

Industry Observations – September 30, 2019 Asset Management Industry

### Select Asset Management Public Company Industry Data As of September 30, 2019

(USD in millions, except per share data)

		Market Data		LTM Operating Data			Forward Estimates				
						Debt /	Assets			CY 2019	CY 2019
Company Name	Ticker	Price at 09/30/19	% of 52	Equity Value	Enterprise Value	Total	Under	LTM	LTM Examinan	Revenue Estimate	Earnings Estimate
Company Name	Ticker	09/30/19	Week High	value	value	Capital	Management	Revenue	Earnings	Estimate	Estimate
Traditional Asset Managemen	t										
Apollo Global Management, Inc.	APO	\$37.82	90.5%	\$8,411.29	\$0.00	56.6%	\$311,862.00	\$1,644.38	\$298.16	\$1,604.79	\$525.14
Artisan Partners Asset		ę57102	201070	ψ0,111.2 <i>)</i>	ę0.00	50.070	<i>\$</i> 011,002.000	ę1,011130	<i>\2)0110</i>	¢1,00 1172	<del>402011</del>
Management Inc.	APAM	\$28.24	86.9%	\$1,585.36	\$1,645.61	67.7%	\$113,843.00	\$792.02	\$145.76	\$792.63	\$147.23
Eaton Vance Corp.	EV	\$44.93	84.9%	\$4,878.96	\$4,976.03	29.6%	\$482,780.00	\$1,690.13	\$396.32	\$1,729.93	\$381.38
Federated Investors, Inc.	FII	\$32.41	90.1%	\$3,151.43	\$3,277.73	18.4%	\$502,247.00	\$1,244.36	\$238.41	\$1,304.93	\$241.43
GAMCO Investors, Inc.	GBL	\$19.55	81.1%	\$528.26	\$393.79	57.0%	\$36,924.00	\$317.51	\$102.26	\$0.00	\$0.00
Janus Henderson Group plc	JHG	\$22.46	83.1%	\$4,151.94	\$3,521.38	8.8%	\$359,800.00	\$2,181.50	\$421.50	\$2,097.42	\$446.90
Legg Mason, Inc.	LM	\$38.19	94.8%	\$3,312.89	\$5,496.04	37.3%	\$780,200.00	\$2,860.71	-\$49.25	\$2,844.20	\$241.32
Waddell & Reed Financial, Inc.	WDR	\$17.18	80.2%	\$1,255.43	\$399.44	12.4%	\$71,876.00	\$1,096.91	\$158.78	\$1,060.52	\$118.90
Alternative Asset Management	:										
Ares Management Corporation	ARES	\$26.81	86.4%	\$3,072.61	\$11,737.27	83.14%	\$142,108.00	\$1,350.23	\$104.94	\$1,220.59	\$167.50
Cohen & Steers, Inc.	CNS	\$54.93	99.0%	\$2,594.96	\$2,897.54	14.23%	\$0.00	\$394.89	\$123.45	\$409.76	\$121.50
Ellington Financial Inc.	EFC	\$18.07	97.7%	\$610.24	\$0.00	80.23%	\$0.00	\$81.17	\$32.50	\$157.59	\$60.79
Virtus Investment Partners, Inc.	VRTS	\$110.57	87.4%	<b>\$</b> 767.90	\$951.23	31.50%	\$105,006.50	\$561.48	\$77.83	\$565.97	\$96.17
Private Equity/ Venture Capit	al										
BlackRock Capital Investment	ai										
Corporation	BKCC	\$5.01	75.5%	\$344.87	\$559.80	35.0%	\$0.00	\$80.70	-\$5.04	\$81.72	\$42.24
Capital Southwest Corporation	CSWC	\$21.80	90.2%	\$385.80	\$605.58	40.8%	\$0.00	\$56.57	\$28.12	\$61.49	\$29.67
Hercules Capital, Inc.	HTGC	\$13.37	94.4%	\$1,394.66	\$2,568.31	51.6%	\$0.00	\$237.55	\$128.21	\$265.96	\$140.61
Main Street Capital Corporation	MAIN	\$43.21	97.4%	\$2,728.08	\$3,632.74	40.6%	\$0.00	\$240.20	\$157.90	\$246.93	\$159.73
Prospect Capital Corporation	PSEC	\$6.59	89.2%	\$2,420.42	\$4,676.02	41.9%	\$0.00	\$703.77	\$144.49	\$662.28	\$286.48
The Carlyle Group L.P.	CG	\$25.56	94.6%	\$2,828.98	\$11,160.95	63.7%	\$222,658.00	<b>\$2,</b> 978.90	\$304.40	\$2,072.29	\$182.85

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt); EBITDA (earnings before interest, taxes, depreciation and amortization)

Source: Capital IQ

The material contained in this publication is meant to provide general information regarding valuation topics. This publication does not constitute investment advice with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Professional advice should be obtained before taking any action based on the information contained herein.

