4% 2.2% 2.8% 2.3% 9.1% 8.4% 2.2% 2.2% 2.3% 3.1% 2.2% 2.2% 3.1% 2.2% 2.2% 3.1% 3.2% 2.2% 3.1% 3.2%	Cohen & Steers, Inc.	CNS	65.44	99%	95%	88%	3,148	2,970)	66,601	(4%)	12%	26.1x	22.5x	4%	16%	7.2x	6.5x	18.6x	16.0x	40%
Foos Foos Foos Foos Foos Sale	Eaton Vance Corp.	EV	45.60	96%	34%	5%	5,174	5,604	4	482,780	4%	7%	13.3x	12.8x	5%	4%	3.3x	3.1x	10.1x	9.8x	34%
Franklin Resources, Inc. BEN 27.55 77% 58% 77% 138% 13,876 9,263 715,200 (48%) (39%) 1.13% 10.9% (19%) 39% 1.6% 1.5% 5.2% 5.9% 34% 1.98%	Federated Investors, Inc.	FII	31.94	89%	24%	34%	3,230	3,285	5	527,162	(5%)	21%	12.5x	11.4x	17%	9%	2.5x	2.3x	9.1x	8.4x	28%
Investor, Ltd. Inve	Focus Financial Partners Inc.	FOCS	21.88	54%	(17%)	(43%)	1,520	2,744	4	n/a	n/a	n/a	10.0x	8.1x	25%	24%	2.3x	1.9x	11.0x	8.9x	22%
Janus Henderson Group pic JHG 23.13 90% 17% 11% 43.46 3.717 336,100 (8%) (8%) (8%) 9.4k 9.5k (11%) (11%) 1.7k 1.7k 1.7k 5.7k 5.7k 33% 12.8k 37.8k 13.7k 37.8k 13.7k 37.8k 13.7k 37.8k 13.7k 37.8k 11.7k 37.8k 12.7k 22.8k 22	Franklin Resources, Inc.	BEN	27.55	77%	(5%)	(7%)	13,876	9,263	3	715,200	(4%)	(3%)	11.3x	10.9x	(19%)	3%	1.6x	1.6x	5.2x	5.9x	34%
Legg Mason, Inc. LM 37.26 93% 51% 38% 3.482 4,260 781,800 (2%) 37% 11.7x 9.5x 17.7m 24% 1.5x 1.5x 7.7x 6.3x 22% Manning & Napier, Inc. MNN 1.71 59% 11% (9%) 137 79 21,251 (15%) (11%) 11.8x 14.3x (34%) (17%) 0.6x 0.6x 0.6x 0.6x 4.4x 5.0x 16% 51% 51% 51% 51% 51% 51% 51% 51% 51% 51	Invesco, Ltd.	IVZ	16.82	75%	6%	(17%)	7,703	11,455	5 :	1,184,400	(3%)	21%	6.5x	6.5x	6%	1%	1.8x	1.6x	6.4x	5.6x	29%
Manning & Napier, Inc. MN 1.71 59% 11% 69% 137 79 21_251 (15%) (11%) 11.82 14.3x (34%) (17%) 0.6x 0.6x 4.4x 5.0x 16% 15% 15% 15% 15% 11%	Janus Henderson Group plc	JHG	23.13	90%	17%	1%	4,346	3,717	7	356,100	(8%)	(6%)	9.4x	9.5x	(11%)	(1%)	1.7x	1.7x	5.7x	5.7x	33%
Pzena Investment Management, Inc.	Legg Mason, Inc.	LM	37.26	93%	51%	38%	3,482	4,260)	781,800	(2%)	3%	11.7x	9.5x	n/m	24%	1.5x	1.5x	7.7x	6.3x	22%
Silvercrest Asset Management Group, Inc. SAMG 12.02 75% (6%) (13%) 173 181 22,500 676 878 9.8x 9.8x 9.8x 1.5x 1.5x 1.5x 1.5x 1.5x 1.5x 1.5x 1.5	Manning & Napier, Inc.	MN	1.71	59%	1%	(9%)	137	79	9	21,251	(15%)	(11%)	11.8x	14.3x	(34%)	(17%)	0.6x	0.6x	4.4x	5.0x	16%
