



NEPC, LLC

YOU DEMAND MORE. So do we.SM

2016 Investment Manager Webinar

NEPC Research

April 5th, 2016

255 State Street, Boston, MA 02109 | TEL: 617.374.1300 | FAX: 617.374.1313 | www.nepc.com

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | SAN FRANCISCO

Our Goal

To work constructively with the asset management community to deliver innovative and high quality investment strategies that meet and exceed our clients' objectives.

Agenda

- **Introduction and NEPC Update**
- **Client Perspectives**
- **Market Outlook**
- **NEPC Research**
- **Investment Manager Searches and Activity**
- **Final Thoughts**
- **Your Questions**



Today's Speakers



- **Mike Manning, CFA, CAIA**



- **Timothy Bruce**



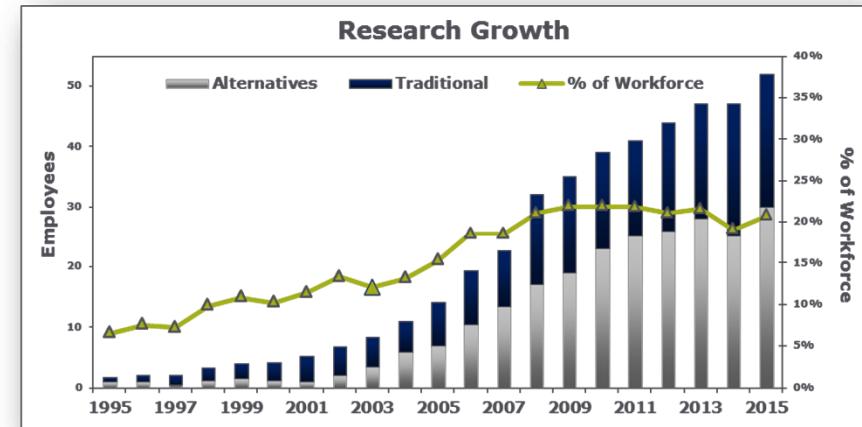
- **Matt Brady**

NEPC Update



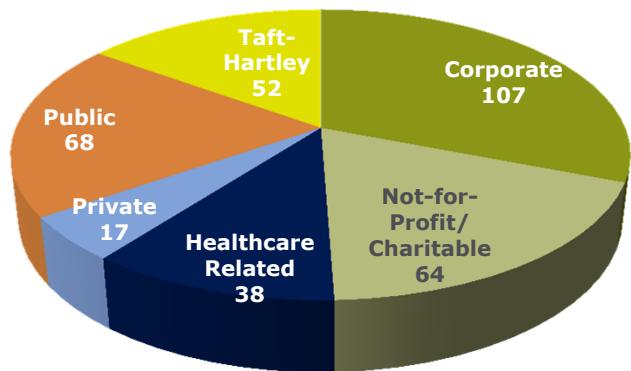
NEPC, LLC

- **NEPC remains a leading independent consulting firm**
 - 100% employee owned by 34 Partners
 - Focused business model that puts clients first
 - A destination for investment professionals who want to consult
- **We remain focused on our commitment to clients**
 - Engage with clients as a boutique firm with large scale resources
 - Offer flexible service mandates customized to client needs
 - Work constantly to identify best in class managers and strategies
 - Focus on exceeding client expectations for service

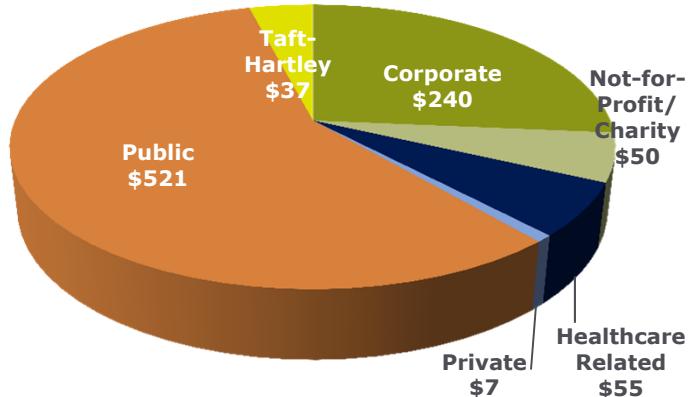


NEPC by the Numbers

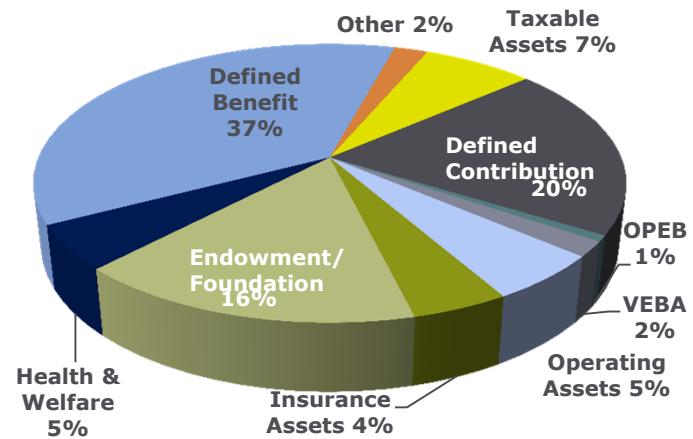
Our Clients (346)



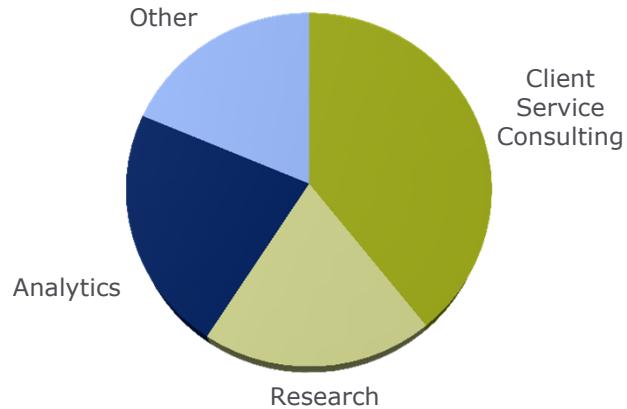
Total Assets (\$910 billion)



Total Funds (735)



Our Employees (252)



