CONVERGENCE

OPTIMAL PERFORMANCE

Alternative Asset Management Industry[1]
Convergence Insights
December 31, 2016

The Industry Remained Strong in 2016 with Favorable Tailwinds for 2017!

KEY CONVERGENCE 12 MONTH GROWTH INDICATORS

	ALL ALTS MANAGERS			MANAGERS >50% Alt Assets		
	2015	**2016**	**Change**	**2015**	**2016**	**Change**
# REGULATORY ACTIONS	4,695	5,115	8.9%	4,418	4,784	8.3%
# ALTERNATIVE MANAGERS	6,739	7,354	9.1%	5,041	5,409	7.3%
# ALTERNATIVE ADVISORS	7,490	8,145	8.7%	5,855	6,460	10.3%
# ALTERNATIVE FUNDS	42,629	47,710	11.9%	30,147	34,204	13.5%
# ALTERNATIVE HEADCOUNT	427,903	468,000	9.4%	79,803	87,703	9.9%
$ ALTERNATIVE ASSETS-Trillions (TR)	$12.20	$12.90	5.7%	$9.32	$9.90	6.2%
OPERATING PRODUCTIVITY	NA	NA	NA	11.21	11.42	1.9%

Convergence's Q4 2016 update on the Alternative Asset Management Industry provides detailed and original insights into the factors driving the alternatives industry. We measure the overall health of the Industry by analyzing changes we observe in 17,500+ Advisors, 53,000+ Private Funds and 6,000+ Service Providers.

The alternatives Industry grew solidly across all segments and factors tracked by Convergence. More Advisors and Managers were formed who in turn hired more people and launched more funds. The number of Service Providers servicing the industry grew and, of course, the number of regulatory actions increased as well.