T. Rowe Price Group, Inc. TROW 115.80 96% 28% 23% 27,442 23,603 1,126,300 0% 4% 13.9% 14.1k 15% (1½) 4.2k 4.0k 9.1k 8.8k 47% Victor Capital Holdings, Inc. VICTR 15.56 78% 53% 100% 1,148 2,058 145,832 4% 125% 6.1k 3.5% 56% 54% 3.3k 2.3k 7.9k 5.0k 39% Victor Investment Parinters, Inc. VRTS 108.48 88% 40% (1½% 877 959 104,076 (6%) (1½) 7.5k 6.9k 18% 85% 1.8k 1.8k 5.2k 5.1k 30% Waddell & Reed Financial, Inc. WDR 16.56 80% (3½) (8½) 1,165 505 68,782 (13½) (14½) 9.6k 10.8k (24½) (11½) 0.5k 0.5k 0.5k 0.5k 2.9k 3.2k 21½ WisdomTree Investments, Inc. (1) WETF 5.11 64½ (2½%) (33½) 871 961 60,012 1½ 1½ 0.2k 12½ (1½½) 0.5k 0.5k 0.5k 0.5k 0.5k 0.5k 0.5k 0.5k	Pzena Investment Management, Inc.	PZN	8.30	79%	2%	(12%)	581	559	9	35,800	(1%)	(8%)	n/a	n/a	n/m	n/m	n/a	n/a	n/a	n/a	51%
Victory Capital Holdings, Inc. VCTR 15.56 78% 53% 100% 1,148 2,058 145,832 4% 129% 6.1x 3.9x 56% 54% 3.3x 2.3x 7.9x 5.0x 39% Virtus Investment Partners, Inc. VIRTS 108.48 86% 40% 120% 877 959 104,067 (6%) (1%) 17.5x 6.9x 18% 18% 88% 18x 1.8x 5.2x 5.1x 30% Waddell 8.Reed Financial, Inc. WDR 16.56 88% (38%) 88% 18x 18x 5.2x 5.1x 30% Waddell 8.Reed Financial, Inc. WBT 5.11 64% (12%) (33%) 871 961 66,012 18% 18% 18% 18% 18% 18% 18% 1	Silvercrest Asset Management Group, Inc.	SAMG	12.02	75%	(6%)	(13%)	173	181	1	23,500	6%	8%	9.8x	8.2x	(5%)	19%	1.8x	1.6x	5.9x	4.9x	30%
Virtus Investment Partners, Inc. VRTS	T. Rowe Price Group, Inc.	TROW	115.80	96%	28%	23%	27,442	23,603	3 :	1,126,300	0%	4%	13.9x	14.1x	15%	(1%)	4.2x	4.0x	9.1x	8.8x	47%
Waddell & Reed Financial, Inc. WDR 16.56 80% (3%) (8%) 1,165 505 68,782 (13%) (14%) 9.6x 10.8x (24%) (11%) 0.5x 0.5x 2.9x 3.2x 21% WisdomTree Investments, Inc. (1) WETF 5.11 64% (22%) (33%) 871 961 60,012 11% 12% 24.3x 21.3x (34%) 14% 3.5x 17.4x 14.5x 25% Median 80% 14% 10% 10% 10% 10.3x 11% 10.3x 13% 2.5x 2.3x 7.5x 7.2x 33% Maximum 20% 95% 100% 43% 12.9x 26.1x 22.5x 56% 54% 7.2x 6.5x 18.6x 16.0x 51% Maximum 20 54% 17% 43% 17.4x 12.9x 22.5x 25.8x 23.2x 2.5x 2.5x 2.5x 2.5x 2.5x 2.5x 2.5x	Victory Capital Holdings, Inc.	VCTR	15.56	78%	53%	100%	1,148	2,058	3	145,832	4%	129%	6.1x	3.9x	56%	54%	3.3x	2.3x	7.9x	5.0x	39%
Weddin W	Virtus Investment Partners, Inc.	VRTS	108.48	86%	40%	12%	877	959	9	104,067	(6%)	(1%)	7.5x	6.9x	18%	8%	1.8x	1.8x	5.2x	5.1x	30%
Median 1	Waddell & Reed Financial, Inc.	WDR	16.56	80%	(3%)	(8%)	1,165	505	5	68,782	(13%)	(14%)	9.6x	10.8x	(24%)	(11%)	0.5x	0.5x	2.9x	3.2x	21%
Mean Seg	WisdomTree Investments, Inc. (1)	WETF	5.11	64%	(22%)	(33%)	871	961	1	60,012	1%	1%	24.3x	21.3x	(34%)	14%	3.6x	3.5x	17.4x	14.5x	25%
Maximum	Median			80%	14%	1%					(3%)	2%	10.8x	10.2x	(3%)	8%	2.3x	2.0x	7.6x	6.2x	31%
Minimum	Mean			82%	18%	10%					(3%)	8%	11.1x	10.3x	1%	9%	2.5x	2.3x	7.9x	7.2x	33%
Alternative Asset Managers Apollo Global Management, Inc. APO \$ 41.16 98% 76% 49% \$ 17,849 \$ 18,955 \$ 322,674 20% 19% 17.7x 14.4x 8% 23% 11.8x 10.7x 16.9x 15.3x 25% Ares Management Corporation ARES 29.57 95% 72% 58% 7,348 7,741 144,298 13% 15% 20.1x 15.6x 4% 29% 6.0x 5.0x 17.0x 13.7x 41% The Blackstone Group, Inc. BX 53.16 96% 85% 70% 63,738 66,047 554,022 18% 21% 23.5x 17.1x 4% 37% 12.2x 9.0x 21.8x 15.4x 42% The Carlyle Group, L.P. CG 27.28 98% 82% 45% 9,457 9,929 221,833 2% 4% 16.4x 11.1x (6%) 47% 4.8x 3.8x 15.6x 12.3x 19% Hamilton Lane Inc. HLNE 59.62 92% 64% 59% 3,093 3,147 65,680 14% 13% 30.3x 26.7x 7% 13% 11.2x 9.6x 22.8x 20.0x 54% EVALUATION CONTROL OF CONTROL	Maximum			99%	95%	100%					6%	129%	26.1x	22.5x	56%	54%	7.2x	6.5x	18.6x	16.0x	51%
Apollo Global Management, Inc. APO \$ 41.16 98% 76% 49% \$ 17,849 \$ 18,955 \$ 322,674 20% 19% 17.7x 14.4x 8% 23% 11.8x 10.7x 16.9x 15.3x 25% Ares Management Corporation ARES 29.57 95% 72% 58% 7,348 7,741 144,298 13% 15% 20.1x 15.6x 4% 29% 6.0x 5.0x 17.0x 13.7x 41% 14.8x	Minimum			54%	(17%)	(43%)					(15%)	(14%)	5.6x	3.9x	(34%)	(17%)	0.5x	0.5x	2.9x	3.2x	16%
Ares Management Corporation ARES 29.57 95% 72% 58% 7,348 7,741 144,298 13% 15% 20.1x 15.6x 4% 29% 6.0x 5.0x 17.0x 13.7x 41% The Blackstone Group, Inc. BX 53.16 96% 85% 70% 63,738 66,047 554,022 18% 21% 23.5x 17.1x 4% 37% 12.2x 9.0x 21.8x 15.4x 42% The Carlyle Group, L.P. CG 27.28 98% 82% 45% 9,457 9,929 221,833 2% 4% 16.4x 11.1x (6%) 47% 4.8x 3.8x 15.6x 12.3x 19% Hamilton Lane Inc. HLNE 59.62 92% 64% 59% 3,093 3,147 65,680 14% 13% 30.3x 26.7x 7% 13% 11.2x 9.6x 22.8x 20.0x 54% KKR & Co. Inc. KKR 28.83 96% 49% 24% 24,452 24,214 208,427 5% 7% 17.0x 14.3x (12%) 18% 6.5x 5.6x 12.8x 11.0x 49% Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median Mean 96% 76% 58% Maximum 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35%	Alternative Asset Managers																				
The Blackstone Group, Inc. BX 53.16 96% 85% 70% 63,738 66,047 554,022 18% 21% 23.5x 17.1x 4% 37% 12.2x 9.0x 21.8x 15.4x 42% 1.4x 1.4x 1.4x 1.4x 1.4x 1.4x 1.4x 1.4x	Apollo Global Management, Inc.	APO S	\$ 41.16	98%	76%	49%	\$ 17,849	\$ 18,955	5 \$	322,674	20%	19%	17.7x	14.4x	8%	23%	11.8x	10.7x	16.9x	15.3x	25%
The Carlyle Group, L.P. CG 27.28 98% 82% 45% 9,457 9,929 221,833 2% 4% 16.4x 11.1x (6%) 47% 4.8x 3.8x 15.6x 12.3x 19% Hamilton Lane Inc. HLNE 59.62 92% 64% 59% 3,093 3,147 65,680 14% 13% 30.3x 26.7x 7% 13% 11.2x 9.6x 22.8x 20.0x 54% KKR & Co. Inc. KKR 28.83 96% 49% 24% 24,452 24,214 208,427 5% 7% 17.0x 14.3x (12%) 18% 6.5x 5.6x 12.8x 11.0x 49% Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median Median Mean 92% 76% 53% Maximum 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54% Maximum	Ares Management Corporation	ARES	29.57	95%	72%	58%	7,348	7,741	1	144,298	13%	15%	20.1x	15.6x	4%	29%	6.0x	5.0x	17.0x	13.7x	41%
Hamilton Lane Inc. HLNE 59.62 92% 64% 59% 3,093 3,147 65,680 14% 13% 30.3x 26.7x 7% 13% 11.2x 9.6x 22.8x 20.0x 54% KKR & Co. Inc. KKR 28.83 96% 49% 24% 24,452 24,214 208,427 5% 7% 17.0x 14.3x (12%) 18% 6.5x 5.6x 12.8x 11.0x 49% Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median Median Mean 92% 76% 53% Maximum 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%	The Blackstone Group, Inc.	BX	53.16	96%	85%	70%	63,738	66,047	7	554,022	18%	21%	23.5x	17.1x	4%	37%	12.2x	9.0x	21.8x	15.4x	42%
KKR & Co. Inc. KKR 28.83 96% 49% 24% 24,452 24,214 208,427 5% 7% 17.0x 14.3x (12%) 18% 6.5x 5.6x 12.8x 11.0x 49% Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median 96% 76% 58% 12.8x 1.20 13% 13% 17.7x 14.4x 4% 23% 6.5x 5.6x 16.9x 13.7x 41% Mean 92% 76% 53% 10% 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 15.2x 13.7x 41% Maximum 92% 76% 53% 10% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x <th< td=""><td>The Carlyle Group, L.P.</td><td>CG</td><td>27.28</td><td>98%</td><td>82%</td><td>45%</td><td>9,457</td><td>9,929</td><td>9</td><td>221,833</td><td>2%</td><td>4%</td><td>16.4x</td><td>11.1x</td><td>(6%)</td><td>47%</td><td>4.8x</td><td>3.8x</td><td>15.6x</td><td>12.3x</td><td>19%</td></th<>	The Carlyle Group, L.P.	CG	27.28	98%	82%	45%	9,457	9,929	9	221,833	2%	4%	16.4x	11.1x	(6%)	47%	4.8x	3.8x	15.6x	12.3x	19%
Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median 96% 76% 58% 13% 13% 17.7x 14.4x 4% 23% 6.5x 5.6x 16.9x 13.7x 41% Mean 92% 76% 53% 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 98% 105% 70% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%	Hamilton Lane Inc.	HLNE	59.62	92%	64%	59%	3,093	3,147	7	65,680	14%	13%	30.3x	26.7x	7%	13%	11.2x	9.6x	22.8x	20.0x	54%
Sculptor Capital Management, Inc. SCU 17.97 70% 105% 63% 898 1,206 31,951 (3%) (3%) 5.3x 4.3x 191% 22% 2.1x 1.7x 6.2x 4.5x 16% Median 96% 76% 58% 13% 13% 17.7x 14.4x 4% 23% 6.5x 5.6x 16.9x 13.7x 41% Mean 92% 76% 53% 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 98% 105% 70% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%	KKR & Co. Inc.	KKR	28.83		49%	24%	,	,							(12%)			5.6x	12.8x	11.0x	
Mean 92% 76% 53% 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 98% 105% 70% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%	Sculptor Capital Management, Inc.	SCU	17.97	70%	105%	63%	898	1,206	5	31,951	(3%)	(3%)	5.3x	4.3x	191%	22%	2.1x	1.7x	6.2x	4.5x	16%
Mean 92% 76% 53% 10% 11% 18.6x 14.8x 28% 27% 7.8x 6.5x 16.2x 13.2x 35% Maximum 98% 105% 70% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%	Median			96%	76%	58%					13%	13%	17.7x	14.4x	4%	23%	6.5x	5.6x	16.9x	13.7x	41%
Maximum 98% 105% 70% 20% 21% 30.3x 26.7x 191% 47% 12.2x 10.7x 22.8x 20.0x 54%																					
Minimum 70% 49% 24% (3%) 5.3x 4.3x (12%) 13% 2.1x 1.7x 6.2x 4.5x 16%					49%	24%					(3%)	(3%)			(12%)						16%