Client Perspectives



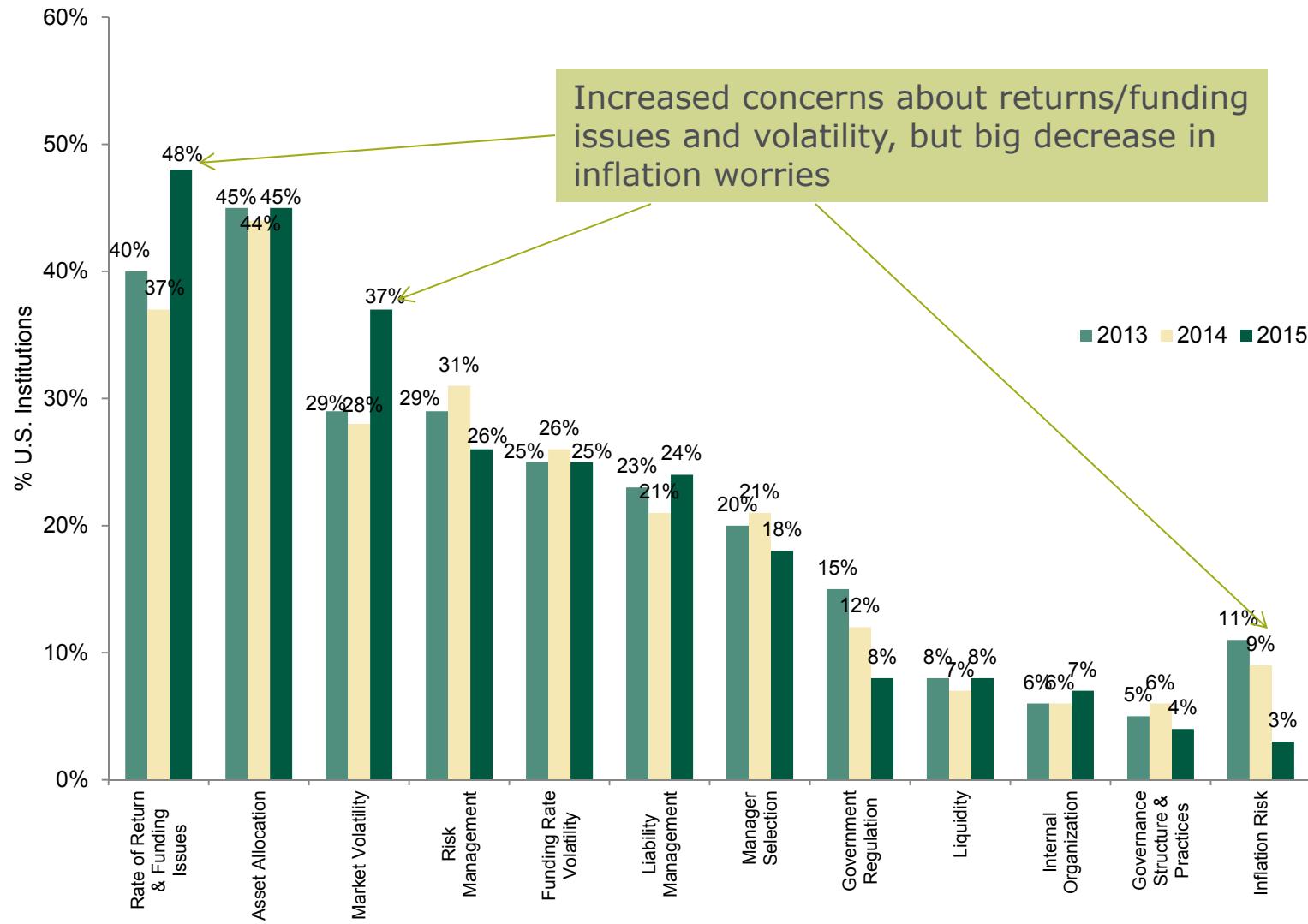
NEPC, LLC

Investor Questions

- **Can I meet my return objectives in the current market?**
- **Does it make sense to continue to pursue a diversified strategy?**
- **What is the best way to capture alpha going forward?**
- **Where are the best opportunities in the market?**



Key Issues Facing U.S. Institutional Investors 2015

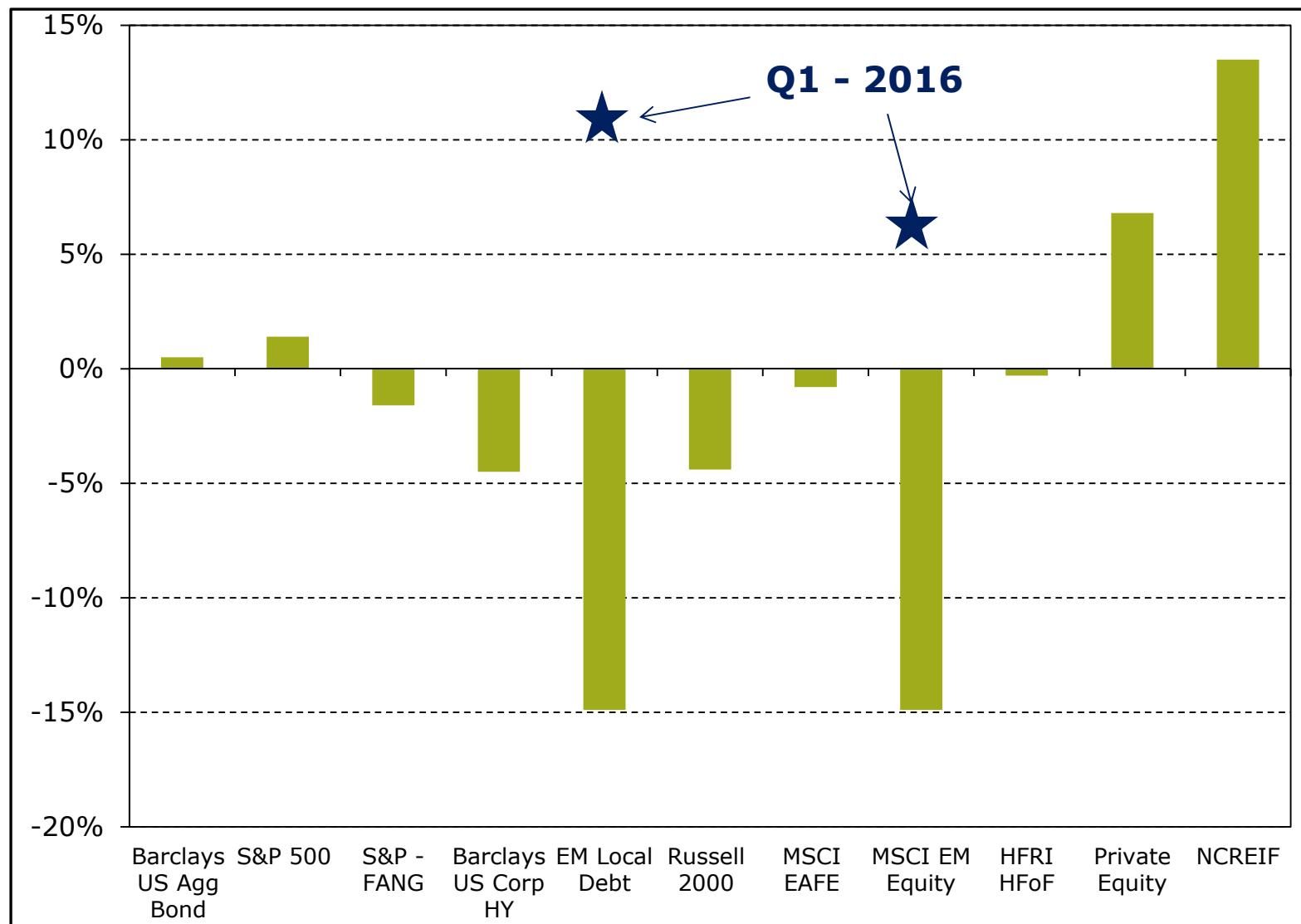


Source: Greenwich Associates 2015, USII-15.