Hedge Funds "noise" garnered the most negative attention this year as a series of high profile closures, scandals and performance woes caused many investors to withdraw capital or suspend allocations to the asset class. While Managers in all segments grew, we saw investors direct new capital allocations away from Hedge Funds and into Private Equity, Real Estate and Venture Capital.

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

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

Alternative Funds-3 Year Growth Profile

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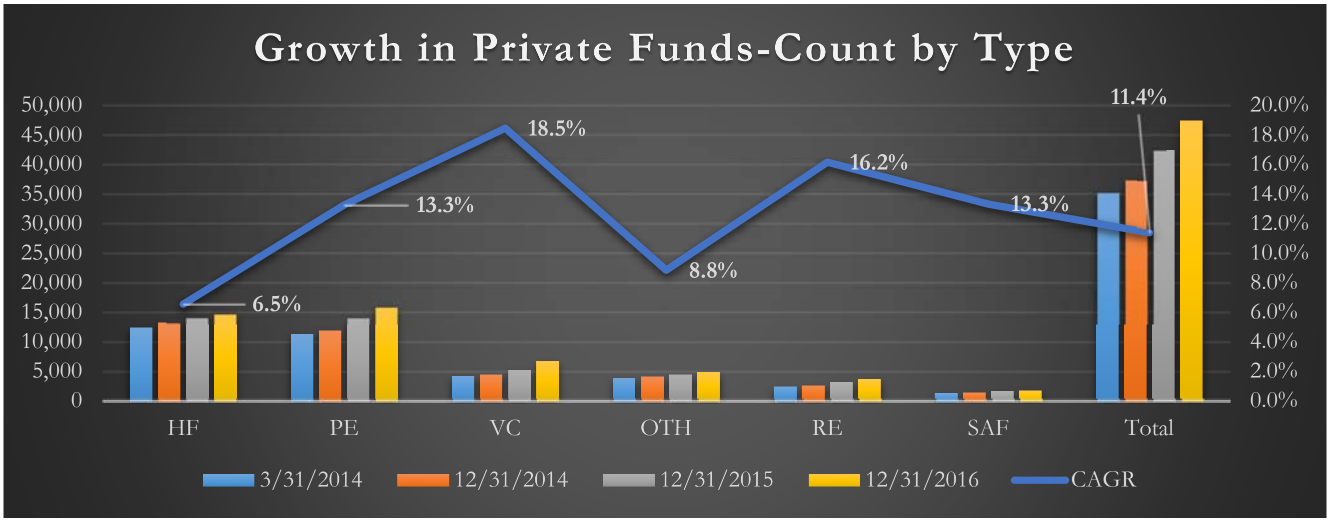
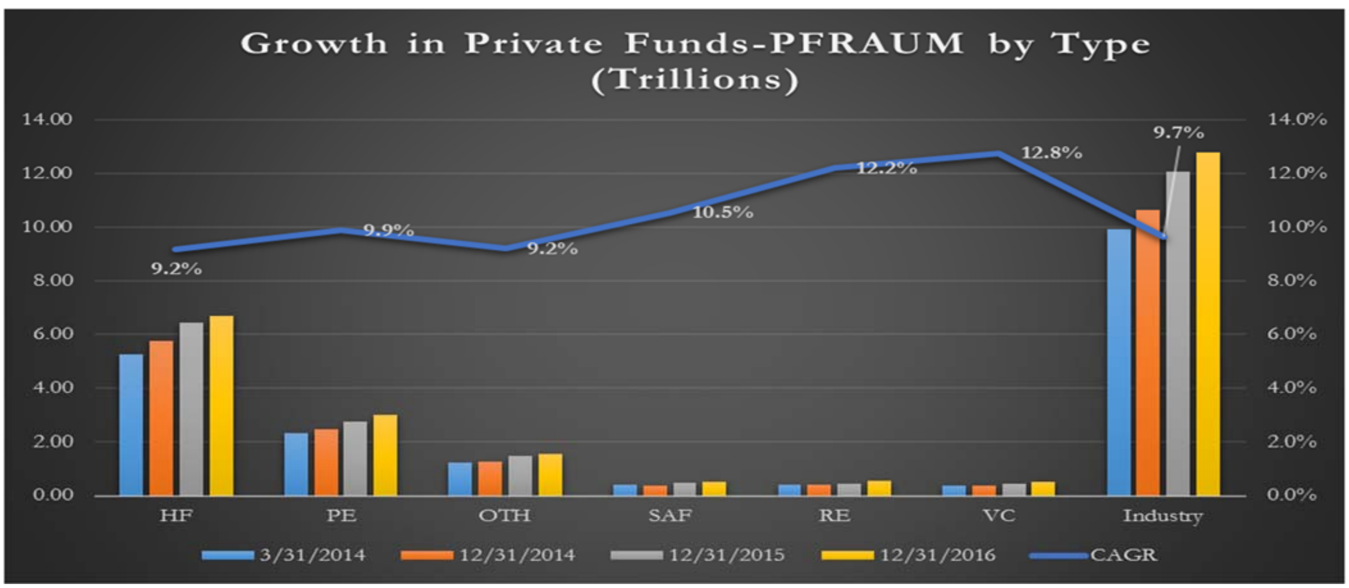
The number of alternatives funds grew at an 11.4% CAGR over the past three years led by Venture Capital, Real Estate and Private Equity funds growing 18.5%, 16.2% and 13.3%, respectively. Other Funds and Hedge Funds grew at a healthy 8.8% and 6.5%, respectively. Hedge Funds continue to grow, albeit more slowly due to inconsistent performance, criticisms and challenges to fee structures, fund expenses, regulatory headlines and several high-profile closures announced during the year.



