Alternative Asset Management Industry 1
Convergence Insights
Twelve Months Ended September 30, 2016

The Alternative Asset Management Industry is STRONG and GROWING!

**KEY CONVERGENCE GROWTH MEASURES**

<table>
<thead>
<tr>
<th></th>
<th>TOTAL ALTS MANAGERS</th>
<th>50% + ALTS MANAGERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGULATORY ACTION GROWTH:</td>
<td>+ 32%</td>
<td>+ 32%</td>
</tr>
<tr>
<td>ALTERNATIVE MANAGER GROWTH:</td>
<td>+ 14%</td>
<td>+ 10%</td>
</tr>
<tr>
<td>ALTERNATIVE ADVISOR GROWTH:</td>
<td>+ 9%</td>
<td>+ 11%</td>
</tr>
<tr>
<td>ALTERNATIVE FUNDS GROWTH:</td>
<td>+ 8%</td>
<td>+ 18%</td>
</tr>
<tr>
<td>ALTERNATIVE HEADCOUNT GROWTH:</td>
<td>+ 6%</td>
<td>+ 8%</td>
</tr>
<tr>
<td>ALTERNATIVE ASSET GROWTH:</td>
<td>+ 6%</td>
<td>+ 6%</td>
</tr>
<tr>
<td>OPERATING PRODUCTIVITY DECLINE:</td>
<td>- 2%</td>
<td>- 2%</td>
</tr>
</tbody>
</table>

2016 is shaping up to be a year where the facts don’t support the popular view that the alternative asset management industry is struggling. While it is true that hedge fund performance is weak, managers are continuing to find themselves in the regulatory spotlight and long-standing managers are calling it quits, Hedge Funds are one of seven alternative asset classes investors use to diversify exposure and generate less correlated returns.

Convergence’s Q3 2016 update on the Alternative Asset Management Industry provides original insights into the alternatives industry. Convergence measures the overall health of the “Alts Industry” by analyzing the data it collects from multiple sources in the marketplace on 17,000+ Advisors and their 51,000+ Private Funds. During the past 9 months, RIAs filed 29,000 updates to their Form ADV indicating a greater level of compliance with the SEC’s guidance on filing updates upon the occurrence of material changes to their business model.

Please go to [www.convergenceinc.com](http://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. Unless otherwise noted our observations are based on those Managers advising 50% or more of their Regulatory Assets under Management as Private Funds. Private Funds include Hedge, Private Equity, Real Estate, Venture Capital, Structured Asset, Liquidity and Other Funds
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The number of Private Funds advised across the industry grew 8% and by 18% at alternative Managers with 50% or more of their assets in alternatives. The amount of Private Fund Assets across the industry grew 6% and by 6% in Managers with 50% or more in alternatives. Headcount across the industry grew 6% across the industry while Managers with 50% of more in alternative assets grew 8%.

Total regulator enforcement actions taken against alternative managers increased 32%. Enforcement Actions have been widespread across criminal, civil and regulatory categories. See “Regulatory Actions Profile” on page 6 of this report.

Alternative assets continue to grow despite reduced leverage, weaker hedge fund performance returns, fund closures and increased industry regulation. This type of strong growth confirms that institutional investors, family offices and other investors continue to invest in alternatives despite the strong headwinds that exist within the industry. Additional tailwinds for alternatives exist in the form of lower interest rates globally and negative rates in certain countries. In light of continued growth in these business factors we remain bullish on the alternative asset management industry and believe it creates opportunities for service providers to continue growing.

Industry Growth Factors
Managers 50% or More in Alternative Assets

- Q3 2015
- Q3 2016
- Y-Y Change

<table>
<thead>
<tr>
<th>Category</th>
<th>Q3 2015</th>
<th>Q3 2016</th>
<th>Y-Y Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Fund Count</td>
<td>2.88</td>
<td>3.39</td>
<td>18%</td>
</tr>
<tr>
<td>Regulatory Actions</td>
<td>2.81</td>
<td>3.71</td>
<td>10%</td>
</tr>
<tr>
<td>Alternative Managers</td>
<td>4.82</td>
<td>5.31</td>
<td>10%</td>
</tr>
<tr>
<td>Alternative Advisors</td>
<td>5.70</td>
<td>6.32</td>
<td>11%</td>
</tr>
<tr>
<td>Headcount</td>
<td>8.07</td>
<td>8.71</td>
<td>8%</td>
</tr>
<tr>
<td>Private Fund Assets TR</td>
<td>9.31</td>
<td>9.83</td>
<td>6%</td>
</tr>
</tbody>
</table>
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Hedge Funds assets advised by all Managers of $7.2 trillion continue to represent the largest asset pool within the $12.79 trillion Alternatives Industry and grew 3% since Q32015. Hedge Fund managers, whose alternative assets are 50% or more of their total assets, advise $5.71 trillion in hedge fund assets total and grew 1% year-over-year. Based on reported Hedge Fund NAV of $2.8 trillion, average leverage across the industry is approximately 2.6x of invested capital. Real Estate assets grew the largest clocking-in with 17% growth in assets and funds and Venture Capital funds and assets grew 28% and 17%, respectively. Private Equity represent the largest number of funds with 15,600, growing 12%, while PE assets grew 6%.
Manager headcount rose 6% across Industry and 8% at Managers advising 50% or more in alternative assets. At Managers with 50% or more in alternatives the increase was driven by a 6% increase in non-Investment Staff and a 10% increase in Investment staff. The large increase in Investment staff is attributable to the significant increase in Real Estate and Venture Capital funds which typically have lower levels of non-investment staff when they initially launch.