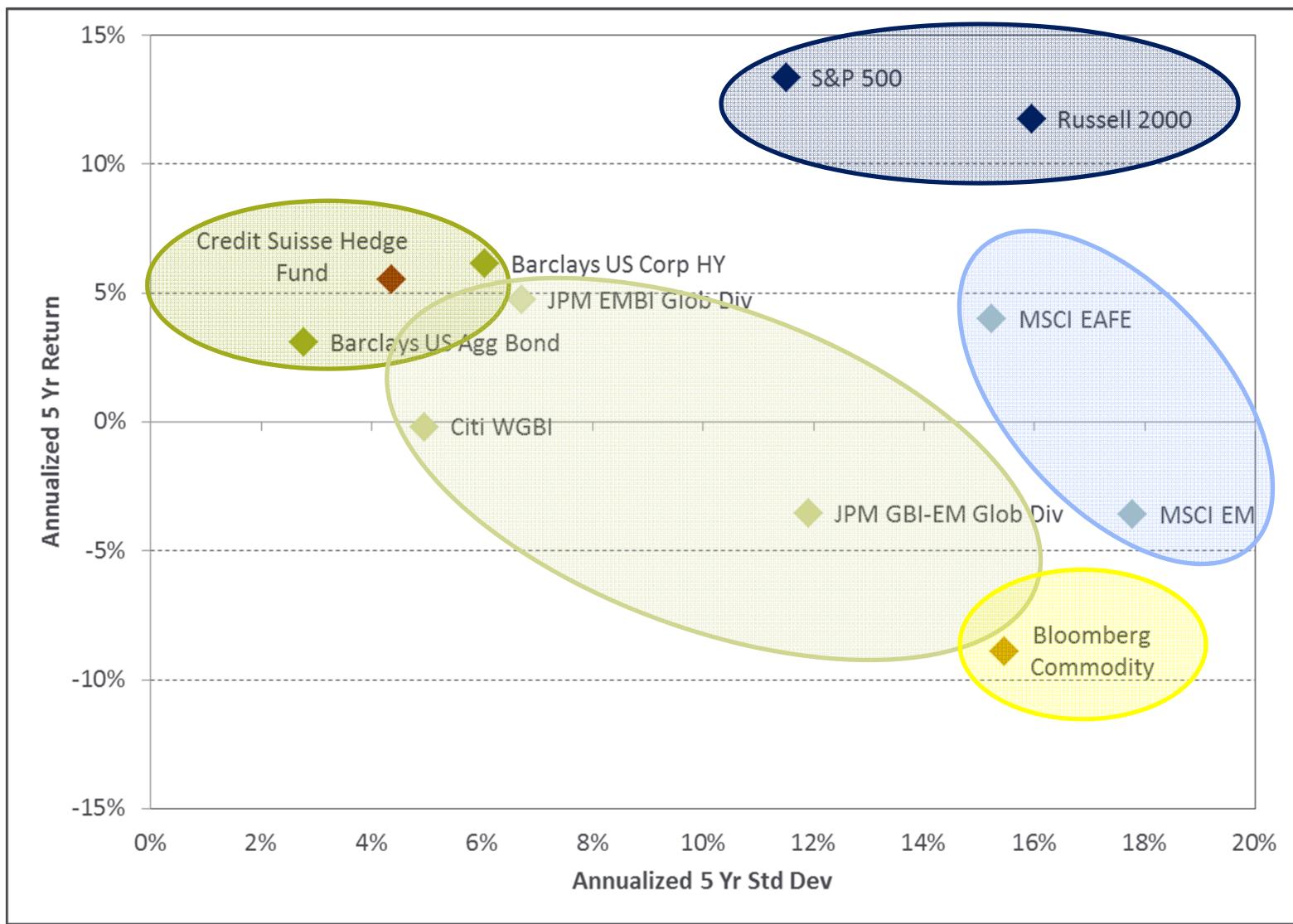
NEPC, LLC

2015: A Challenge for Sophisticated Investors



*Private Equity and Real Estate lagged one quarter. Source: NEPC, InvestorForce

Challenging Environment For Diversified Investors – 5 Year Global Performance Summary



Source: Morningstar Direct



NEPC, LLC

Themes for 2016 Asset Class Assumptions

- **Outlook for risk assets has improved relative to last year**
 - Return expectations are moderately higher among global equity and credit assets
 - Expectations of slow Fed policy tightening reduce cash forecasts
 - Increase in expectations for credit markets reflect higher credit spread levels
- **We adjusted our views after the selloff early in the year**

Asset Class	Long-Term Return	2015	2016	Change
Cash ¹	3.4%	1.75%	1.50%	-0.25%
Core Bonds ³	7.7%	2.30%	2.46%	0.16%
High Yield Bonds ⁴	8.9%	4.00%	5.25%	1.25%
US Large Cap Equity ¹	10.1%	6.00%	6.00%	0.00%
Non-US Developed Equity ²	8.9%	7.00%	7.25%	0.25%
Emerging Equity ⁵	10.4%	9.00%	9.75%	0.75%

