



CONVERGENCE

OPTIMAL PERFORMANCE

Alternative Asset Management Industry¹ Convergence Insights Twelve Months Ended June 30, 2017

Strong Growth Continued over the Twelve Months Ended June 30, 2017!

Our quarterly year-over-year analysis of the Alternative Asset Industry digs deeply into the business activities across 8,000 + Managers advising 51,000+ private funds to observe and report changes that are taking shape across the industry. The industry continued to exhibit strong growth within and across various market segments for the twelve months-ended June 30, 2017. Please refer to page 14 for key definitions of terms used throughout this report.

- *Capital Flows into Alternative Funds remain brisk, increasing 6%*
 - *Flows into Hedge Funds increased by 12%, driven by:*
 - *Flows into existing HF increased 15%*
 - *Flows into new HF declined by 1%*
 - *Flows into Private Equity Funds increased by 2%, driven by:*
 - *Flows into existing PE Funds declined by 36%*
 - *Flows into new PE Funds increased by 49%*
- *The number of alternative Managers and Advisers increased by 4%*
- *The number of Private Funds increased by 6.4%*
- *The USD value of Private Fund Assets increased by 8.1%*
- *The number of Funds Added and Dropped equaled 15.9% and 9.7%*
- *The USD value of Fund Assets Added and Dropped increased by 8.7% and 2.7%*
- *Headcount across the industry increased by 5.4%*
- *High Complexity/Risk Profiles across the industry increased by 3.7%*
- *Activity across the Regulatory Actions increased by 5.3%*
- *The number of Service Providers increased by 1%*
- *Operating Efficiency improved by 2%*

Please go to www.convergenceinc.com for information on Convergence or call John Phinney, George Evans or George Gainer @ 203-956-4824.

¹ The Alternative Asset Management Industry is defined as all RIAs advising one or more Private Funds. Private Funds include Hedge, Private Equity, Real Estate, Venture Capital, Structured Asset, Liquidity and Other Funds.

New & Incremental Capital into Alternative Funds²

Convergence Insights

Capital flowing into new and existing alternative funds totaled \$984.14b, an increase of 6% over 2016 levels and driven by \$202.91bn invested into Hedge Funds, an increase of 12%, and \$272.00bn invested into Private Equity Funds, an increase of 2%.

The increase in Hedge Fund investments was driven by investors who added \$174.5bn of capital into existing funds, an increase of 15% and \$28.41bn into new funds, a decline of 1% from 2016 levels.

The amounts sold into Private Equity Funds declined \$51.84bn driven by the increase in new private Equity funds. Newly formed Private Equity funds typically call capital over longer periods of time than Hedge Funds, accounting for the decline in year-to-year numbers. This also indicates that PE firms have \$51.84bn in “dry-powder” to fund new investments.

This is consistent with the growing level of positive Investor sentiment reported by Credit Suisse³

Table 1: Net New & Incremental Capital into Alternative Funds

	Total Fund Amounts Sold into New Funds				
Reporting Period	Total	PE	HF	VC	OTH
Q2 2016	\$928.06	\$265.60	\$181.14	\$32.61	\$448.71
Q2 2017	\$984.14	\$272.00	\$202.91	\$31.20	\$478.02
Increase (Decrease)	\$56.08	\$6.40	\$21.77	-\$1.41	\$29.32
Increase (Decrease) %	6%	2%	12%	-4%	7%

Fund Amounts Sold into New Funds					
Reporting Period	Total	PE	HF	VC	OTH
Q2 2016	\$221.81	\$119.62	\$28.78	\$22.69	\$50.72
Q2 2017	\$276.92	\$177.86	\$28.41	\$12.69	\$57.96
Increase (Decrease)	\$55.12	\$58.24	-\$0.37	-\$9.99	\$7.24
Increase (Decrease) %	25%	49%	-1%	-44%	14%

Fund Amounts Sold into Existing Funds					
Reporting Period	Total	PE	HF	VC	OTH
Q2 2016	\$706.26	\$145.99	\$152.36	\$9.92	\$397.98
Q2 2017	\$707.21	\$94.14	\$174.50	\$18.51	\$420.06
Increase (Decrease)	\$0.96	-\$51.84	\$22.14	\$8.59	\$22.08
Increase (Decrease) %	0%	-36%	15%	87%	6%

Total Fund Filings				
Total	PE	HF	VC	OTH
19,429	2,284	11,979	773	4,393
19,907	2,560	11,940	785	4,622
478	276	-39	12	229
2%	12%	0%	2%	5%

New Fund Filings				
Total	PE	HF	VC	OTH
11,426	1,615	6,431	657	2,723
11,764	1,810	6,417	623	2,914
338	195	-14	-34	191
3%	12%	0%	-5%	7%

Amended Fund Filings				
Total	PE	HF	VC	OTH
8,003	669	5,548	116	1,670
8,143	750	5,523	162	1,708
140	81	-25	46	38
2%	12%	0%	40%	2%

² Based on Form D filing data compiled by Convergence from 2008 through 6/30/2017

³ The 2017 Credit Suisse Global Survey of Hedge Fund Investor Appetite and Activity

Adviser and Manager⁴ Growth

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An **ADVISER** is an entity that registers with the SEC as an Exempt or Non-Exempt reporting entity. A **MANAGER** is an entity created by Convergence to define the ‘parent’ of an affiliated group of Advisers. There can be a one-to-one and one-to-many relationship between a Manager and Adviser or a **MANAGER**.

Dedicated Alternative Managers/Advisers are defined by Convergence as Managers that advise private fund assets greater than 50% of their Total Regulatory Assets. For example, “Manager A” discloses \$4bn in Total Regulatory Assets, of which \$3bn are held in Private Funds. Manager A is defined a Dedicated Alternatives Manager because 75% of their advised assets are held in private funds. Convergence then assigns “Manager A” a Dominant Fund Type, meaning we calculate the value disclosed within all the Fund Types it advises and determine the Fund Type that holds the greatest value of Private Assets. For example, assume that “Manager A” advises Hedge and Private Equity Fund Types. Its Hedge Fund Assets equal \$2bn and its Private Equity Assets equal \$1bn. Manager A’s Primary Fund Type is defined by Convergence as “Hedge Fund” because it \$2bn/\$3bn equals 67% of its Total Regulatory Assets, greater than 50%.

The number of SEC Advisers to alternative funds, both Exempt and Non-Exempt filers, increased 3.9% while the increase for Dedicated Managers⁵ increased 4.5%. Venture Capital, Real Estate and Securitized Assets Advisers increased 9.3%, 10.2% and 8.0%, respectively, while Private Equity and Other Fund Advisers increased 5.4% and 3.4%, respectively. The number of Hedge Fund Advisers increased 2.2%. The popularity of Real Estate investing continues as seen in the 10.2% increase in Real Estate Managers. Hedge Fund Managers grew the slowest at 2.2%.

The number of Convergence Manager Groups advising alternative funds increased 3.8% while the increase for Dedicated Managers was 4.5%. Venture Capital, Real Estate and Securitized Assets Managers increased 9.5%, 9.5% and 5.6%, respectively, while Private Equity and Other Fund Advisers increased 4.9% and 2.5%, respectively. The number of Hedge Fund Managers increased 1.7%.

Table 2: Net Manager and Adviser Growth

Manager/Adviser Category	2016-06-30	2017-06-30	Increase	Change	ALL	DM	HF-DM	PE-DM	VC-DM	RE-DM	SAF-DM	OTH-DM
Number of Advisers	7,307	7,589	282	3.9%	3.9%	4.5%	2.2%	5.4%	9.3%	10.2%	8.0%	3.4%
Number of Manager Groups	6,329	6,568	239	3.8%	3.8%	4.5%	1.7%	4.9%	9.5%	9.5%	5.6%	2.5%

⁴ A Manager is defined by Convergence as a group of affiliated Advisers. The affiliation is determined based on the ownership levels disclosed in individual Adviser form ADV filings. An Adviser is defined as an Adviser who files either as an Exempt or Non-Exempt filer.

⁵ A Dedicated Manager is defined as a Manager with Alternative Assets > than 50% of their disclosed Total Regulatory Assets

Fund Count Growth⁶

Convergence Insights

*Managers across the industry added 2,854 alternative funds, an increase of **6.4%**. The increase was driven by **Dedicated Alternative Managers** who increased their funds by **7.5%** and **Non-Dedicated Managers** who increased their funds by **3.7%**. Growth was driven by increases by **Venture Capital, Real Estate, Private Equity, Other and Securitized Asset Fund Managers** while **Liquidity Managers** experienced a small decline.*

Venture Capital Fund Managers

VC Managers added **743** funds, an increase of **11.7%**, driven by **Dedicated VC Managers** who added **692** funds, an increase of **11.4%** and **Non-Dedicated RE Managers** added **326** funds, an increase of **11.6%**. VC Fund Types added represent **100%** of the annual net new funds added, indicating that VC Managers are gaining most of their funds consistent with their dominant Fund Type. VC Fund Types advised by VC Managers, as a percentage of their Total Funds, increased from **95.3%** to **95.7%**.