Non-investment staff 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.

Higher headcount is driven by the increase in new Managers and Funds, the selection of service providers and the increasing level of complexity across the industry. Complexity drives risk and cost and all Managers should remain acutely aware of how their headcount compares to their peer group.

There exist wide swings in headcount levels across managers of similar complexity levels which suggests that opportunities exist for those Managers with higher headcount levels than their peer group to improve their efficiency.
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Convergence created a proprietary methodology to assign a complexity/risk profile to the 17,000+ Advisors and 7,000+ Managers in our database. We measure the level of operating risk and complexity 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”, meaning they are not available elsewhere.

At the end of Q3 2016, 25% of the alternative Managers in our database have a High Complexity/Risk Profile which means the Manager needs to have a robust control environment to avoid incurring significant levels of operating risk. Our “Watch Profile” is new and assigned to 21% of all Alternative Managers. The “Watch Profile” applies to 4 of the 40 risk factors and means that regardless of a Manager's LOW/MEDIUM/HIGH Complexity/Risk Profile, Convergence deems the manager’s profile for this risk factor SIGNIFICANT enough by itself to create MATERIAL operating risk. An example of such a “Watch Profile” factor is Auditor and Administrator Independence.

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.

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

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2 The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. – Basel II
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The number of Regulators per Manager increased 6% and can be attributed to increases in non-US office locations.

Non-exempt registrants advising alternative assets increased by 6% while the number of exempt filers increased 14%. The significant increase is driven by the large increase in the number of Venture Capital and Real Estate Advisors who are typically exempt under current SEC rules.

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:

Alternative Industry-Regulator Actions Profile

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Total regulatory actions disclosed by Managers grew 32%. Criminal, Civil and Regulatory Actions increased 14%, 27% and 35%, respectively. The SEC has made it quite clear that they will continue their efforts to review more Advisors.

The Industry’s eyes have been blackened this quarter with major enforcement actions concluded with some of the industry’s bell-weather firms. Apollo Global Management agreed to a $50mm+ settlement, without admitting guilt, for failing to advise investors that it planned to accelerate portfolio company monitoring fees, Och-Ziff agreed to fines and penalties of $400mm+ for what is described as pay-to-play schemes and bribery of African officials and most recently Omega Advisors was accused by the SEC of insider trading. While these profile names generate significant buzz in the industry and concern among investors, they do not seem to keep investors from investing in alternatives. For an interesting perspective on why institutional investors continue investing with firms that have run afoul of the regulators go to:


Convergence believes that many more managers will suffer similar fates as the SEC holds them accountable for 4 simple rules that managers seem to ignore. The four tests are TRANSPARENCY, COMPLETENESS, CONSISTENCY and ACCURACY of their DISCLOSURES. While 40 shades of gray may keep law firms in business, it is ruining the brand value of many leading managers.
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The Convergence Service Provider Index increased by 4% driven by increases in the number of Custodians, Prime Brokers and Auditors used per Manager. The news around Deutsche Bank may have influenced the increase in average Prime Brokers and Custodians. The increase in Auditors is interesting. Managers have been moving away from the single Auditor model for some time and this change is worth noting.

FSLV, a Fund Administrator to Private Equity Funds, was sold to the Sanne Group this quarter for $66mm. Sanne Group is a European Fund Administrator with $14bn in US RIA assets. The Sanne purchase confirms the belief held by many that Private Equity Managers will continue to outsource to third party Fund Administrators. Today, 92% of Private Equity Managers perform the Fund Accounting for their funds and we, among many, believe that within 10 years, PE firms will follow the path chosen by 90%+ of Hedge Funds who outsource fund accounting to third party administrators. This suggests a massive opportunity for Fund Administrators able to “crack the code” on scaling complex waterfall calculation, handling complex opt-in and opt-out provisions and dealing with highly complex expense allocations schemes.
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Operating Productivity factors tracked by Convergence influences the profitability of the Manager and industry. The two key productivity measures we use, (1) Headcount per Billions of Regulatory Assets declined 4.2% and (2) Headcount per Funds improved 5.3%.

The decline in the Headcount/Assets productivity metric is explained by the larger growth in headcount compared to asset growth. The improvement in Headcount/Funds productivity metric is explained by the larger growth in funds compared to the growth in headcount. We believe the improvement in Headcount/Funds is driven in part by improved operating scale, meaning Managers are able to launch additional accounts with fewer incremental staff driven by better use of service providers, improved technology and better internal processes.

Convergence can help you understand your productivity relative to leaders in the market and help you determine ways to improve your overall productivity levels. If you are aware of these market leaders, you may be able to learn how they are generating productivity levels that can reduce risk and increase net management fees.