1 – Annualized returns since 12/31/1926

2 – Annualized returns since 12/31/1969

3 – Annualized returns since 12/31/1975

4 – Annualized returns since 6/30/1983

5 – Annualized returns since 12/31/1987

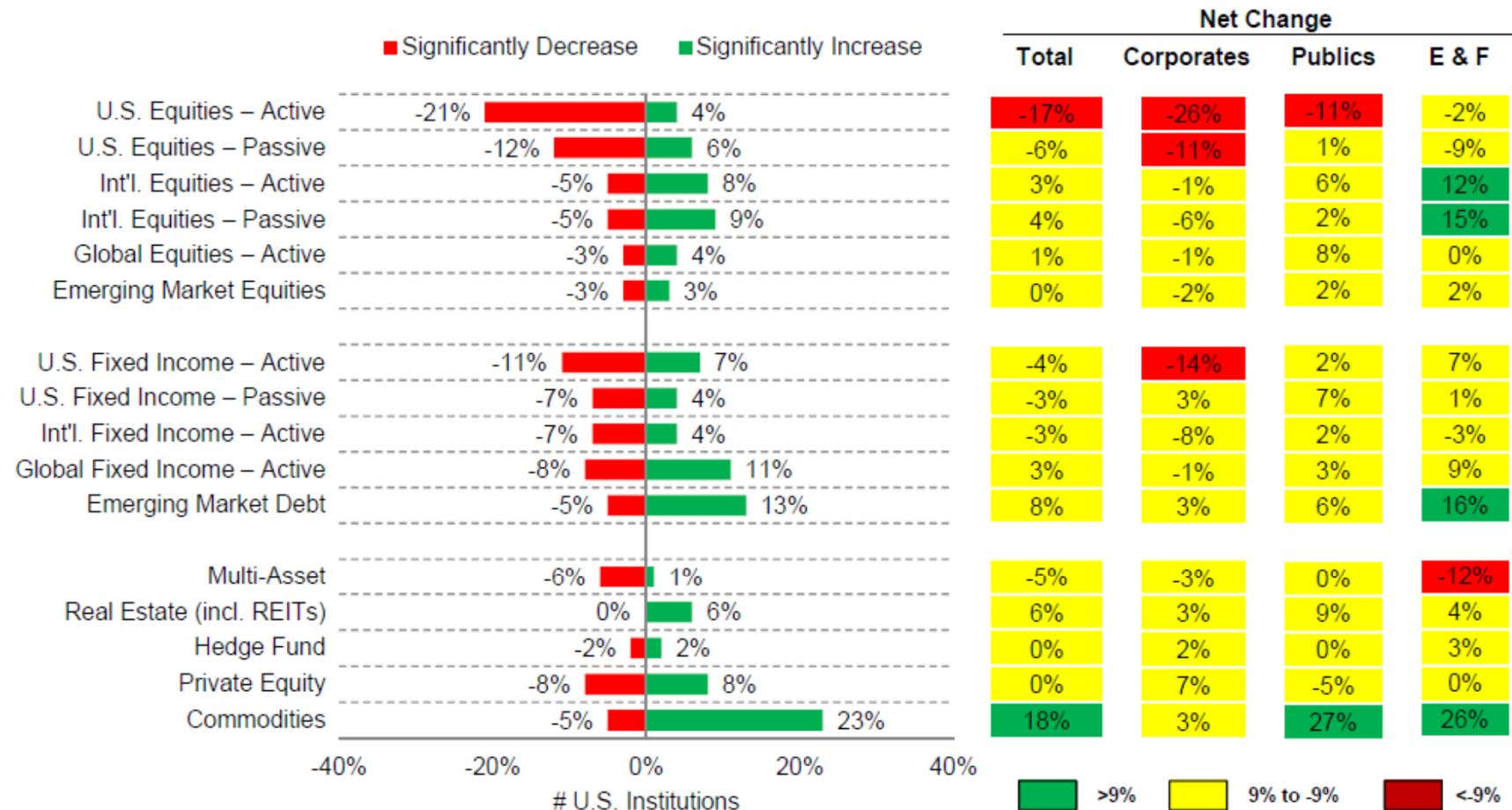
NEPC 5-7 Year Expected Returns



NEPC, LLC

Expected Changes by Investor Type

U.S. Institutional Investors' 3-Year Expected Target Allocation Changes 2015

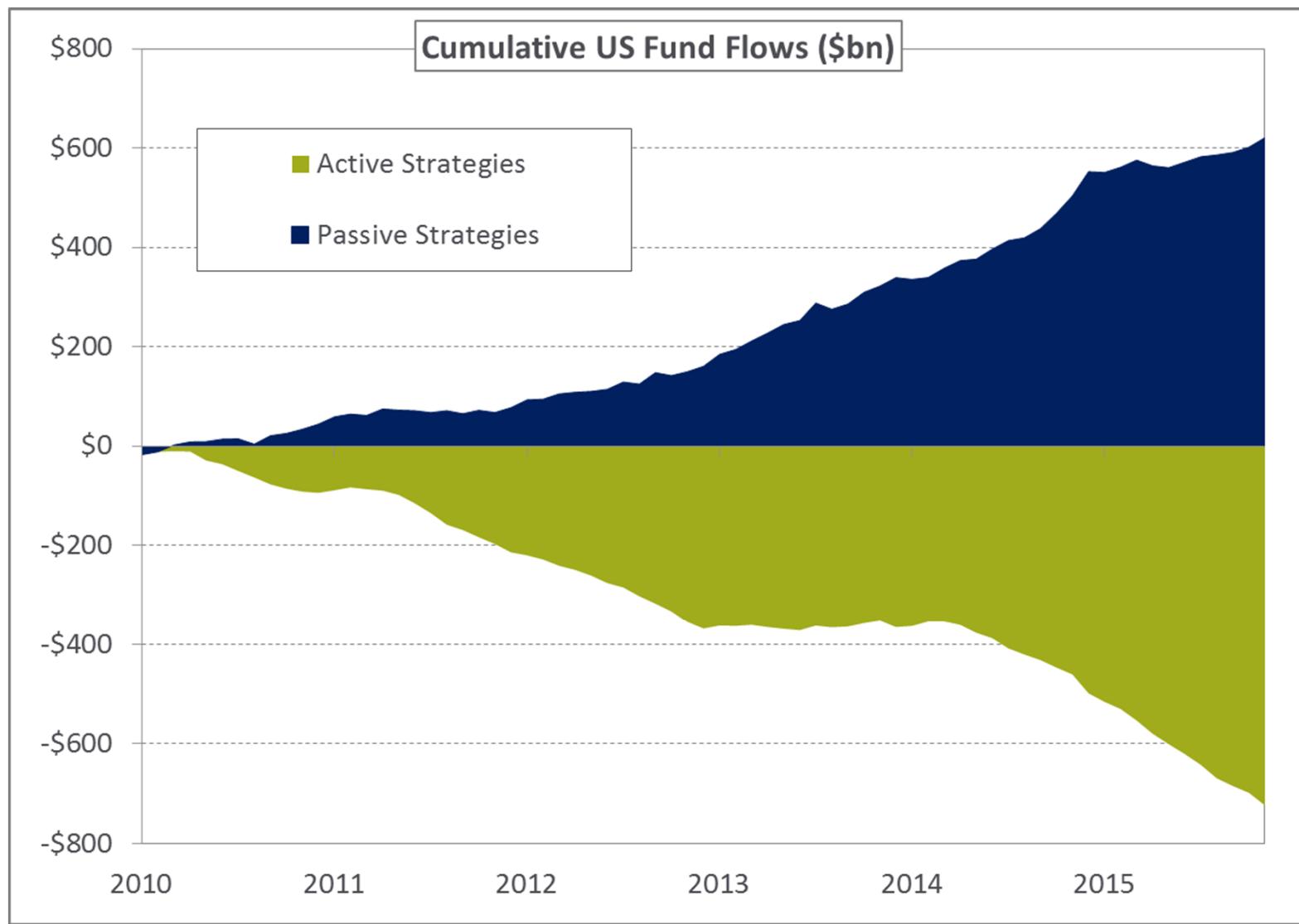


Source: Greenwich Associates 2015, USII-15.