Real Estate Fund Managers

RE Managers added **398** funds, an increase of **11.6%**, driven by **Dedicated RE Managers** who added **326** funds, an increase of **12.9%** and **Non-Dedicated RE Managers** who added **72** funds, an increase of **7.9%**. RE and Non-RE funds added represented **80%** and **20%** of annual net new funds added indicating that RE Managers are gaining most of their assets in funds consistent with their dominant Fund Type. RE Fund Types advised by RE Managers, as a percentage of their Total Funds, increased from **73.1%** to **73.9%**.

Private Equity Fund Managers

PE Managers added **1,275** funds, an increase of **8.4%**, driven by **Dedicated PE Managers** who added **938** funds, an increase of **8.2%** and **Non-Dedicated PE Managers** who added **337** funds, an increase of **8.9%**. PE and Non-PE funds added represented **93%** and **7%** of annual net new funds added indicating that PE Managers are gaining most of their assets in funds consistent with their dominant fund type. PE Funds advised by PE Managers, as a percentage of their Total Funds, increased from **82.0%** to **82.8%**.

Hedge Fund Managers

HF Managers added **1,275** funds, an increase of **8.4%**, driven by **Dedicated HF Managers** who added **938** funds, an increase of **8.2%** and by **Non-Dedicated HF Managers** who added **337** funds, an increase of **8.9%**. HF and Non-HF funds added represented **40%** and **60%** of annual net new funds added indicating that HF Managers are adding more diverse Fund Types. HF Fund Types advised by HF Managers, as a percentage of their Total Funds, declined from **77.6%** to **76.7%**.

**** Please go to Schedules 2 and 4 on Pages 14 and 16 for additional details on Fund Types.**

⁶ Based on Form ADV Filings obtained by Convergence from 3/31/2014 through 6/30/2017

Fund Asset Growth⁷

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Managers across the industry increased their Fund Assets by \$983.5bn, an increase of 8.1%. The increase was driven by Dedicated Alternative Managers who increased their fund assets by 7.5% and Non-Dedicated Managers who increased their fund assets by 10.9%. Asset Growth was driven by asset increases across Hedge Fund, Private Equity, Liquidity Fund, Securitized Asset and Venture Capital Fund Managers while Real Estate Managers experienced a small decline.

Hedge Fund Managers

HF Managers added **\$420.1bn** in assets, an increase of 6.6%, driven by Dedicated HF Managers who added **\$297.2bn**, an increase of 5.5% and by Non-Dedicated HF Managers who added **\$122.9bn**, an increase of 13.6%. HF and Non-HF assets represented 91% and 9% of annual new assets flows, respectively, indicating that HF Managers are gaining most of their assets in funds consistent with their dominant Fund Type. HF Assets advised by HF Managers, as a percentage of their Total Assets, increased from 88.5% to 88.7%.

Real Estate Fund Managers

RE Managers added **\$80.0bn** in assets, an increase of 15.8%, driven by Dedicated RE Managers who added **\$73bn**, an increase of 18.9% and by Non-Dedicated RE Managers who added **\$7.0bn**, an increase of 5.9%. RE and Non-RE assets represented 69% and 31% of annual new assets flows, respectively, indicating that RE Managers are advising more diverse funds and assets. RE Assets advised by RE Managers, as a percentage of their Total Assets, increased from 56.7% to 58.5% indicating that RE Managers are focusing more on their core competency.

Venture Capital Funds

VC Managers added **\$29.7bn** in assets, an increase of 6.0%, driven by Dedicated VC Managers who added **\$29.0bn**, an increase of 5.9% and by Non-Dedicated RE Managers who added **\$7.7bn**, an increase of 8.1%. VC and Non-VC assets represented 93% and 7% of annual new assets flows, respectively, indicating that VC Managers are highly focused on their core competency. VC Assets advised by VC Managers, as a percentage of their Total Assets, declined slightly from 94.2% to 94.0%.

Private Equity Fund Managers

PE Managers added **\$203.2bn** in assets, an increase of 7.1%, driven by Dedicated PE Managers who added **\$207.4bn**, an increase of 9.0% and by Non-Dedicated PE Managers who reduced assets by **\$4.2bn**, a decline of .7%. PE and Non-PE assets represented 99% and 1% of annual new assets flows, respectively, indicating that PE Managers are highly focused on their core competency. PE Assets advised by PE Managers, as a percentage of their Total Assets, increased from 82.1% to 82.3%.

**** Please go to Schedules 3 and 5 on Page 14 and 16 for additional details Fund Type Asset Values.**

⁷ Fund assets are based on the gross asset value of funds as disclosed by Adviser in their Form ADV

Funds Added and Dropped⁸

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Managers added 5,479 funds or 15.9% of the beginning fund balance and dropped 4,314 funds, or 9.7%, for a net gain of 2,768 funds, or 6.2%. Existing Managers launched 5,479 funds, or 78%, and new Managers launched 1,603, or 22%. The entire dropped fund number is attributable to existing Managers.

PE Funds increased by 1,316 funds, or 8.3% driven by 2,449 fund adds and 1,133 fund drops followed by Venture Funds adding 703 funds driven by 1,359 adds and 659 drops. Real Estate and Other Funds added 385 and 309 funds, respectively, driven by 642 and 726 funds added and 257 and 417 funds dropped, respectively. Hedge Funds were flat adding 13 funds and Securitized Asset Funds added 40 funds.

Table 3: Alternative Funds Added-Dropped

Reporting Period	# Fund Types-All Managers							
	Total	PE	HF	VC	OTHER	RE	SAF	LF
Q2 2016	44,578	15,235	13,389	6,363	4,387	3,438	1,685	81
NEW FUNDS - Existing Advisers	5,479	2,020	1,228	1,003	549	486	187	6
NEW FUNDS - New Advisers	1,603	429	456	356	177	156	21	8
NEW FUNDS ADDED	7,082	2,449	1,684	1,359	726	642	208	14
% Funds Added	15.9%	16.1%	12.6%	21.4%	16.5%	18.7%	12.3%	17.3%
FUND TYPE CHANGES-IN	379	85	107	44	98	31	13	1
FUND TYPE CHANGES-OUT	(381)	(138)	(101)	(7)	(91)	(26)	(14)	(4)
DROPPED FUNDS	(4,314)	(1,133)	(1,671)	(656)	(417)	(257)	(168)	(12)
FUND DROPPED AND CHANGED	-4,316	-1,186	-1,665	-619	-410	-252	-169	-15
% Funds Dropped	-9.7%	-7.4%	-12.5%	-10.3%	-9.5%	-7.5%	-10.0%	-19.8%
Net Adds/Drops	2,766	1,263	19	740	316	390	39	-1
% Net Fund Added/Dropped	6.2%	8.6%	0.1%	11.0%	7.0%	11.2%	2.4%	-2.5%

⁸ Funds Added or Dropped are based on the comparison of funds disclosed by Advisers in their Form Adv filings

Fund Assets Added and Dropped

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Asset values across all Alternative funds increased \$959.6bn or 7.9%. driven by \$732bn in net asset gains from New Funds less Fund Drops, and 218.7bn in net Asset Inflation/Deflation⁹. Assets added from New Fund launches of \$1,006bn offset asset losses in Funds closed of \$332bn. We see this trend continuing in 2017.

Asset values in Other Funds, Real Estate, Securitized Asset and Private Equity Fund types increased 17.2%, 14.4%, 7.1% and 7.0%, respectively and asset values in Venture Capital and Liquidity Fund increased 5.4% and 4.1%, respectively. Hedge Fund assets increased 6.5% picking up \$196.6bn in new fund assets. Convergence is currently projecting Hedge Fund assets will grow 27% in 2017.

Table 4: Alternative Fund Assets Added-Dropped

Reporting Period	\$BN Fund Assets-All Managers							
	Total	HF	PE	OTHER	VC	SAF	RE	LF
Q2 2016	12,194.28	6,348.89	2,862.63	1,122.78	500.19	507.68	513.30	338.81
NEW FUNDS - EXISTING ADVISERS	889.45	287.59	305.90	119.94	41.13	79.33	51.57	4.00
NEW FUNDS - NEW ADVISERS	176.76	74.14	47.89	15.68	11.05	2.80	11.53	13.67
TOTAL NEW FUND ASSETS ADDED	\$1,066.21	\$361.73	\$353.79	\$135.62	\$52.18	\$82.14	\$63.10	\$17.66
% TOTAL NEW FUND ASSETS ADDED	8.7%	5.7%	12.4%	12.1%	10.4%	16.2%	12.3%	5.2%
FUND TYPE CHANGES-IN	\$89.20	\$52.25	\$6.84	\$20.17	\$2.68	\$3.45	\$3.73	\$0.08
FUND TYPE CHANGES-OUT	-\$80.28	-\$22.74	-\$20.21	-\$15.35	-\$9.62	-\$2.38	-\$8.56	-\$1.44
DROPPED FUNDS	-\$334.20	-\$165.09	-\$77.63	-\$32.83	-\$6.98	-\$14.13	-\$19.09	-\$18.46
TOTAL NEW FUND ASSETS DROPPED	-\$325.28	-\$135.57	-\$90.99	-\$28.01	-\$13.92	-\$13.06	-\$23.92	-\$19.81
% TOTAL FUND ASSETS DROPPED	-2.7%	-2.1%	-3.2%	-2.5%	-2.8%	-2.6%	-4.7%	-5.8%
POSITIVE CHANGE EXISTING FUNDS DROPPED	1,730.76	1,021.97	319.99	172.48	38.50	33.74	111.97	32.12
NEGATIVE CHANGE EXISTING FUNDS	(1,512.07)	(833.43)	(381.76)	(86.87)	(49.78)	(66.72)	(77.30)	(16.20)
NO CHANGE EXISTING FUNDS	579.54	399.94	80.22	26.63	31.73	14.20	26.81	0.02
TOTAL NET ASSET CHANGE IN EXISTING FUNDS	\$218.70	\$188.54	-\$61.77	\$85.61	-\$11.28	-\$32.99	\$34.67	\$15.92
% TOTAL NEW FUND ASSETS ADDED	1.8%	3.0%	-2.2%	7.6%	-2.3%	-6.5%	6.8%	4.7%
TOTAL CHANGE IN FUND ASSETS	7.9%	6.5%	7.0%	17.2%	5.4%	7.1%	14.4%	4.1%

⁹ Net Asset Inflation/Deflation is created by performance, investor activity, leverage and asset sales in PE/VC and RE funds

Headcount

Convergence Insights

Managers of all Alternative Funds added 2,946 new jobs since the end of Q2 2016, or .7%, driven by Dedicated Managers who increased Investment Professionals by 4.9% and reduced non-Investment Professionals by 2.9%. The overall increase in headcount is being driven by industry wide-growth and is consistent with the growth Convergence sees in New Managers and Funds. Convergence believes that Headcount analysis can be more meaningful when focusing on Dedicated Managers.

Dedicated Managers added 4,732 new jobs or 5.4% spread equally between Investment and Non-Investment staff. Headcount growth was most pronounced in Dedicated Managers of Venture Capital Funds, growing 36.8%, driven by a 44.2% increase in Investment Professionals and 17.7% increase in Non-Investment Professionals. Growth in headcount at Venture Capital Managers is consistent with the growth we see in VC Managers. Real Estate, Other, Private Equity and Securitized Asset Fund Managers increased headcount by 11.7%, 10.2%, 7.5%, 2.1% and .2%, respectively.

Table 5: Headcount Profile and Growth

		All Managers-Total Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	449,384	118,896	131,776	2,010	15,626	22,188	158,888
Q2 2017	452,330	109,135	137,683	1,920	17,711	18,620	167,261
Increase (Decrease)	2,946	-9,761	5,907	-90	2,085	-3,568	8,373
Increase (Decrease) %	0.7%	-8.9%	4.3%	-4.7%	11.8%	-19.2%	5.0%
		All Managers-Investment Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	204,280	54,995	75,394	1,080	6,044	4,900	61,867
Q2 2017	214,378	50,198	76,952	1,088	7,265	4,765	74,110
Increase (Decrease)	10,098	-4,797	1,558	8	1,221	-135	12,243
Increase (Decrease) %	4.9%	-9.6%	2.0%	0.7%	16.8%	-2.8%	16.5%
		All Managers-Non Investment Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	245,104	63,901	56,382	930	9,582	17,288	97,021
Q2 2017	237,952	58,937	60,731	832	10,446	13,855	93,151
Increase (Decrease)	-7,152	-4,964	4,349	-98	864	-3,433	-3,870
Increase (Decrease) %	-2.9%	-8.4%	7.2%	-11.8%	8.3%	-24.8%	-4.2%
		Dedicated Managers-Total Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	83,119	44,933	23,128	795	8,320	2,979	2,964
Q2 2017	87,851	45,885	25,003	1,258	9,418	2,986	3,301
Increase (Decrease)	4,732	952	1,875	463	1,098	7	337
Increase (Decrease) %	5.4%	2.1%	7.5%	36.8%	11.7%	0.2%	10.2%
		Dedicated Managers-Investment Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	42,348	21,274	13,103	507	4,164	1,978	1,322
Q2 2017	44,690	21,466	14,159	908	4,716	2,012	1,429
Increase (Decrease)	2,342	192	1,056	401	552	34	107
Increase (Decrease) %	5.2%	0.9%	7.5%	44.2%	11.7%	1.7%	7.5%
		Dedicated Managers-Non Investment Staff					
Reporting Date	Total	HF	PE	VC	RE	SAF	OTH
Q2 2016	40,771	23,659	10,025	288	4,156	1,001	1,642
Q2 2017	43,161	24,419	10,844	350	4,702	974	1,872
Increase (Decrease)	2,390	760	819	62	546	-27	230
Increase (Decrease) %	5.5%	3.1%	7.6%	17.7%	11.6%	-2.8%	12.3%

Complexity/Risk Profiles©¹⁰

Convergence Insights

The number of Managers with High Complexity Profile increased 3.7% driven by Managers receiving High Complexity Profiles in Private Equity, up 80%. High Complexity/Risk Profiles© suggest higher operational risk. Institutional Investors Regulators expect Managers with Medium-High Complexity Profiles© to have sufficiently experienced staff, mature policies and procedures and Service Providers in place to manage the risk.

Table 6: Complexity Profiles-Dedicated Alternative Managers

2016-Complexity Profiles	Total	HF	PE	VC	RE	SAF	OTH
Complexity Profiles-HIGH	92	79	5	1	1	0	6
Complexity Profiles-HIGH-WATCH	581	236	201	30	51	28	35
Complexity Profiles-MEDIUM	653	542	42	4	14	7	44
Complexity Profiles-MEDIUM-WATCH	1,811	415	742	421	133	14	86
Complexity Profiles-LOW	664	523	70	24	15	1	31
Complexity Profiles-LOW-WATCH	1,014	262	282	379	48	4	39
Complexity Profiles-HIGH	673	315	206	31	52	28	41
Complexity Profiles-MEDIUM	2,464	957	784	425	147	21	130
Complexity Profiles-LOW	1,678	785	352	403	63	5	70

2017-Complexity Profiles	Total	HF	PE	VC	RE	SAF	OTH
Complexity Profiles-HIGH	104	84	9	1	1	2	7
Complexity Profiles-HIGH-WATCH	594	244	206	31	51	26	36
Complexity Profiles-MEDIUM	654	547	45	4	10	10	38
Complexity Profiles-MEDIUM-WATCH	1,922	418	785	450	165	12	92
Complexity Profiles-LOW	671	543	53	28	12	3	32
Complexity Profiles-LOW-WATCH	1,082	255	307	427	48	4	41
Complexity Profiles-HIGH	698	328	215	32	52	28	43
Complexity Profiles-MEDIUM	2,576	965	830	454	175	22	130
Complexity Profiles-LOW	1,753	798	360	455	60	7	73

2016-2017 % Complexity Profile Changes	Total	HF	PE	VC	RE	SAF	OTH
Complexity Profiles-HIGH	13.0%	6.3%	80.0%	0.0%	0.0%	NA	16.7%
Complexity Profiles-HIGH-WATCH	2.2%	3.4%	2.5%	3.3%	0.0%	-7.1%	2.9%
Complexity Profiles-MEDIUM	0.2%	0.9%	7.1%	0.0%	-28.6%	42.9%	-13.6%
Complexity Profiles-MEDIUM-WATCH	6.1%	0.7%	5.8%	6.9%	24.1%	-14.3%	7.0%
Complexity Profiles-LOW	1.1%	3.8%	-24.3%	16.7%	-20.0%	200.0%	3.2%
Complexity Profiles-LOW-WATCH	6.7%	-2.7%	8.9%	12.7%	0.0%	0.0%	5.1%
Complexity Profiles-HIGH	3.7%	4.1%	4.4%	3.2%	0.0%	0.0%	4.9%
Complexity Profiles-MEDIUM	4.5%	0.8%	5.9%	6.8%	19.0%	4.8%	0.0%
Complexity Profiles-LOW	4.5%	1.7%	2.3%	12.9%	-4.8%	40.0%	4.3%

¹⁰ Complexity Profiles and Factors are trademarked terms used by Convergence to indicate its opinion on the level of operating risk that exists in a Managers business model. A Complexity Profile is generated by from 40 individual Complexity Factors identified and measured by Convergence. It is not a recommendation to invest or avoid investing with Managers.

Regulation

Convergence Insights

The percentage of Exempt to Non-Exempt Advisors across all Alts Managers changed from 41% to 42% indicating that new filers are filing as Non-Exempt and there were very few changes in the registration status of existing Advisors. This is not the case, however, with Real Estate Securitized Asset and Other Fund types which saw an increase in the level of Non-Exempt filers. We would expect to see corresponding increase in the Complexity Profiles of Managers in these segments because Non-Exempt Advisors file more ADV data than Exempts, giving Convergence the opportunity to examine additional parts of the Advisors organization.

The pace of SEC Enforcement Actions across all Alts Managers, based on Adviser disclosures, slowed from the double-digit growth in prior years, increasing 5.3% across all Alts Managers and 1.6% for Dedicated Managers. There were some notable exceptions, specifically within Private Equity and Venture Capital Managers who report and increase of 22.6% and 30.8%, respectively. Regulatory disclosures within Hedge Fund and Securitized Asset Managers declined driven primarily by Advisors who closed their businesses.

The number of Regulators overseeing Manager activity increased 1%. A far slower pace than in prior years and driven by the continued political uncertainty around the future of regulation.

Table 7: Regulatory Actions, Filing Profiles and Regulators

Adviser DRPs	2016-06-30	2017-06-30	Change
Reg Violations-Civil	149	148	-0.7%
Reg Violations-Criminal	1,362	1,363	0.1%
Reg Violations-Regulatory	3,308	3,563	7.7%
Total	4,819	5,074	5.3%

Advisers	2016-06-30	2017-06-30	Change
Exempt Advisers	3,011	3,022	0.4%
Non-Exempt Advisers	4,296	4,387	2.1%
Total	7,307	7,409	1.4%

Advisers	2016-06-30	2017-06-30	Change
Unique Regulators	579	585	1.0%

Two noteworthy reminders:

- 1) The SEC recently announced they will step-up their review of funds that engage in direct and indirect lending activities*
- 2) In October 2017, the SEC's updated Form Adv goes into effect. This document adds a fair amount of new burden to the Advisors current filing requirements.*

Service Providers

Convergence Insights

The total number of service providers named in alternative funds increased 1% despite industry consolidation taking place across Administrators and Prime Brokers.

The number of Fund Administrators disclosed by Managers increased to 515, or 12%. New Administrators are being formed to service the more specialized needs of Private Equity and Real Estate Funds. The number of new Administrators continues to divert financial scale away from established Administrators and continues to pressure pricing and reinvent service models. Convergence expects greater head-to-head competition amongst Administrators for existing funds since the 12% growth rate in new Admins continues to outpace the 6% growth in new funds.

The number of Fund Auditors was up 2%.

The number of Prime Brokers declined 7%. Industry mergers have reduced the number of Prime Brokers and Advisers are consolidating relationships which is reducing the number of unique Prime Brokers disclosed.

The number of Custodians and Marketers was essentially flat.

The service provider industry continues to be very fragmented with very redundant offerings in place. We see little movement on product innovation and providers distinguishing the offering. No firm has yet to scale middle office outsourcing.

Starting in October of 2016, Convergence will be picking up and tracking Compliance firms that Advisers will need to disclose if they are retaining outsourcing CCO services.

Table 8: Unique Service Providers

Unique Service Providers	6/30/2016	2017-06-30	Change
Unique Admins	461	515	12%
Unique Auditors	423	432	2%
Unique Prime Brokers	256	237	-7%
Unique Custodians	1,122	1,124	0%
Unique Marketers	1,925	1,931	0%
Total Unique Service Providers	4,187	4,239	1%

Operating Efficiency

Convergence Insights

Operating Efficiency, defined as “the number of staff supporting funds and assets at Managers who advise greater than 50% alternative assets”, improved by 2%, driven by efficiency gains in Staff/Funds and Private Assets/Staff of 2.2% and 1.9%, respectively. Negative period-to-period values mean that fewer staff were needed to support fund and fund assets. The number of Non-Investment Staff supporting funds and assets declined by 1.8% and 1.5%, respectively. The decline is driven by lower levels of hiring as compared and higher levels of funds and assets observed during the period. In addition, managers continue to outsource work reducing their internal staff needs.

Investment staff per fund remained flat year-over-year while investment staff per billion of private assets increased by 6%. The increase is typically driven by new fund launch activity. When new funds are launched by new Advisors there are typically more investment staff hired than non-investment staff.

The decline in non-Investment staff can also be attributed to the increase in Administrators providing services to Private Equity funds. We suspect this trend will continue to reduce the number of non-Investment staff needed to support these types of funds.

Gains in Operating Efficiency should lower costs which can be used to offset lower management fees or can be reinvested into investment process improvements. Managers will need to continue becoming more efficient as the trend toward a 1%-30% management fee/incentive fee structure becomes more common.

Table 9: Operating Efficiency

Operating Efficiency Factors	6/30/2016	2017-06-30	Change	Comments
NIP/IP Ratio	0.986	0.995	-0.9%	Efficiency Decline-More Total Staff needed to support investment staff
Operational Productivity (Staff/Funds)	2.59	2.53	2.2%	Efficiency Gain-Fewer Staff needed to support Private Funds
Operational Productivity (PFRAUM/Staff)	8.70	8.53	1.9%	Efficiency Gain-Fewer Staff needed to support Private Assets
Operational Productivity-IP (Staff/Funds)	1.30	1.27	2.7%	Efficiency Gain-Fewer Investment Staff needed to support funds
Operational Productivity-NIP(Staff/Funds)	1.28	1.26	1.8%	Efficiency Gain-Fewer Non-Investment Staff needed to support funds
Operational Productivity-IP (PFRAUM/Staff)	4.38	4.28	2.4%	Efficiency Gain-Fewer Investment Staff needed to support Private Assets
Operational Productivity-NIP(PFRAUM/Staff)	4.32	4.26	1.5%	Efficiency Gain-Fewer Non-Investment Staff needed to support Private Assets

Convergence Productivity Index	6/30/2016	2017-06-30	Change	Comments
Operational Productivity (Staff/Funds)	2.59	2.53	2.2%	Efficiency Gain-Fewer Staff needed to support Private Funds
Operational Productivity (PFRAUM/Staff)	8.70	8.53	1.9%	Efficiency Gain-Fewer Staff needed to support Private Assets
Productivity Index	11.29	11.06	2.0%	Productivity Index Gain-Fewer Staff needed to support Private Assets and Funds

Supporting Schedule 1

Key Definitions of Terms Used in this Report

Hedge Fund

Means any private fund (other than a securitized asset fund), (a) with respect to which one or more investment advisers (or related persons of investment advisers) may be paid a performance fee or allocation calculated by taking into account unrealized gains (other than a fee or allocation the calculation of which may take into account unrealized gains solely for the purpose of reducing such fee or allocation to reflect net unrealized losses); (b) that may borrow an amount in excess of one-half of its net asset value (including any committed capital) or may have gross notional exposure in excess of twice its net asset value (including any committed capital) and (c) that may sell securities or other assets short or enter into similar transactions (other than for the purpose of hedging currency exposure or managing duration).

Private Equity Fund

Means any private fund that is not a hedge fund, liquidity fund, real estate fund, securitized asset fund, or venture capital fund and does not provide investors with redemption rights in the ordinary course.

Real Estate Funds

Means any private fund that is not a hedge fund, that does not provide investors with redemption rights in the ordinary course, and that invests primarily in real estate and real estate related assets.

Venture Capital Fund

Means any private fund meeting the definition of venture capital fund in rule 203(l)-1 under the Advisers Act.

Securitized Asset Funds

Means any private fund whose primary purpose is to issue asset backed securities and whose investors are primarily debt-holders.

Liquidity Funds

Means any private fund that seeks to generate income by investing in a portfolio of short-term obligations in order to maintain a stable net asset value per unit or minimize principal volatility for investors.

Other Funds

Means any private fund that is not a hedge fund, liquidity fund, private equity fund, real estate fund, securitized asset fund, or venture capital fund.

Investment Professionals

Means portfolio managers, research analysts, traders and executive, including executive management that oversee investment professionals.

Non-Investment Professional

Means any other staff not included within the definition of Investment Professionals but excluding staff that are registered representatives of the firm or affiliated broker dealers.

Assets

Means the current market value of the assets as determined within 90 days prior to the date of filing your Form ADV. Determine market value using the same method you used to report account values to clients or to calculate fees for investment advisory services. In the case of a private fund, determine the current market value (or fair value) of the private fund's assets and the contractual amount of any uncalled commitment pursuant to which a person is obligated to acquire an interest in, or make a capital contribution to, the private fund. Referred to as the RAUM calculation (Regulatory Assets under Management) calculation requires managers to report assets managed without deduction of any offsetting liabilities. RAUM will represent all the assets managed by a single manager, including assets of separate accounts and separate private funds.

Supporting Schedule 2

Fund Type Details- # of Funds

Dedicated and Non-Dedicated Alternative Managers

Managers Primary Fund Type	Fund Types Advised All Managers								Fund Types Advised Dedicated Managers								Fund Types Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
# Funds-2016-Total																								
Hedge	14,526	11,266	1,584	398	82	388	30	778	9,605	8,041	801	171	56	286	5	245	4,926	3,225	783	227	26	102	25	533
Private Equity	14,967	1,047	12,268	479	273	356	5	489	11,672	662	10,065	308	243	196	4	194	3,294	435	2,203	171	30	160	1	295
Real Estate	3,202	150	287	2,342	42	112	3	266	2,678	124	220	2,000	19	88	2	225	524	26	67	342	23	24	1	41
Venture Capital	6,166	27	194	22	5,870	5	1	47	5,923	20	166	6	5,700	1	0	30	243	7	28	16	170	4	1	17
Securitized Assets	1,380	264	241	46	2	671	1	155	704	120	108	16	0	425	0	35	673	144	133	30	2	246	1	120
Liquidity	424	183	120	6	0	47	26	42	4	2	0	0	0	0	2		420	181	120	6	0	47	24	42
OTHER	3,773	322	517	135	97	96	15	2,591	1,109	65	78	20	39	9	3	895	2,662	257	439	115	58	87	12	1,696
Total	44,438	13,309	15,211	3,428	6,366	1,675	81	4,368	31,695	9,034	11,438	2,521	6,057	1,005	16	1,624	12,742	4,275	3,773	907	309	670	65	2,744
# Funds-2017-Total																								
Hedge	14,875	11,404	1,719	421	82	407	31	811	9,867	8,179	880	178	51	306	4	269	5,008	3,225	839	243	31	101	27	542
Private Equity	16,222	1,074	13,439	511	295	380	3	520	12,656	679	10,924	338	265	217	3	230	3,566	395	2,515	173	30	163	0	290
Real Estate	3,616	168	311	2,673	43	117	1	303	3,007	133	235	2,284	17	85	0	253	609	35	76	389	26	32	1	50
Venture Capital	6,862	30	192	18	6,567	4	1	50	6,591	24	162	3	6,369	1	0	32	271	6	30	15	198	3	1	18
Securitized Assets	1,335	250	226	52	2	676	1	128	721	125	99	20	0	444	0	33	614	125	127	32	2	232	1	95
Liquidity	429	171	125	8	0	50	32	43	8	0	2	0	0	0	6		421	171	123	8	0	50	26	43
OTHER	3,953	268	474	143	120	92	11	2,845	1,228	60	74	24	47	11	3	1,009	2,725	208	400	119	73	81	8	1,836
Total	47,292	13,365	16,486	3,826	7,109	1,726	80	4,700	34,078	9,200	12,376	2,847	6,749	1,064	16	1,826	13,214	4,165	4,110	979	360	662	64	2,874
Increase (Decrease)																								
Hedge	349	138	135	23	0	19	1	33	262	138	79	7	-5	20	-1	24	82	0	56	16	5	-1	2	9
Private Equity	1,255	-23	1,171	32	22	24	-2	31	984	17	859	30	22	21	-1	36	272	-40	312	2	0	3	-1	-5
Real Estate	414	18	24	331	1	5	-2	37	329	9	15	284	-2	-3	-2	28	85	9	9	47	3	8	0	9
Venture Capital	696	3	-2	-4	697	-1	0	3	668	4	-4	-3	669	0	0	2	28	-1	2	-1	28	-1	0	1
Securitized Assets	-45	-14	-15	6	0	5	0	-27	17	5	-9	4	0	19	0	-2	-59	-19	-6	2	0	-14	0	-25
Liquidity	5	-12	5	2	0	3	6	1	4	-2	2	0	0	0	4	0	1	-10	3	2	0	3	2	1
OTHER	180	-54	-43	8	23	-4	-4	254	119	-5	-4	4	8	2	0	114	63	-49	-39	4	15	-6	-4	140
Total	2,854	56	1,275	398	743	51	-1	332	2,383	166	938	326	692	59	0	202	472	-110	337	72	51	-8	-1	130
% Increase (Decrease)																								
Hedge	2.4%	1.2%	8.5%	5.8%	0.0%	4.9%	3.3%	4.2%	2.7%	1.7%	9.9%	4.1%	-8.9%	7.0%	-20.0%	9.8%	1.7%	0.0%	7.2%	7.0%	19.2%	-1.0%	8.0%	1.7%
Private Equity	8.4%	-2.1%	9.5%	6.7%	8.1%	6.7%	-40.0%	6.3%	8.4%	2.6%	8.5%	9.7%	9.1%	10.7%	-25.0%	18.6%	8.3%	-4.2%	14.2%	1.2%	0.0%	1.9%	-100.0%	-1.7%
Real Estate	12.9%	12.0%	8.4%	14.1%	2.4%	4.5%	-66.7%	13.9%	12.9%	7.3%	6.8%	14.2%	-10.5%	-3.4%	-100.0%	12.4%	16.2%	34.6%	13.4%	13.7%	13.0%	33.3%	0.0%	22.0%
Venture Capital	11.3%	11.1%	-1.0%	-18.2%	11.9%	-20.0%	0.0%	6.4%	11.3%	20.0%	-2.4%	-50.0%	11.7%	0.0%	NA	6.7%	11.5%	-14.3%	7.1%	-6.3%	16.5%	-25.0%	0.0%	5.9%
Securitized Assets	-3.3%	-5.3%	-6.2%	13.0%	0.0%	0.7%	0.0%	-17.4%	2.4%	4.2%	-8.3%	25.0%	NA	4.5%	NA	-5.7%	-8.5%	-13.2%	-4.5%	6.7%	0.0%	-5.7%	0.0%	-20.8%
Liquidity	1.2%	-6.6%	4.2%	33.3%	NA	6.4%	23.1%	2.4%	100.0%	-100.0%	NA	NA	NA	NA	200.0%	NA	0.2%	-5.5%	2.5%	NA	NA	6.4%	8.3%	2.4%
OTHER	4.8%	-16.8%	-8.3%	5.9%	23.7%	-4.2%	-26.7%	9.8%	10.7%	-7.7%	-5.1%	20.0%	20.5%	22.2%	0.0%	12.7%	2.4%	-19.1%	-8.9%	3.5%	25.9%	-6.9%	-33.3%	8.3%
Total	6.4%	0.4%	8.4%	11.6%	11.7%	3.0%	-1.2%	7.6%	7.5%	1.8%	8.2%	12.9%	11.4%	5.9%	0.0%	12.4%	3.7%	-2.6%	8.9%	7.9%	16.5%	-1.2%	-1.5%	4.7%

Supporting Schedule 3

Fund Type Details - \$ Value of Assets

Dedicated and Non-Dedicated Alternative Managers

Managers Primary Fund Type	Fund Assets Advised All Managers								Fund Assets Advised Dedicated Managers								Fund Assets Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Assets-2016-Total																								
Hedge	\$6,608.8	\$5,851.6	\$210.0	\$48.8	\$11.9	\$115.9	\$175.7	\$194.9	\$5,468.5	\$5,133.9	\$101.1	\$12.5	\$11.6	\$42.0	\$67.0	\$50.4	\$1,140.3	\$717.7	\$108.9	\$36.3	\$0.3	\$23.9	\$108.7	\$144.5
Private Equity	\$2,954.6	\$264.0	\$2,425.2	\$78.7	\$18.0	\$100.7	\$0.4	\$68.2	\$2,399.6	\$203.6	\$2,037.1	\$56.6	\$16.8	\$61.8	\$0.4	\$23.8	\$555.0	\$60.4	\$388.0	\$22.2	\$1.2	\$38.9	\$0.0	\$44.4
Real Estate	\$639.0	\$70.2	\$104.3	\$362.2	\$0.9	\$28.7	\$0.0	\$72.7	\$553.8	\$60.1	\$99.5	\$312.6	\$0.8	\$21.9	\$0.0	\$58.8	\$85.2	\$10.0	\$4.7	\$49.6	\$0.1	\$6.8	\$0.0	\$13.8
Venture Capital	\$489.4	\$1.3	\$20.9	\$1.0	\$461.1	\$0.0	\$0.1	\$5.2	\$485.0	\$1.2	\$20.2	\$1.0	\$457.9	\$0.0	\$0.0	\$5.1	\$4.4	\$0.1	\$0.7	\$0.1	\$3.2	\$0.0	\$0.1	\$0.1
Securitized Assets	\$327.6	\$52.2	\$21.0	\$2.5	\$0.0	\$226.8	\$2.9	\$22.2	\$204.4	\$26.9	\$15.8	\$1.3	\$0.0	\$151.9	\$0.0	\$8.5	\$123.2	\$25.3	\$5.1	\$1.2	\$0.0	\$74.9	\$2.9	\$13.7
Liquidity	\$214.1	\$39.6	\$10.5	\$0.2	\$0.0	\$11.5	\$139.0	\$13.2	\$3.2	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$3.2	\$0.0	\$210.8	\$39.6	\$10.5	\$0.2	\$0.0	\$11.5	\$135.9	\$13.2
OTHER	\$938.1	\$64.8	\$69.0	\$13.5	\$5.5	\$20.6	\$20.6	\$745.6	\$322.2	\$14.5	\$30.4	\$3.3	\$2.3	\$3.4	\$0.1	\$269.8	\$615.9	\$50.3	\$38.6	\$10.2	\$3.2	\$17.3	\$20.5	\$475.8
Total	\$12,172.1	\$6,343.7	\$2,860.8	\$507.0	\$447.4	\$504.3	\$349.6	\$1,111.4	\$9,437.3	\$5,440.3	\$2,304.2	\$387.1	\$489.4	\$331.0	\$70.7	\$416.5	\$2,734.9	\$903.4	\$556.6	\$119.8	\$8.0	\$173.3	\$278.9	\$694.9

Managers Primary Fund Type	Fund Assets Advised All Managers								Fund Assets Advised Dedicated Managers								Fund Assets Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Assets-2017-Total																								
Hedge	\$7,106.9	\$6,307.0	\$215.8	\$52.9	\$3.7	\$129.8	\$179.9	\$217.8	\$5,770.0	\$5,440.0	\$95.2	\$13.5	\$3.4	\$103.1	\$60.1	\$54.7	\$1,336.8	\$867.0	\$120.5	\$39.4	\$0.4	\$26.6	\$119.8	\$163.1
Private Equity	\$3,156.6	\$242.4	\$2,625.2	\$78.1	\$17.3	\$110.6	\$0.3	\$82.8	\$2,611.4	\$199.0	\$2,251.6	\$57.0	\$16.0	\$69.5	\$0.3	\$28.0	\$545.3	\$53.3	\$373.6	\$21.1	\$1.3	\$41.1	\$0.0	\$54.8
Real Estate	\$750.5	\$73.7	\$113.9	\$439.3	\$0.9	\$30.5	\$1.6	\$90.5	\$657.6	\$63.6	\$109.1	\$385.4	\$0.8	\$22.7	\$0.0	\$76.1	\$92.9	\$10.2	\$4.8	\$53.9	\$0.1	\$7.9	\$1.6	\$14.5
Venture Capital	\$529.7	\$1.3	\$22.9	\$0.1	\$498.2	\$0.0	\$0.1	\$7.0	\$526.0	\$1.2	\$22.3	\$0.0	\$495.5	\$0.0	\$0.0	\$6.9	\$3.7	\$0.1	\$0.6	\$0.1	\$2.7	\$0.0	\$0.1	\$0.1
Securitized Assets	\$338.5	\$53.2	\$20.6	\$2.3	\$0.0	\$233.0	\$2.7	\$26.5	\$207.6	\$29.8	\$16.5	\$1.5	\$0.0	\$150.5	\$0.0	\$9.3	\$130.9	\$23.4	\$4.2	\$0.8	\$0.0	\$82.5	\$2.7	\$17.2
Liquidity	\$228.0	\$27.9	\$9.5	\$0.9	\$0.0	\$14.9	\$165.6	\$9.2	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.8	\$0.0	\$224.1	\$27.9	\$9.5	\$0.9	\$0.0	\$14.9	\$161.8	\$9.2
OTHER	\$1,044.1	\$58.2	\$56.1	\$13.4	\$7.0	\$25.0	\$2.3	\$882.2	\$363.3	\$13.8	\$16.8	\$2.8	\$2.7	\$4.4	\$0.1	\$322.7	\$680.7	\$44.3	\$39.3	\$10.6	\$4.2	\$20.6	\$2.2	\$559.6
Total	\$13,154.3	\$6,763.8	\$3,064.0	\$587.0	\$527.2	\$543.8	\$352.6	\$1,316.0	\$10,139.7	\$5,737.5	\$2,511.5	\$460.2	\$518.5	\$350.1	\$64.4	\$497.6	\$3,014.5	\$1,026.3	\$552.4	\$126.8	\$8.7	\$193.6	\$288.2	\$818.5

Increase (Decrease)	Fund Assets Advised All Managers								Fund Assets Advised Dedicated Managers								Fund Assets Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	\$498.1	\$455.4	\$5.8	\$4.1	-\$8.2	\$13.9	\$4.2	\$22.8	\$301.6	\$306.2	-\$5.9	\$1.0	-\$8.2	\$11.1	-\$6.9	\$4.2	\$196.5	\$149.2	\$11.7	\$3.1	\$0.0	\$2.7	\$11.1	\$18.6
Private Equity	\$201.5	-\$21.6	\$200.0	-\$0.6	-\$0.6	\$9.9	-\$0.1	\$14.5	\$211.2	-\$14.6	\$214.4	\$0.4	-\$0.8	\$7.6	-\$0.1	\$4.2	-\$9.8	-\$7.0	-\$14.4	-\$1.0	\$0.1	\$2.2	\$0.0	\$10.4
Real Estate	\$111.5	\$3.6	\$9.6	\$77.0	\$0.0	\$1.8	\$1.6	\$17.9	\$103.8	\$3.4	\$9.5	\$72.8	\$0.0	\$0.8	\$0.0	\$17.3	\$7.7	\$0.1	\$0.1	\$4.3	\$0.0	\$1.6	\$0.6	\$0.6
Venture Capital	\$40.0	\$0.0	\$0.0	-\$0.9	\$37.0	\$0.0	\$0.0	\$1.8	\$40.6	\$0.0	\$2.1	-\$0.9	\$37.6	\$0.0	\$0.0	\$1.8	-\$0.7	\$0.0	-\$0.1	\$0.0	-\$0.6	\$0.0	\$0.0	\$0.0
Securitized Assets	\$10.9	\$1.0	-\$0.3	-\$0.2	\$0.0	\$6.2	-\$0.2	\$4.3	\$3.1	\$2.9	\$0.7	\$0.2	\$0.0	-\$1.4	\$0.0	\$0.7	\$7.8	-\$1.9	-\$1.0	-\$0.4	\$0.0	\$7.6	-\$0.2	\$3.5
Liquidity	\$13.9	-\$11.7	-\$1.0	\$0.7	\$0.0	\$3.4	\$26.6	-\$4.0	\$0.6	-\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7	\$0.0	\$13.3	-\$11.7	-\$1.0	\$0.7	\$0.0	\$3.4	\$25.9	-\$4.0
OTHER	\$104.5	-\$6.6	-\$12.9	-\$0.1	\$1.4	\$4.3	-\$18.3	\$136.6	\$39.6	-\$0.7	-\$18.5	-\$0.5	\$0.4	\$1.0	\$0.0	\$52.8	\$64.9	-\$5.9	\$0.6	\$0.4	\$1.0	\$3.3	-\$18.3	\$83.7
Total	\$980.2	\$420.1	\$203.2	\$80.1	\$29.7	\$39.5	\$3.0	\$204.6	\$700.6	\$297.2	\$207.4	\$73.0	\$29.1	\$19.1	-\$6.3	\$81.1	\$279.7	\$122.9	-\$4.2	\$7.0	\$0.6	\$20.4	\$9.3	\$123.6

% Increase (Decrease)	Fund Assets Advised All Managers								Fund Assets Advised Dedicated Managers								Fund Assets Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	7.5%	7.8%	2.8%	8.4%	-68.6%	12.0%	2.4%	11.7%	5.5%	6.0%	-5.8%	8.2%	-70.9%	12.1%	-10.3%	8.4%	17.2%	20.8%	10.7%	8.4%	14.3%	11.5%	10.2%	12.9%
Private Equity	6.8%	-8.2%	8.2%	-0.8%	-3.6%	9.8%	-15.1%	21.3%	8.8%	-7.2%	10.5%	0.7%	-4.5%	12.4%	-15.1%	NA	-1.8%	-11.6%	-3.7%	-4.6%	10.3%	5.7%	NA	23.3%
Real Estate	17.4%	5.1%	9.2%	21.3%	2.8%	6.3%	1104.5%	24.6%	18.7%	5.7%	9.6%	23.3%	-0.9%	3.4%	-100.0%	29.4%	9.1%	1.4%	2.0%	8.6%	35.0%	15.2%	31045.7%	4.5%
Venture Capital	8.2%	3.2%	9.5%	-88.7%	81.0%	-25.0%	0.4%	35.1%	8.4%	2.1%	10.4%	-98.4%	8.2%	-23.5%	NA	36.1%	-15.3%	17.2%	-17.3%	31.0%	-18.1%	-25.4%	0.4%	-3.2%
Securitized Assets	3.3%	1.9%	-1.5%	-6.2%	-11.8%	2.8%	-6.3%	19.2%	1.5%	10.9%	4.2%	18.1%	NA	-0.9%	NA	8.4%	6.3%	-7.5%	-18.8%	-31.4%	-11.6%	10.2%	-6.3%	25.9%
Liquidity	6.5%	-29.6%	-4.6%	327.7%	NA	29.6%	19.1%	-30.6%	19.7%	-100.0%	NA	NA	NA	NA	21.6%	NA	6.3%	-29.5%	-4.7%	327.7%	NA	29.6%	19.1%	-30.6%
OTHER	11.1%	-10.2%	-18.7%	-0.7%	26.2%	21.0%	-88.9%	18.3%	12.3%	-4.5%	-44.5%	-14.0%	17.9%	29.5%	-1.7%	19.6%	10.5%	-11.8%	1.6%	3.5%	32.2%	19.3%	-99.3%	17.6%
Total	8.1%	6.6%	7.1%	15.8%	6.0%	7.8%	0.9%	18.4%	7.4%	5.5%	9.0%	18.9%	5.9%	5.8%	-8.9%	19.5%	10.2%	13.6%	-0.7%	5.9%	8.1%	11.8%	3.3%	17.8%

Supporting Schedule 4

Distribution of Fund Types-Number of Funds

Dedicated and Non-Dedicated Alternative Managers

Managers Primary Fund Type	Fund Types Advised All Managers								Fund Types Advised Dedicated Managers								Fund Types Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
# Funds-2016-Total																								
Hedge	100%	77.6%	10.9%	2.7%	0.6%	2.7%	0.2%	5.4%	100%	83.7%	8.3%	1.8%	0.6%	3.0%	0.1%	2.6%	100.0%	65.5%	15.9%	4.6%	0.5%	2.1%	0.5%	10.8%
Private Equity	100%	7.3%	82.0%	3.2%	1.8%	2.4%	0.0%	3.3%	100%	5.7%	86.2%	2.6%	2.1%	1.7%	0.0%	1.7%	100.0%	13.2%	66.9%	5.2%	0.9%	4.9%	0.0%	9.0%
Real Estate	100%	4.7%	9.0%	73.1%	1.3%	3.5%	0.1%	8.3%	100%	4.6%	8.2%	74.7%	0.7%	3.3%	0.1%	8.4%	100.0%	5.0%	12.8%	65.3%	4.4%	4.6%	0.2%	7.8%
Venture Capital	100%	0.4%	3.1%	0.4%	95.2%	0.1%	0.0%	0.8%	100%	0.3%	2.8%	0.1%	96.2%	0.0%	0.0%	0.5%	100.0%	2.9%	11.5%	6.6%	70.0%	1.6%	0.4%	7.0%
Securitized Assets	100%	19.1%	17.5%	3.3%	0.1%	48.6%	0.1%	11.2%	100%	17.0%	15.3%	2.3%	0.0%	60.4%	0.0%	5.0%	100.0%	21.4%	19.8%	4.5%	0.3%	36.6%	0.1%	17.8%
Liquidity	100%	43.2%	28.3%	1.4%	0.0%	11.1%	6.1%	9.9%	100%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	100.0%	43.1%	28.6%	1.4%	0.0%	11.2%	5.7%	10.0%
OTHER	100%	8.5%	13.7%	3.6%	2.6%	2.5%	0.4%	68.7%	100%	5.9%	7.0%	1.8%	3.5%	0.8%	0.3%	80.7%	100.0%	9.7%	16.5%	4.3%	2.2%	3.3%	0.5%	63.7%
Total	100%	29.9%	34.2%	7.7%	14.3%	3.8%	0.2%	9.8%	100%	28.5%	36.1%	8.0%	19.1%	3.2%	0.1%	5.1%	100.0%	33.6%	29.6%	7.1%	2.4%	5.3%	0.5%	21.5%

# Funds-2017-Total	Fund Types Advised All Managers								Fund Types Advised Dedicated Managers								Fund Types Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	100%	76.7%	11.6%	2.8%	0.6%	2.7%	0.2%	5.5%	100%	82.9%	8.9%	1.8%	0.5%	3.1%	0.0%	2.7%	100%	64.4%	16.8%	4.9%	0.6%	2.0%	0.5%	10.8%
Private Equity	100%	6.6%	82.8%	3.2%	1.8%	2.3%	0.0%	3.2%	100%	5.4%	86.3%	2.7%	2.1%	1.7%	0.0%	1.8%	100%	11.1%	70.5%	4.9%	0.8%	4.6%	0.0%	8.1%
Real Estate	100%	4.6%	8.6%	73.9%	1.2%	3.2%	0.0%	8.4%	100%	4.4%	7.8%	76.0%	0.6%	2.8%	0.0%	8.4%	100%	5.7%	12.5%	63.9%	4.3%	5.3%	0.2%	8.2%
Venture Capital	100%	0.4%	2.8%	0.3%	95.7%	0.1%	0.0%	0.7%	100%	0.4%	2.5%	0.0%	96.6%	0.0%	0.0%	0.5%	100%	2.2%	11.1%	5.5%	73.1%	1.1%	0.4%	6.6%
Securitized Assets	100%	18.7%	16.9%	3.9%	0.1%	50.6%	0.1%	9.6%	100%	17.3%	13.7%	2.8%	0.0%	61.6%	0.0%	4.6%	100%	20.4%	20.7%	5.2%	0.3%	37.8%	0.2%	15.5%
Liquidity	100%	39.9%	29.1%	1.9%	0.0%	11.7%	7.5%	10.0%	100%	0.0%	25.0%	0.0%	0.0%	0.0%	75.0%	0.0%	100%	40.6%	29.2%	1.9%	0.0%	11.9%	6.2%	10.2%
OTHER	100%	6.8%	12.0%	3.6%	3.0%	2.3%	0.3%	72.0%	100%	4.9%	6.0%	2.0%	3.9%	0.9%	0.2%	82.2%	100%	7.6%	14.7%	4.4%	2.7%	3.0%	0.3%	67.4%
Total	100%	28.3%	34.9%	8.1%	15.0%	3.4%	0.2%	9.9%	100%	27.0%	36.3%	8.4%	19.8%	3.1%	0.0%	5.4%	100%	31.5%	31.1%	7.4%	2.7%	5.0%	0.5%	21.7%

% Increase (Decrease)	Fund Types Advised All Managers								Fund Types Advised Dedicated Managers								Fund Types Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	0.0%	-1.2%	6.0%	3.3%	-2.3%	2.4%	0.9%	1.8%	0.0%	-1.0%	6.9%	1.3%	-11.3%	4.2%	-22.1%	6.9%	0.0%	-1.6%	5.4%	5.3%	17.3%	-2.6%	6.2%	0.0%
Private Equity	0.0%	-9.7%	1.1%	-1.6%	-0.3%	-1.5%	-44.6%	-1.9%	0.0%	-5.4%	0.1%	1.2%	0.6%	2.1%	-30.8%	9.3%	0.0%	-16.1%	5.5%	-6.5%	-7.6%	-5.9%	-100.0%	-9.2%
Real Estate	0.0%	-0.8%	-4.0%	1.1%	-4.3%	-7.5%	-70.5%	0.9%	0.0%	-4.5%	-4.9%	1.7%	-20.3%	-14.0%	-100.0%	0.1%	0.0%	15.8%	-2.4%	-2.1%	-2.7%	14.7%	-14.0%	4.9%
Venture Capital	0.0%	-0.2%	-11.1%	-26.5%	0.5%	-28.1%	-10.1%	-4.4%	0.0%	7.8%	-12.3%	-55.1%	0.4%	-10.1%	NA	-4.1%	0.0%	-23.1%	-3.9%	-15.9%	4.4%	-32.7%	-10.3%	-5.1%
Securitized Assets	0.0%	-2.1%	-3.1%	16.9%	3.4%	4.1%	3.4%	-14.6%	0.0%	1.7%	-10.5%	22.1%	NA	2.0%	NA	-7.9%	0.0%	-4.9%	4.7%	16.9%	9.6%	3.4%	9.6%	-18.2%
Liquidity	0.0%	-7.6%	3.0%	31.8%	NA	5.1%	21.6%	1.2%	0.0%	-100.0%	NA	NA	NA	NA	50.0%	NA	0.0%	-5.7%	2.3%	33.0%	NA	6.1%	8.1%	2.1%
OTHER	0.0%	-20.6%	-12.5%	1.1%	18.1%	-8.5%	-30.0%	4.8%	0.0%	-16.6%	-14.3%	8.4%	8.8%	10.4%	-9.7%	1.8%	0.0%	-20.9%	-11.0%	1.1%	23.0%	-9.0%	-34.9%	5.8%
Total	0.0%	-5.6%	1.8%	4.9%	4.9%	-3.2%	-7.2%	1.1%	0.0%	-5.3%	0.6%	5.0%	3.6%	-1.5%	-7.0%	4.6%	0.0%	-6.1%	5.0%	4.1%	12.3%	-4.7%	-5.1%	1.0%

Distribution of Annual Change

Hedge	100%	40%	39%	7%	0%	5%	0%	9%	100%	53%	30%	3%	-2%	8%	0%	9%	100%	0%	68%	20%	6%	-1%	2%	11%
Private Equity	100%	-2%	93%	3%	2%	2%	0%	2%	100%	2%	87%	3%	2%	2%	0%	4%	100%	-15%	115%	1%	0%	1%	0%	-2%
Real Estate	100%	4%	6%	80%	0%	1%	0%	9%	100%	3%	5%	86%	-1%	-1%	-1%	9%	100%	11%	11%	55%	4%	9%	0%	11%
Venture Capital	100%	0%	0%	-1%	100%	0%	0%	0%	100%	1%	-1%	0%	100%	0%	0%	0%	100%	-4%	7%	-4%	100%	-4%	0%	4%
Securitized Assets	100%	31%	33%	-13%	0%	-11%	0%	60%	100%	29%	-53%	24%	0%	112%	0%	-12%	100%	32%	10%	-3%	0%	24%	0%	42%
Liquidity	100%	-240%	100%	40%	0%	60%	120%	20%	100%	-50%	50%	0%	0%	0%	100%	0%	100%	-1000%	300%	200%	0%	300%	200%	100%
OTHER	100%	-30%	-24%	4%	13%	-2%	-2%	141%	100%	-4%	-3%	3%	7%	2%	0%	96%	100%	-78%	-62%	6%	24%	-10%	-6%	222%
Total	100%	2%	45%	14%	26%	2%	0%	12%	100%	7%	39%	14%	2%	2%	0%	8%	100%	-23%	71%	15%	11%	-2%	0%	28%

Supporting Schedule 5

Distribution of Fund Type- \$ Value of Assets

Dedicated and Non-Dedicated Alternative Managers

Dedicated

Managers Primary Fund Type	Fund Assets Advised All Managers								Fund Assets Advised Dedicated Managers								Fund Assets Advised Non-Dedicated Managers							
	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	100%	88.5%	3.2%	0.7%	0.2%	1.8%	2.7%	2.9%	100%	93.9%	1.8%	0.2%	0.2%	1.7%	1.2%	0.9%	100%	62.9%	9.5%	3.2%	0.0%	2.1%	9.5%	12.7%
Private Equity	100%	8.9%	82.1%	2.7%	0.6%	3.4%	0.0%	2.3%	100%	8.5%	84.9%	2.4%	0.7%	2.6%	0.0%	1.0%	100%	10.9%	69.9%	4.0%	0.2%	7.0%	0.0%	8.0%
Real Estate	100%	11.0%	16.3%	56.7%	0.1%	4.5%	0.0%	11.4%	100%	10.9%	18.0%	56.4%	0.1%	4.0%	0.0%	10.6%	100%	11.8%	5.6%	58.3%	0.1%	8.0%	0.0%	16.2%
Venture Capital	100%	0.3%	4.3%	0.2%	94.2%	0.0%	0.0%	1.1%	100%	0.2%	4.2%	0.2%	94.4%	0.0%	0.0%	1.0%	100%	2.1%	16.0%	1.8%	73.5%	0.3%	3.3%	3.1%
Securitized Assets	100%	15.9%	6.4%	0.8%	0.0%	69.2%	0.9%	6.8%	100%	13.2%	7.7%	0.6%	0.0%	74.3%	0.0%	4.2%	100%	20.6%	4.2%	1.0%	0.0%	60.8%	2.4%	11.1%
Liquidity	100%	18.5%	4.9%	0.1%	0.0%	5.4%	64.9%	6.2%	100%	1.9%	0.0%	0.0%	0.0%	98.1%	0.0%	0.0%	100%	18.8%	5.0%	0.1%	0.0%	5.5%	64.4%	6.3%
OTHER	100%	6.9%	7.4%	1.4%	0.6%	2.2%	2.2%	79.5%	100%	4.5%	9.4%	1.0%	0.7%	1.0%	0.0%	83.7%	100%	8.2%	6.3%	1.7%	0.5%	2.8%	3.3%	77.3%
Total	100%	52.1%	23.5%	4.2%	4.1%	4.1%	2.9%	9.1%	100%	57.6%	24.4%	4.1%	5.2%	3.5%	0.7%	4.4%	100%	33.0%	20.4%	4.4%	0.3%	6.3%	10.2%	25.4%

# Funds-2016-Total	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	100%	88.7%	3.0%	0.7%	0.1%	1.8%	2.5%	3.1%	100%	94%	2%	0%	0%	2%	1%	1%	100%	65%	9%	3%	0%	2%	9%	12%
Private Equity	100%	7.7%	83.2%	2.5%	0.5%	3.5%	0.0%	2.6%	100%	7%	86%	2%	1%	3%	0%	1%	100%	10%	69%	4%	0%	8%	0%	10%
Real Estate	100%	9.8%	15.2%	58.5%	0.1%	4.1%	0.2%	12.1%	100%	10%	17%	54%	0%	3%	0%	12%	100%	11%	5%	58%	0%	8%	2%	16%
Venture Capital	100%	0.2%	4.3%	0.0%	94.0%	0.0%	0.0%	1.3%	100%	0%	4%	0%	94%	0%	0%	1%	100%	3%	16%	3%	71%	0%	4%	4%
Securitized Assets	100%	15.7%	6.1%	0.7%	0.0%	68.8%	0.8%	7.8%	100%	14%	8%	1%	0%	73%	0%	4%	100%	18%	3%	1%	0%	63%	2%	13%
Liquidity	100%	12.2%	4.2%	0.4%	0.0%	6.5%	72.5%	4.0%	100%	0%	0%	0%	0%	0%	100%	0%	100%	12%	4%	0%	0%	7%	72%	4%
OTHER	100%	5.6%	5.4%	1.3%	0.7%	2.4%	0.2%	84.5%	100%	4%	5%	1%	1%	1%	0%	89%	100%	7%	6%	2%	1%	3%	0%	82%
Total	100%	51.4%	23.3%	4.5%	4.0%	4.1%	2.7%	10.0%	100%	57%	25%	5%	5%	3%	1%	5%	100%	34%	18%	4%	0%	6%	10%	27%

%- Increase (Decrease)	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER	Total	HF	PE	RE	VC	SAF	LF	OTHER
Hedge	0.0%	0.2%	-4.4%	0.8%	-70.8%	4.1%	-4.8%	3.9%	0.0%	0.4%	-10.7%	2.6%	-72.4%	6.2%	-15.0%	2.7%	0.0%	3.0%	-5.6%	-7.5%	-2.5%	-4.9%	-6.0%	-3.7%
Private Equity	0.0%	-14.1%	1.3%	-7.1%	-9.7%	2.8%	-20.5%	13.6%	0.0%	-14.7%	1.6%	-7.5%	-12.8%	3.3%	-22.0%	8.0%	0.0%	-10.1%	-2.0%	-2.9%	12.3%	7.6%	NA	25.6%
Real Estate	0.0%	-10.5%	-7.0%	3.3%	-12.5%	-4.5%	10121.1%	6.1%	0.0%	-11.0%	-7.7%	3.8%	-16.5%	-12.9%	-100.0%	8.9%	0.0%	-7.0%	-6.5%	-0.5%	23.8%	5.6%	28498.2%	-4.2%
Venture Capital	0.0%	-4.7%	1.1%	-89.5%	-0.2%	-30.7%	-7.3%	24.8%	0.0%	-5.9%	1.8%	-98.6%	-0.2%	-29.5%	NA	25.5%	0.0%	38.3%	-2.4%	54.7%	-3.5%	-11.9%	18.5%	14.3%
Securitized Assets	0.0%	-1.3%	-4.6%	-9.2%	-14.6%	-0.5%	-9.3%	15.3%	0.0%	9.2%	2.6%	16.3%	NA	-2.4%	NA	6.8%	0.0%	-13.0%	-23.7%	-35.4%	-17.0%	3.7%	-11.9%	18.4%
Liquidity	0.0%	-33.9%	-15.1%	301.5%	NA	21.7%	11.9%	-34.9%	0.0%	-100.0%	NA	NA	NA	NA	1.6%	NA	0.0%	-33.7%	-15.1%	302.3%	NA	21.9%	12.0%	-34.7%
OTHER	0.0%	-19.3%	-26.9%	-10.8%	13.3%	8.7%	-40.0%	6.3%	0.0%	-15.3%	-50.8%	-23.7%	4.5%	14.8%	-12.8%	6.0%	0.0%	-20.2%	-8.1%	-6.5%	19.6%	8.0%	-40.8%	6.4%
Total	0.0%	-1.5%	-0.9%	7.1%	-1.9%	-0.2%	-6.7%	9.6%	0.0%	-1.8%	1.4%	10.6%	-1.4%	-1.6%	-15.2%	11.2%	0.0%	3.1%	-10.0%	-4.0%	-2.0%	1.4%	-6.2%	6.9%

Distribution of Annual Change

Hedge	100%	9%	1%	1%	-2%	3%	1%	5%	100%	102%	-2%	0%	-3%	4%	-2%	1%	100%	76%	5%	2%	0%	1%	6%	9%
Private Equity	100%	-1%	9%	0%	0%	5%	0%	7%	100%	-7%	102%	0%	0%	4%	0%	2%	100%	72%	148%	10%	-1%	-23%	0%	-106%
Real Estate	100%	3%	9%	69%	0%	2%	1%	16%	100%	3%	9%	70%	0%	1%	0%	17%	100%	2%	1%	55%	0%	13%	20%	8%
Venture Capital	100%	0%	5%	-2%	93%	0%	0%	5%	100%	0%	5%	-2%	93%	0%	0%	5%	100%	-2%	18%	-4%	87%	0%	0%	1%
Securitized Assets	100%	9%	-3%	-1%	0%	57%	-2%	39%	100%	94%	21%	7%	0%	-45%	0%	23%	100%	-25%	-12%	-5%	0%	99%	-2%	46%
Liquidity	100%	-84%	-7%	5%	0%	24%	191%	-24%	100%	-10%	2%	0%	0%	0%	107%	0%	100%	-88%	-8%	5%	0%	26%	195%	-30%
OTHER	100%	-6%	-12%	0%	1%	4%	-18%	131%	100%	-2%	-34%	-1%	1%	3%	0%	133%	100%	-9%	1%	1%	2%	5%	-28%	129%
Total	100%	43%	21%	8%	3%	4%	0%	21%	100%	42%	30%	10%	4%	3%	-1%	12%	100%	44%	-1%	3%	0%	7%	3%	44%