

Q1 2016 Headline-The Alternative Asset Management Industry is GROWING!

#### KEY CONVERGENCE GROWTH MEASURES

-	ALTERNATIVE MANAGER GROWTH:	+ 16%
-	ALTERNATIVE ADVISOR GROWTH:	+ 10%
-	HEADCOUNT GROWTH:	+ 13%
-	PRIVATE FUND COUNT GROWTH:	+ 11%
-	REGULATORY ACTION GROWTH:	+ 11%
-	EXEMPT MANAGER REGISTRANTS:	+ 31%
-	NON-EXEMPT MANAGER REGISTRANTS:	+ 8%
-	PRIVATE FUND ASSET GROWTH:	+ 3%
-	COMPLEXITY GROWTH:	+ 4%
-	SERVICE PROVIDER INDEX DECLINE:	- 1%
-	PRODUCTIVITY DECLINE:	- 3%

The alternative asset management industry continues to grow by almost all measures tracked by Convergence. Headcount growth was particularly robust as managers added more staff to their back-offices to deal with increasing business complexity, a challenging regulatory environment and greater reporting and transparency required by their investors. Productivity and the Service Provider Indices are the only factors to experience a year-over-year drop.

Convergence's Q1 2016 update on the Alternative Asset Management Industry includes the most recent filings provided by all SEC registered Advisors through the first week of April 2016 making the Q1 2016 year-over-year the most original and comprehensive view of the alternatives industry. Convergence measures the overall health of the "Industry" by analyzing the data it collects and creates on 16,500+ Advisors and the 50,000+ Private Funds<sup>2</sup> that they manage. During the prior 12 months, RIAs filed almost 40,000 Form ADV updates indicating a greater level of compliance with the SEC's guidance on material changes to the Advisor's business.

# Please go to <u>www.convergenceinc.com</u> for more detailed information or call John Phinney, George Evans or George Gainer @ 203-956-4824 or Joe Dello Russo @ 781-439-5125.

<sup>&</sup>lt;sup>1</sup> An Alternative Asset Manager is defined as an RIA that discloses advising one or more Private Funds

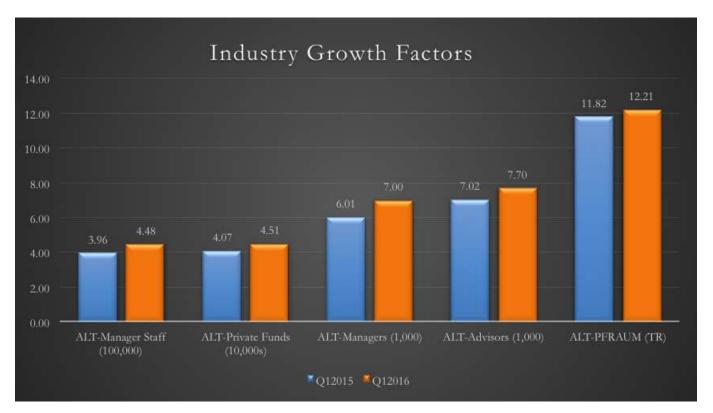
<sup>&</sup>lt;sup>2</sup> Private Funds include Hedge, Private Equity, Real Estate, Venture Capital, Structured Asset, Liquidity and Other Funds

### Alternative Industry Growth

### **Convergence** Insights

The number of Private Funds, Alternative Asset Managers, Private Fund Assets under Management<sup>3</sup> and Headcount grew 11%, 16%, 3% and 13%, respectively. Headcount growth is attributed to the growth we see in the various complexity factors we follow. Please see the Business Complexity and Risk section of this paper for more information on this topic.

The industry is growing much greater than one hears by listening to selective sources. Convergence sees broad-based growth as alternative assets are growing despite reduced leverage, weaker performance returns and increased industry regulation. Banks continue to reduce their balance sheets and are shedding alternative asset management and proprietary trading businesses. The specter of negative interest rates and underfunded retirement systems globally make alternative investment attractive to investors seeking better returns from asset classes less correlated with traditional equity and fixed income markets.

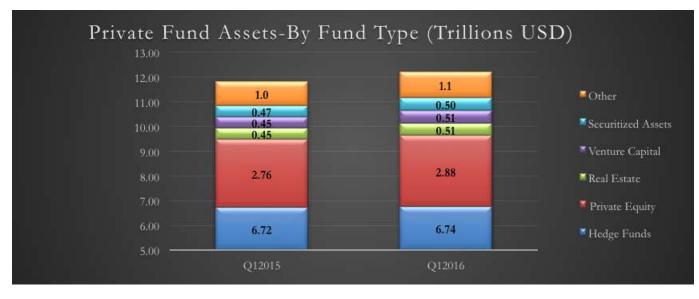


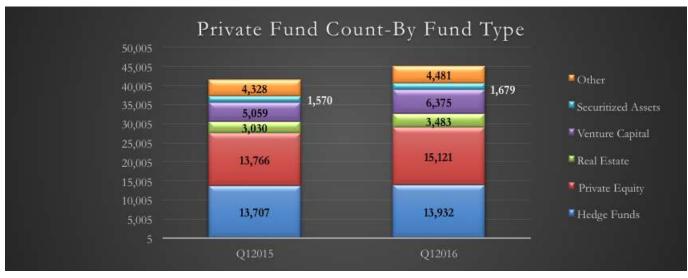
<sup>&</sup>lt;sup>3</sup> Regulatory assets under management includes the value of securities portfolios for which an Advisor provides continuous and regular supervisory or management services as of the date of filing this Form ADV without deducting the value of liabilities or other debt.

### Alternative Industry-Fund Type Profile

#### **Convergence** Insights

Hedge Funds with \$6.74tr in private fund regulatory assets under management continue to be the largest among all fund types yet was only up 1% from 2015 levels. The number of hedge funds increased to 13,932 up 1.6% from 2015 levels. Private Equity fund types continued to represent the largest number of funds with 15,121 funds, up 10% from 2015 levels and asset of \$2.88tr, up 4% from 2015 levels. This is due in large part to the popularity of closed-end private equity fund structures that protect fund assets from premature redemptions that sometimes occur during periods of significant volatility. The use of private equity fund structures became more popular post the 2008 financial crisis.



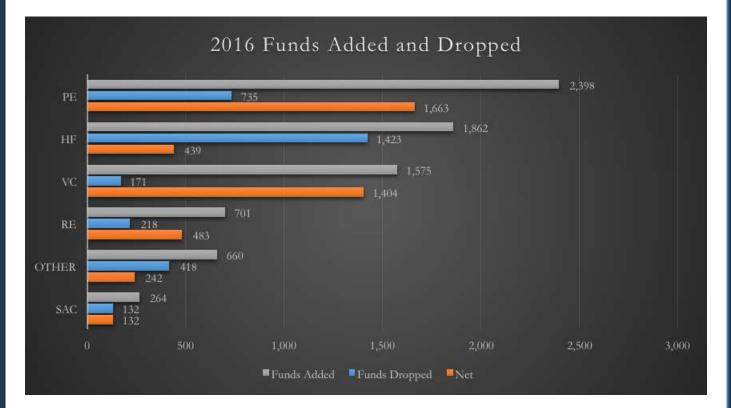


### Alternative Industry-New Funds Added & Existing Funds Dropped

### **Convergence** Insights

Convergence tracks new funds added and existing funds dropped each day based on the fund disclosures made by Advisor's in their Form ADV. From Q1 2015 through Q1 2016, Private Equity Fund Structures saw the greatest overall increase adding a net 1,663 funds while Hedge Funds increased by a net 439 funds. This is consistent with the increased use of closed-end private equity fund structures by alternative managers of all types including non-private equity managers, who seek to protect assets from redemption risk. Many credit managers use private equity style funds to house less liquid credit assets including bank loans and trade claims.

The increase is also being driven by the entrance of more traditional private equity managers. We define these as managers who specialize in buy-outs, carve-outs and restructuring of public and private companies.



## Alternative Industry-Manager Investment Strategy Profile

### **Convergence** Insights

Multi-strategy remains the most prevalent strategy. Managers of multi-strategy asset classes advise \$4.73tr of private fund assets, down 5% from \$4.96tr at the end of Q1 2015. Multi-Strategy managers transact in equity, fixed income and other asset classes and all experienced downward pressure in 2015 and early 2016. Managers of Quantitative and Private Equity funds saw an increase in private fund assets of 15% and 10%, respectively.



## Alternative Industry-Headcount

### **Convergence** Insights

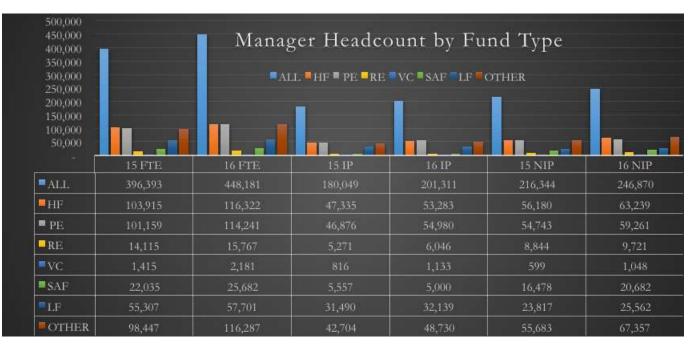
Industry headcount rose 13% in 2016 driven by increases in the Manager's front and back-office, which grew 12% and 14%, respectively. Middle and Back-office hiring continues to be driven by business complexity, increased regulatory pressures and greater investor demands for more frequent reporting and additional transparency into their business models. The Service Provider community has ample opportunity to continue to outsource select functions.



## Alternative Industry-Headcount

#### **Convergence** Insights

Headcount differs based on the Fund Type of the Manager. Managers of Hedge Funds have the greatest level of headcount with 116,322, up 13% with Investment professionals and Non-Investment Professionals increasing by 13%, respectively. The largest increase in reported staff was seen in Venture Capital firms who are disclosing more headcount data in their ADV as well as by the growth in VC firms. Back-office hiring continues to be driven by business complexity, increased regulatory pressures and greater investor demands for more frequent reporting and additional transparency into their business models.



2016 Growth	FTE	IP	NIP
A11	13%	12%	14%
HF	12%	13%	13%
PE	13%	17%	8%
RE	12%	15%	10%
VC	54%	39%	75%
SAF	17%	-10%	26%
LF	4%	2%	7%
OTHER	18%	14%	21%

## Alternative Industry-Headcount Ratios by Size Band

### Convergence Insights

As managers grow they experience different levels of scale. For example, Investment Professionals (IP) as a percentage of Full Time Equivalents (FTE) shows the most consistent level of scale and improvement as firms grow. Yet Non-Investment Professionals (NIP) as a percentage of FTE grows steadily from .46 to .55 and does not show the same scale benefits as investment professionals as firms grow. Perhaps the most interesting statistic is the ratio of Non-Investment Professionals per Investment Professional, what we call the "support ratio." This ratio increases steadily as firms grow indicating that as investment professionals gain scale other complexity is requiring the Manager to hire greater levels of Non-Investment. The central message is that complexity does not scale well.



### **Alternative Industry- Business Complexity**

#### **Convergence** Insights

Business Complexity, defined as the unweighted sum of the complexity factors listed in the chart below, rose 4% driven by increases in private funds, limited partners, affiliates, total accounts and fund types which grew 13%, 14%, 15%, 16% and 17%, respectively. These increases were offset by declines in regulatory regimes, wrap fee programs, office locations and Convergence's Service Provider Index which declined by 5%, 6%, 7% and 1%, respectively. The increase in the number of private funds, fund types and limited partners advised by Managers appears to be driving headcount most dramatically as increases in these complexity factors place the greatest burdens on Managers.



### Alternative Industry-Manager Registration Profile

#### **Convergence** Insights

Managers of alternative assets who are non-exempt registrants declined as a percentage of all registered advisors from 65% to 60%. This change was driven by 122 Managers who changed their registration status from Non-Exempt-to-Exempt status and by the large number of new Private Equity and Venture Capital Managers who can file Exempt, regardless of size, when they only advise 1 or more Private Equity or Venture Funds. In 2016, the number of Private Equity and Venture Fund Managers grew by 17% and 21%, respectively. Exempt Managers grew 31 % driven by the significant growth in new private equity, venture capital and smaller hedge fund registrants who are able to file as exempt.





## Alternative Industry-Regulatory Actions Profile

### **Convergence** Insights

The number of regulators per manager declined from 2.78 to 2.65 or 5%. This decline is consistent with the decline in the number of office locations reported by managers which declined by 7%. Cumulative Regulatory Actions disclosed by Manager's in our universe increased 11% to 4,807 driven by increases in Civil, Criminal and Regulatory actions of 7%, 10% and 12%, respectively.



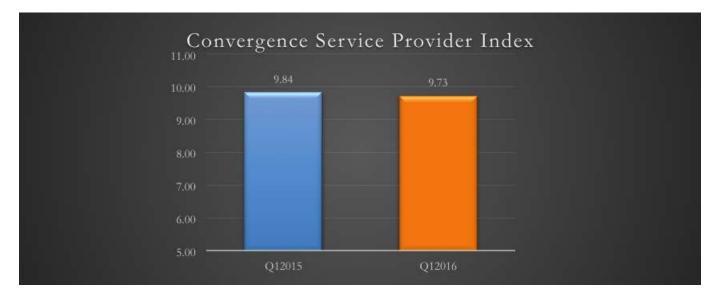


## Alternative Industry-Service Provider Index

### **Convergence** Insights

The Convergence Service Provider Index, defined as the unweighted sum of Service Providers per Manager (shown in the chart below), declined slightly during the year driven by the large number of merger transactions taking place in the Fund Administration and Fund Auditor markets. These transactions reduced the average number of Fund Administrators and Fund Auditors by 1% and 5%, respectively.

Convergence believes that several other Fund Administration deals are in the works as several universal banks are losing market share and numerous smaller administrators are seeking larger platforms to scale their current business model. We see an over-abundance of service providers in many Advisor relationships.



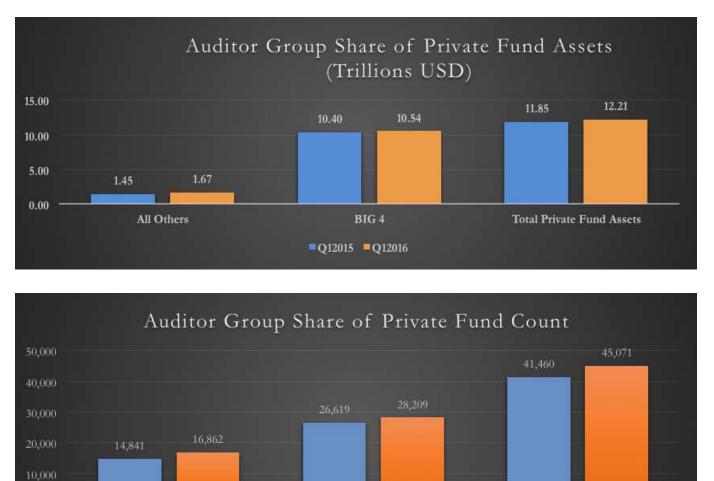


## **Alternative Industry-Fund Auditors**

## **Convergence** Insights

The Big 4 Audit firms continue to dominate the market in 2016 with \$10.54tr or 86% of private fund assets, representing a 1% annual gain in assets. There are 456 Other Audit firms who service \$1.67tr<sup>4</sup> of private fund assets or 14% of total industry assets, representing a 15% annual gain in fund assets.

The Big 4 Audit firms service 28,209 private funds or 63% of all private funds, representing a 6% annual gain in funds. There are 456 Other Audit firms who service 16,862 or 37% of all private funds, representing a 14% annual gain in funds.



**BIG 4 Fund Count** 

Total Fund Count

<sup>4</sup> Includes the value and number of funds that do not report an Auditor

All Other Fund Count

### **Alternative Industry-Fund Administrators**

### **Convergence** Insights

The top 10 Administrators continue to dominate the market in 2016 with \$6.78tr or 56% of private fund assets, representing an 8% annual gain in this group's share of private funds assets. Managers continue to Self-Administer \$3.20tr of private fund assets representing 26% of industry private assets and an annual decline of 2%. There are 444 Other Administrators who service \$2.23tr of private fund assets or 18% of total industry assets, representing an annual decline of 3%.

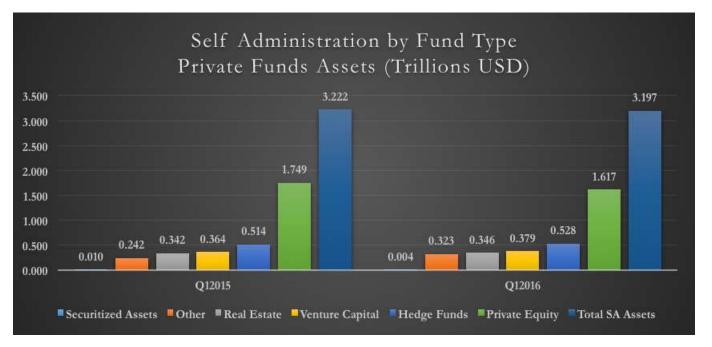
The top 10 Administrators service 11,715 private funds, or 26% of all private funds, and grew 11% over the prior year. Self-Administered Funds continue to represent the largest number of funds in 2016 with 19,846 funds, or 44% of private funds, and grew 14% over the prior year. The large increase in new Private Equity, Real Estate and Venture Capital fund types contributed to this increase. All Other Administrators service 13,510, or 30% of industry private funds, and fund growth was flat to last year.



### Alternative Industry-Self-Administration

#### **Convergence** Insights

Alternative Managers disclose that they Self Administer \$3.20tr of private fund assets representing 26% of industry assets and representing an annual decline of 2%. Private Equity Fund Types continue to dominate the Self-Administration market representing \$1.62tr or 52% of Self-Administered assets, representing an annual decline of 8%. Private Equity also leads with 9,226 funds or 87% of all Self-Administered Funds, representing an annual increase of 13%. Hedge Funds experienced a slight uptick of 3% in Self-Administered private assets.



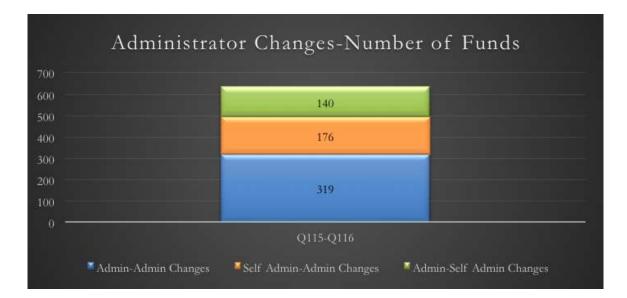
## Self Administration by Fund Type Private Fund Count

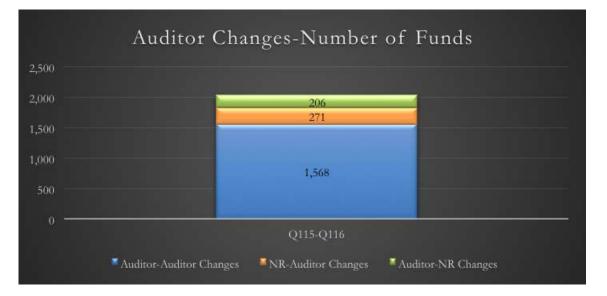


### Alternative Industry-Fund Administrators and Auditor Changes

#### **Convergence** Insights

Managers changed Administrators across 2% of their funds in 2016 and changed Auditors across 5% of their Funds. The change in Auditors is somewhat surprising yet Convergence believes that the Big 4 Audit firms may be shedding smaller and higher risk clients to create capacity for current and new clients. The changes in Fund Administrators is in line with the historical average of 2-4% and is typical in markets where there is a fair amount of merger activity.

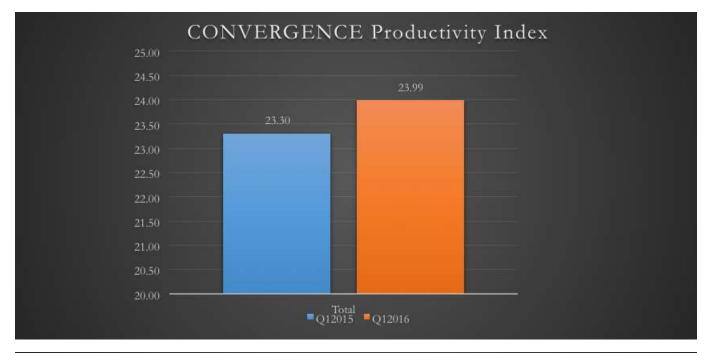


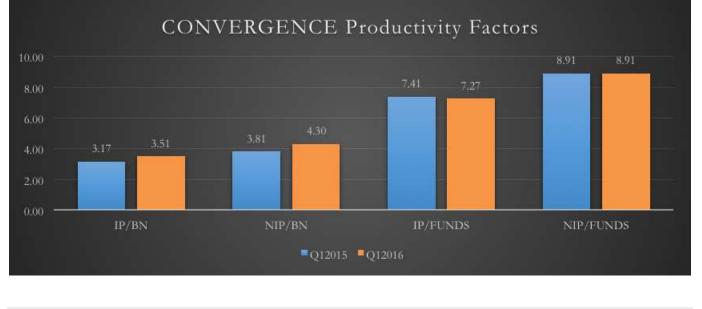


### **Alternative Industry-Operating Productivity**

#### Convergence Insights

Convergence is publishing its inaugural Operating Productivity Index which is the unweighted combination of (1) front and back office headcount per billion of regulatory assets under management and (2) front and back-office headcount per number of funds advised. Declines in the value of the Index represent productivity improvements and increases represent productivity declines. In 2016, a 12% increase in headcount per billion offset a 1% productivity gain in headcount per fund resulted in a productivity decline of 3%.





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Administrator & Auditor League Tables by Fund Type<sup>5</sup> Measured by Private Fund Assets<sup>6</sup> & Number of Private Funds

<sup>&</sup>lt;sup>5</sup> Advisor Strategy is assigned by Convergence based on the dominant asset classes used by the Advisor to generate return. Convergence technology scores the asset classes disclosed by the Advisor and recommends a primary strategy that is validated by a Convergence Analyst. Primary Strategies are designed to provide the user a sense of what types of assets the Advisor is likely to trade and thus a sense of the types of systems and control procedures the Advisor is likely to have in place.

<sup>&</sup>lt;sup>6</sup> Private Fund Assets are based on the reported Fund GAV disclosed by the Advisor for each single or mini-master fund entities. Convergence does not double count assets held by linked master-feeder funds. We eliminate all feeder fund asset values from our asset and fund count calculations.

## Top 25 Administrator & Auditor-Private Fund Assets under Management<sup>7</sup>

	Tota	4		To	tal
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	20,645	19,156	SELF ADMINISTERED	3,573.4	3,420.0
SS&C	3,110	3,060	SS&C	1,799.6	1,371.8
STATE STREET IFS	2,751	2,552	STATE STREET IFS	1,593.0	1,491.2
CITCO FUNDS SERVICES	2,008	1,888	CITCO FUNDS SERVICES	1,356.0	1,155.3
BANK OF NEW YORK	1,447	1,552	BANK OF NEW YORK	795.9	767.2
SEI FUND ADMINISTRATION	1,058	789	NORTHERN TRUST	544.6	547.3
US BANCORP	934	686	MORGAN STANLEY FUNDS SERVICES	392.2	335.8
ASSURE FUND SERVICES	869	372	JPMORGAN	344.5	294.7
NORTHERN TRUST	868	792	SEI FUND ADMINISTRATION	258.2	210.3
JPMORGAN	701	568	MITSUBISHI FUND SERVICES	247.2	207.0
MITSUBISHI FUND SERVICES	664	612	US BANCORP	230.1	180.4
STANDISH MANAGEMENT	457	307	HEDGE SERVE	170.3	132.4
MORGAN STANLEY FUNDS SERVICES	412	406	BNP CREDIT SUISSE	157.5	126.1
HEDGE SERVE	386	333	MAPLES FUND SERVICES	110.4	91.4
ALPS PRICE MEADOWS	386	349	HONG KONG SHANGHAI BANKING CORP	103.6	101.2
MAPLES FUND SERVICES	378	310	BROWN BROTHERS HARRIMAN	95.1	119.9
NAV CONSULTING	342	248	DEUTSCHE BANK	79.8	67.4
DEUTSCHE BANK	338	339	GEN II FUND SERVICES	72.8	41.6
GEN II FUND SERVICES	334	215	WELLS FARGO GFS	67.5	128.1
UMB JDC FUND SERVICES	302	308	HARMONIC FUND SERVICES	61.2	70.0
CONIFER FINANCIAL SERVICES	201	184	AZTEC FINANCIAL SERVICES	53.6	37.3
BROWN BROTHERS HARRIMAN	193	170	STONE COAST FUND SERVICES	40.2	37.7
HONG KONG SHANGHAI BANKING CORP	182	177	FLSV FUND ADMINISTRATION SERVICES	37.4	32.7
AZTEC FINANCIAL SERVICES	177	138	ROYAL BANK OF CANADA	37.3	44.8
BNP CREDIT SUISSE	170	179	VIRTUS GROUP	35.8	21.1
STONE COAST FUND SERVICES	168	144	STANDISH MANAGEMENT	35.3	26.6

	Tot	al		To	otal
Auditor	2016	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	8,178	7,843	ERNST YOUNG	3,586.5	3,451.8
NR	7,655	6,114	PRICE WATERHOUSE COOPERS	3,387.3	3,425.4
ERNST YOUNG	7,569	7,087	KPMGRK	1,968.7	2,020.1
KPMGRK	7,103	6,830	DELOITTE TOUCHE	1,598.0	1,504.5
DELOITTE TOUCHE	5,359	4,859	NR	648.3	551.0
MCGLADREY PULLEN	1,736	1,552	GRANT THORNTON	229.5	210.3
BDO SEIDMAN	1,036	857	MCGLADREY PULLEN	184.8	175.7
GRANT THORNTON	881	777	BDO SEIDMAN	148.9	139.8
EISNERAMPER	871	706	EISNERAMPER	114.5	107.2
COHN RESNICK	318	285	MARCUM LLP	31.5	8.9
SPICER JEFFERIES	263	198	CROWE HORWATH	23.2	18.1
MARCUM LLP	182	144	COHN RESNICK	23.0	20.9
MOSS ADAMS	182	166	BAKER TILLEY VIRCHOW KRAUSE	15.9	9.8
DECOSIMO	162	167	MAYER HOFFMAN MCCANN	12.6	12.6
CROWE HORWATH	148	115	DECOSIMO	10.7	11.9
PLANTE MORAN	141	107	PLANTE MORAN	10.3	7.9
BBD CPA	130	127	SPICER JEFFERIES	10.1	5.6
WITHUM SMITH BROWN	122	47	ANCHIN BLOCK ANCHIN	9.6	10.9
BAKER TILLEY VIRCHOW KRAUSE	114	100	MOSS ADAMS	9.2	7.3
FRANK RIMERMAN CO	112	58	WEISERMAZARS	8.8	8.4
MAYER HOFFMAN MCCANN	110	96	BKD	8.8	6.8
WEAVER	105	65	FRANK RIMERMAN CO	8.7	5.1
ANCHIN BLOCK ANCHIN	95	81	WITHUM SMITH BROWN	8.5	5.6
ARTHUR BELL	94	68	KREISCHER MILLER	8.1	6.7
CITRIN COOPERMAN	84	73	MITCHELL TITUS	5.5	6.1
SENSIBA SAN FELIPO	71	55	MAZARS	5.1	3.6

<sup>7</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Hedge Funds<sup>8</sup>

	HF			HF		
Administrator	2016	2015	Administrator	2016	2015	
SELF ADMINISTERED	2,472	2,543	\$\$&C	1,607.6	1,121.2	
SS&C	1,822	1,668	CITCO FUNDS SERVICES	1,284.8	1,091.8	
CITCO FUNDS SERVICES	1,753	1,543	STATE STREET IFS	1,141.0	1,057.1	
STATE STREET IFS	1,446	1,266	SELF ADMINISTERED	552.6	548.4	
BANK OF NEW YORK	668	734	BANK OF NEW YORK	463.1	422.1	
SEI FUND ADMINISTRATION	661	572	MORGAN STANLEY FUNDS SERVICES	388.8	328.1	
MITSUBISHI FUND SERVICES	622	579	NORTHERN TRUST	349.8	351.6	
MORGAN STANLEY FUNDS SERVICES	435	372	BNP CREDIT SUISSE	239.5	187.0	
NORTHERN TRUST	404	363	MITSUBISHI FUND SERVICES	228.3	190.0	
HEDGE SERVE	376	329	SEI FUND ADMINISTRATION	180.9	146.6	
US BANCORP	356	284	HEDGE SERVE	171.4	134.9	
JPMORGAN	325	223	JPMORGAN	122.1	98.2	
NAV CONSULTING	305	214	HONG KONG SHANGHAI BANKING CORP	108.7	90.6	
ALPS PRICE MEADOWS	303	278	US BANCORP	106.1	85.8	
HONG KONG SHANGHAI BANKING CORP	225	148	BROWN BROTHERS HARRIMAN	67.6	87.8	
UMB JDC FUND SERVICES	206	243	HARMONIC FUND SERVICES	48.4	58.6	
BNP CREDIT SUISSE	204	211	WELLS FARGO GFS	47.0	110.0	
STONE COAST FUND SERVICES	158	134	STONE COAST FUND SERVICES	37.7	35.6	
DEUTSCHE BANK	138	130	ALPS PRICE MEADOWS	26.6	24.2	
APEX FUND SERVICES	119	96	DEUTSCHE BANK	23.0	11.7	
BROWN BROTHERS HARRIMAN	108	100	ADMIRAL FUND ADMINISTRATION	21.7	21.2	
ADMIRAL FUND ADMINISTRATION	106	129	DUQUESNE FUND SERVICES	19.8	14.0	
CONIFER FINANCIAL SERVICES	96	93	UMB JDC FUND SERVICES	19.4	20.3	
OPUS FUND SERVICES	96	80	ASSURE FUND SERVICES	18.4		
CREDIT AGRICOLE FUNDS SERVICES	75	82	CONIFER FINANCIAL SERVICES	15.0	47.9	
TRIDENT FUND SERVICES	74	46	NAV CONSULTING	14.5	12.0	

	HE			H	F
Auditor	2016	2015	Auditor	2016	2015
ERNST YOUNG	3,199	3,139	ERNST YOUNG	2,445.9	2,356.3
PRICE WATERHOUSE COOPERS	2,894	2,874	PRICE WATERHOUSE COOPERS	1,829.6	1,874.1
KPMGRK	2,651	2,684	KPMGRK	980.4	1,064.9
DELOITTE TOUCHE	1,577	1,475	DELOITTE TOUCHE	581.4	524.3
NR	602	577	GRANT THORNTON	158.3	144.5
MCGLADREY PULLEN	552	556	EISNERAMPER	68.5	63.9
EISNERAMPER	455	404	MCGLADREY PULLEN	66.9	77.6
GRANT THORNTON	300	269	NR	61.3	45.7
BDO SEIDMAN	291	262	BDO SEIDMAN	61.3	75.6
SPICER JEFFERIES	159	143	MARCUM LLP	14.0	4.5
MARCUM LLP	81	71	COHN RESNICK	11.4	10.9
ARTHUR BELL	80	61	WEISERMAZARS	8.3	7.7
DECOSIMO	78	81	DECOSIMO	8.3	9.2
COHN RESNICK	66	62	ANCHIN BLOCK ANCHIN	6.8	7.4
ANCHIN BLOCK ANCHIN	57	45	BAKER TILLEY VIRCHOW KRAUSE	6.3	0.5
CITRIN COOPERMAN	48	38	WITHUM SMITH BROWN	5.7	4.8
WITHUM SMITH BROWN	40	41	SPICER JEFFERIES	4.6	3.8
WEAVER	40	38	ARTHUR BELL	4.0	3.7
COHEN FUND AUDIT SERVICES	38	30	RAINES & FISCHER	3.4	3.4
DEMETRIUS BERKOWER	32	22	MAYER HOFFMAN MCCANN	3.3	3.0
MAYER HOFFMAN MCCANN	31	27	HORTY HORTY	3.2	3.1
BAKER TILLEY VIRCHOW KRAUSE	28	14	COHEN FUND AUDIT SERVICES	1.8	0.6
UNTRACHT EARLY	28	35	KATZ SAPPER MILLER	1.8	1.3
KAUFMAN ROSSIN	28	27	KAUFMAN ROSSIN	1.7	1.8
WEISERMAZARS	26	27	WEAVER	1.6	1.3
SANVILLE	25	25	MITCHELL TITUS	1.6	2.3

<sup>8</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Private Equity Funds<sup>9</sup>

	PE			PE		
Administrator	2016	2015	Administrator	2016	2015	
SELF ADMINISTERED	9,562	8,929	SELF ADMINISTERED	1,834.2	1,770.6	
SS&C	937	901	STATE STREET IFS	168.5	172.0	
STATE STREET IFS	785	699	SS&C	154.3	171.1	
SEI FUND ADMINISTRATION	293	172	GEN II FUND SERVICES	65.0	37.4	
GEN II FUND SERVICES	290	192	JPMORGAN	58.8	53.0	
JPMORGAN	252	226	SEI FUND ADMINISTRATION	54.9	45.3	
CITCO FUNDS SERVICES	239	158	NORTHERN TRUST	50.9	53.8	
US BANCORP	214	75	AZTEC FINANCIAL SERVICES	48.8	33.0	
NORTHERN TRUST	177	174	CITCO FUNDS SERVICES	45.8	27.7	
FLSV FUND ADMINISTRATION SERVICES	166	125	FLSV FUND ADMINISTRATION SERVICES	42.8	32.7	
STANDISH MANAGEMENT	153	85	SALTGATE	23.2	19.8	
AZTEC FINANCIAL SERVICES	153	117	AUGENTIUS FUND ADMINISTRATION	22.3	17.0	
BANK OF NEW YORK	139	146	IPES PRIVATE EQUITY FUNDS SERVICES	22.0	22.6	
AUGENTIUS FUND ADMINISTRATION	125	102	HERITAGE GROUP	20.6	24.3	
STONE PINE ACCOUNTING SERVICES	123	93	MITSUBISHI FUND SERVICES	15.4	15.9	
IPES PRIVATE EQUITY FUNDS SERVICES	122	90	CARTA FUND SERVICES	14.7	10.3	
MITSUBISHI FUND SERVICES	79	77	BANK OF NEW YORK	13.0	12.6	
UMB JDC FUND SERVICES	71	63	US BANCORP	13.0	8.6	
CONIFER FINANCIAL SERVICES	67	46	HARMONIC FUND SERVICES	12.6	11.4	
LEVERPOINT	67	59	LEVERPOINT	11.9	10.7	
TRIDENT FUND SERVICES	61	51	STANDISH MANAGEMENT	11.9	7.9	
DEUTSCHE BANK	54	51	TRIDENT FUND SERVICES	10.1	10.5	
CARTA FUND SERVICES	53	47	STONE PINE ACCOUNTING SERVICES	9.6	7.7	
APEX FUND SERVICES	50	27	MORGAN SHARPE ADMINISTRATION	9.0	12.5	
HERITAGE GROUP	47	48	BEDELL FUND SERVICES	8.7	11.8	
GRANT THORNTON	45	33	GP FUND SOLUTIONS	8.4	4.8	

PMGRK RNST YOUNG ELOITTE TOUCHE	PE	Second Second		PE	
Auditor	2016	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	3,124	2,954	PRICE WATERHOUSE COOPERS	745.1	740.5
KPMGRK	2,658	2,441	ERNST YOUNG	681.2	626.1
ERNST YOUNG	2,539	2,278	DELOITTE TOUCHE	576.3	566.0
DELOITTE TOUCHE	2,268	1,987	KPMGRK	559.7	535.8
NR	1,611	1,384	MCGLADREY PULLEN	72.5	61.3
MCGLADREY PULLEN	709	610	GRANT THORNTON	49.1	40.9
GRANT THORNTON	364	325	NR	33.8	32.5
EISNERAMPER	243	159	EISNERAMPER	33.1	30.6
BDO SEIDMAN	236	179	BDO SEIDMAN	32.0	16.8
CROWE HORWATH	119	95	CROWE HORWATH	21.9	17.2
BBD CPA	99	101	MARCUM LLP	13.9	1.7
PLANTE MORAN	90	67	PLANTE MORAN	6.6	5.5
COHN RESNICK	67	48	BAKER TILLEY VIRCHOW KRAUSE	6.3	4.5
WITHUM SMITH BROWN	63	1	COHN RESNICK	3.7	2.0
MARCUM LLP	59	41	MAZARS	3.3	2.3
BAKER TILLEY VIRCHOW KRAUSE	56	53	STOUT CAUSEY HORNING	2.2	2.4
MONTGOMERY COSCIA GREILLICH	48	37	MAYER HOFFMAN MCCANN	1.9	1.5
BURR PILGER MAYER	33	29	SQUAR MILNER PETERSON MIRA WILLIAMSON	1.9	1.4
MAYER HOFFMAN MCCANN	31	24	WEAVER	1.7	0.7
SPICER JEFFERIES	30	30	WITHUM SMITH BROWN	1.7	0.0
ROTENBERG MERIL SOLOMON BERTIGER & GUTTILLA	30	29	MONTGOMERY COSCIA GREILLICH	1.5	1.6
EKS&H	29	33	S.R. BATLIBOI AND COMPANY	1.3	0.6
STOUT CAUSEY HORNING	27	25	MITCHELL TITUS	1.2	1.1
WEAVER	23	20	CHERRY BEKAERT & HOLLAND	1.0	1.0
MOSS ADAMS	23	18	MOSS ADAMS	1.0	0.2
CITRIN COOPERMAN	22	21	BKD	0.9	6.1

<sup>&</sup>lt;sup>9</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Real Estate Funds<sup>10</sup>

	RE			R	E
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	2,634	2,279	SELF ADMINISTERED	397.8	353.2
STATE STREET IFS	109	90	STATE STREET IFS	16.1	14.6
SS&C	98	84	55&C	10.7	7.3
CITCO FUNDS SERVICES	56	57	CORTLAND FUND SERVICES	9.6	4.2
CORTLAND FUND SERVICES	49	37	CITCO FUNDS SERVICES	8.6	5.5
IPMORGAN	43	24	GEN II FUND SERVICES	5.1	3.0
TRADE PMR	37	38	CRESTBRIDGE	4.7	3.1
SEI FUND ADMINISTRATION	36	33	REAL ESTATE SYSTEMS IMPLEMENTATION GROUP	4.6	4.1
MITSUBISHI FUND SERVICES	34	33	LANGHAM HALL	4.6	1.9
REAL ESTATE SYSTEMS IMPLEMENTATION GROU	28	20	MAPLES FUND SERVICES	4.1	0.0
FIDELITY	20	18	JPMORGAN	3.3	1.3
NORTHERN TRUST	19	5	SANDSPOINT CAPITAL ADVISORS	3.0	2.3
BANK OF NEW YORK	19	19	FIDELITY	3.0	2.2
MAPLES FUND SERVICES	18	1	AZTEC FINANCIAL SERVICES	2.6	1.8
GEN II FUND SERVICES	17	8	MITSUBISHI FUND SERVICES	2.6	2.7
STANDISH MANAGEMENT	17	7	DEUTSCHE BANK	2.3	-
LANGHAM HALL	16	8	BEPCO	2.3	2.2
ALPS PRICE MEADOWS	15	12	FORMATION CAPITAL	2.3	0.3
BROWN BROTHERS HARRIMAN	15	9	BROWN BROTHERS HARRIMAN	2.2	0.7
LICCAR	14	4	CT CORPORATION	2.2	1.5
US BANCORP	12	11	JTC GROUP	2.0	1.1
TRIDENT FUND SERVICES	12	5	DELOITTE TOUCHE	2.0	0.3
SANDSPOINT CAPITAL ADVISORS	12	12	SANNE TRUST COMPANY	1.9	1.9
LEVERPOINT	11	10	NORTHERN TRUST	1.5	0.7
HERITAGE GROUP	11	6	HERITAGE GROUP	1.5	0.7
BEPCO	11	11	SALTGATE	1.5	0.6

	RE			RJ	E
Auditor	2016	2015	Auditor	2016	2015
ERNST YOUNG	702	591	ERNST YOUNG	137.6	122.6
PRICE WATERHOUSE COOPERS	549	497	PRICE WATERHOUSE COOPERS	119.1	103.0
KPMGRK	506	448	DELOITTE TOUCHE	114.6	98.5
NR	476	383	KPMGRK	82.3	75.3
DELOITTE TOUCHE	421	357	NR	10.1	5.6
MCGLADREY PULLEN	93	69	GRANT THORNTON	7.9	5.4
GRANT THORNTON	78	62	MCGLADREY PULLEN	5.6	2.3
MOSS ADAMS	59	66	BDO SEIDMAN	4.0	1.7
COHN RESNICK	54	44	COHN RESNICK	2.7	1.5
BDO SEIDMAN	53	38	NOVOGRADAC	2.5	1.7
BKM SOWAN HORAN	47	45	DIXON HUGHES GOODMAN	2.3	1.4
NOVOGRADAC	43	34	MARCUM LLP	1.9	2.0
EISNERAMPER	24	19	MARGOLIN WINER & EVENS	1.9	1.4
MARCUM LLP	22	15	PLANTE MORAN	1.8	0.8
MAYER HOFFMAN MCCANN	22	16	FRAZIER DEETER	1.4	1.2
SMITH BUNDAY BERMAN BRITTON	22	22	EKS&H	1.3	1.0
BREARD ASSOCIATES	18	18	BERGE & LUNDAL REVISJONSSELSKAP AS	1.3	1.3
STOUT CAUSEY HORNING	15	15	MAYER HOFFMAN MCCANN	1.1	0.6
KEITER STEPHENS	15	12	FRIEDMAN	1.1	0.6
PLANTE MORAN	14	8	BAKER TILLEY VIRCHOW KRAUSE	1.0	2.0
HOLTHOUSE CARLIN VAN TRIGHT	12	6	ELDE BAILLY	0.9	0.8
BKD	11	3	JONES, MCKNIGHT & EDMONSON, P.C.	0.8	
COHEN FUND AUDIT SERVICES	11	8	MAZARS	0.8	0.3
FRAZIER DEETER	11	4	MOSS ADAMS	0.8	0.7
WHITLEY PENN	10	14	BKM SOWAN HORAN	0.7	0.8
MOURANT INTERNATIONAL FINANCE ADMINISTRATION	10	8	BKD	0.5	0.1

<sup>10</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Venture Capital Funds<sup>11</sup>

	VC			V	6
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	4,418	3,789	SELF ADMINISTERED	407.9	367.5
ASSURE FUND SERVICES	863	371	STATE STREET IFS	23.8	18.0
STANDISH MANAGEMENT	226	165	STANDISH MANAGEMENT	18.7	14.4
SS&C	125	103	SS&C	14.2	11.2
VENTURE BACK OFFICE	123	109	ADURO ADVISORS	4.8	1.7
VMS FUND ADMINISTRATION	87	70	VMS FUND ADMINISTRATION	4.7	3.8
LEVERPOINT	71	49	LEVERPOINT	3.3	2.3
STATE STREET IFS	67	41	BROADSCOPE	2.9	1.4
ADURO ADVISORS	65	40	GP FUND SOLUTIONS	2.3	1.8
KRANZ & ASSOCIATES	34	33	AZTEC FINANCIAL SERVICES	2.1	2.4
CORNERSTONE FUND SERVICES	28	-	ELIAN FUND SERVICES	1.8	1.6
BROADSCOPE	25	14	JPMORGAN	1.7	1.9
AZTEC FINANCIAL SERVICES	20	17	AUGENTIUS FUND ADMINISTRATION	1.7	0.7
CONIFER FINANCIAL SERVICES	18	14	GREENOUGH CONSULTING GROUP	1.6	1.6
COMPLETE FINANCIAL OPS	17	14	TRIDENT FUND SERVICES	1.5	1.2
TRIDENT FUND SERVICES	15	16	TMF ADMINISTRATION SERVICES	1.3	0.9
GP FUND SOLUTIONS	14	10	CITCO FUNDS SERVICES	1.3	0.5
Q-BIZ SOLUTIONS	14	8	US BANCORP	1.1	0.8
AMG NATIONAL TRUST BANK	12	11	INVESTMENT PARTNERSHIP SERVICES	1.1	0.8
STRATA FUND SERVICES	12	2.5	CARTA FUND SERVICES	1.1	0.5
ANDOVER MANAGEMENT GROUP	12		VENTURE BACK OFFICE	1.0	0.8
AUGENTIUS FUND ADMINISTRATION	11	5	CONIFER FINANCIAL SERVICES	1.0	0.6
REDBRICK ASSOCIATES	11	*°	CIM GLOBAL BUSINESS	0.9	0.6
JPMORGAN	10	10	Q-BIZ SOLUTIONS	0.9	0.4
APEX FUND SERVICES	10	2	KRANZ & ASSOCIATES	0.9	0.9
INVESTMENT PARTNERSHIP SERVICES	10	7	HC GLOBAL FUND SERVICES	0.6	0.4

	VC			V	C
Auditor	2016	2015	Auditor	2016	2015
NR	2,871	1,816	PRICE WATERHOUSE COOPERS	174.7	162.2
PRICE WATERHOUSE COOPERS	702	670	ERNST YOUNG	93.8	88.2
ERNST YOUNG	559	560	DELOITTE TOUCHE	57.7	41.4
KPMGRK	494	488	KPMGRK	53.8	47.4
BDO SEIDMAN	398	321	BDO SEIDMAN	42.9	34.8
DELOITTE TOUCHE	389	322	NR	24.3	17.8
MCGLADREY PULLEN	264	205	MCGLADREY PULLEN	20.3	16.0
FRANK RIMERMAN CO	98	48	FRANK RIMERMAN CO	8.3	5.0
EISNERAMPER	93	73	EISNERAMPER	5.9	5.3
SENSIBA SAN FELIPO	63	49	MAYER HOFFMAN MCCANN	5.2	6.7
SPICER JEFFERIES	55	9	SENSIBA SAN FELIPO	3.1	2.3
MOSS ADAMS	52	44	MITCHELL TITUS	2.6	2.7
DECOSIMO	38	38	GRANT THORNTON	1.6	1.2
GRANT THORNTON	25	24	MOSS ADAMS	1.4	1.1
PLANTE MORAN	24	19	PLANTE MORAN	1.4	0.8
MAYER HOFFMAN MCCANN	19	21	COHN RESNICK	1.1	1.3
BURR PILGER MAYER	18	17	DECOSIMO	1.1	1.1
EKS&H	15	18	CROWE HORWATH	0.8	0.8
MITCHELL TITUS	14	14	SPICER JEFFERIES	0.8	0.2
UNTRACHT EARLY	14	14	EDO	0.7	
AMANINO	13	12	UBERNOSKY & MAJERES	0.6	0.4
TO BE DETERMINED	13	10	AMANINO	0.6	0.5
CROWE HORWATH	12	12	LATTIMORE BLACK MORGAN & CAIN	0.5	0.2
COHN RESNICK	11	8	EKS&H	0.4	0.9
LILLING	11	4	TO BE DETERMINED	0.4	0.3
BF BORGERS CPA	10		BURR PILGER MAYER	0.3	0.3

<sup>&</sup>lt;sup>11</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Securitized Asset Funds<sup>12</sup>

	SAF			SA	F
Administrator	2016	2015	Administrator	2016	2015
US BANCORP	318	241	US BANCORP	102.5	69.3
BANK OF NEW YORK	318	285	MAPLES FUND SERVICES	101.8	79.5
MAPLES FUND SERVICES	310	242	SELF ADMINISTERED	89.8	78.9
SELF ADMINISTERED	305	269	BANK OF NEW YORK	75.2	69.9
DEUTSCHE BANK	134	137	DEUTSCHE BANK	41.5	42.8
VIRTUS GROUP	86	55	VIRTUS GROUP	33.7	18.7
STATE STREET IFS	84	66	STATE STREET IFS	32.0	26.8
APPLEBY FUND SERVICES	60	47	APPLEBY FUND SERVICES	29.6	22.8
WELLS FARGO GFS	59	48	WELLS FARGO GFS	15.2	10.8
INTERTRUST FUNDS SERVICES	51	44	INTERTRUST FUNDS SERVICES	12.9	11.8
WALKERS SPV LIMITED ADMINISTRATOR	42	28	TMF ADMINISTRATION SERVICES	10.3	5.5
TMF ADMINISTRATION SERVICES	40	19	SS&C	8.8	7.4
SS&C	20	15	WALKERS SPV LIMITED ADMINISTRATOR	5.6	5.2
MITSUBISHI FUND SERVICES	13	9	SEI FUND ADMINISTRATION	5.4	6.3
OGIER FIDUCIARY SERVICES	9	8	CITCO FUNDS SERVICES	4.6	0.9
SEI FUND ADMINISTRATION	8	7	JPMORGAN	4.5	0.1
CORTLAND FUND SERVICES	8	9	OGIER FIDUCIARY SERVICES	2.8	3.1
QUEENSGATE SPV SERVICES	8	9	PHOENIX FUND SERVICES	2.5	0.6
JPMORGAN	7	2	CORTLAND FUND SERVICES	2.1	2.5
BNP CREDIT SUISSE	5	6	EVALON FINANCIAL SERVICES	1.3	0.4
UMB JDC FUND SERVICES	4	1	SALTGATE	1.2	
CITCO FUNDS SERVICES	4	5	VOLAW TRUST SERVICES	1.1	1.1
SALTGATE	4	*	BNP CREDIT SUISSE	1.1	0.9
PHOENIX FUND SERVICES	4	1	MITSUBISHI FUND SERVICES	0.4	0.3
VOLAW TRUST SERVICES	3	3	PEF SERVICES	0.3	0.3
CALEDONIAN FUND SERVICES	3	3	SANNE TRUST COMPANY	0.3	0.3

	SAI			SAF	
Auditor	2016	2015	Auditor	2016	2015
NR	1,421	1,326	NR	406.1	367.8
DELOITTE TOUCHE	82	76	DELOITTE TOUCHE	38.6	37.4
KPMGRK	72	61	KPMGRK	27.0	23.8
ERNST YOUNG	46	33	ERNST YOUNG	18.0	15.8
PRICE WATERHOUSE COOPERS	32	26	PRICE WATERHOUSE COOPERS	11.3	13.2
BDO SEIDMAN	20	14	BDO SEIDMAN	5.0	4.8
GRANT THORNTON	7	5	GRANT THORNTON	2.1	0.7
MCGLADREY PULLEN	6	8	L'ALLIANCE REVISION S.A.R.L.	0.7	1.5
L'ALLIANCE REVISION S.A.R.L.	6	8	MCGLADREY PULLEN	0.3	0.7
MAZARS	4	4	MAZARS	0.3	0.6
HORWICH COLEMAN LEVIN	2	2	HALL CHADWICK	0.2	0.2
EISNERAMPER	1	1	MKO PARTNERS	0.2	0.0
LILLING	1	1	GETTRY MARCUS, CPA P.C.	0.1	
BF BORGERS CPA	1		SCHWARTZ	0.1	+
BAKER TILLEY VIRCHOW KRAUSE	1		BRISCOE BURKE GRIGSBY	0.0	0.0
STOUT CAUSEY HORNING	1	1	NOVOGRADAC	0.0	0.0
KAHN LITWIN RENZA	1	1	BF BORGERS CPA	0.0	- 22
NOVOGRADAC	1	1	BAKER TILLEY VIRCHOW KRAUSE	0.0	<del>.</del>
SCHWARTZ	1		STOUT CAUSEY HORNING	0.0	0.0
GETTRY MARCUS, CPA P.C.	1		KAHN LITWIN RENZA	0.0	0.0
BRISCOE BURKE GRIGSBY	1	1	HORWICH COLEMAN LEVIN	0.0	0.0
MKO PARTNERS	1	1	EISNERAMPER	0.0	0.0
DANIEL HERTZ	1	1	LILLING	0.0	0.0
HALL CHADWICK	1	1			

<sup>&</sup>lt;sup>12</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Liquidity Funds<sup>13</sup>

	LF	C.		LF	
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	26	24	BANK OF NEW YORK	189.8	196.7
BANK OF NEW YORK	12	16	JPMORGAN	97.3	114.3
STATE STREET IFS	9	9	STATE STREET IFS	29.9	27.9
JPMORGAN	8	8	SELF ADMINISTERED	10.1	11.3
SS&C	4	1	RUSSELL FUND SERVICES	3.7	4.6
SEI FUND ADMINISTRATION	4	3	BMO HARRIS BANK	2.9	2.8
ALPS PRICE MEADOWS	3	3	SEI FUND ADMINISTRATION	2.1	2.0
HERITAGE GROUP	2	2	SS&C	1.1	0.2
ROYAL BANK OF CANADA	2	2	ROYAL BANK OF CANADA	0.2	0.3
RUSSELL FUND SERVICES	2	2	ALPHAMETRIX 360	0.1	0.1
ALPHAMETRIX 360	2	2	HERITAGE GROUP	0.1	0.1
MITSUBISHI FUND SERVICES	1		ALPS PRICE MEADOWS	0.1	0.1
BNP CREDIT SUISSE	1		MITSUBISHI FUND SERVICES	0.0	
GEMINI FUND SERVICES	1		BNP CREDIT SUISSE	0.0	
OPUS FUND SERVICES	1	1	OPUS FUND SERVICES	0.0	0.0
BMO HARRIS BANK	1	1	GEMINI FUND SERVICES	0.0	
ADMIRAL FUND ADMINISTRATION	1	1	ADMIRAL FUND ADMINISTRATION	0.0	0.0

	LF			L	F
Auditor	2016 //	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	23	23	PRICE WATERHOUSE COOPERS	225.6	229.5
KPMGRK	14	14	KPMGRK	90.7	107.9
ERNST YOUNG	14	13	ERNST YOUNG	11.2	14.4
NR	10	12	DELOITTE TOUCHE	5.3	4.3
DELOITTE TOUCHE	8	7	NR	4.0	5.1
EKS&H	3	3	SPICER JEFFERIES	0.6	
EISNERAMPER	1	1	EKS&H	0.1	0.1
SPICER JEFFERIES	1		KOCH SIEDHOFF H DUNN	0.1	0.1
WEAVER	1	1	MACIAS GINI	0.0	÷.
KAUFMAN ROSSIN	1		AGL ASCENT GROUP	0.0	73
MACIAS GINI	1	2	EISNERAMPER	0.0	0.0
ARTHUR BELL	1	1	KAUFMAN ROSSIN	0.0	÷2
AGL ASCENT GROUP	1		ARTHUR BELL	0.0	0.0
KOCH SIEDHOFF H DUNN	1	2	WEAVER	0.0	0.0
BDO SEIDMAN	-	1	BDO SEIDMAN		0.0

<sup>13</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Other Funds<sup>14</sup>

Administrator	OTHI	ER		OTHER		
	2016	2015	Administrator	2016	2015	
SELF ADMINISTERED	1,471	1,474	SELF ADMINISTERED	278.0	287.0	
STATE STREET IFS	507	423	STATE STREET IFS	201.9	204.0	
BANK OF NEW YORK	365	378	NORTHERN TRUST	143.6	142.0	
SS&C	294	337	JPMORGAN	73.2	34.1	
NORTHERN TRUST	292	257	BANK OF NEW YORK	60.8	68.2	
CITCO FUNDS SERVICES	155	167	CITCO FUNDS SERVICES	53.0	39.7	
JPMORGAN	133	100	SS&C	36.0	68.8	
SEI FUND ADMINISTRATION	107	50	ROYAL BANK OF CANADA	30.6	36.1	
US BANCORP	78	74	BROWN BROTHERS HARRIMAN	24.2	30.2	
ROYAL BANK OF CANADA	74	74	SEI FUND ADMINISTRATION	23.8	10.7	
BROWN BROTHERS HARRIMAN	68	59	BNP CREDIT SUISSE	19.5	18.7	
STANDISH MANAGEMENT	62	45	US BANCORP	14.8	13.9	
FIDELITY	57	55	MAPLES FUND SERVICES	10.5	7.4	
ALPS PRICE MEADOWS	44	27	MITSUBISHI FUND SERVICES	9.7	7.4	
MITSUBISHI FUND SERVICES	33	22	FIDELITY	9.3	6.4	
ROCKIT	33	32	INBHEAR FUND SERVICES	8.6	-	
UMB JDC FUND SERVICES	31	20	CONIFER FINANCIAL SERVICES	8.6	7.1	
CONIFER FINANCIAL SERVICES	30	30	DEUTSCHE BANK	8.1	5.9	
DEUTSCHE BANK	27	24	HONG KONG SHANGHAI BANKING CORP	7.9	9.4	
NAV CONSULTING	27	21	BENEFIT FINANCE	6.5	5.4	
HONG KONG SHANGHAI BANKING CORP	26	22	SANNE TRUST COMPANY	5.7	2.0	
FAMILY CAPITAL MANAGEMENT	22	23	DELAWARE LIFE INSURANCE COMPANY	4.7	3.9	
BNP CREDIT SUISSE	21	19	PRUDENTIAL	4.5	8.8	
NORTHEAST RETIREMENT SERVICES	21	16	STANDISH MANAGEMENT	4.3	3.6	
CIM GLOBAL BUSINESS	19	16	TAO ADMIN CORP.	4.0	4.6	
MORGAN STANLEY FUNDS SERVICES	19	31	NORTHEAST RETIREMENT SERVICES	4.0	1.8	

	OTH	ER		OTHER		
Auditor	2016	2015	Auditor	2016	2015	
PRICE WATERHOUSE COOPERS	854	799	PRICE WATERHOUSE COOPERS	282.0	302.9	
KPMGRK	708	694	DELOITTE TOUCHE	224.1	232.6	
NR	664	616	ERNST YOUNG	198.8	228.4	
DELOITTE TOUCHE	614	635	KPMGRK	174.8	165.0	
ERNST YOUNG	510	473	NR	108.6	76.5	
COHN RESNICK	120	123	MCGLADREY PULLEN	19.1	17.9	
MCGLADREY PULLEN	112	104	GRANT THORNTON	10.5	17.7	
GRANT THORNTON	107	92	KREISCHER MILLER	7.3	6.2	
EISNERAMPER	54	49	EISNERAMPER	6.7	7.0	
KREISCHER MILLER	39	40	BKD	6.6	0.3	
BDO SEIDMAN	38	42	MOSS ADAMS	5.6	4.7	
WEAVER	33	2	COHN RESNICK	4.2	5.1	
MOSS ADAMS	32 25	24	BDO SEIDMAN	3.7	6.2	
HORWICH COLEMAN LEVIN	25	28	SPICER JEFFERIES	3.4	0.9	
DECOSIMO	25	28	HARPER & PEARSON CO., P.C.	3.0	3.2	
BKD	25	12	BAKER TILLEY VIRCHOW KRAUSE	2.2	2.8	
STOUT CAUSEY HORNING	20	20	ANCHIN BLOCK ANCHIN	2.1	2.7	
ANCHIN BLOCK ANCHIN	17	18	GRASSI	1.6	0.3	
BBD CPA	16	14	MARCUM LLP	1.3	0.4	
SPICER JEFFERIES	15	15	WOLF CO	1,3	1.3	
BAKER TILLEY VIRCHOW KRAUSE	15	21	BBD CPA	1.2	0.7	
WOLF CO	14	13	CLARK SCHAEFER HACKETT	1.2	1.2	
STOCKMAN KAST RYAN CO	13	12	KEITER STEPHENS	1.1	0.6	
MARCUM LLP	12	9	DECOSIMO	1.1	1.3	
PFK O'CONNOR DAVIES	11	9	MAYER HOFFMAN MCCANN	1.0	0.8	
ASHL PARTNERS	10	4	BERGE & LUNDAL REVISJONSSELSKAP AS	0.8	1.0	

<sup>14</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.



OPTIMAL PERFORMANCE

Administrator League Tables by Advisor Strategy<sup>15</sup> Measured by Private Fund Assets<sup>16</sup> & Number of Private Funds

<sup>&</sup>lt;sup>15</sup> Advisor Strategy is assigned by Convergence based on the dominant asset classes used by the Advisor to generate return. Convergence technology scores the asset classes disclosed by the Advisor and recommends a primary strategy that is validated by a Convergence Analyst. Primary Strategies are designed to provide the user a sense of what types of assets the Advisor is likely to trade and thus a sense of the types of systems and control procedures the Advisor is likely to have in place.

<sup>&</sup>lt;sup>16</sup> Private Fund Assets are based on the reported Fund GAV disclosed by the Advisor for each all single or mini-master fund entities. Convergence does not double count assets held by linked master-feeder funds. We eliminate all feeder fund asset values from our asset and fund count calculations.

## Top 25 Administrator & Auditor-Multi-Strategy Advisors<sup>17</sup>

Administrator	MULTI-	STRAT		MULTI-STRAT	
	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	3,161	2,883	SS&C	886.9	614.2
STATE STREET IFS	1,031	956	STATE STREET IFS	784.5	747.0
SS&C	738	814	CITCO FUNDS SERVICES	645.1	641.5
CITCO FUNDS SERVICES	731	748	SELF ADMINISTERED	532.4	586.0
BANK OF NEW YORK	391	435	BANK OF NEW YORK	401.4	406.9
JPMORGAN	267	175	NORTHERN TRUST	267.9	291.9
SEI FUND ADMINISTRATION	247	195	MITSUBISHI FUND SERVICES	140.1	103.5
NORTHERN TRUST	241	260	JPMORGAN	128.9	88.6
MITSUBISHI FUND SERVICES	190	185	SEI FUND ADMINISTRATION	111.0	98.8
US BANCORP	167	159	BROWN BROTHERS HARRIMAN	79.9	108.2
BROWN BROTHERS HARRIMAN	135	132	HEDGE SERVE	75.2	63.7
HEDGE SERVE	107	116	MORGAN STANLEY FUNDS SERVICES	62.1	59.8
NAV CONSULTING	84	75	HARMONIC FUND SERVICES	60.5	69.8
ALPS PRICE MEADOWS	79	76	HONG KONG SHANGHAI BANKING CORP	41.2	41.8
DEUTSCHE BANK	76	99	US BANCORP	36.1	34.1
MORGAN STANLEY FUNDS SERVICES	76	103	WELLS FARGO GFS	22.6	96.4
HONG KONG SHANGHAI BANKING CORP	67	62	ROYAL BANK OF CANADA	20.1	22.8
MAPLES FUND SERVICES	62	67	DUQUESNE FUND SERVICES	19.7	14.2
STONE COAST FUND SERVICES	57	48	MAPLES FUND SERVICES	19.5	23.0
FIDELITY	54	56	DEUTSCHE BANK	18.5	20.4
HARMONIC FUND SERVICES	44	48	VIRTUS GROUP	16.2	10.5
UMB JDC FUND SERVICES	43	46	APPLEBY FUND SERVICES	14.7	10.9
ROYAL BANK OF CANADA	43	41	RUSSELL FUND SERVICES	10.8	12.1
BNP CREDIT SUISSE	42	42	FIDELITY	9.6	6.8
APEX FUND SERVICES	40	29	OPUS FUND SERVICES	7.5	7.6
ADMIRAL FUND ADMINISTRATION	36	55	STONE COAST FUND SERVICES	7.2	7.8

	MULTI-S	TRAT		MULTI-STRAT	
Auditor	2016	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	2,014	2,049	ERNST YOUNG	1,451.2	1,503.0
NR	1,920	1,633	PRICE WATERHOUSE COOPERS	1,249.2	1,256.7
ERNST YOUNG	1,677	1,636	KPMGRK	916.1	776.0
KPMGRK	1,153	1,266	DELOITTE TOUCHE	414.9	392.8
DELOITTE TOUCHE	939	927	NR	159.2	190.5
EISNERAMPER	168	137	GRANT THORNTON	121.7	86.0
MCGLADREY PULLEN	134	141	BDO SEIDMAN	35.5	39.2
GRANT THORNTON	113	126	EISNERAMPER	18.3	16.9
BDO SEIDMAN	112	107	MCGLADREY PULLEN	14.1	13.7
SPICER JEFFERIES	62	58	KREISCHER MILLER	7.4	6.0
UNTRACHT EARLY	39	48	MARCUM LLP	6.6	0.9
KREISCHER MILLER	36	36	COHN RESNICK	6.5	5.5
WEAVER	33	5	HARPER & PEARSON CO., P.C.	3.0	3.1
KATZ SAPPER MILLER	31	29	ANCHIN BLOCK ANCHIN	2.3	3.1
MARCUM LLP	25	18	MAYER HOFFMAN MCCANN	1.6	0.5
MAYER HOFFMAN MCCANN	24	19	MOSS ADAMS	1.5	1.5
MOSS ADAMS	22	23	ARTHUR BELL	1.4	1.1
CROWE HORWATH	20	8	COHEN FUND AUDIT SERVICES	1.4	0.2
RAICHE ENDE MALTER CO	20	20	MARGOLIN WINER & EVENS	1.2	1.2
BKD	19	15	BKD	1.2	0.5
ARTHUR BELL	19	19	PLANTE MORAN	1.1	0.4
DEMARCO SCIACCOTTA WIKLENS DUNLEAVY	19	13	CROWE HORWATH	1.1	0.1
COHN RESNICK	16	20	WITHUM SMITH BROWN	0.9	0.8
COHEN FUND AUDIT SERVICES	16	10	SPICER JEFFERIES	0.9	0.7
BAKER TILLEY VIRCHOW KRAUSE	15	11	UNTRACHT EARLY	0.8	0.9
LILLING	15	6	MELTON MELTON	0.7	1.7

<sup>&</sup>lt;sup>17</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Equity Advisors<sup>18</sup>

and the second sec		ity		Equity	
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	957	835	MORGAN STANLEY FUNDS SERVICES	301.3	241.0
SS&C	349	312	CITCO FUNDS SERVICES	294.2	209.8
CITCO FUNDS SERVICES	313	295	STATE STREET IFS	208.1	176.9
STATE STREET IFS	285	256	BNP CREDIT SUISSE	116.9	70.4
MORGAN STANLEY FUNDS SERVICES	263	224	NORTHERN TRUST	114.7	104.9
HEDGE SERVE	141	137	SS&C	89.6	98.5
NORTHERN TRUST	140	121	SELF ADMINISTERED	78.8	88.2
BANK OF NEW YORK	108	106	JPMORGAN	70.4	86.6
NAV CONSULTING	97	54	HEDGE SERVE	63.4	54.1
ALPS PRICE MEADOWS	94	81	BANK OF NEW YORK	33.3	30.7
MITSUBISHI FUND SERVICES	70	61	MITSUBISHI FUND SERVICES	23.7	23.4
CONIFER FINANCIAL SERVICES	61	43	STONE COAST FUND SERVICES	18.8	18.9
STONE COAST FUND SERVICES	60	52	US BANCORP	13.2	10,9
SEI FUND ADMINISTRATION	53	29	CONIFER FINANCIAL SERVICES	12.8	7.9
UMB JDC FUND SERVICES	51	51	SEI FUND ADMINISTRATION	9.7	1.5
OPUS FUND SERVICES	42	29	INBHEAR FUND SERVICES	8.6	
ROCKIT	40	39	ALPS PRICE MEADOWS	7.3	6.1
BNP CREDIT SUISSE	38	39	APEX FUND SERVICES	6.4	6.5
US BANCORP	38	28	SUMITOMO	5.2	4.8
DEUTSCHE BANK	28	28	NAV CONSULTING	5.1	4.4
LICCAR	26	21	MAPLES FUND SERVICES	5.0	0.2
APEX FUND SERVICES	23	20	PHOENIX FUND SERVICES	4.5	4.6
EQUINOXE ALTERNATIVE INVESTMENT SERVIC	23	10	DEUTSCHE BANK	4.3	1.6
TRIDENT FUND SERVICES	22	21	RAINES & FISCHER	3.9	2.5
JPMORGAN	21	21	BROWN BROTHERS HARRIMAN	3.7	2.5
ADMIRAL FUND ADMINISTRATION	21	21	UMB JDC FUND SERVICES	3.6	3.6

	Equ	ity		Equity		
Auditor	2016	2015	Auditor	2016	2015	
KPMGRK	822	692	ERNST YOUNG	515.0	420.2	
ERNST YOUNG	616	573	PRICE WATERHOUSE COOPERS	503.6	429.3	
NR	558	450	KPMGRK	279.3	228.9	
PRICE WATERHOUSE COOPERS	447	400	DELOITTE TOUCHE	108.1	100.1	
DELOITTE TOUCHE	333	305	MCGLADREY PULLEN	41.1	41.4	
MCGLADREY PULLEN	225	196	EISNERAMPER	19.6	16.2	
EISNERAMPER	155	134	GRANT THORNTON	13.6	16.7	
GRANT THORNTON	86	66	BDO SEIDMAN	11.9	11.9	
BDO SEIDMAN	75	70	NR	4.2	10.7	
WITHUM SMITH BROWN	31	21	WITHUM SMITH BROWN	4.1	2.7	
SPICER JEFFERIES	28	19	ANCHIN BLOCK ANCHIN	3.8	4.2	
ANCHIN BLOCK ANCHIN	28	25	GRASSI	2.5	1.3	
LANE GORMAN TRUBITT, LP	19	14	COHN RESNICK	1.7	1.4	
MELTON MELTON	16	14	ARTHUR BELL	1.6	0.7	
WOLF CO	15	18	SPICER JEFFERIES	1.4	1.1	
COHN RESNICK	13	11	WOLF CO	1.0	1.8	
GRASSI	13	10	MELTON MELTON	1.0	0.8	
SANVILLE	12	12	RAINES & FISCHER	0.8	0.5	
MARCUM LLP	11	10	KREISCHER MILLER	0.7	0.7	
BBD CPA	11	5	ASHL PARTNERS	0.6	0.1	
ARTHUR BELL	10	8	WEAVER	0.6	0.6	
COHEN FUND AUDIT SERVICES	10	8	FULVIO ASSOCIATES	0.6	0.6	
KREISCHER MILLER	9	8	RAPHAEL SERS GOLDBERG NIKPOUR COHEN	0.6	0.6	
ASHL PARTNERS	9	4	COHEN FUND AUDIT SERVICES	0.5	0.3	
WEAVER	8	6	DECOSIMO	0.5	0.1	
PATKE ASSOCIATES	8	7	MARCUM LLP	0.4	0.4	

<sup>&</sup>lt;sup>18</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Debt Distress Advisors<sup>19</sup>

	Distresse	d-Debr		Distressed-De	
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	296	197	SELF ADMINISTERED	54.7	60.0
JPMORGAN	92	75	STATE STREET IFS	53.5	33.3
CITCO FUNDS SERVICES	90	61	S5&C	48.5	48.9
SS&C	90	67	JPMORGAN	48.2	43.3
STATE STREET IFS	31	38	CITCO FUNDS SERVICES	37.1	33.6
SEI FUND ADMINISTRATION	28	23	NORTHERN TRUST	8.1	8.2
US BANCORP	23	21	HONG KONG SHANGHAI BANKING CORP	6.1	3.0
VITEOS FUND SERVICES	16	2	US BANCORP	5.9	4.6
GEN II FUND SERVICES	12	12	HEDGE SERVE	5.3	2.2
WELLS FARGO GFS	11	7	INTERTRUST FUNDS SERVICES	4.6	2.8
INTERTRUST FUNDS SERVICES	11	6	SEI FUND ADMINISTRATION	4.3	2.8
VIRTUS GROUP	10	10	GEN II FUND SERVICES	2.1	1.9
HEDGE SERVE	10	8	VIRTUS GROUP	2.0	1.7
NORTHERN TRUST	8	9	VITEOS FUND SERVICES	1.9	0.1
BANK OF NEW YORK	6	6	STONE COAST FUND SERVICES	1.9	1.6
ADMIRAL FUND ADMINISTRATION	6	6	MORGAN STANLEY FUNDS SERVICES	1.2	1.4
STONE COAST FUND SERVICES	5	7	WELLS FARGO GFS	1.1	1.2
O'CONNOR FUND SERVICES	5	4	BANK OF NEW YORK	0.6	0.9
MORGAN STANLEY FUNDS SERVICES	4	4	TMF ADMINISTRATION SERVICES	0.2	
AUGENTIUS FUND ADMINISTRATION	4	4	CONIFER FINANCIAL SERVICES	0.2	0.1
BNP CREDIT SUISSE	3	5	MITSUBISHI FUND SERVICES	0.2	0.2
TMF ADMINISTRATION SERVICES	3	2 <del>1</del>	FIDINAM	0.1	0.2
CONIFER FINANCIAL SERVICES	3	3	PARTNERS ADMIN	0.1	0.1
ALPS PRICE MEADOWS	3	2	ORANGEFIELD COLUMBUS FUND SERVICES	0.1	0.2
MITSUBISHI FUND SERVICES	2	3	MAPLES FUND SERVICES	0.1	0.1
MAPLES FUND SERVICES	2	1	ALPS PRICE MEADOWS	0.1	0.1

	Distresse	d-Debt		Distressed-Deb	
Auditor	2016	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	329	254	PRICE WATERHOUSE COOPERS	156.1	153.0
NR	145	64	ERNST YOUNG	76.1	53.6
ERNST YOUNG	132	119	KPMGRK	14.4	16.8
KPMGRK	64	47	NR	11.4	10.1
DELOITTE TOUCHE	26	21	GRANT THORNTON	7.0	7.5
CROWE HORWATH	25	26	DELOITTE TOUCHE	6.0	4.6
EISNERAMPER	19	22	BDO SEIDMAN	3.0	3.3
BDO SEIDMAN	9	9	EISNERAMPER	1.5	2.0
GRANT THORNTON	7	7	COHN RESNICK	0.8	1.0
HOLTHOUSE CARLIN VAN TRIGHT	7	7	MCGLADREY PULLEN	0.5	0.4
MCGLADREY PULLEN	4	2	CROWE HORWATH	0.3	0.5
COHN RESNICK	4	4	HOLTHOUSE CARLIN VAN TRIGHT	0.2	0.2
ANCHIN BLOCK ANCHIN	3	3	LILLING	0.2	0.2
LILLING	2	2	ANCHIN BLOCK ANCHIN	0.1	0.1
BAKER TILLEY VIRCHOW KRAUSE	1	-	SPICER JEFFERIES	0.1	0.0
SPICER JEFFERIES	1	1	DEMETRIUS BERKOWER	0.0	0.1
FULVIO ASSOCIATES	1	÷.	BAKER TILLEY VIRCHOW KRAUSE	0.0	
DEMETRIUS BERKOWER	1	1	CARR RIGGS & INGRAM	0.0	
MBAF-ERE CPAS	1	+	FULVIO ASSOCIATES	0.0	
CARR RIGGS & INGRAM	1	+	MBAF-ERE CPAS	0.0	

<sup>19</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Debt Diverse Advisors<sup>20</sup>

		iverse			liverse
Administrator	2016 2015		Administrator	2016	2015
SELF ADMINISTERED	884	685	SS&C	415.1	293.0
CITCO FUNDS SERVICES	180	150	SELF ADMINISTERED	163.1	159.9
SS&C	161	162	STATE STREET IFS	91.2	74.9
US BANCORP	144	131	US BANCORP	60.1	43.4
BANK OF NEW YORK	138	132	NORTHERN TRUST	54.3	46.3
STATE STREET IFS	115	75	CITCO FUNDS SERVICES	52.2	57.9
NORTHERN TRUST	105	96	BANK OF NEW YORK	50.6	73.9
JPMORGAN	52	36	WELLS FARGO GFS	29.5	22.3
SEI FUND ADMINISTRATION	45	32	HONG KONG SHANGHAI BANKING CORP	24.6	28.6
WELLS FARGO GFS	32	29	JPMORGAN	20.2	8.3
EQUINOXE ALTERNATIVE INVESTMENT SERVIC	26	23	MORGAN STANLEY FUNDS SERVICES	9.3	12.3
DEUTSCHE BANK	23	18	DEUTSCHE BANK	8.7	5.3
MITSUBISHI FUND SERVICES	18	13	MITSUBISHI FUND SERVICES	8.0	5.9
MAPLES FUND SERVICES	18	17	MAPLES FUND SERVICES	5.9	6.2
BROWN BROTHERS HARRIMAN	13	4	SEI FUND ADMINISTRATION	5.1	5.5
ILS FUND SERVICES	10	9	BROWN BROTHERS HARRIMAN	3.8	3.8
VIRTUS GROUP	9	6	STONE COAST FUND SERVICES	3.8	3.8
HEDGE SERVE	9	9	BNP CREDIT SUISSE	3.6	3.5
STONE COAST FUND SERVICES	9	9	VIRTUS GROUP	3.4	1.8
NAV CONSULTING	8	6	SANNE TRUST COMPANY	2.9	
BNP CREDIT SUISSE	8	5	PHOENIX FUND SERVICES	2.5	0.6
OPUS FUND SERVICES	7	1	ARGONAUT	2.3	2.4
HONG KONG SHANGHAI BANKING CORP	7	9	HEDGE SERVE	2.1	2.3
TMF ADMINISTRATION SERVICES	6	1	ILS FUND SERVICES	2.0	1.4
HC GLOBAL FUND SERVICES	6	~	EQUINOXE ALTERNATIVE INVESTMENT SERVICES	1.9	2.7
GEMINI FUND SERVICES	5	4	NATIONWIDE CORP - TREASURY DEPT	1.3	1.6

	Debt-D	iverse	1000 M 10	Debt-Diverse		
Auditor	2016	2015	Auditor	2016	2015	
NR	558	356	ERNST YOUNG	429.6	330.9	
DELOITTE TOUCHE	517	452	KPMGRK	183.2	136.5	
PRICE WATERHOUSE COOPERS	272	226	PRICE WATERHOUSE COOPERS	171.3	147.5	
ERNST YOUNG	268	225	DELOITTE TOUCHE	133.1	139.3	
KPMGRK	229	243	NR	73.2	56.7	
MCGLADREY PULLEN	62	75	GRANT THORNTON	59.8	30.5	
GRANT THORNTON	38	33	EISNERAMPER	19.8	8.7	
EISNERAMPER	34	33	MCGLADREY PULLEN	12.1	21.8	
BDO SEIDMAN	22	12	BAKER TILLEY VIRCHOW KRAUSE	2.1	1.6	
STOUT CAUSEY HORNING	18	19	BDO SEIDMAN	2.0	1.2	
WITHUM SMITH BROWN	15	-	SQUAR MILNER PETERSON MIRA WILLIAMSON	1.9	1.4	
MONTGOMERY COSCIA GREILLICH	15	- 20 <sub>100</sub>	MARCUM LLP	0.6	0.5	
DECOSIMO	11	7	KAUFMAN ROSSIN	0.5	0.5	
SQUAR MILNER PETERSON MIRA WILLIAMSON	8	7	MONTGOMERY COSCIA GREILLICH	0.4	+	
BAKER TILLEY VIRCHOW KRAUSE	8	8	BOGARDT	0.4	0.4	
MARCUM LLP	6	5	WOLF CO	0.3	0.3	
KAUFMAN ROSSIN	5	4	DECOSIMO	0.3	0.3	
MAYER HOFFMAN MCCANN	5	5	UNTRACHT EARLY	0.3	0.2	
BOGARDT	5	5	MAYER HOFFMAN MCCANN	0.2	0.3	
COHN RESNICK	4	÷	STOUT CAUSEY HORNING	0.2	0.2	
WOLF CO	4	4	SD MAYER	0.2	0.2	
DONOHUE ASSOCIATES	3	3	MKO PARTNERS	0.2	0.0	
UNTRACHT EARLY	3	2	WEAVER	0.2	25	
SD MAYER	3	4	DIXON HUGHES GOODMAN	0.1		
WEAVER	3	÷.	COHN RESNICK	0.1	-	
WEISERMAZARS	3	3	FULVIO ASSOCIATES	0.1	0.1	

<sup>&</sup>lt;sup>20</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Private Equity Advisors<sup>21</sup>

	PE			PE		
SS&C STATE STREET IFS GEN II FUND SERVICES IPMORGAN	2016	2015	Administrator	2016	2015	
SELF ADMINISTERED	7,077	6,290	SELF ADMINISTERED	1,403.6	1,294.7	
SS&C	611	538	STATE STREET IFS	148.6	142.2	
STATE STREET IFS	345	365	BANK OF NEW YORK	115.3	104.5	
GEN II FUND SERVICES	270	180	SS&C	100.4	114.2	
JPMORGAN	215	199	GEN II FUND SERVICES	61.0	35.0	
NORTHERN TRUST	170	159	SEI FUND ADMINISTRATION	55.8	36.6	
SEI FUND ADMINISTRATION	148	89	JPMORGAN	54.5	49.0	
AZTEC FINANCIAL SERVICES	140	106	NORTHERN TRUST	53.0	55.7	
CITCO FUNDS SERVICES	123	91	AZTEC FINANCIAL SERVICES	47.4	31.9	
IPES PRIVATE EQUITY FUNDS SERVICES	121	89	FLSV FUND ADMINISTRATION SERVICES	28.4	27.7	
FLSV FUND ADMINISTRATION SERVICES	119	113	CITCO FUNDS SERVICES	25.4	18.6	
BANK OF NEW YORK	109	116	SALTGATE	23.2	19.8	
AUGENTIUS FUND ADMINISTRATION	107	88	IPES PRIVATE EQUITY FUNDS SERVICES	20.8	20.9	
STANDISH MANAGEMENT	75	44	HERITAGE GROUP	20.6	24.3	
MITSUBISHI FUND SERVICES	67	58	AUGENTIUS FUND ADMINISTRATION	20.2	15.8	
LEVERPOINT	61	55	MITSUBISHI FUND SERVICES	14.1	13.9	
DEUTSCHE BANK	57	54	DEUTSCHE BANK	11.8	9.6	
HERITAGE GROUP	47	48	LEVERPOINT	10.9	9.5	
GRANT THORNTON	45	33	MORGAN SHARPE ADMINISTRATION	9.6	13.0	
TRIDENT FUND SERVICES	43	42	BEDELL FUND SERVICES	8.7	11.8	
US BANCORP	42	35	GP FUND SOLUTIONS	8.4	4.8	
APEX FUND SERVICES	37	26	TRIDENT FUND SERVICES	8.4	10.0	
SALTGATE	33	26	ORANGEFIELD COLUMBUS FUND SERVICES	6.9	5.2	
MAPLES FUND SERVICES	28	14	LANGHAM HALL	6.6	3.9	
PEF SERVICES	28	22	STANDISH MANAGEMENT	6.6	5.0	
ELIAN FUND SERVICES	27	7	BNP CREDIT SUISSE	6.5	7.3	

	PE	Second Second		PI	Elenne
Auditor	2016	2015	Auditor	2016	2015
PRICE WATERHOUSE COOPERS	2,073	1,923	PRICE WATERHOUSE COOPERS	654.3	617.6
KPMGRK	1,733	1,670	ERNST YOUNG	499.0	467.2
ERNST YOUNG	1,645	1,479	KPMGRK	459.1	433.7
DELOITTE TOUCHE	1,590	1,381	DELOITTE TOUCHE	449.5	426.1
NR	1,588	1,206	MCGLADREY PULLEN	73.0	56.5
MCGLADREY PULLEN	595	522	NR	58.0	39.2
GRANT THORNTON	312	331	GRANT THORNTON	34.4	42.7
EISNERAMPER	226	144	EISNERAMPER	33.1	30.4
BDO SEIDMAN	214	149	BDO SEIDMAN	30.6	13.3
PLANTE MORAN	93	71	CROWE HORWATH	20.9	17.0
CROWE HORWATH	81	66	MARCUM LLP	18.5	1.5
MARCUM LLP	63	42	BKD	7.1	6.1
COHN RESNICK	57	42	PLANTE MORAN	6.6	5.5
BAKER TILLEY VIRCHOW KRAUSE	45	39	BAKER TILLEY VIRCHOW KRAUSE	6.0	4.2
BKD	30	14	MAZARS	3.4	2.3
MONTGOMERY COSCIA GREILLICH	28	16	COHN RESNICK	3.0	1.7
WHITLEY PENN	27	3	MAYER HOFFMAN MCCANN	2.9	1.0
WITHUM SMITH BROWN	25	1	STOUT CAUSEY HORNING	2.2	2.3
WEAVER	23	18	WEAVER	1.7	0.7
MAZARS	23	12	FRIEDMAN	1.4	1.0
STOUT CAUSEY HORNING	22	21	S.R. BATLIBOI AND COMPANY	1.3	0.6
SPICER JEFFERIES	19	19	CHERRY BEKAERT & HOLLAND	1.0	1.0
MAYER HOFFMAN MCCANN	19	13	MONTGOMERY COSCIA GREILLICH	1.0	1.0
ANCHIN BLOCK ANCHIN	18	14	MOSS ADAMS	0.8	0.1
RICHEY MAY CO	18	2	ANCHIN BLOCK ANCHIN	0.7	0.7
DECOSIMO	17	15	CBIZ MAYER HOFFMAN MCCANN	0.7	0.6

<sup>&</sup>lt;sup>21</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Real Estate Advisors<sup>22</sup>

	RE				E
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	2,564	2,261	SELF ADMINISTERED	426.6	375.1
STATE STREET IFS	101	90	STATE STREET IFS	23.1	14.1
SS&C	92	74	S5&C	19.8	15.4
CITCO FUNDS SERVICES	72	72	MITSUBISHI FUND SERVICES	7.9	7.8
MITSUBISHI FUND SERVICES	42	39	CORTLAND FUND SERVICES	7.6	4.2
CORTLAND FUND SERVICES	42	39	GEN II FUND SERVICES	6.5	4.0
BANK OF NEW YORK	40	43	CITCO FUNDS SERVICES	5.8	8.6
US BANCORP	32	33	SANNE TRUST COMPANY	4.7	4.3
AMG NATIONAL TRUST BANK	27	32	CRESTBRIDGE	4.7	3.1
SEI FUND ADMINISTRATION	26	26	REAL ESTATE SYSTEMS IMPLEMENTATION GROUP	4.6	4.1
REAL ESTATE SYSTEMS IMPLEMENTATION GROU	25	20	LANGHAM HALL	4.6	1.9
GEN II FUND SERVICES	24	14	JPMORGAN	3.2	2.4
NORTHERN TRUST	20	6	BANK OF NEW YORK	3.2	3.5
FIDELITY	20	18	SANDSPOINT CAPITAL ADVISORS	3.0	2.3
SANNE TRUST COMPANY	19	14	FIDELITY	3.0	2.2
ROYAL BANK OF CANADA	17	3	HARBOUR FINANCIAL SERVICES	2.9	3.1
STANDISH MANAGEMENT	15	7	US BANCORP	2.8	4.9
LANGHAM HALL	15	7	DEUTSCHE BANK	2.7	1.9
SANDSPOINT CAPITAL ADVISORS	12	12	AZTEC FINANCIAL SERVICES	2.6	1.8
LEVERPOINT	11	11	BEPCO	2.3	2.2
DEUTSCHE BANK	11	10	CT CORPORATION	2.2	1.5
TRIDENT FUND SERVICES	11	6	NORTHERN TRUST	2.2	1.4
BEPCO	11	11	BROWN BROTHERS HARRIMAN	2.0	0.7
JPMORGAN	10	10	MORGAN STANLEY FUNDS SERVICES	2.0	2.4
WOODFIELD FUND ADMINISTRATION	10	14	CIM GLOBAL BUSINESS	1.5	1.5
UMB JDC FUND SERVICES	10	4	SALTGATE	1.5	0.6

				RE	
Auditor	2016	2015	Auditor	2016	2015
ERNST YOUNG	647	577	ERNST YOUNG	154.1	140.2
KPMGRK	565	522	DELOITTE TOUCHE	132.5	99.9
NR	508	421	PRICE WATERHOUSE COOPERS	108.4	100.4
PRICE WATERHOUSE COOPERS	437	377	KPMGRK	98.4	94.5
DELOITTE TOUCHE	433	363	NR	11.9	8.3
COHN RESNICK	144	129	GRANT THORNTON	9.1	7.4
MCGLADREY PULLEN	101	70	WEISERMAZARS	7.9	7.3
GRANT THORNTON	69	57	COHN RESNICK	6.0	4.9
MOSS ADAMS	63	70	MCGLADREY PULLEN	5.3	2.7
BDO SEIDMAN	58	42	BDO SEIDMAN	5.1	3.4
BKM SOWAN HORAN	50	48	MOSS ADAMS	3.5	3.1
NOVOGRADAC	44	37	MARCUM LLP	2.8	2.8
MARCUM LLP	27	22	NOVOGRADAC	2.7	1.9
BF BORGERS CPA	19	-	BERGE & LUNDAL REVISJONSSELSKAP AS	2.1	2.4
MAYER HOFFMAN MCCANN	18	11	MARGOLIN WINER & EVENS	1.9	1.4
STOUT CAUSEY HORNING	17	17	FRAZIER DEETER	1.4	1.2
KEITER STEPHENS	14	11	KATZ SAPPER MILLER	1.4	1.0
COHEN FUND AUDIT SERVICES	12	9	MAYER HOFFMAN MCCANN	1.3	0.8
PLANTE MORAN	11	8	EKS&H	1.2	0.9
FRAZIER DEETER	11	4	PLANTE MORAN	1.0	0.7
HOLTHOUSE CARLIN VAN TRIGHT	11	7	BAKER TILLEY VIRCHOW KRAUSE	1.0	1.9
WEISERMAZARS	10	10	JONES, MCKNIGHT & EDMONSON, P.C.	0.9	÷2
MOURANT INTERNATIONAL FINANCE ADMINISTRATION	10	8	ELDE BAILLY	0.9	0.8
KATZ SAPPER MILLER	9	9	BKM SOWAN HORAN	0.7	0.8
EISNERAMPER	8	9	MAZARS	0.7	0.3
KAUFMAN ROSSIN	8	4	COHEN FUND AUDIT SERVICES	0.6	0.5

<sup>&</sup>lt;sup>22</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Venture Capital Advisors<sup>23</sup>

	VC			VC	
Administrator	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	4,768	3,977	SELF ADMINISTERED	432.0	376.4
ASSURE FUND SERVICES	863	371	STANDISH MANAGEMENT	18.4	14.4
STANDISH MANAGEMENT	227	165	S5&C	17.3	13.5
VENTURE BACK OFFICE	121	108	STATE STREET IFS	16.7	10.6
SS&C	111	92	ADURO ADVISORS	4.7	1.6
VMS FUND ADMINISTRATION	86	69	VMS FUND ADMINISTRATION	4.7	3.7
LEVERPOINT	70	48	CITCO FUNDS SERVICES	4.0	1.2
ADURO ADVISORS	62	38	LEVERPOINT	3.3	2.1
STATE STREET IFS	43	36	BROADSCOPE	2.9	1.4
FAMILY CAPITAL MANAGEMENT	35	32	GP FUND SOLUTIONS	2.3	1.8
KRANZ & ASSOCIATES	34	33	AZTEC FINANCIAL SERVICES	2.1	2.4
CORNERSTONE FUND SERVICES	28	-	ELIAN FUND SERVICES	1.8	1.6
BROADSCOPE	25	14	AUGENTIUS FUND ADMINISTRATION	1.8	0.7
AZTEC FINANCIAL SERVICES	20	17	GREENOUGH CONSULTING GROUP	1.6	1.6
COMPLETE FINANCIAL OPS	17	14	NORTHERN TRUST	1.6	0.1
TRIDENT FUND SERVICES	16	16	TRIDENT FUND SERVICES	1.5	1.2
STRATA FUND SERVICES	15	•	JPMORGAN	1.3	1.5
GP FUND SOLUTIONS	14	10	TMF ADMINISTRATION SERVICES	1.3	0.9
AUGENTIUS FUND ADMINISTRATION	13	5	INVESTMENT PARTNERSHIP SERVICES	1.1	0.8
CONIFER FINANCIAL SERVICES	13	11	CARTA FUND SERVICES	1.1	0.5
ANDOVER MANAGEMENT GROUP	12		CIM GLOBAL BUSINESS	0.9	0.6
REDBRICK ASSOCIATES	11	2°	US BANCORP	0.9	0.8
INVESTMENT PARTNERSHIP SERVICES	10	7	KRANZ & ASSOCIATES	0.9	0.9
CITCO FUNDS SERVICES	9	9	VENTURE BACK OFFICE	0.8	0.7
NORTHERN TRUST	9	6	CONIFER FINANCIAL SERVICES	0.8	0.6
APEX FUND SERVICES	9	2	MAYFLOWER MANAGEMENT SERVICES	0.7	0.7

	VC	2		Ve	Carrier
Auditor	2016	2015	Auditor	2016	2015
NR	3,210	2,004	PRICE WATERHOUSE COOPERS	197.5	163.8
PRICE WATERHOUSE COOPERS	806	729	ERNST YOUNG	100.0	90.1
ERNST YOUNG	549	545	KPMGRK	59.4	51.0
KPMGRK	480	479	DELOITTE TOUCHE	50.5	37.5
BDO SEIDMAN	408	324	BDO SEIDMAN	43.8	35.6
DELOITTE TOUCHE	319	281	NR	26.9	19.4
MCGLADREY PULLEN	230	176	MCGLADREY PULLEN	19.9	15.8
FRANK RIMERMAN CO	98	47	FRANK RIMERMAN CO	8.4	5.0
EISNERAMPER	92	76	EISNERAMPER	6.0	5.4
MOSS ADAMS	67	46	MAYER HOFFMAN MCCANN	5.2	6.5
SENSIBA SAN FELIPO	65	51	MITCHELL TITUS	3.8	3.7
SPICER JEFFERIES	53	9	SENSIBA SAN FELIPO	3.1	2.3
DECOSIMO	41	41	MOSS ADAMS	2.2	1.7
MITCHELL TITUS	28	27	GRANT THORNTON	1.6	1.3
PLANTE MORAN	27	21	PLANTE MORAN	1.5	0.9
GRANT THORNTON	24	24	DECOSIMO	1.1	1.2
BURR PILGER MAYER	21	20	COHN RESNICK	1.0	1.2
MAYER HOFFMAN MCCANN	19	20	SPICER JEFFERIES	0.8	0.2
AMANINO	14	13	EDO	0.7	
TO BE DETERMINED	14	10	UBERNOSKY & MAJERES	0.6	0.4
EKS&H	13	17	AMANINO	0.6	0.5
DASZKOWSKI, TOMPKINS, WEG & CARBONELLA	11	+	TO BE DETERMINED	0.5	0.3
MARCUM LLP	9	8	LATTIMORE BLACK MORGAN & CAIN	0.5	0.2
CROWE HORWATH	8	8	EKS&H	0.4	0.9
FESNAK ASSOCIATES	8	14	BURR PILGER MAYER	0.3	0.3
BAKER TILLEY VIRCHOW KRAUSE	7	6	LILLING	0.3	0.3

<sup>&</sup>lt;sup>23</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Securitized Asset Advisors<sup>24</sup>

	SA	F		SAF	
Administrator SELF ADMINISTERED	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	288	233	MAPLES FUND SERVICES	72.1	53.6
MAPLES FUND SERVICES	232	176	US BANCORP	58.3	38.0
US BANCORP	198	148	BANK OF NEW YORK	53,9	37.9
BANK OF NEW YORK	181	136	SELF ADMINISTERED	48.3	47.1
SS&C	105	77	STATE STREET IFS	30.5	21.1
STATE STREET IFS	85	49	DEUTSCHE BANK	25.8	18.6
DEUTSCHE BANK	74	54	SS&C	22.2	11.7
WELLS FARGO GFS	45	27	APPLEBY FUND SERVICES	12.6	9.0
INTERTRUST FUNDS SERVICES	33	33	CITCO FUNDS SERVICES	11.1	5.3
APPLEBY FUND SERVICES	32	22	VIRTUS GROUP	9.3	3.5
VIRTUS GROUP	26	9	WELLS FARGO GFS	9.2	4.5
WALKERS SPV LIMITED ADMINISTRATOR	25	13	INTERTRUST FUNDS SERVICES	7.4	8.4
CITCO FUNDS SERVICES	22	11	JPMORGAN	6.5	3.5
TMF ADMINISTRATION SERVICES	21	16	TMF ADMINISTRATION SERVICES	4.8	4.0
SEI FUND ADMINISTRATION	12	4	BNP CREDIT SUISSE	4.8	3.0
JPMORGAN	12	8	WALKERS SPV LIMITED ADMINISTRATOR	4.0	1.6
MITSUBISHI FUND SERVICES	11	8	CORTLAND FUND SERVICES	2.1	2.4
NAV CONSULTING	11	8	SANNE TRUST COMPANY	1.9	0.9
CORTLAND FUND SERVICES	10	8	SEI FUND ADMINISTRATION	1.9	0.1
BNP CREDIT SUISSE	9	12	BROWN BROTHERS HARRIMAN	1.8	0.3
SANNE TRUST COMPANY	7	3	HONG KONG SHANGHAI BANKING CORP	1.4	0.8
SALTGATE	7	200 - C	EVALON FINANCIAL SERVICES	1.3	0.4
FLSV FUND ADMINISTRATION SERVICES	6	12	SALTGATE	1.2	220
QUEENSGATE SPV SERVICES	5	5	VOLAW TRUST SERVICES	1.1	1.1
ADMINISYSTEMS	5	6	ALPS PRICE MEADOWS	0.9	0.9
BROWN BROTHERS HARRIMAN	4	2	FLSV FUND ADMINISTRATION SERVICES	0.9	

	SAI	·		SAF	
Auditor	2016	2015	Auditor	2016	2015
NR	874	705	NR	215.5	174.7
KPMGRK	167	95	KPMGRK	48.8	26.9
PRICE WATERHOUSE COOPERS	143	98	DELOITTE TOUCHE	33.8	27.0
DELOITTE TOUCHE	95	89	PRICE WATERHOUSE COOPERS	33.6	24.9
ERNST YOUNG	74	49	ERNST YOUNG	29.5	21.2
MCGLADREY PULLEN	14	10	GRANT THORNTON	2.8	1.2
GRANT THORNTON	11	7	DIXON HUGHES GOODMAN	2.7	1.5
CITRIN COOPERMAN	10	9	BDO SEIDMAN	2.7	2.7
BDO SEIDMAN	8	7	MCGLADREY PULLEN	1.5	0.8
DIXON HUGHES GOODMAN	6	6	CITRIN COOPERMAN	0.7	0.2
L'ALLIANCE REVISION S.A.R.L.	6	6	L'ALLIANCE REVISION S.A.R.L.	0.7	1.2
BAKER TILLEY VIRCHOW KRAUSE	5	3	EISNERAMPER	0.5	1.0
TAIT WELLER BAKER	5	1	CROWE HORWATH	0.4	0.1
EISNERAMPER	4	5	TAIT WELLER BAKER	0.3	0.2
WEISERMAZARS	3	4	HALL CHADWICK	0.2	0.2
SPICER JEFFERIES	3	4	COHN RESNICK	0.2	
CROWE HORWATH	3	1	BAKER TILLEY VIRCHOW KRAUSE	0.1	0.0
RAICHE ENDE MALTER CO	3	-	SPICER JEFFERIES	0.1	0.2
GETTRY MARCUS, CPA P.C.	3		EDELSTEIN	0.1	0.2
COLLINS BARROW	2	2	GETTRY MARCUS, CPA P.C.	0.1	
COHN RESNICK	1	÷.	RAICHE ENDE MALTER CO	0.0	
NOVOGRADAC	1	1	COLLINS BARROW	0.0	0.0
AMANINO	1	2	SANDLER & COMPANY	0.0	0,0
WEAVER	1	1	ROSENBERG RICH BAKER BERMAN CO	0.0	0.0
SANDLER & COMPANY	1	1	WEAVER	0.0	0.0
ROSENBERG RICH BAKER BERMAN CO	1	1	BERDON	0.0	

<sup>24</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Emerging Market Advisors<sup>25</sup>

	EN	- I	
Administrator	2016	2015	Administrator
SELF ADMINISTERED	253	133	CITCO FUNDS SERVICES
STATE STREET IFS	98	81	SS&C
CITCO FUNDS SERVICES	92	71	STATE STREET IFS
NORTHERN TRUST	55	52	HONG KONG SHANGHAI BANKING CORP
HONG KONG SHANGHAI BANKING CORP	50	34	NORTHERN TRUST
SS&C	47	.3.3	BNP CREDIT SUISSE
DEUTSCHE BANK	29	23	ROYAL BANK OF CANADA
MITSUBISHI FUND SERVICES	25	14	SELF ADMINISTERED
ROYAL BANK OF CANADA	25	21	MITSUBISHI FUND SERVICES
BNP CREDIT SUISSE	23	26	US BANCORP
TRIDENT FUND SERVICES	20	3	MAPLES FUND SERVICES
BANK OF NEW YORK	19	21	MORGAN STANLEY FUNDS SERVICES
BROWN BROTHERS HARRIMAN	16	19	BANK OF NEW YORK
MAPLES FUND SERVICES	15	10	NORTHEAST RETIREMENT SERVICES
US BANCORP	14	16	TRIDENT FUND SERVICES
MORGAN STANLEY FUNDS SERVICES	12	9	BROWN BROTHERS HARRIMAN
APEX FUND SERVICES	10	9	DEUTSCHE BANK
AUGENTIUS FUND ADMINISTRATION	9	2	JPMORGAN
JPMORGAN	7	5	APEX FUND SERVICES
ALPS PRICE MEADOWS	7	5	WELLS FARGO GFS
CIM GLOBAL BUSINESS	7	6	INTERNATIONAL MANAGEMENT
WELLS FARGO GFS	6	2	CONIFER FINANCIAL SERVICES
CONIFER FINANCIAL SERVICES	6	5	AUGENTIUS FUND ADMINISTRATION
TMF ADMINISTRATION SERVICES	5	2	SOCIETE GENERALE
SOCIETE GENERALE	5	5	SANNE TRUST COMPANY
ADMIRAL FUND ADMINISTRATION	4	2	MILLENNIUM FUND SERVICES

	EM	Lange and the second		EM		
Auditor	2016	2015	Auditor	2016	2015	
NR	215	99	ERNST YOUNG	68.0	48.7	
PRICE WATERHOUSE COOPERS	211	190	PRICE WATERHOUSE COOPERS	64.2	75.6	
KPMGRK	186	127	KPMGRK	53.3	41.1	
ERNST YOUNG	154	117	DELOITTE TOUCHE	21.9	15.1	
DELOITTE TOUCHE	74	61	BDO SEIDMAN	2.2	2.5	
MCGLADREY PULLEN	10	8	MCGLADREY PULLEN	1.6	1.2	
BDO SEIDMAN	8	6	ANCHIN BLOCK ANCHIN	1.0	1.5	
BAKER TILLEY VIRCHOW KRAUSE	6	6	NR	0.7	0.5	
ARTHUR BELL	6	4	GRANT THORNTON	0.4	0.4	
ANCHIN BLOCK ANCHIN	5	5	ARTHUR BELL	0.4	0.3	
EISNERAMPER	4	10	EISNERAMPER	0.3	3.4	
GRANT THORNTON	4	3	NEXIA BAKER & ARENSON	0.2	0.1	
PATKE ASSOCIATES	4	2	BAKER TILLEY VIRCHOW KRAUSE	0.2	0.2	
SPICER JEFFERIES	3	2	PATKE ASSOCIATES	0.1	0.0	
MOSS ADAMS	3	3	SPICER JEFFERIES	0.1	0.0	
LIGGETT, VOGT & WEBB P.A.	3	3	WEAVER	0.0	0.1	
KOSSLER & COMPANY	2	+	BULBUL SHARMA CO	0.0	0.1	
KAUFMAN ROSSIN	1		KOSSLER & COMPANY	0.0		
WEAVER	1	1	NOT APPLICABLE	0.0	0.0	
BBD CPA	1	1	PRIME MANAGEMENT	0.0	÷	
PRIME MANAGEMENT	1		MOSS ADAMS	0.0	0.3	
WEGNER	1	1	LIGGETT, VOGT & WEBB P.A.	0.0	0.0	
RAINES & FISCHER	1	1	WEGNER	0.0	0.0	
BULBUL SHARMA CO	1	1	T.R. CHADHA & CO.	0.0	0.0	
NEXIA BAKER & ARENSON	1	1	BBD CPA	0.0	0.0	
NOT APPLICABLE	1	1	KAUFMAN ROSSIN	0.0	-	

<sup>25</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

EM 2015

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3.2 3.0 2.9 2.8 2.7 2.7 2.2 2.1 1.7 1.2 1.2 1.2 0.9 0.8 0.8

## Top 25 Administrator & Auditor-Fund of Funds Advisors<sup>26</sup>

Administrator	FOF			FOF	
	2016	2015	Administrator	2016	2015
SELF ADMINISTERED	2,912	2,874	SELF ADMINISTERED	334.1	358.2
SS&C	669	661	SS&C	145.7	118.1
STATE STREET IFS	472	478	CITCO FUNDS SERVICES	107.3	89.5
BANK OF NEW YORK	415	513	STATE STREET IFS	104.7	118.3
SEI FUND ADMINISTRATION	386	369	BANK OF NEW YORK	86.7	76.4
CITCO FUNDS SERVICES	279	263	SEI FUND ADMINISTRATION	60.1	59.9
US BANCORP	234	72	MITSUBISHI FUND SERVICES	36.7	34.4
MITSUBISHI FUND SERVICES	197	190	HEDGE SERVE	19.9	5.6
UMB JDC FUND SERVICES	165	176	NORTHERN TRUST	16.7	5,4
ALPS PRICE MEADOWS	151	139	CARTA FUND SERVICES	15.8	
STANDISH MANAGEMENT	131	88	UMB JDC FUND SERVICES	14.0	14.8
STONE PINE ACCOUNTING SERVICES	124	93	RENAISSANCE TECHNOLOGIES	12.6	13.9
NORTHERN TRUST	87	33	ALPS PRICE MEADOWS	12.5	11.7
HEDGE SERVE	85	22	US BANCORP	11.3	7.1
NAV CONSULTING	77	53	CONIFER FINANCIAL SERVICES	9.9	45.6
CONIFER FINANCIAL SERVICES	60	67	STONE PINE ACCOUNTING SERVICES	9.7	7.7
CARTA FUND SERVICES	58	-	ADMIRAL FUND ADMINISTRATION	9.5	10.9
CREDIT AGRICOLE FUNDS SERVICES	53	42	STANDISH MANAGEMENT	9.3	6.6
BRANDYWINE TRUST	48	46	FLSV FUND ADMINISTRATION SERVICES	8.1	4.3
ADMIRAL FUND ADMINISTRATION	46	46	BRANDYWINE TRUST	7.5	7.2
DEUTSCHE BANK	35	36	JPMORGAN	7.3	7.2
JPMORGAN	34	34	MORGAN STANLEY FUNDS SERVICES	7.0	7.1
FLSV FUND ADMINISTRATION SERVICES	34	13	DEUTSCHE BANK	5.0	3.6
MORGAN STANLEY FUNDS SERVICES	31	26	BNP CREDIT SUISSE	4.6	6.3
ESSENTIAL FUND SERVICES	27	25	HONG KONG SHANGHAI BANKING CORP	4.4	4.6
TRIDENT FUND SERVICES	26	15	CREDIT AGRICOLE FUNDS SERVICES	4.0	4.0

	FOF			FOF	
Auditor	2016	2015	Auditor	2016	2015
ERNST YOUNG	1,541	1,466	ERNST YOUNG	323.0	296.3
KPMGRK	1,360	1,230	PRICE WATERHOUSE COOPERS	214.3	243.8
PRICE WATERHOUSE COOPERS	1,172	1,197	DELOITTE TOUCHE	211.6	211.0
NR	966	761	KPMGRK	179.5	164.9
DELOITTE TOUCHE	773	729	GRANT THORNTON	31.4	14.8
MCGLADREY PULLEN	289	271	NR	29.4	27.5
GRANT THORNTON	169	76	EISNERAMPER	21.3	19.6
EISNERAMPER	100	80	BDO SEIDMAN	16.7	20.5
BDO SEIDMAN	89	82	MCGLADREY PULLEN	15.8	15.6
DECOSIMO	72	78	DECOSIMO	8.1	9.5
SPICER JEFFERIES	71	63	SPICER JEFFERIES	5.9	2.5
COHN RESNICK	63	67	BAKER TILLEY VIRCHOW KRAUSE	5.8	1.2
ARTHUR BELL	44	32	COHN RESNICK	3.9	4.9
CITRIN COOPERMAN	40	26	MAYER HOFFMAN MCCANN	3.4	2.8
RAINES & FISCHER	33	32	HORTY HORTY	3.2	3.1
HOBE LUCAS CPA	32	31	RAINES & FISCHER	3.1	3.3
ROTENBERG MERIL SOLOMON BERTIGER & GUTTILLA	32	29	WITHUM SMITH BROWN	2.0	0.4
WITHUM SMITH BROWN	31	2	MARCUM LLP	2.0	1.8
EKS&H	29	23	KEITER STEPHENS	1.8	1.3
BURR PILGER MAYER	26	24	MITCHELL TITUS	1.6	2.3
MARCUM LLP	23	22	CITRIN COOPERMAN	1.5	1.0
CF & CO	21	24	CLARK SCHAEFER HACKETT	1.2	1.2
MAYER HOFFMAN MCCANN	20	19	ARTHUR BELL	1.1	1.7
ZION SYNEK ASSOCIATES	20	21	MOSS ADAMS	0.9	0.5
ANCHIN BLOCK ANCHIN	19	12	DEMETRIUS BERKOWER	0.8	0.2
HORWICH COLEMAN LEVIN	19	19	MEISEL TEUTER LEWIS	0.7	0.6

<sup>&</sup>lt;sup>26</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.

## Top 25 Administrator & Auditor-Quantitative Advisors<sup>27</sup>

	Quant				Quant	
Administrator	2016	2015	Administrator		2015	
SELF ADMINISTERED	114	50	CITCO FUNDS SERVICES	126.1	33.0	
STATE STREET IFS	95	68	STATE STREET IFS	83.6	80.5	
CITCO FUNDS SERVICES	77	47	SELF ADMINISTERED	35.0	13.0	
SS&C	44	35	BANK OF NEW YORK	22.7	24.4	
NORTHERN TRUST	23	22	NORTHERN TRUST	6.7	5.9	
BANK OF NEW YORK	22	20	SS&C	6.6	4.6	
NAV CONSULTING	21	16	STONE COAST FUND SERVICES	5.4	2.4	
STONE COAST FUND SERVICES	13	8	ADMIRAL FUND ADMINISTRATION	4.1	1.3	
PERENNIAL FUND SERVICES	7	4	US BANCORP	2.4	1.4	
US BANCORP	6	5	MITSUBISHI FUND SERVICES	2.4	2.6	
WOODFIELD FUND ADMINISTRATION	6	6	CREDIT AGRICOLE FUNDS SERVICES	1.8	0.0	
MITSUBISHI FUND SERVICES	5	5	SEI FUND ADMINISTRATION	1.1	0.2	
CREDIT AGRICOLE FUNDS SERVICES	5	1	EQUINOXE ALTERNATIVE INVESTMENT SERVICES	0.8	0.4	
EQUINOXE ALTERNATIVE INVESTMENT SERVIC	4	3	CENTAUR FUND SERVICES	0.8		
SEI FUND ADMINISTRATION	4	2	PERENNIAL FUND SERVICES	0.5	0.4	
ISIS FUNDS SERVICES	3	3	NAV CONSULTING	0.4	0.3	
LICCAR	3	2	LICCAR	0.2	0.2	
CORTLAND FUND SERVICES	2	2	ISIS FUNDS SERVICES	0.1	0.1	
HC GLOBAL FUND SERVICES	2	10	WOODFIELD FUND ADMINISTRATION	0.1	0.1	
MIZUHO TRUST BANKING CO USA	1	3	ROYAL BANK OF CANADA	0.1	0.1	
ROYAL BANK OF CANADA	1	1	MIZUHO TRUST BANKING CO USA	0.1	0.3	
TZUR CAPITAL MANAGEMENT	1		HC GLOBAL FUND SERVICES	0.1	2.6	
ADMIRAL FUND ADMINISTRATION	1	1	TZUR CAPITAL MANAGEMENT	0.0		

Auditor	Quant		Auditor	Quant	
	2016	2015		2016	2035
NR	100	53	ERNST YOUNG	130.3	35.9
PRICE WATERHOUSE COOPERS	99	57	PRICE WATERHOUSE COOPERS	111.2	95.2
ERNST YOUNG	90	56	NR	23.2	13.5
DELOITTE TOUCHE	61	49	DELOITTE TOUCHE	17.2	13.2
KPMGRK	40	35	KPMGRK	10,5	6.0
MCGLADREY PULLEN	24	16	MCGLADREY PULLEN	3.5	3.3
EISNERAMPER	17	17	BDO SEIDMAN	2.4	4.8
BDO SEIDMAN	7	14	EISNERAMPER	1.0	1.3
BRIGGS VESELKA CO	4	4	KINETIC PARTNERS CAYMAN	1.0	-
GRANT THORNTON	4	2	BRIGGS VESELKA CO	0.4	0.3
SPICER JEFFERIES	4	5	GRANT THORNTON	0.2	0.0
DEMETRIUS BERKOWER	3	1	DEMETRIUS BERKOWER	0.2	0.2
ARTHUR BELL	3	*i <sup>00</sup>	SPICER JEFFERIES	0.2	0.2
PLANTE MORAN	2	÷	SAXBST	0.1	-
KEITER STEPHENS	2	2	WEAVER	0.0	0.0
WEAVER	2	1	MOUNTJOY CHILTON MEDLEY	0.0	-
WITHUM SMITH BROWN	1	2	ARTHUR BELL	0.0	-
SANDLER & COMPANY	1		NAV CONSULTING	0.0	0.0
SAXBST	1		SANDLER & COMPANY	0.0	-
KINETIC PARTNERS CAYMAN	1	<u>_</u>	WITHUM SMITH BROWN	0.0	0.0
CITRIN COOPERMAN	1	( <b>*</b> )	PLANTE MORAN	0.0	-
MOUNTJOY CHILTON MEDLEY	1	-	KEITER STEPHENS	0.0	0.0
NAV CONSULTING	1	1	CITRIN COOPERMAN	2	

<sup>&</sup>lt;sup>27</sup> Left tables represent # of funds, right tables represent Private Fund Assets under Management (PFRAUM). PFRAUM is listed in \$ billions.