Note: For each category, the balance of institutions not displayed here have indicated no change or no answer. Multi-Asset includes risk parity, asset allocation, GTAA, etc.

Results are for corporate and union DB plans, public fund DB plans, healthcare DB, DC and operating assets, endowment and foundation investment pools and insurance general account assets.

Passive Trends a Headwind for Traditional Active Management



Source: EBFR Global

Market Outlook



NEPC, LLC

- **US economic cycle and US central bank policy are at the forefront of major cyclical and secular forces informing our Assumptions and Actions**
 - These factors interact to create a supportive environment for risk assets in the near term but ultimately push long term capital market forecasts lower relative to history
- **The US economy is nearly 7 years removed from the previous recession but the health of US consumers can extend the expansion**
 - Prolonged US economic cycle has the potential to push the US dollar higher straining commodity markets and international borrowers with dollar based debt
- **Influence of central bank policies in the developed world remain broadly supportive for risk assets but come with long term effects**
 - US policy is diverging from Europe and Japan but slow expected pace of hikes provides a positive backdrop for US equities and credit in the near term
- **Emerging Market growth compressed yet still stronger than developed; fears of further adjustments in China remain a near-term concern**
 - Large currency adjustments across most emerging countries healthy for future prospects
 - Chinese Yuan (RMB) devaluation has been incremental relative to other EM FX adjustments

- **Maintain exposure to US risk assets in a low return environment**
 - Lower returns expected but risk premia can still be harvested as cycle extends
 - Economic cycle is in the advanced stages but macro policy remains supportive
 - Low core bond returns warrant a more positive tilt to equity, especially after sell-offs
- **Overweight non-US developed market equities**
 - Central bank support and dollar strength provide a positive economic backdrop
 - Corporate earnings remain well below 2007 levels despite recent earnings recovery
 - EAFE equity markets offer the potential for outsized returns relative to US equities
- **Reaffirm commitment to emerging market equities**
 - Valuations and long-term fundamentals suggest an overweight
 - China uncertainty, dollar pressure and idiosyncratic country risks temper excitement
 - Overweight small-cap and consumer focused strategies relative to broad mandates
- **Seek tactical fixed income strategies but preserve duration exposure**
 - Spreads have widened but credit selection is critical as credit cycle matures
 - US duration continues to have a role in a diversified and risk-aware portfolio
 - TIPS offer an attractive duration profile with inflation expectations at secular lows
- **Explore positive yielding assets revealed from energy market distress**
 - Private strategy returns are compelling but suggest patience
 - Focus on segments of the public markets that offer a yield



NEPC Research



NEPC, LLC

- **We will give you an organizational chart of the research team**
- **We are going to provide an overview of how we develop investment ideas and select managers**
- **We will give a current example of an area of research focus**

NEPC's Research Team

Tim McCusker, FSA, CFA, CAIA
*Chief Investment Officer**

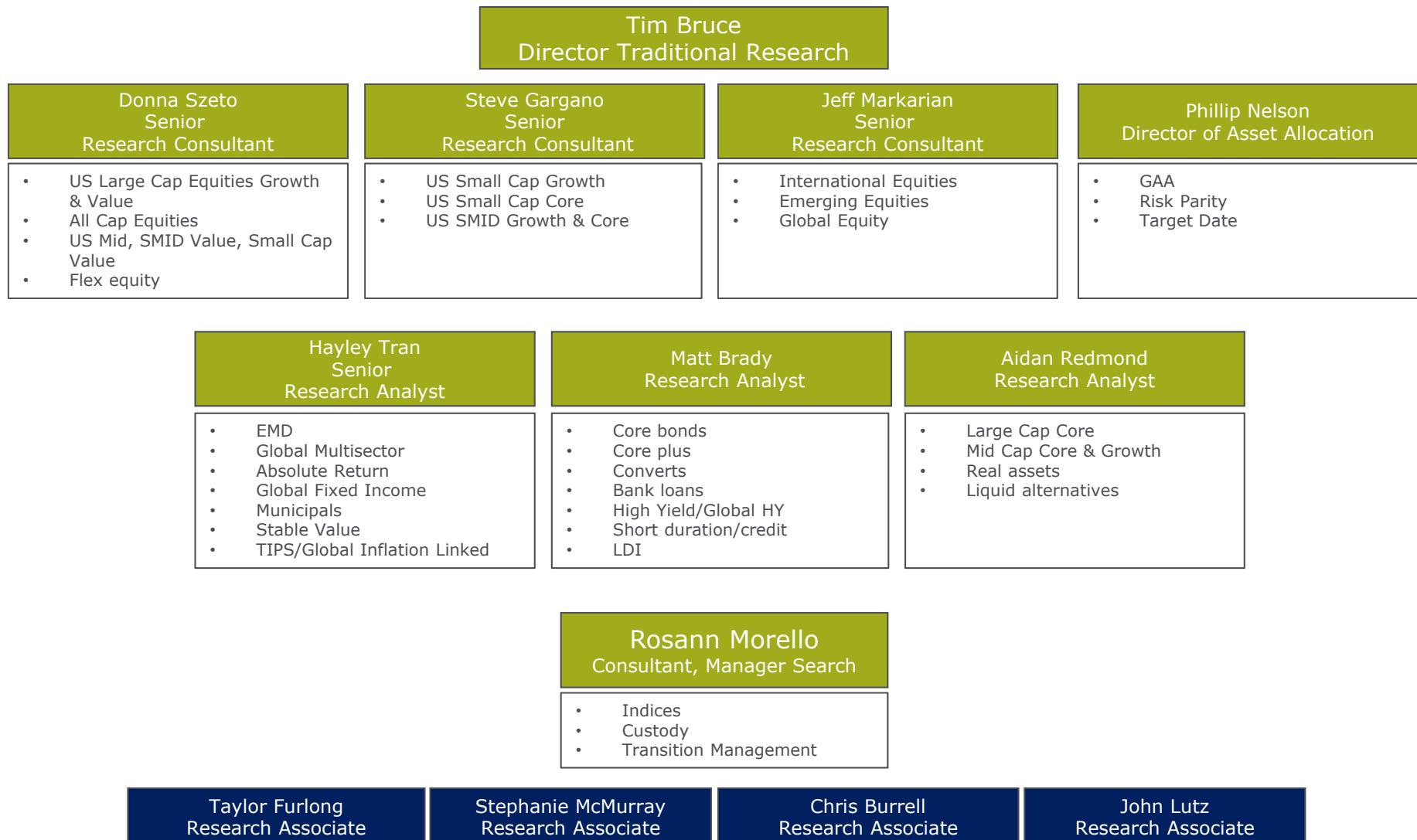
Client Strategy & Asset Allocation	Traditional Research	Alternatives Research	Operational Due Diligence
Client Strategy Alternative Investments Sean Gill, CFA, CAIA <i>Partner*</i> Defined Contribution Ross Bremen, CFA <i>Partner*</i>	Traditional Research Timothy Bruce <i>Partner*</i>	Alternatives Research Neil Sheth <i>Partner*</i>	Operational Due Diligence William Bogle <i>Partner*</i>
Asset Allocation Phillip Nelson, CFA <i>Director of Asset Allocation</i> John Minahan, PhD, CFA <i>Senior Investment Strategist**</i> Mark Cintolo, CAIA <i>Senior Consultant</i> Lynda Dennen, ASA, EA <i>Senior Consultant</i> Ian Spencer <i>Sr. Analyst</i>	Traditional Research Stephen Gargano <i>Senior Consultant</i> Jeff Markarian <i>Senior Consultant</i> Donna Szeto, CFA <i>Senior Consultant</i> Rosann Morello <i>Consultant, Manager Search</i> Hayley Tran <i>Sr. Analyst</i> Matthew Brady <i>Analyst</i> Aidan Redmond <i>Analyst</i> Research Associates Christopher Burrell Taylor Furlong John Lutz Stephanie McMurray	Private Markets Research Sean Ruhmann <i>Director of Private Markets*</i> Private Equity Eric Harnish <i>Senior Consultant+</i> Chris Hill, CFA, CAIA <i>Senior Consultant</i> Jeffrey Roberts, <i>Senior Consultant</i> Siddique Haq, CAIA <i>Consultant</i> Melissa Mendenhall <i>Consultant</i> Aarish Patell, CAIA <i>Consultant</i> Oliver Fadly, Sr. Analyst Joshua Ko, Analyst Brad Rowbotham, CAIA, <i>Analyst</i> Real Assets Andrew Brett, CAIA <i>Consultant</i> Michael Yang , Consultant William Elcock, CAIA, Sr. Analyst Matthew Ritter, CAIA, Sr. Analyst Lily Fenn, Analyst	Hedge Fund Research Dulari Pancholi, CFA, CAIA <i>Senior Consultant</i> Kamal Suppal, CFA <i>Senior Consultant</i> Seth Bancroft, CFA <i>Consultant</i> Reino Ecklord, CFA, CAIA <i>Consultant</i> Amanda Karlsson, CFA <i>Consultant</i> Timothy O'Connell <i>Consultant</i> Alissa Howard, CAIA <i>Sr. Analyst</i> Larissa Davy <i>Analyst</i> Christian Pieri <i>Analyst</i>