The value of alternative assets grew at a CAGR of 9.7% over the past three years led by Venture Capital, Real Estate and Securitized Assets growing at 12.8%, 12.2% and 10.5%, respectively. Private Equity and Hedge Fund Assets grew at 9.9% and 9.2%, respectively. Capital flows into new and existing Hedge funds totaled $325bn in 2016, well above reported redemption levels of $100bn, with $260bn going into existing funds and $65bn going into new funds. Overall capital allocated to Hedge Funds declined 25% over 2015 levels yet were substantial nonetheless.



Alternative Funds-3 Year Profile of Funds Closed

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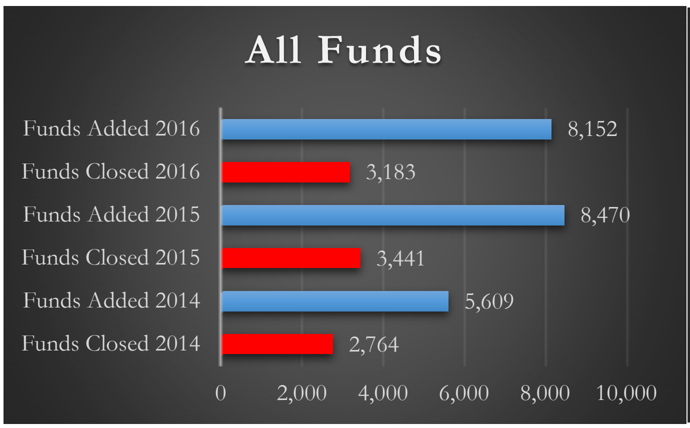
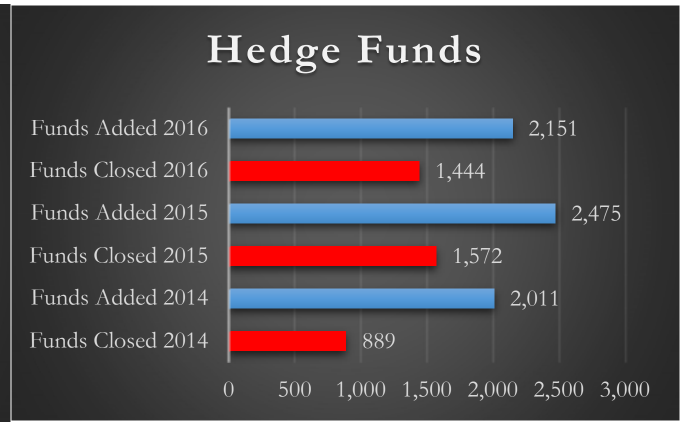
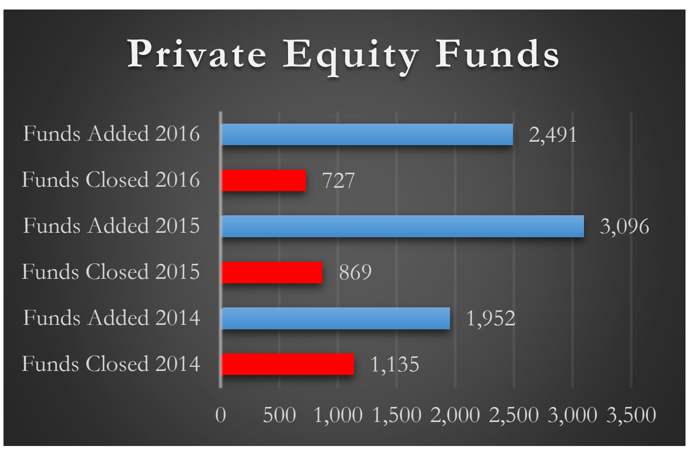
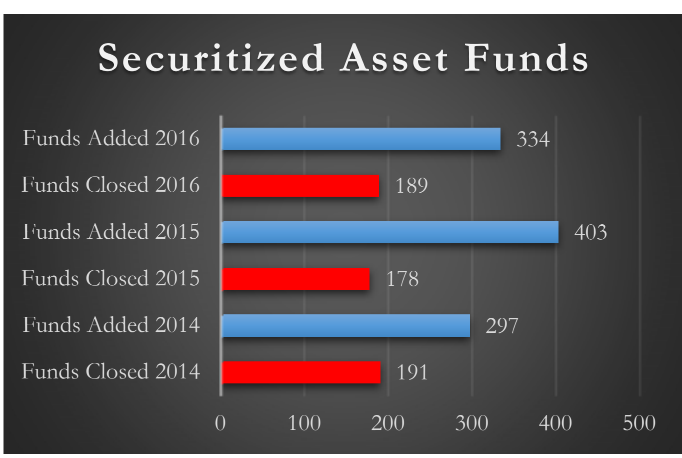
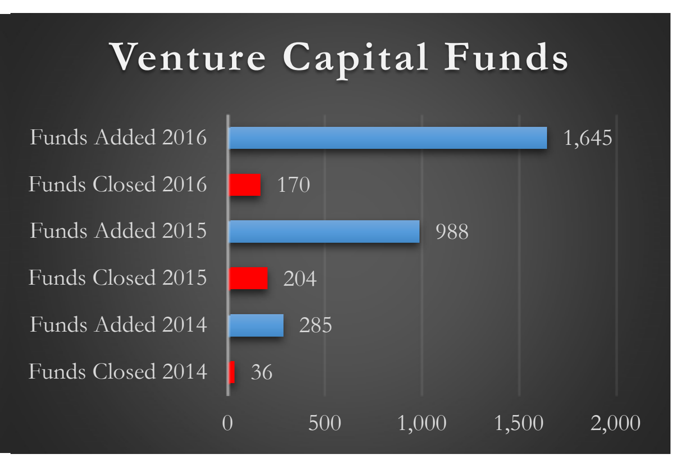
Despite the headline of record fund closures, fewer funds closed in 2016 than in 2015, including fewer declines in the number or Hedge Fund and Private Equity closures while Real Estate and Securitized Asset fund closures increased slightly. Net New Funds, defined as New Funds Less Closed Funds remained at 2015 levels with Venture Capital Funds posting the largest net increase in 2016.











Alternative Managers-Year-over-Year Growth

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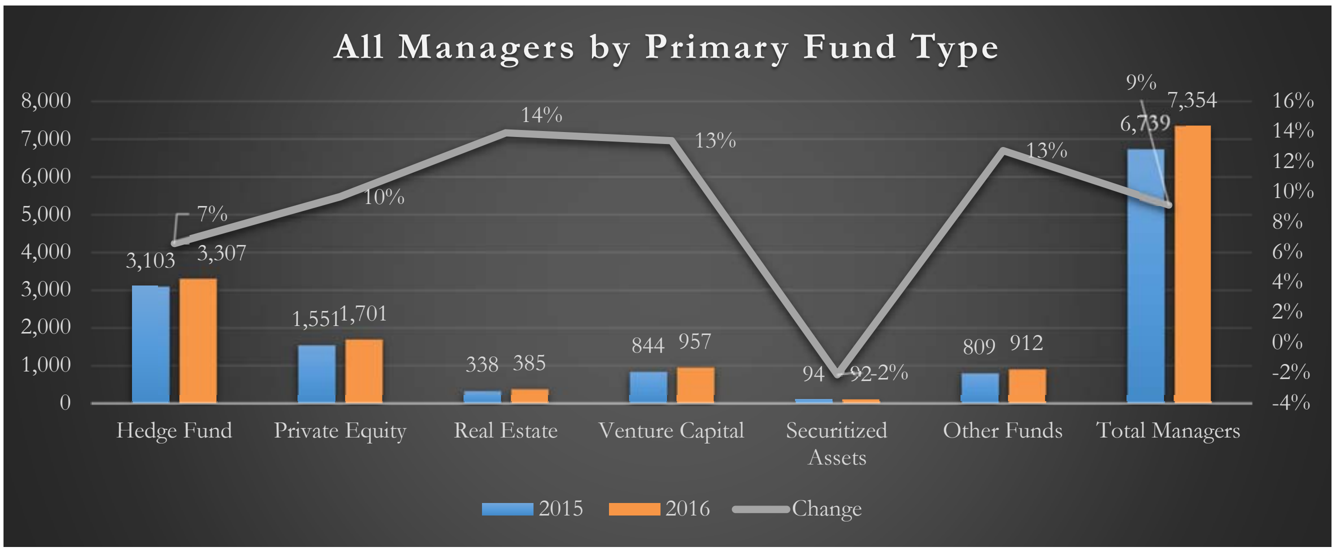
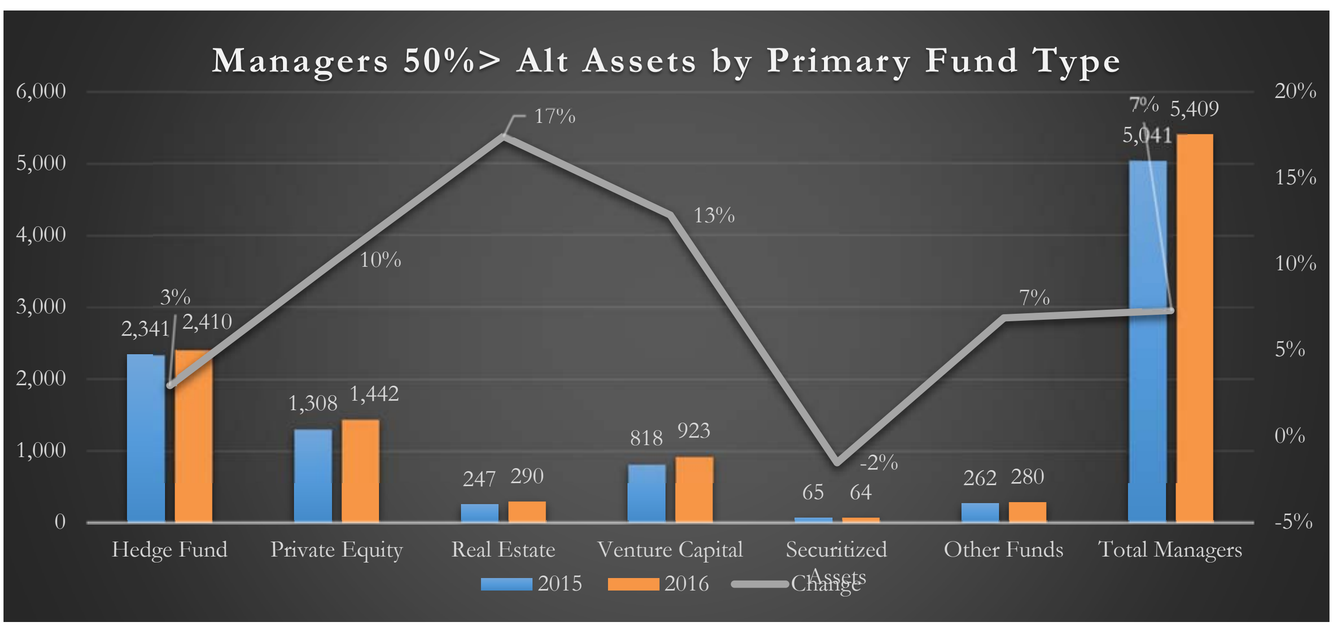
The number of Managers that advise alternative funds grew 9% year-over-year led by Managers of Real Estate, Venture Capital and Other Funds which grew 14%, 13% and 13%, respectively while Managers of Private Equity and Hedge Funds grew 10% and 7%, respectively. While Hedge Funds garnered plenty of negative attention in 2016, the number of existing and new Managers offering Hedge Funds continued to grow. It is interesting to note that the growth in Hedge Fund assets is more pronounced in Managers with less than 50% of their assets in alternative funds, confirming the trend into alternative advisory by Managers advising registered funds and managed accounts.





Top 100 Alternative Managers (by Assets)-Year-over-Year Growth

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The tables below show that the capital flowing into alternatives funds continues to go to the top 100 managers of alternative assets. At the end of 2016 the top 100 Alternative asset managers advised $5.787 trillion or 45% of total alternative assets, up from 34% in 2016. While asset consolidation among the top 100 Managers is clear, new Advisors continue to enter the market with an increase of 8.7% over 2015 (see page 1). Alternative asset management is becoming more crowded. With more managers chasing alpha, trades are becoming more crowded and the infrastructure more expensive, which reduces alpha for fund investors. We anticipate that industry returns will remain uneven in 2017, taking on a barbell like shape, where managers on each end generate positive and negative alpha with most tracking the general market.

The table below shows the growth drivers in the top 100 Alternative Managers over the prior 3 years. New Funds Launched represented 85% of the total change in value while Growth in Existing Funds represented 30% of the change. Growth in Existing Funds is driven by net new subscriptions, positive performance and increases in leverage levels.

During the 3 years ended 12/31/2016, the top 100 Managers launched new funds at a rate of 4.25x that of fund closures, indicating that investors are willing to allocate capital to industry leaders.

3/31/2014 Value	**4,091,369,226,320**	
New Funds Launched	1,436,047,998,680	**85%**
Funds Acquired	80,689,564,309	**5%**
Funds Sold	-31,401,771,326	**-2%**
Funds Closed	-299,290,662,761	**-18%**
Growth in Existing Funds	509,930,660,592	**30%**
12/31/2016 Value	**5,787,345,015,814**	

Total Value Change	**1,695,975,789,494**

A closer inspection of New Fund Launches indicates that the top 20 Managers launched 85% of New Fund Value. The top 10 firms of Net New Fund Launches (New Funds Launched less Funds Closed) include Goldman, Blackstone, Blackrock, Fortress, TPG, Wellington, 3G Capital, Vanguard, Apollo and Brookfield.

Alternative Managers-Headcount Profile-Year-over-Year

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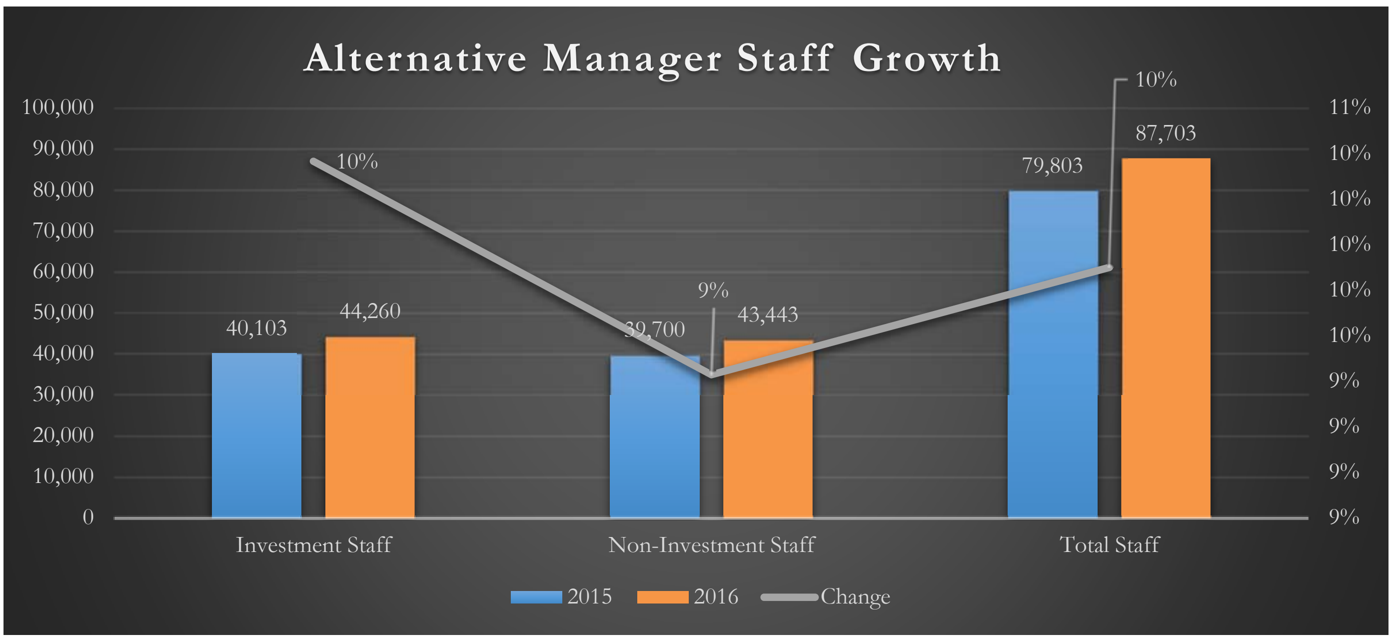
Hiring continues across the Industry. Managers with greater than 50% of their advised assets in alternatives increased headcount 10%, driven by a 9% increase in non-Investment Staff and a 10% increase in Investment staff. The increase in Investment staff is attributable to the significant increase in Real Estate and Venture Capital funds which typically start-out with lower levels of non-investment staff. We expect the ratio of investment: non-investment staff will normalize to 50-50 levels seen in the past.

Non-investment staff hiring continues to be driven by business complexity, increased regulatory pressures, greater investor servicing demands and additional transparency into their business models. Service Provider fragmentation and uneven service model scope contribute to this trend.

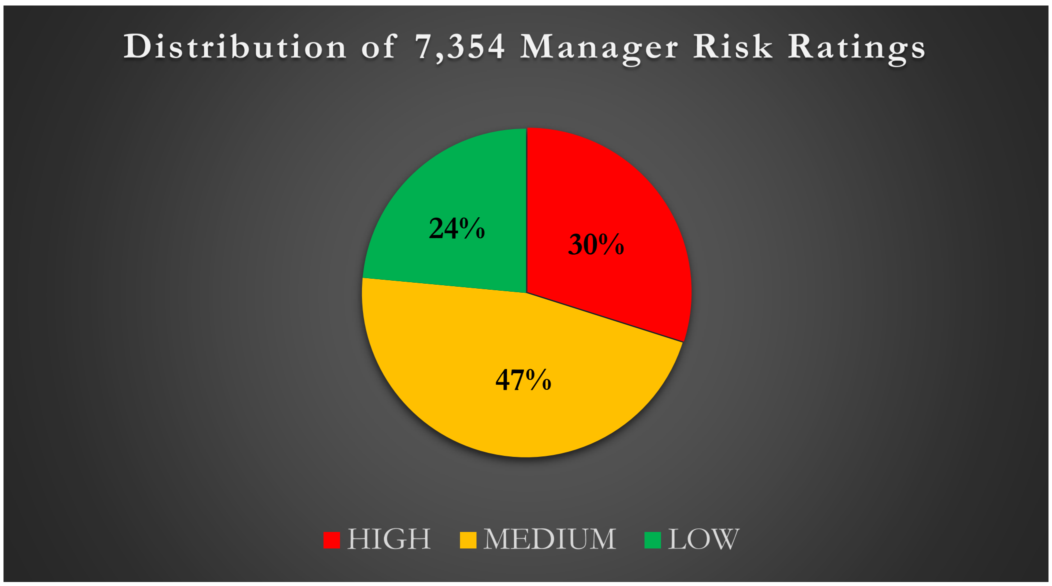


Alternative Industry- Complexity/Risk Profile©

Convergence Insights

Convergence created a proprietary methodology to assign a complexity/risk profile to the 17,000+ Advisors and 7,400+ Managers of alternative assets in our database. We measure the level of operating risk and complexity[2] across 40 different key risk factors identified in the Advisor's business model. Many of these factors are part of Convergence's growing library of "original content", and are proprietary and not available from other sources.

At the end of Q4 2016, 30% of the alternative Managers in our database were rated a High Complexity/Risk Profile© which means the Manager needs a robust control environment to avoid incurring significant levels of operating risk.



High Complexity/Risk Profiles© can create red flags in the eyes of institutional investors and used by regulators to target Managers for audit. We would expect Managers with Medium-High Complexity Profiles© to use service providers who have demonstrated experience with Managers with similar complexity/risk profiles and look for ways to simplify that risk.

Please contact Convergence to learn more about how you can use our Complexity/Risk Profiles© to improve your business model.

[2] The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. – Basel II

Alternative Managers-Regulatory Actions-Year-over-Year

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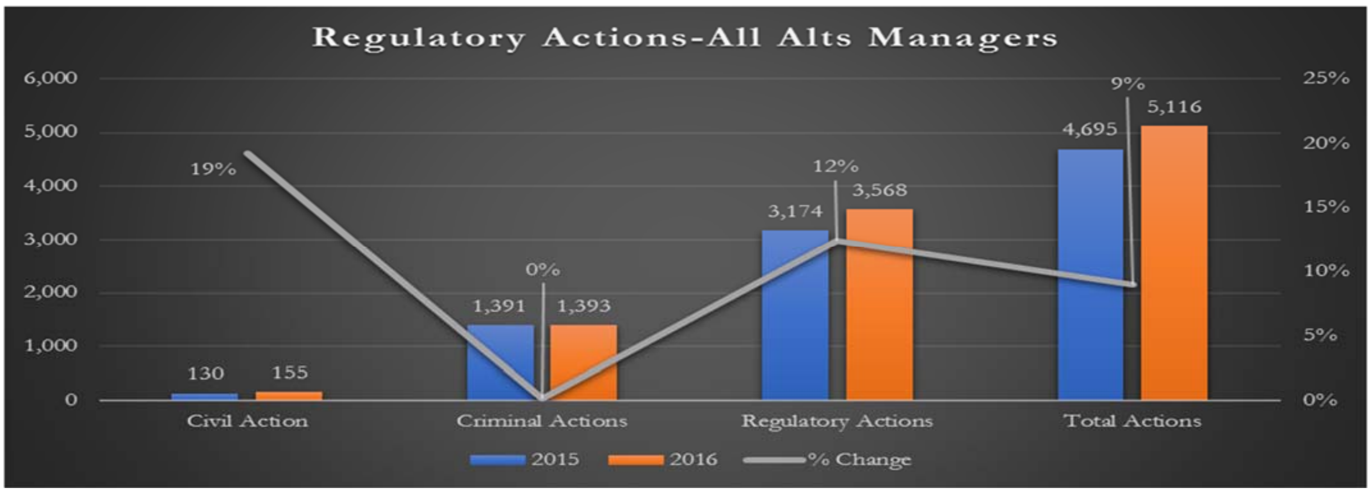
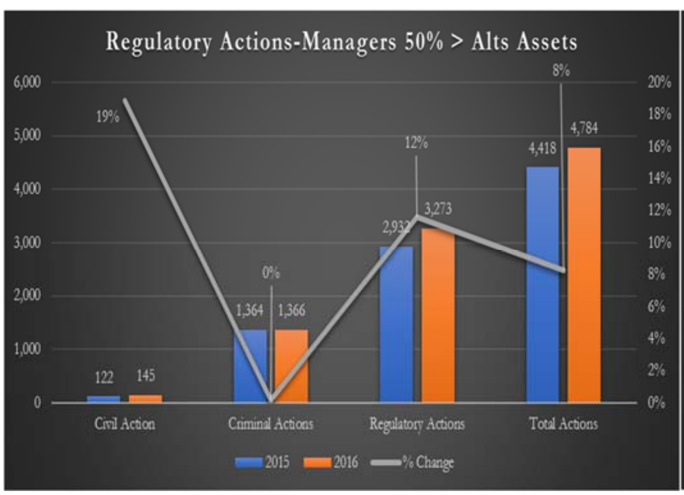
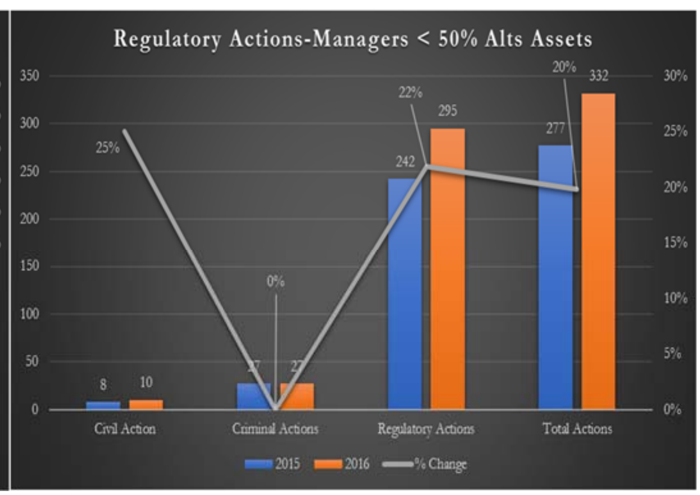
The number of regulatory Actions across the industry grew 9% led by a 19% increase in Civil Actions and a 12% increase in Regulatory Actions. Criminal Actions increased by 2 or less than 1%. During 2016 there were many actions taken against Advisors for inadequate and misleading expense disclosures and false valuation and performance representations.

It should be noted by Managers with less than 50% of their assets in alternative assets experienced a 20% increase in Regulatory Actions led by a 25% and 20% increase in Civil and Regulatory Actions, respectively. Managers with greater than 50% alternative assets incurred 8% more Regulatory Actions led by a 12% and 19% increase in Civil and Regulatory Actions, respectively. This material difference suggests that Managers with less than 50% alternative assets may have less organizational expertise dealing with the regulatory issues created by alternatives.







The SEC announced significant changes to Form ADV that will go into effect in October of 2017. Registered Advisors will need to submit much more information on managed accounts as well as the types of asset classes, derivatives and in certain cases, the leverage used by Advisors. For a summary of these changes please go to: **http://convergenceinc.com/final-form-adv-changes-august-2016/.**

Alternative Industry-3 Year View of Service Providers

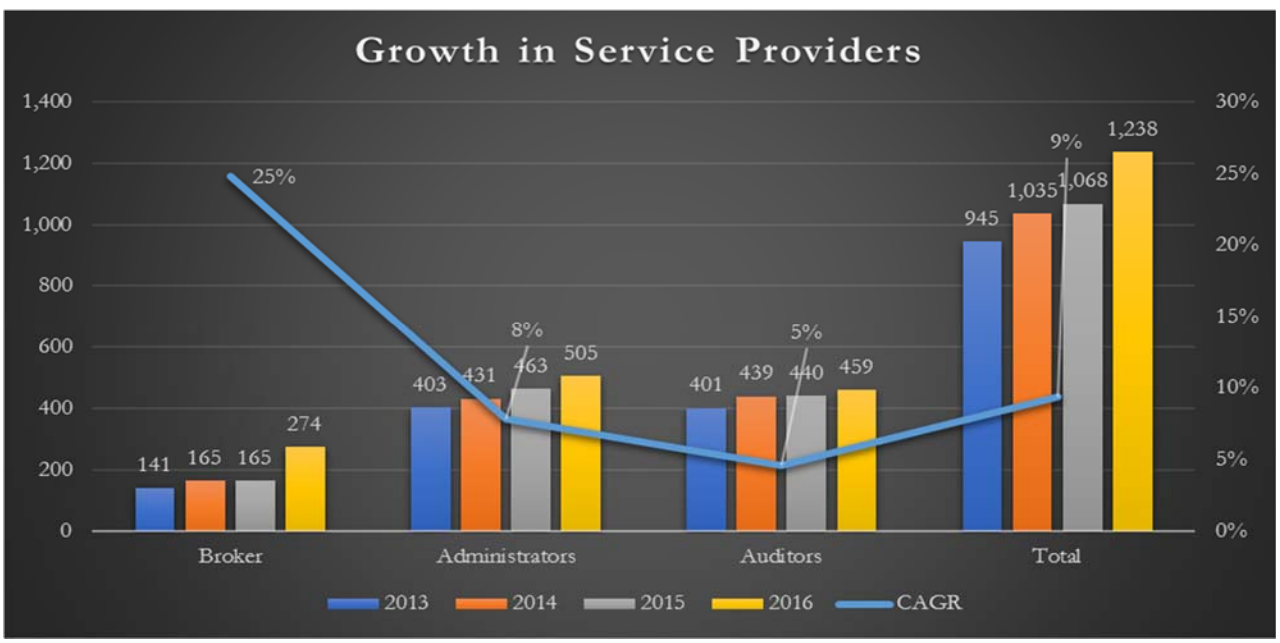
Convergence Insights

The total number of service providers named in alternative funds grew at a CAGR of 9%, consistent with the growth rates and new funds and Advisors. Prime Brokers led the pack growing at 25% while new Administrators and Auditors grew 8% and 9%, respectively.

The growth in Prime Brokers comes as no surprise as banks continue to prune their book of business, seeking to do business with the larger fund managers. Smaller Prime Brokers led the way in growth as Advisors scrambled to find replacement Prime Brokers and new Advisors need to find alternatives to the traditional Primes.

What is surprising is the continued growth in Administrators and Audit firms. While the Fund Administration business continues to consolidate at the top of the market, new Administrators are finding demand for their services. Many of the new entrants are differentiating themselves with newer technology platforms and pricing models. We have mentioned in previous Quarterly Updates and regular Insights that more Private Equity Advisors are testing the third-party Administrator model, accounting for some of this incremental growth.

A closer look at the names of new service providers that Convergence is unable to validate through its own research reveals many examples where the Advisor names itself as the service provider, in the case of Administrator, despite indicating they are independent, or it names a very small CPA firm. We believe that names falling into this group of service providers are temporary, or interim, arrangements. Of course, this creates opportunities for hungry Administrators and Auditors looking to grow in this segment of the market. We expect that same trend in Real Estate and Venture Capital.



Alternative Industry-Operating Efficiency Profile

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Operating Efficiency, defined as the number of staff supporting assets and funds, declined 1.9%, meaning the number of staff supporting assets and funds increased year-over-year. A 3.1% gain in Headcount per Fund was offset by a 3.5% decline in Headcount per Billions of Regulatory Assets. Staff hires outpaced annual asset growth while Headcount per Fund showed an improvement of 3.1%, meaning fewer staff were needed to support the additional funds launched during 2016.

Growth in the top 100 Managers drove most of the improvement in the Productivity per Fund ratio given the number of funds they launched relative to smaller providers and they have the infrastructure in place to handle the additional funds. Many of these larger firms also use third-party Administrators who help keep management company headcount level low.