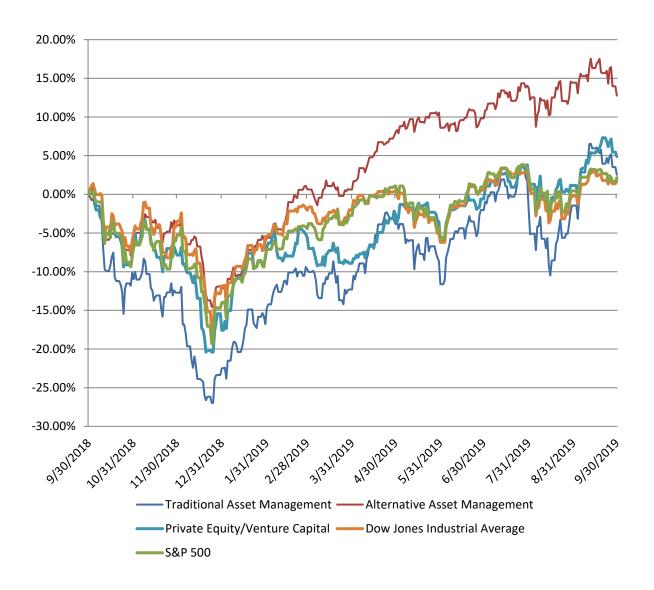
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## Select Asset Management Public Company Valuation Metrics As of September 30, 2019

#### (USD in millions, except per share data)

	,	LTM Operating Statistics						Trading Multiples		
Company Name	Ticker	Return On Assets	Return On Equity	Return On Capital	Revenue Growth	Net Income Growth	Net Income Margin	TEV/ LTM Revenue	TEV/ CY 2018 Revenue	Price/ LTM Earnings
Traditional Asset Manager	nent									
Apollo Global Management,										
Inc.	APO	9.2%	24.0%	0.0%	-27.7%	-25.0%	18.1%	0.0x	0.0x	63.3x
Artisan Partners Asset										
Management Inc.	APAM	18.4%	126.3%	40.2%	-5.7%	68.6%	18.4%	2.1x	2.1x	15.7x
Eaton Vance Corp.	EV	9.1%	29.0%	16.1%	1.4%	10.5%	23.4%	2.9x	2.9x	19.5x
Federated Investors, Inc.	FII	13.7%	25.0%	17.2%	15.6%	-17.0%	19.2%	2.6x	2.5x	15.9x
GAMCO Investors, Inc.	GBL	68.6%	N/A	351.2%	-12.2%	15.0%	32.2%	1.2x	N/A	5.8x
Janus Henderson Group pk	JHG	5.1%	8.3%	6.4%	-7.9%	-51.9%	19.3%	1.6x	1.7x	11.8x
Legg Mason, Inc. Waddell & Reed Financial,	LM	3.8%	-0.2%	4.3%	-7.6%	N/A	-1.7%	1.9x	1.9x	15.8x
Inc.	WDR	8.8%	18.0%	11.3%	-6.8%	-8.8%	14.5%	0.4x	0.4x	10.0x
	Mean	17.1%	32.9%	55.8%	-6.4%	-1.2%	17.9%	1.6x	1.6x	19.7x
	Median	9.1%	24.0%	13.7%	-7.2%	-8.8%	18.8%	1.8x	1.9x	15.8x
Alternative Asset Managen Ares Management Corporati		1.2%	16.6%	1.4%	19.1%	8.6%	7.8%	8.7x	9.6x	73.4x
Cohen & Steers, Inc.	CNS	0.0%	0.0%	24.6%	2.3%	13.5%	31.3%	N/A	N/A	28.8x
Ellington Financial Inc.	EFC	1.1%	6.1%	0.0%	13.3%	-41.8%	40.0%	8.7x	9.6x	14.6x
Virtus Investment Partners, Inc.	VRTS	2.5%	11.6%	7.4%	9.3%	10.1%	13.9%	1.7x	1.7x	12.1x
Inc.	Mean	1.2%	8.6%	8.4%	11.0%	-2.4%	23.2%	6.4x	7.0x	
	Median	1.1%	8.8%	4.4%	11.3%	9.4%	22.6%	8.7x	9.6x	
Private Equity/Venture Ca BlackRock Capital	apital									
Investment Corporation Capital Southwest	BKCC	4.9%	-1.0%	5.1%	-9.6%	N/A	-6.2%	6.9x	6.9x	11.9x
Corporation	CSWC	5.1%	8.8%	5.2%	46.9%	-38.2%	49.7%	10.7x	9.8x	21.7x
Hercules Capital, Inc. Main Street Capital	HTGC	5.4%	12.4%	5.5%	22.2%	17.1%	54.0%	10.8x	9.7x	16.7x
Corporation	MAIN	5.1%	10.6%	5.2%	7.5%	-15.2%	65.7%	15.1x	14.7x	26.8x
Prospect Capital Corporation	n PSEC	5.0%	4.3%	5.2%	7.0%	-51.8%	20.5%	6.6x	7.1x	12.3x
The Carlyle Group L.P.	CG	5.7%	28.0%	7.8%	-8.2%	43.2%	10.2%	3.7x	5.4x	NM
	Mean	5.2%	10.5%	5.7%		-9.0%	32.3%	9.0x	8.9x	
	Median	5.1%	9.7%	5.2%	7.3%	-15.2%	35.1%	8.8x	8.4x	16.7x

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value) Source: Capital IQ



# Asset Management Public Company LTM Equity Performance As of September 30, 2019

Note: The indices are derived from the equity performance of the previously listed companies. Source: Capital IQ

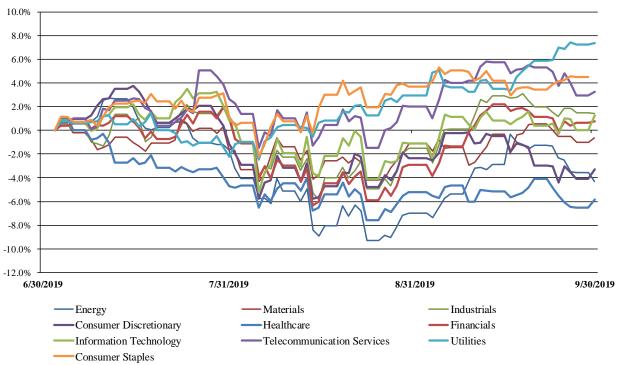
## Recent M&A Activity in Asset Management Industry September 30, 2018 to September 30, 2019

#### (USD in millions)

Close Date	Target	Acquirer	Target Company Primary Industry	Implied Equity Value
5/24/2019	OppenheimerFunds, Inc.	Invesco Ltd.	Asset Management and Custody Banks	\$5,714.13
7/1/2019	USAA Asset Management Company and USAA Transfer Agency	Victory Capital Holdings, Inc.	Asset Management and Custody Banks	\$850.00
7/18/2019	United Capital Financial Partners, Inc.	The Goldman Sachs Group, Inc.	Asset Management and Custody Banks	\$750.00
2/1/2019	Benefit Street Partners L.L.C.	Franklin Resources, Inc.	Asset Management and Custody Banks	\$553.00
11/30/2018	Rialto Capital Management LLC	Stone Point Capital LLC; Trident VII, L.P.	Asset Management and Custody Banks	\$340.00
5/6/2019	1st Global, Inc./1st Global Insurance Services, Inc.	Blucora, Inc.	Asset Management and Custody Banks	\$180.00
11/5/2018	Easterly Acquisition Corp. (nka:Sirius Acquisitions Holding	Sirius International Insurance Group, Ltd.	Asset Management and Custody Banks	\$164.51
11/30/2018		BAM Advisor Services, LLC	Asset Management and Custody Banks	\$148.90
12/19/2018	0 0	The Carlyle Group L.P.	Asset Management and Custody Banks	\$75.00
8/27/2019	Altavair L.P.	KKR & Co. Inc.	Asset Management and Custody Banks	\$60.00
7/1/2019	Substantially All Of The Assets Of Cortina Asset Management,	Silvercrest Asset Management Group LLC	Asset Management and Custody Banks	\$42.53
12/31/2018	Katonah Debt Advisors, L.L.C./Trimaran Advisors,	LibreMax Capital, LLC	Asset Management and Custody Banks	\$37.90
4/17/2019	Global Financial Private Capital, LLC	AssetMark, Inc.	Asset Management and Custody Banks	\$35.90
12/3/2018	Bingham, Osborn & Scarborough, LLC	Kudu Investment Management LLC	Asset Management and Custody Banks	\$33.87
9/19/2019	Alpha UK Property Fund Asset Company (No 2) Limited	Alpha Real Trust Limited; Alpha Real Capital LLP	Asset Management and Custody Banks	\$19.92
6/28/2019	Summit Financial Resources, Inc.	North Mill Capital LLC	Asset Management and Custody Banks	\$15.50
2/14/2019	,		<u> </u>	\$15.50
	Carret Asset Management, LLC	Morningstar Japan K.K.	Asset Management and Custody Banks	
10/4/2018	Certain Assets of LIHTC Property of Morrison Grove	MMA Capital Management, LLC (nka:MMA	Asset Management and Custody Banks	\$4.50
5/31/2019	Trend Discovery Capital Management, LLC	Ecoark Holdings, Inc.	Asset Management and Custody Banks	\$3.14
3/19/2019	JMP Credit Advisors LLC	Medalist Partners LP	Asset Management and Custody Banks	\$0.55
11/30/2018	Punto Group, Corp. (nka:One World Pharma, Inc.)	OWP Ventures, Inc. (nka:One World Pharma, Inc.)	0 1	\$0.53
8/14/2019	Palcapital Ventures Inc.	Element ASA	Asset Management and Custody Banks	\$0.43
4/25/2019	California Trust & Wealth Management business of American	Exchange Bank (Santa Rosa, CA)	Asset Management and Custody Banks	\$0.38
2/20/2019	Quick Start Holdings, Inc. (nka:Kaival Brands Innovations Group,	Kaival Brands Innovations Group, LLC	Asset Management and Custody Banks	\$0.37
9/27/2019	The Remaining Advisory Research Business	N/A	Asset Management and Custody Banks	NA
9/23/2019	Inter-Mountain Retirement Partners, Inc.	Hub International Investment Services Inc.	Asset Management and Custody Banks	NA
9/20/2019	All assets of Perennial Pension & Wealth, Inc.	HUB International Limited	Asset Management and Custody Banks	NA
9/19/2019	WhartonHill Advisors	HUB International Northeast Limited	Asset Management and Custody Banks	NA
9/19/2019	Tålamod Asset Management, LLC	HPS Investment Partners, LLC	Asset Management and Custody Banks	NA
9/18/2019	EPIC Retirement Services Consulting, LLC	HUB International Northeast Limited	Asset Management and Custody Banks	NA
9/16/2019	Assets of Wash Financial, L.L.C	HUB International Limited	Asset Management and Custody Banks	NA
9/11/2019	Modern Media Acquisition Corp.	Akazoo S.A.	Asset Management and Custody Banks	NA
9/9/2019	Electronic Transaction Clearing, Inc.	Apex Clearing Solutions, LLC	Asset Management and Custody Banks	NA
9/5/2019	Sage Future Financial, LLC	Mercer Global Advisors Inc.	Asset Management and Custody Banks	NA
9/4/2019	Belvedere Advisors, LLC	Northern Trust Investments, Incorporated	Asset Management and Custody Banks	NA
8/29/2019	Constellation Alpha Capital Corp.	Dem Tech, Inc.	Asset Management and Custody Banks	NA
8/27/2019	Believeland, LLC	Bluespring Wealth Partners, LLC	Asset Management and Custody Banks	NA
8/22/2019	Grove Advisors LLC	Wealthfront Inc.	Asset Management and Custody Banks	NA
8/20/2019	Mackie Financial Group, LLC	The Hilb Group, LLC	Asset Management and Custody Banks	NA
8/19/2019	Personal Financial Consultants, Inc.	EP Wealth Advisors, Inc.	Asset Management and Custody Banks	NA
8/16/2019	Wealth Management Department of Sonabank	Virginia Asset Group	Asset Management and Custody Banks	NA
8/9/2019	Black Ridge Acquisition Corp.	Allied Esports Entertainment Inc.	Asset Management and Custody Banks	NA
8/6/2019	Wealth Enhancement Group, LLC	TA Associates Management, L.P.	Asset Management and Custody Banks	NA
8/1/2019	Highland Associates, Inc.	Regions Bank	Asset Management and Custody Banks	NA
8/1/2019	Allen & Company of Florida, Inc.	LPL Financial Holdings Inc.	Asset Management and Custody Banks	NA
8/1/2019	Williams, Jones & Associates, LLC	Focus Financial Partners Inc.	Asset Management and Custody Banks	NA
7/31/2019			0 2	
	Capital Health Group, LLC	White Oak Healthcare REIT	Asset Management and Custody Banks	NA
7/31/2019	United Income, Inc.	Capital One Financial Corporation	Asset Management and Custody Banks	NA
7/31/2019	Capitol Investment Corp. IV	NESCO Holdings I, Inc. (nka:Nesco Holdings,	Asset Management and Custody Banks	NA
7/25/2019	Planning Solutions Group LLC	Wealth Enhancement Group, LLC	Asset Management and Custody Banks	NA
7/18/2019	Brookstone Capital Management, LLC	AmeriLife Group, LLC	Asset Management and Custody Banks	NA
7/16/2019	Emerald Asset Advisors, LLC	SlateStone Private Client, LLC	Asset Management and Custody Banks	NA
7/15/2019	Roseview Group, LLC	Madison Marquette Inc.	Asset Management and Custody Banks	NA
7/8/2019	Pathlight Investors, LLC	EP Wealth Advisors, Inc.	Asset Management and Custody Banks	NA
7/5/2019	Mount Santubong Ltd	Perdana Jupiter Ltd.	Asset Management and Custody Banks	NA

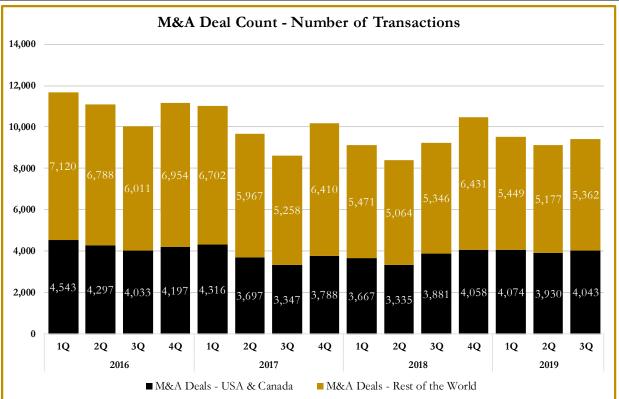
Source: Capital IQ

# S&P Capital IQ - Sector Last 3 Month Equity Performance As of September 30, 2019

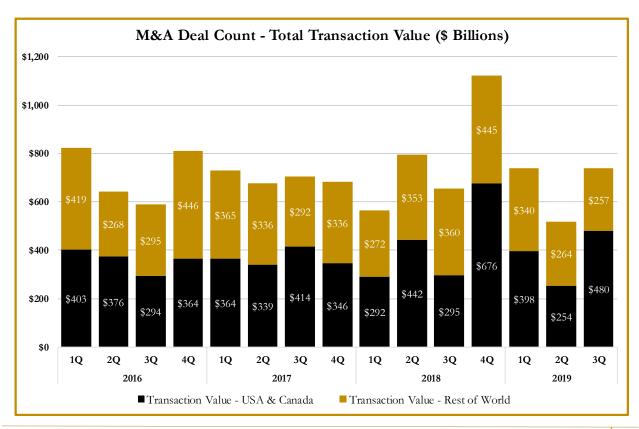


## Change in Market Cap by S&P Capital IQ Sector

Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

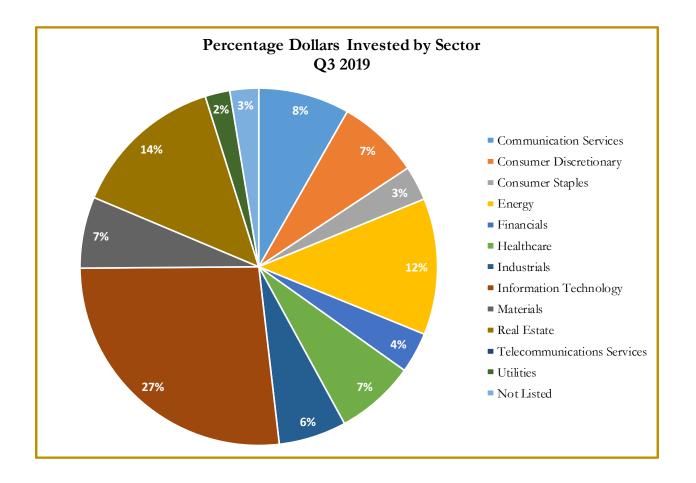


#### M&A Deal Flow Statistics by S&P Capital IQ Sector As of September 30, 2019



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#### M&A Deal Flow Statistics by S&P Capital IQ Sector As of September 30, 2019





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Houlihan Capital is a leading, solutions-driven valuation, financial advisory and boutique investment banking firm. We pride ourselves on being thought leaders in an ever-changing landscape.

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