* Ownership interest in NEPC (Partner)

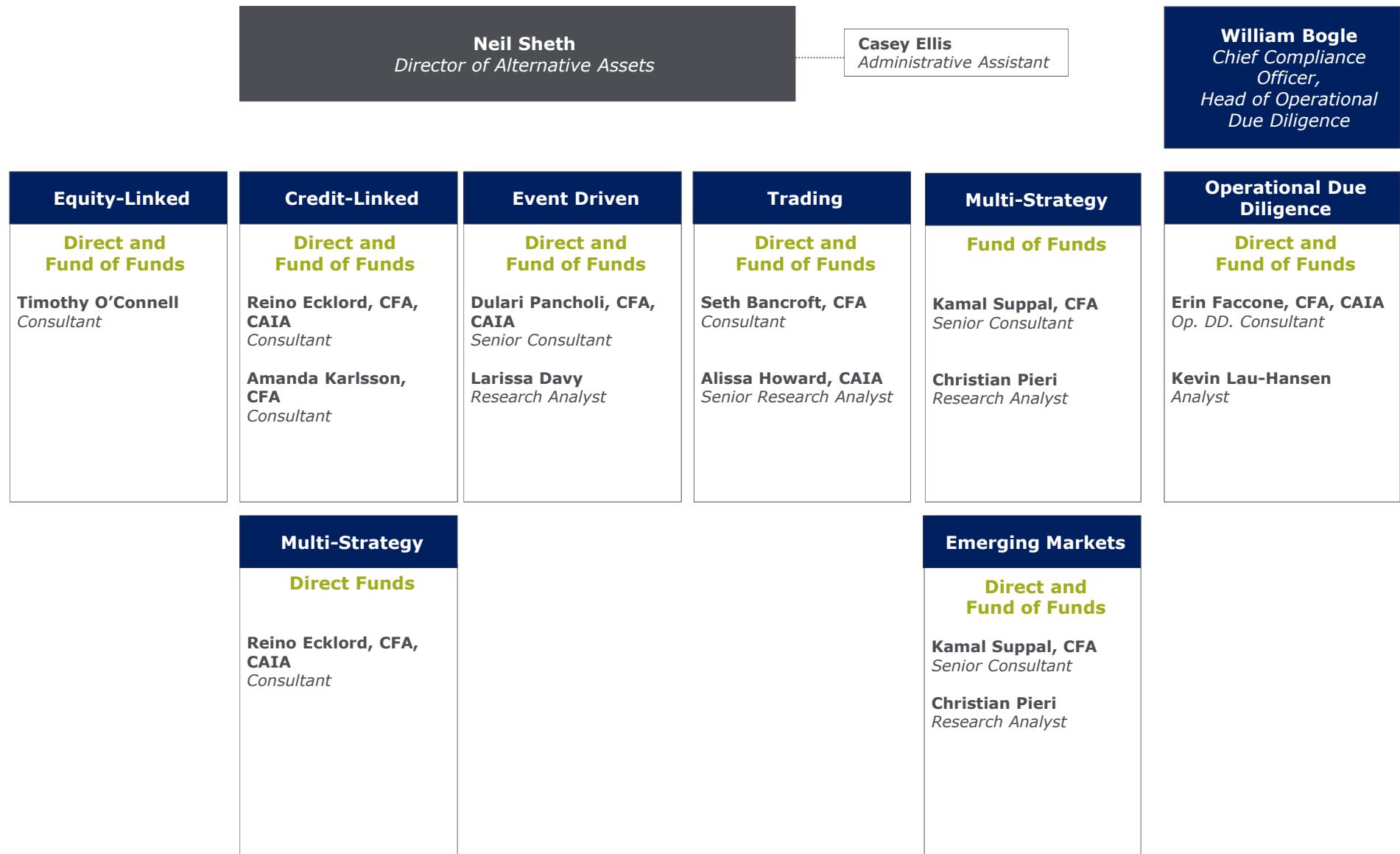
+ Principal designation for leadership within the Firm.