(1) WisdomTree Investments excluded from mean, maximum, and minimum calculations

Notes:

Fully Diluted Market Cap is calculated as closing stock price times fully diluted shares (total common shares outstanding, plus any assumed exchangeable units or other ownership converted to common stock, plus the amount of any other "in-the-money" instruments which are convertible to common stock, such as stock options/awards, restricted stock and non-voting participating preferred stock) Enterprise Value is equal to Fully Diluted Market Cap, less cash & equivalents (including marketable securities), plus total debt, plus minority interest

Estimates are based on analyst median consensus calendar year estimates

FII organic AUM growth represents long-term AUM only. HLNE organic AUM growth represents fee-paying AUM only. OAK organic AUM growth excludes DoubleLine AUM.

EBITDA multiples for Alternative Asset Managers derived using "Distributable Earnings" where applicable

Performance is based on dividend-adjusted returns

Source: Company filings, FactSet, Sandler O'Neill analysis

Non-U.S. Publicly-Traded Asset Managers (as of 10/31/19)

(\$Millions, except per share data)																					
	% of					Fully		Total													2018
			52 Week	% Return		Diluted		nterprise		Current	LTM AUM Growth		Price / EPS		Implied EPS Growth		TEV / Revenue		TEV / EBITDA		EBITDA
Company Name	Ticker	Price	High	YTD	1-Year	Market Ca	p	Value		AUM	Organic	Total	2019E	2020E	18-19	19-20	2019E	2020E	2019E	2020E	Margin
European Traditional Asset Managers																					
Amundi SA	AMUN	\$ 71.40	96%	46%	28%	\$ 14,4)2 \$	16,216	\$	1,725,166	2%	6%	13.2x	12.5x	2%	5%	5.5x	5.3x	11.0x	10.3x	50%
Anima Holding SpA	ANIM	4.34	96%	27%	11%	1,6	18	2,172		209,140	(0%)	83%	8.8x	8.6x	0%	3%	5.8x	5.5x	7.6x	7.3x	74%
Azimut Holding SpA	AZM	20.55	97%	111%	85%	2,9	96	3,398		63,355	9%	9%	9.9x	12.1x	137%	(18%)	3.2x	3.3x	7.9x	9.6x	28%
DWS Group GmbH	DWS	32.35	85%	30%	23%	6,4	55	7,576		830,022	1%	9%	12.0x	10.8x	20%	11%	3.0x	2.9x	9.8x	8.9x	28%
GAM Holding AG	GAM	3.33	52%	(15%)	(44%)	5	32	253		136,533	(9%)	(7%)	n/m	22.7x	n/m	n/m	0.8x	0.8x	10.0x	4.3x	27%
Jupiter Fund Management Plc	JUP	4.43	81%	26%	10%	2,0	29	1,530		58,004	(8%)	(6%)	12.1x	12.8x	(13%)	(5%)	3.1x	3.2x	7.3x	7.3x	46%
Schroders Plc	SDR	40.05	96%	32%	21%	10,7	18	9,600		579,926	(3%)	3%	16.1x	14.7x	(10%)	9%	3.6x	3.4x	10.4x	9.3x	30%
Standard Life Aberdeen Plc	SLA	3.93	99%	28%	22%	9,2	54	11,156		733,865	(6%)	(10%)	16.6x	15.6x	1%	7%	5.3x	5.6x	15.3x	14.8x	28%
Median			96%	29%	21%						(1%)	4%	12.1x	12.7x	1%	5%	3.4x	3.3x	9.9x	9.1x	29%
Mean			88%	36%	19%						(2%)	11%	12.7x	13.7x	20%	2%	3.8x	3.7x	9.9x	9.0x	39%
Maximum			99%	111%	85%						9%	83%	16.6x	22.7x	137%	11%	5.8x	5.6x	15.3x	14.8x	74%
Minimum			52%	(15%)	(44%)						(9%)	(10%)	8.8x	8.6x	(13%)	(18%)	0.8x	0.8x	7.3x	4.3x	27%
European Alternative Asset Managers																					
3i Group Plc	III	\$ 14.60	98%	49%	33%	\$ 14,2	3 \$	13,600	\$	16,557	(2%)	11%	7.8x	7.9x	7%	(1%)	6.4x	6.5x	7.7x	7.8x	84%
Ashmore Group Plc	ASHM	6.02	90%	32%	42%	4,2	94	3,460		91,900	15%	20%	17.8x	15.3x	16%	17%	8.1x	7.0x	12.3x	10.4x	65%
Intermediate Capital Group Plc	ICP	19.23	99%	63%	62%	5,5	35	6,736		43,924	24%	17%	16.6x	16.2x	(1%)	2%	9.5x	8.7x	18.0x	17.1x	54%
Man Group Plc	EMG	1.86	85%	14%	(3%)	2,8	32	3,051		112,700	(0%)	(1%)	10.4x	10.1x	32%	3%	2.9x	2.9x	8.3x	8.1x	31%
Partners Group AG	PGHN	779.53	94%	33%	10%	20,8	L3	21,412		88,079	15%	19%	25.2x	22.8x	8%	11%	14.6x	13.1x	22.6x	20.4x	66%
Polar Capital Holdings Plc	POLR	6.52	82%	11%	2%	6	29	413		18,399	(6%)	(3%)	11.9x	11.4x	(11%)	5%	1.9x	2.1x	5.2x	5.7x	37%
Median			92%	33%	22%						7%	14%	14.2x	13.3x	8%	4%	7.3x	6.8x	10.3x	9.2x	60%
Mean			91%	34%	25%						8%	11%	15.0x	14.0x	9%	6%	7.2x	6.7x	12.3x	11.6x	56%
Maximum			99%	63%	62%						24%	20%	25.2x	22.8x	32%	17%	14.6x	13.1x	22.6x	20.4x	84%
Minimum			82%	11%	(3%)						(6%)	(3%)	7.8x	7.9x	(11%)	(1%)	1.9x	2.1x	5.2x	5.7x	31%
Canadian Asset Managers																					•
AGF Management Ltd	AGF	\$ 4.42	90%	28%	14%	\$ 3	50 S	433	Ś	28.447	(3%)	(3%)	9.4x	10.3x	(30%)	(8%)	1.3x	1.4x	5.1x	6.2x	25%
Brookfield Asset Management Inc.	BAM	55.25	99%	46%	37%	52,7	94	59,977		388,327	23%	35%	12.5x	11.4x	1%	10%	n/a	n/a	n/a	n/a	24%
CI Financial Corp.	CIX	14.59	87%	14%	2%	3,4		4,060		98,353	(7%)	(5%)	8.2x	7.7x	(0%)	5%	2.5x	2.5x	6.4x	6.5x	41%
Fiera Capital Corporation	FSZ	7.99	79%	(2%)	(9%)	7:	97	1,288		124,608	(3%)	15%	8.1x	7.2x	23%	12%	2.7x	2.4x	9.1x	8.0x	25%
Guardian Capital Advisors LP	GCG	19.83	100%	21%	11%	4	92	599		22,881	(12%)	4%	7.0x	19.4x	158%	(64%)	4.3x	4.1x	15.3x	14.2x	33%
IGM Financial Inc	IGM	28.28	97%	25%	23%	6,7	38	8,106		122,970	(1%)	2%	11.7x	10.8x	(3%)	8%	3.3x	3.1x	8.6x	8.1x	41%
Sprott Inc.	SII	2.31	77%	22%	5%	5	36	518		8,570	0%	13%	40.5x	21.7x	(42%)	87%	7.2x	5.6x	17.2x	12.5x	42%
Median			90%	22%	11%						(3%)	4%	9.4x	10.8x	(0%)	8%	3.0x	2.8x	8.8x	8.0x	33%
Mean			90%	22%	12%						(4%)	6%	13.9x	12.7x	15%	7%	3.5x	3.2x	10.3x	9.2x	33%
Maximum			100%	46%	37%						0%	15%	40.5x	21.7x	158%	87%	7.2x	5.6x	17.2x	14.2x	42%
Minimum			77%	(2%)	(9%)						(12%)	(5%)	7.0x	7.2x	(42%)	(64%)	1.3x	1.4x	5.1x	6.2x	24%
THIII I WALL			11/0	(2/0)	(3/0)						(12/0)	(3/0)	7.00	7.21	(72/0)	(04/0)	1.58	1.→∧	J. 1A	0.21	2→/0

Notes:

Fully Diluted Market Cap is calculated as closing stock price times fully diluted shares (total common shares outstanding, plus any assumed exchangeable units or other ownership converted to common stock, plus the amount of any other "in-the-money" instruments which are convertible to common stock, such as stock options/awards, restricted stock and non-voting participating preferred stock)

Enterprise Value is equal to Fully Diluted Market Cap, less cash & equivalents (including marketable securities), plus total debt, plus minority interest

Estimates are based on analyst median consensus calendar year estimates

All figures converted from local currency to USD using applicable FX rate

Brookfield Asset Management earnings multiples reflect use of reported Funds from Operations

III organic AUM growth represents proprietary capital only. AGF organic AUM growth represents mutual fund AUM only. BAM organic AUM growth represents fee-bearing capital only.

Performance is based on dividend-adjusted returns

Source: Company filings, FactSet, Sandler O'Neill analysis

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