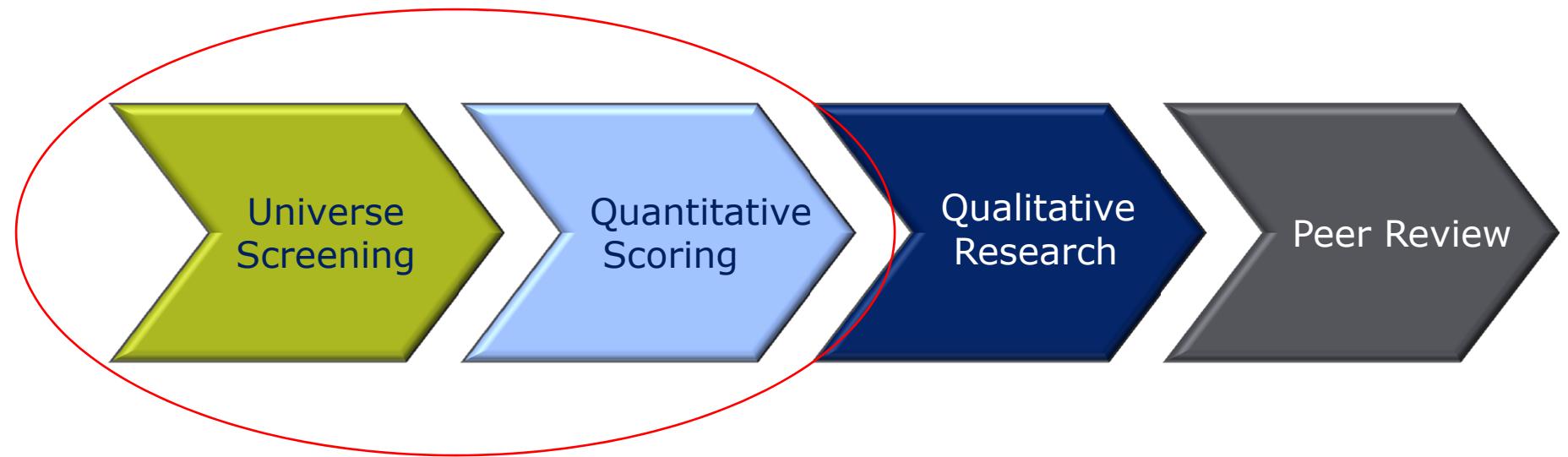
++ John Minahan, a long-time employee of NEPC and former faculty member at MIT's Sloan School of Management, is engaged as an independent consultant to NEPC.

Traditional Research – Organizational Structure



NEPC Hedge Fund Research Practice Structure



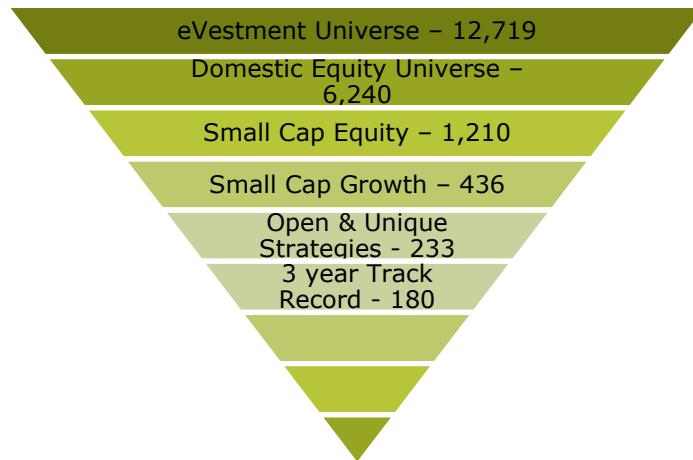


Key Manager Criteria:

- “**Have you done it?**” - **Consistent alpha at appropriate risk levels**
- “**Why can you keep doing it?**” - **Defensible investment thesis**
- “**Who is going to do it?**” – **Solid & stable organization structure**

Universe Screening – Casting a Broad Net

Here is an Example: Small Cap Growth



Same screening criteria on Morningstar Universe to ensure broadest coverage – over 26,000 funds

69 unique funds passing same criteria

249 unique strategies qualifying for further analytics

- **Traditional and Alternatives:**
- **Proprietary PASS tool (Performance Analytics Statistical Software) used to systematize quantitative analysis**
- **This software isolates net-of-fees alpha, removing market/index performance**
 - Attractive strategies will have consistent net-of-fees performance at reasonable levels of active risk (tracking error)
- **Each strategy scored on variety of excess return statistics**
 - Rolling metrics used to minimize end-point sensitivity
 - Statistical significance of alpha
 - Rolling alpha greater than certain hurdles
 - Upside/Downside Capture
 - Information Ratio
 - NEPC Score on quality of investment thesis and firm stability
- **Scoring channels Research focus to strategies demonstrating ability to deliver excess returns over long term**



NEPC Traditional Research - SMALL CAP CORE - NETTING 07/15/10

EVALUATION CRITERIA - DATA										TOTAL SCORE
CONTRARIAN INDICATOR	ROLLING 3 YR. RTR. - % > 0	ROLLING 3 YR. RTR. - % > X%	Avg. 3 YR. INFORMATION RATIO	IR + SQRT LENGTH OF RECORD	UPSIDE MKT CAPTURE	DOWNSIDE MKT CAPTURE	FIRM/TEAM STRUCTURE/STABILITY			
Assigned Weights	5%	5%	10%	15%	20%	5%	10%	30%		
Managers										1-100
1 Manager 1	0.04	86%	58%	0.63	1.92	86%	72%	5	86	
2 Manager 2	0.18	82%	67%	0.58	2.40	125%	100%	5	85	
3 Manager 3	0.03	92%	79%	0.73	1.52	93%	79%	5	85	
4 Manager 4	(0.02)	77%	65%	0.57	2.31	98%	81%	5	84	
5 Manager 5	0.12	88%	68%	0.87	2.82	91%	72%	3	73	
6 Manager 6	(0.03)	81%	24%	0.42	2.16	104%	96%	5	73	
7 Manager 7	0.34	###	100%	1.14	1.89	100%	70%	2	70	
8 Manager 8	0.05	89%	61%	0.87	2.27	104%	89%	3	70	
9 Manager 9	0.20	97%	89%	0.71	2.51	100%	70%	2	70	
10 Manager 10	0.33	82%	75%	0.95	3.16	106%	78%	2	70	
										1-100
172 Manager 172	(0.05)	20%	8%	(0.60)	(1.25)	93%	99%	3	21	
173 Manager 173	(0.02)	0%	0%	(0.69)	(1.23)	87%	96%	3	20	
174 Manager 174	(0.10)	31%	2%	(0.53)	(1.81)	87%	98%	3	19	
175 Manager 175	(0.04)	18%	0%	(0.91)	(2.00)	95%	107%	3	18	

Example of an Innovative Strategy / Something NEPC is currently focused on

Long Duration Diversifiers:

- **Currently looking to identify strategies which can provide diversification benefits within a LDI portfolio**
- **Goal of enhancing yield and reducing risk**
- **Provide complementary allocation to long corporates, may help mitigate risk of supply and demand imbalances**
- **Have identified a number of different approaches to achieve this diversification, evaluating which are best solutions for our clients**



Investment Manager Searches And Activity



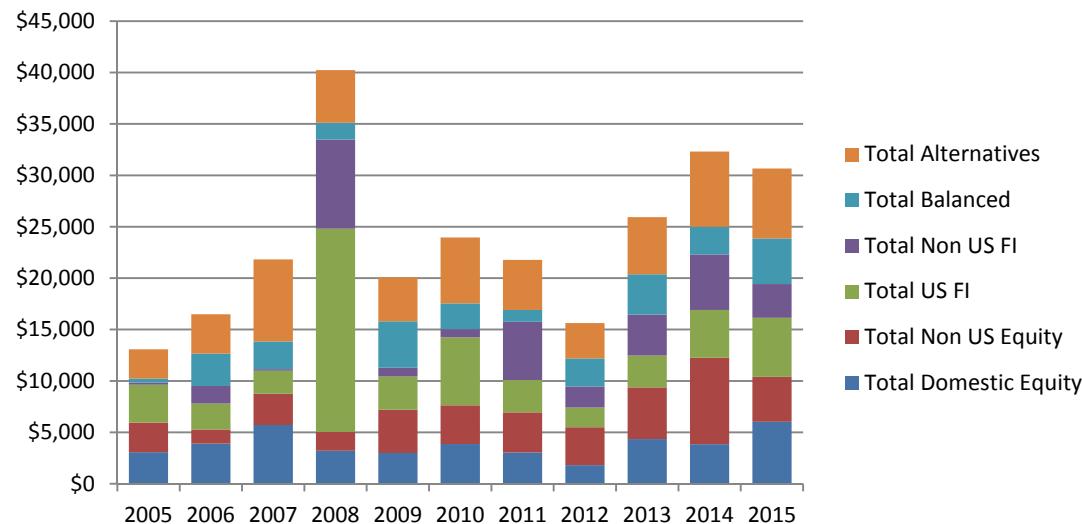
NEPC, LLC

Total Searches & Reviews	752
Searches by Asset Class	
Large Cap Equity	33
Sm/Mid Cap & Mid Cap Equity	30
Small Cap Equity	37
All Cap Equity (includes MLP's)	8
Fixed Income	37
High Yield Bonds	0
Int'l Equity/Global Equity/Emerging	78
Global Bonds/Emerging Market Debt	61
LDI	12
<i>GAA/TAA (includes Risk Parity & LifeCycle)</i>	57
<i>Commodities</i>	11
<i>Hedge Funds</i>	78
<i>Real Estate</i>	53
<i>Real Assets</i>	63
<i>Private Equity (includes Private Debt)</i>	194
Total Search Assets	
	\$30.6 billion

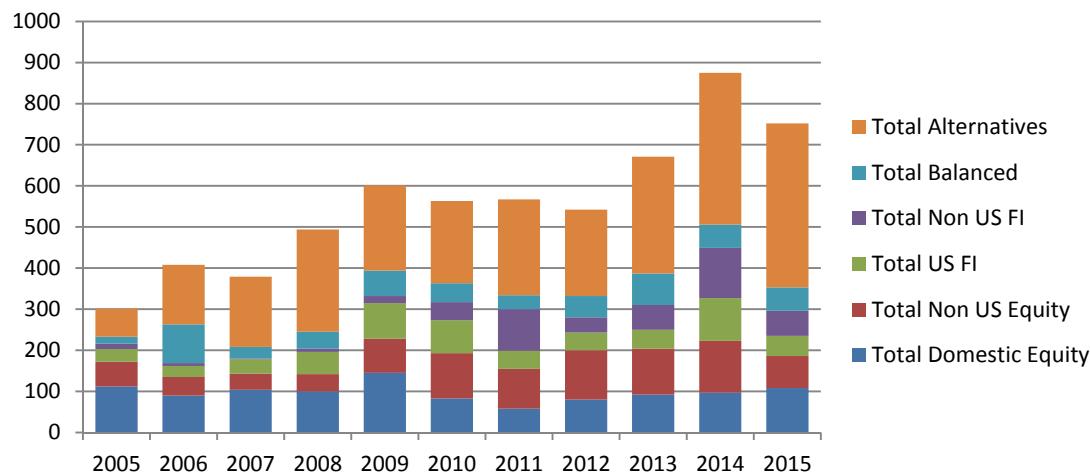
60% of all searches and reviews were for non-traditional managers and strategies

Historical Search Activity

**Total Assets Placed in Searches
(in millions)**



Total Number of Searches



- **Clients and NEPC are focused on fees**
- **When clients run a manager search they see the fee schedule**
 - When applicable, clients see NEPC negotiated fees
- **As part of our research process we evaluate the fees for each asset class**
 - We put the fees in the broader context of average or median for each asset class
- **Our focus is on the returns net of fees in our quantitative screen**

Final Thoughts

- **Stay on top of our views**
 - Available at www.nepc.com
- **Bring your best ideas forward**
 - “Best in Class” products
 - Products consistent with identified market opportunities
 - Innovative strategies
- **Focus on Quality not Quantity**
 - A few meetings on the right products and strategies will be much more productive for both sides than meetings for the sake of meetings
- **Be willing to take “No” for an answer**
 - Engage constructively with our Research team-members, be patient with the timing of our Preferred strategy assessment process, and accept our feedback graciously
 - We cannot accept every meeting request we receive and deliver high quality research for our clients

- **Information about client needs and search activity**
- **Our views on the market and our key messages to clients**
- **Our framework for evaluating managers**
- **Responsiveness to meeting requests**
- **Candid feedback**

Your Questions

- **Past performance is no guarantee of future results.**
- **The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.**
- **The information in this report has been obtained from sources NEPC believes to be reliable. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.**
- **All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.**
- **This report does not constitute a recommendation to implement any of the investment management approaches described herein. Not all strategies are suitable for all investors.**
- **This report may contain confidential or proprietary information and is intended only for the designated recipient(s). If you are not a designated recipient, you may not copy or distribute this document.**

It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds and private equity:

- 1. Performance can be volatile and investors could lose all or a substantial portion of their investment**
- 2. Leverage and other speculative practices may increase the risk of loss**
- 3. Past performance may be revised due to the revaluation of investments**
- 4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms**
- 5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value**
- 6. These funds are not subject to the same regulatory requirements as registered investment vehicles**
- 7. Managers may not be required to provide periodic pricing or valuation information to investors**
- 8. These funds may have complex tax structures and delays in distributing important tax information**
- 9. These funds often charge high fees**
- 10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy**