NEPC, LLC

YOU DEMAND MORE. So do we.[SM]

NEPC 2015 Market Outlook

Assumptions and Actions for Clients

January 22, 2015

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

Today's Agenda

- **Introduction and NEPC Update**
- **Market Review and Current Environment**
- **2015 Observations and Recommendations**
- **Update on NEPC's Impact Investing Efforts**
- **Your Questions**

*Please see disclosures at the back of the presentation

Today’s Speakers

- **Mike Manning, CFA, CAIA**
  - Managing Partner

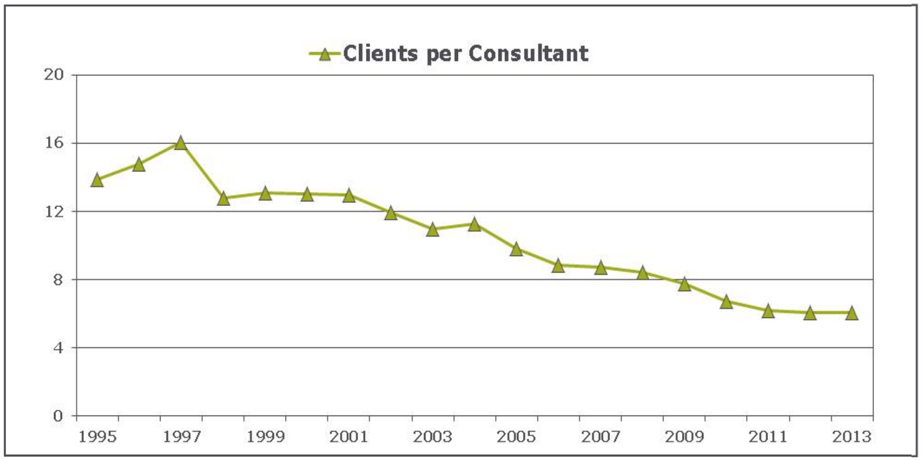
- **Timothy F. McCusker, CFA, CAIA, FSA**
  - Chief Investment Officer

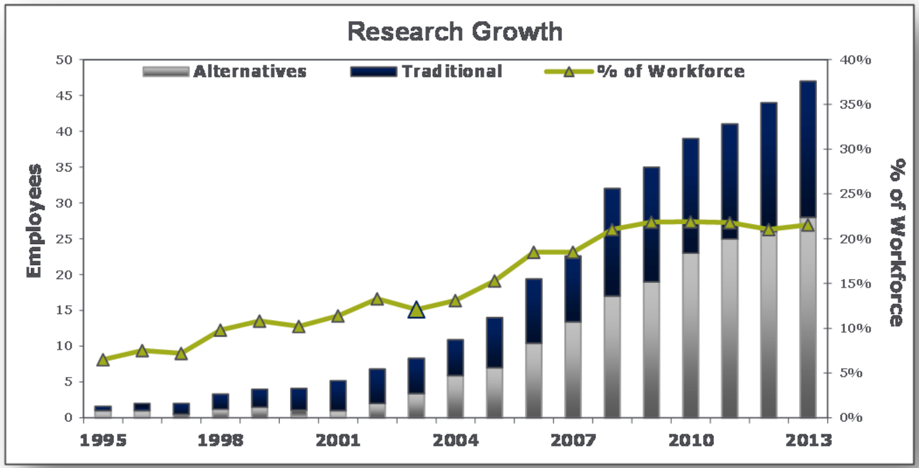
- **Scott F. Perry, CAIA**
  - Partner

NEPC Update

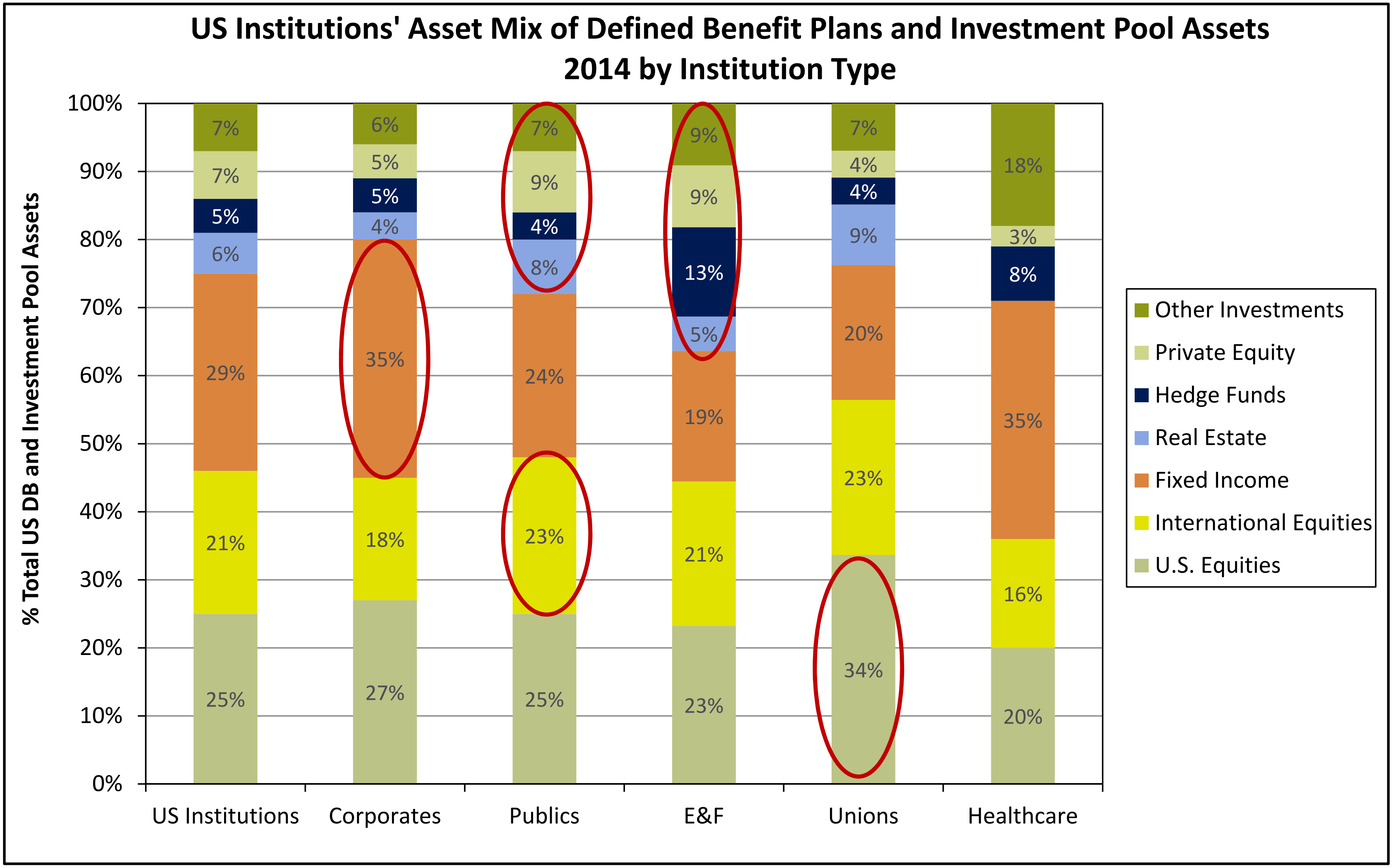
- **NEPC remains the leading independent consulting firm**
  - 100% employee owned by 34 Partners
  - Focused business model that puts clients first
  - A destination for investment professionals who want to consult

- **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 your needs
  - Work constantly to identify best in class managers and strategies
  - Focus on exceeding your expectations for service





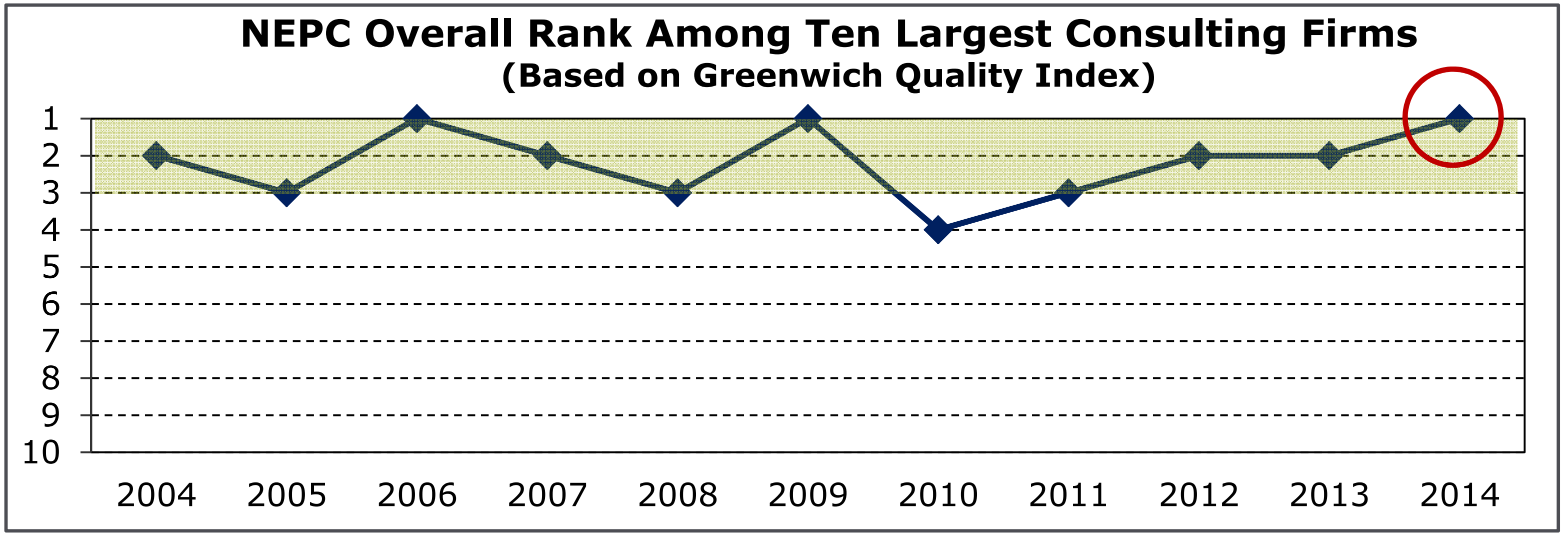
Clients Needs are Diverging



Source: Greenwich Associates 2014, USII-14.

- **Greenwich Associates surveys over 1,000 large plan sponsors every year, regarding investment counseling, manager selection and client servicing [1]**

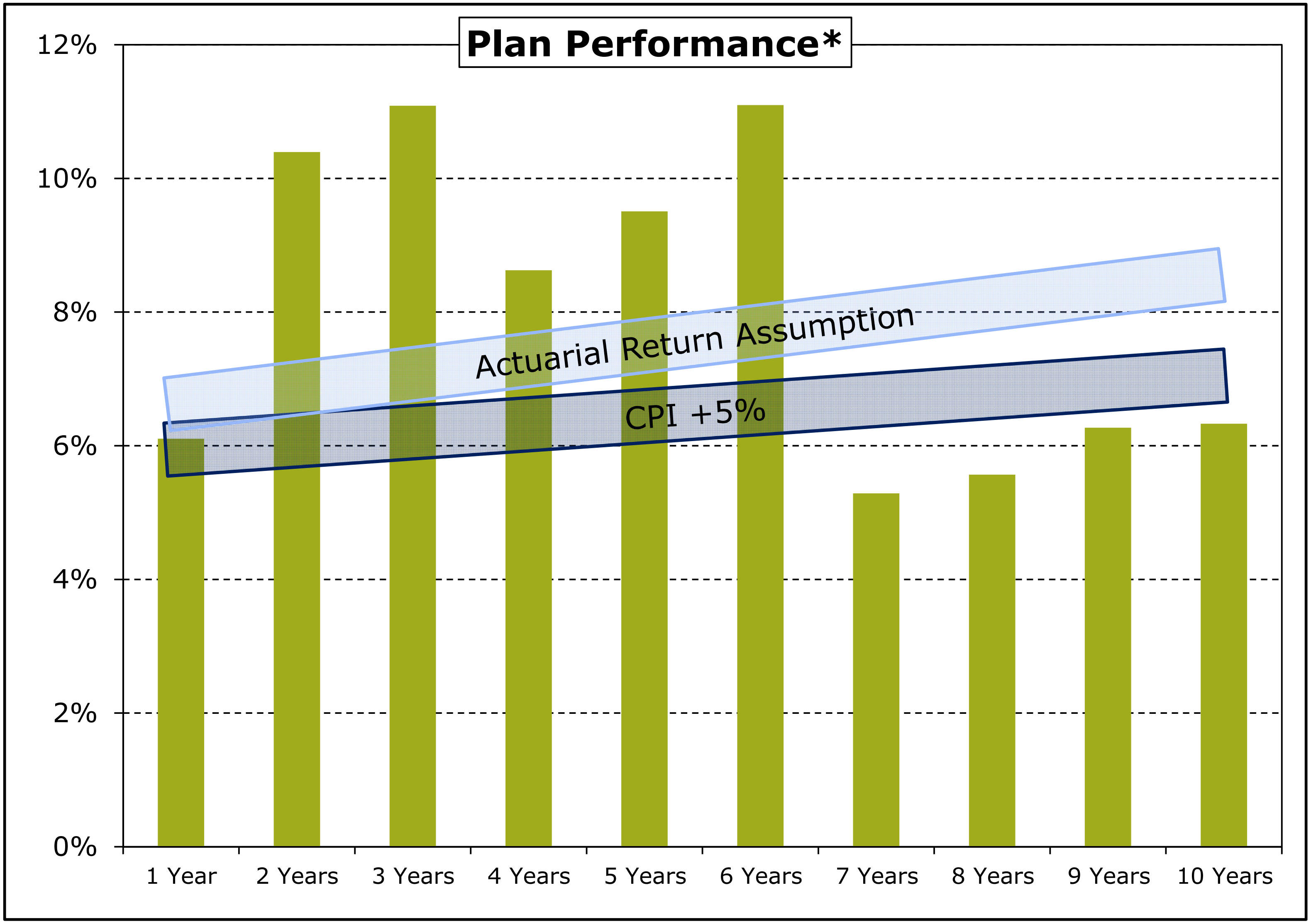
- **NEPC's has consistently been recognized for client satisfaction**
  - Ranked in the top three in 10 of the last 11 years



THANK YOU!!!

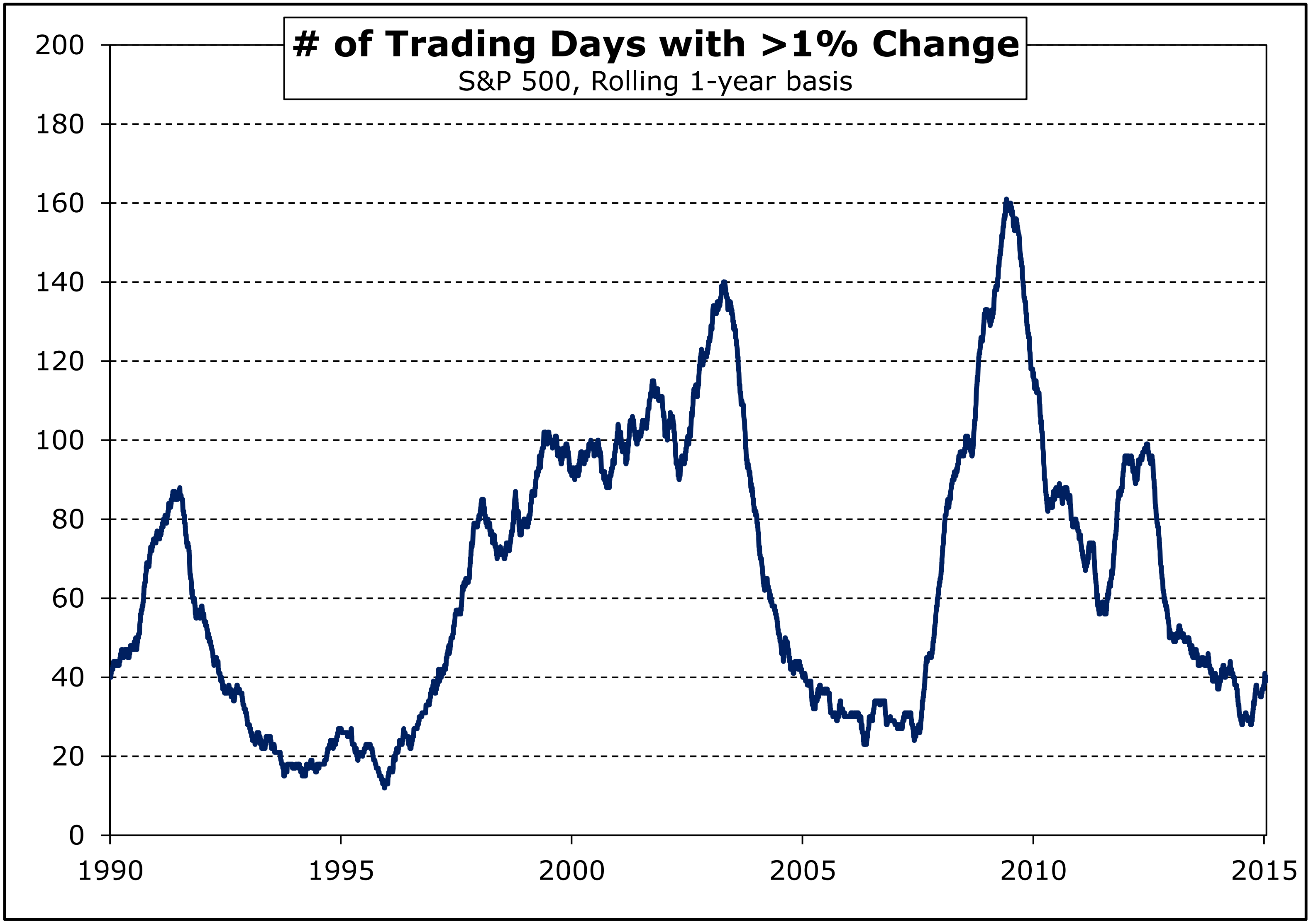
Source: Greenwich Associates, 2013 Evaluations by U.S. Institutional Investors. [1] Greenwich Associates is an independent research firm that interviews US institutional fund sponsors with assets greater than $250 million for this survey. Greenwich Associates 2013 survey information is based on results from 1,093 interviews with US institutions. Specifically the results reflect 58 NEPC client evaluations based on numerical client rankings in a number of qualitative categories. NEPC receives the survey results in exchange for providing Greenwich with market data on investment managers it reviews. NEPC ranks based on consultants included in the survey that received 5 or more client evaluations. Additional information regarding the survey is available upon request. The rankings presented may not be representative of any one client's experience since such rankings reflect the average of client responses to the survey. The rankings presented should not be viewed as an indication of NEPC's future performance and do not represent an endorsement of NEPC. [2] The Greenwich Quality Index is based on the average numerical rankings in a number of qualitative categories. [3] As defined in the Greenwich Associates Survey

Plan Performance Has Generally Met or Exceeded Expectations



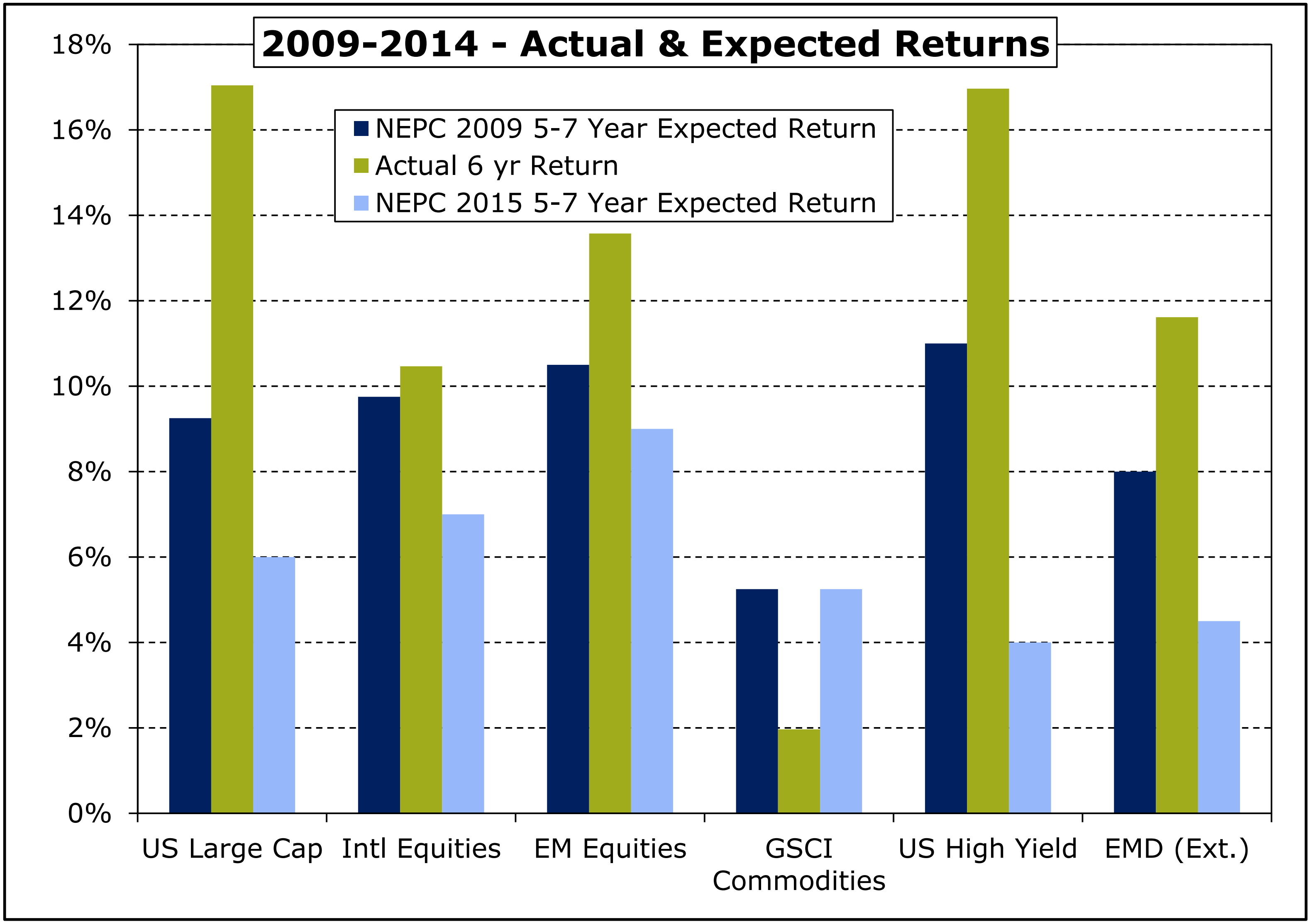
Estimated median annualized return for InvestorForce Universe as of 12/31/14

Volatility Has Been Very Low



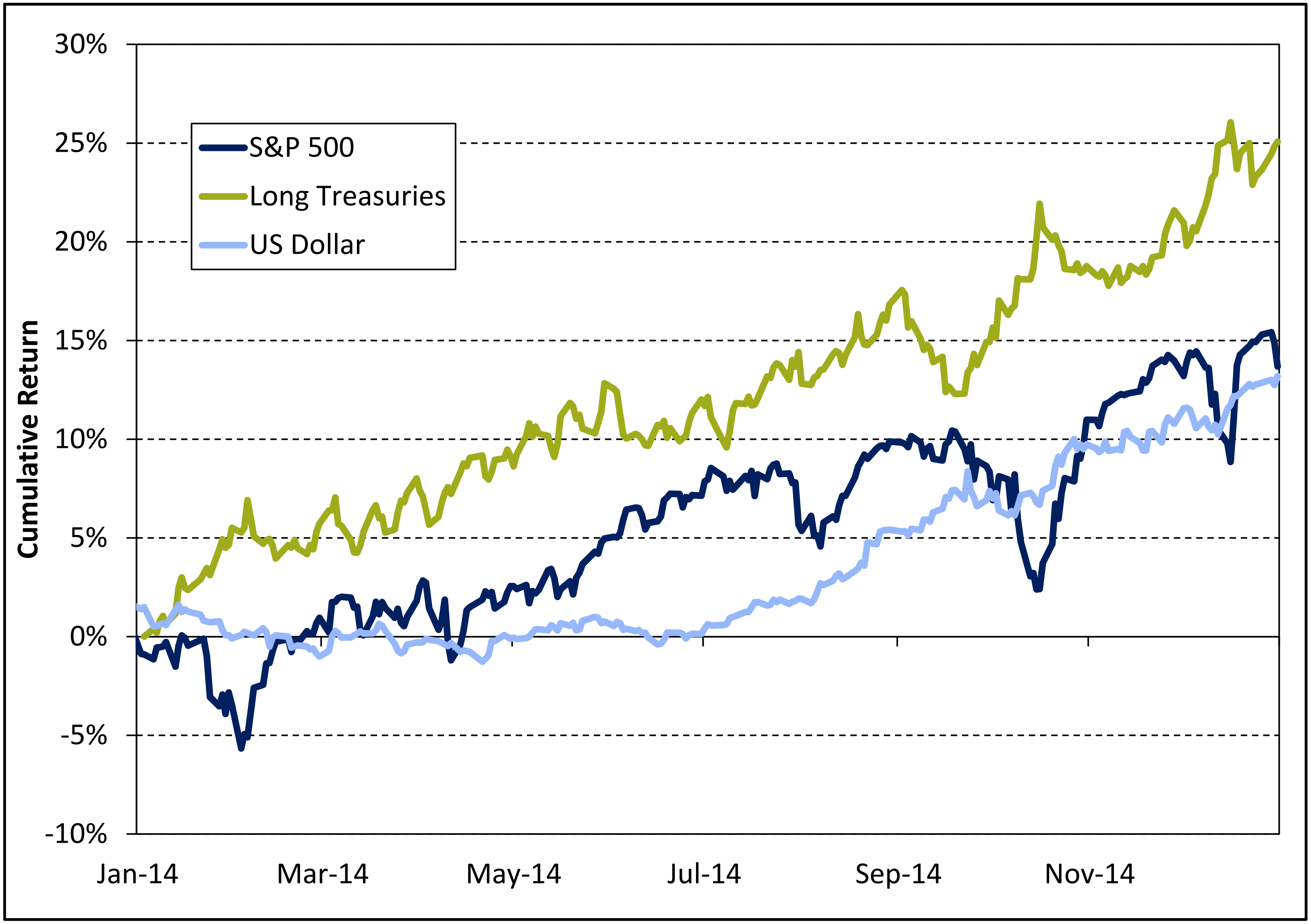
Source: Bloomberg and NEPC as of 1/20

Market Review and Outlook



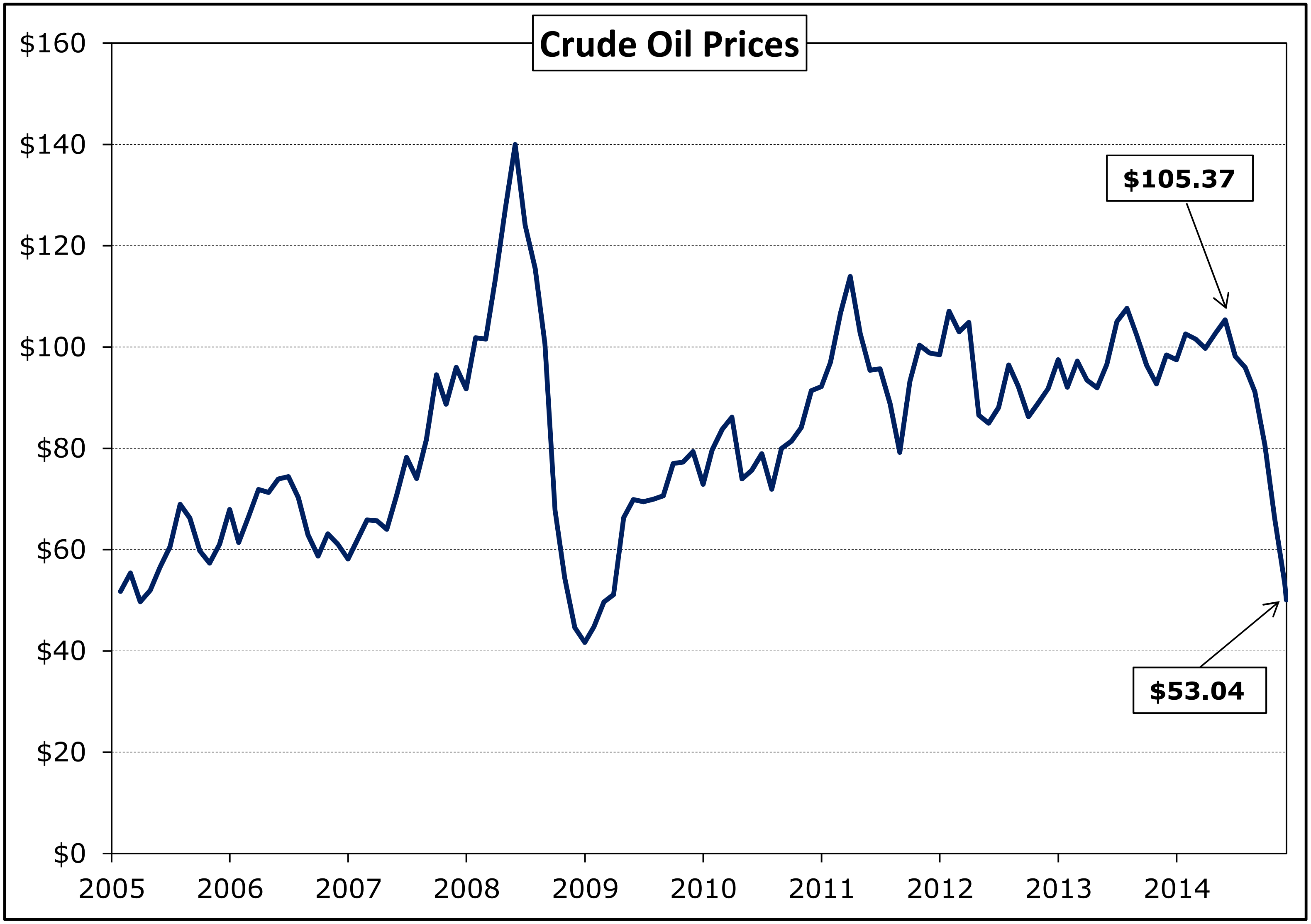
Source: Bloomberg and NEPC as of 11/30

2014 – A Banner Year for Equities, Treasuries, and the US Dollar



Source: Bloomberg as of 12/31

A Collapse of Energy Prices

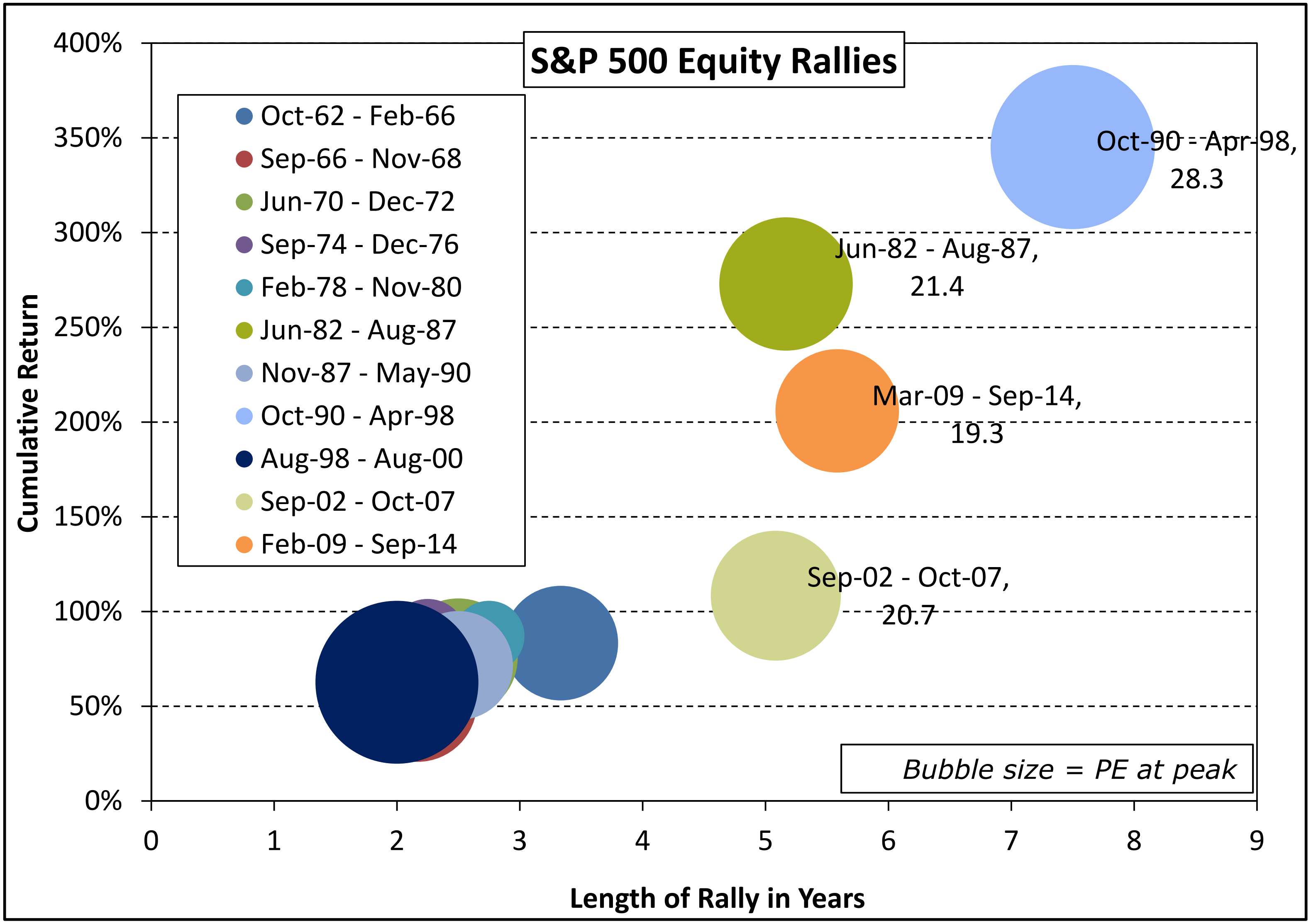


Source: Bloomberg as of 1/5

NEPC 2015 Capital Market Observations

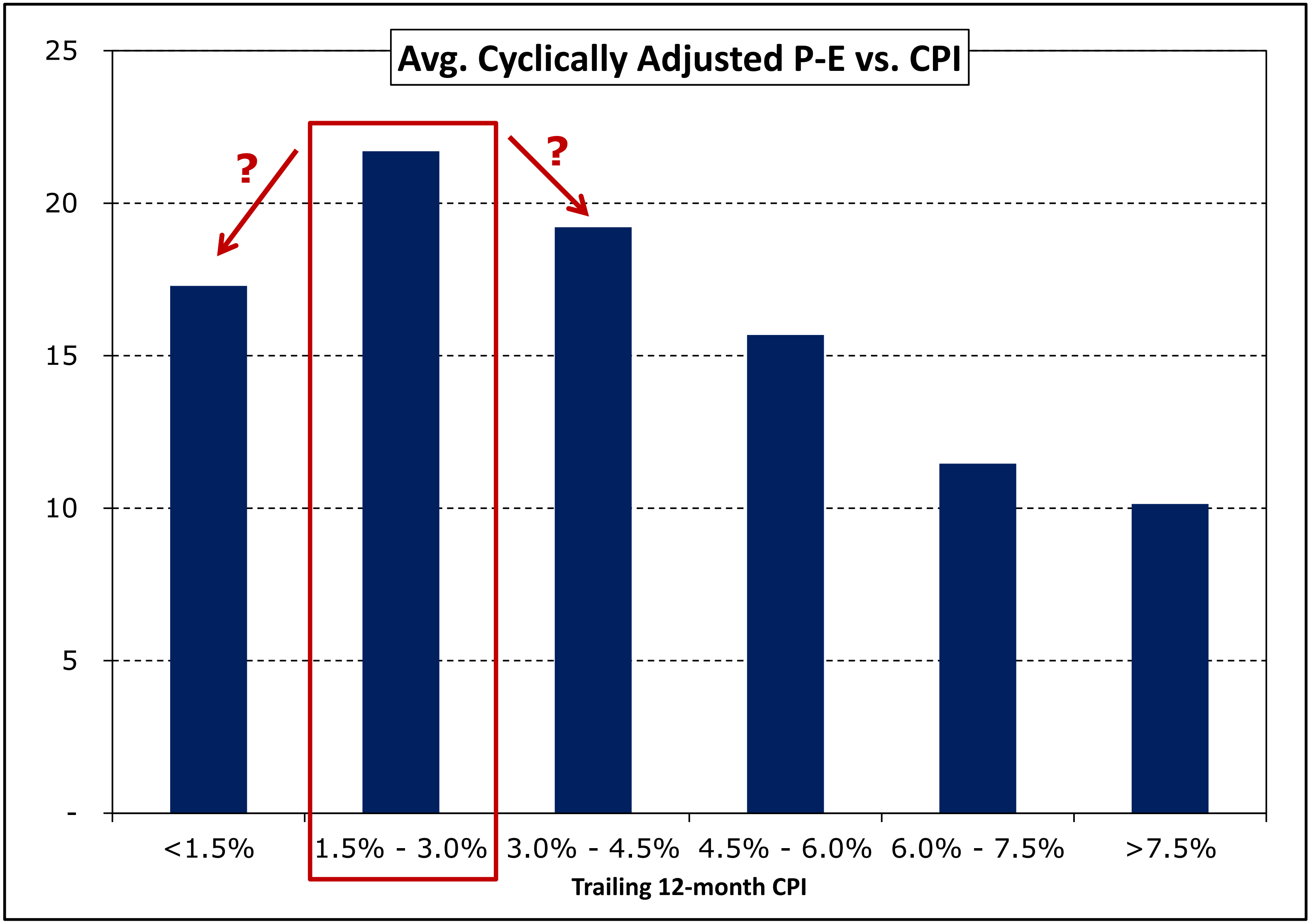
- **Protracted bull market, slow growth, and low interest rates persist**
- **Global monetary policies and capital markets continue to diverge**
- **The US economy shows strength relative to other developed markets**
- **Fed rate hikes are on the horizon but markets expect a slow pace**
- **Emerging Market fatigue tangible; fundamentals cannot be ignored**

A Reason for Continued US Market Optimism – Momentum…



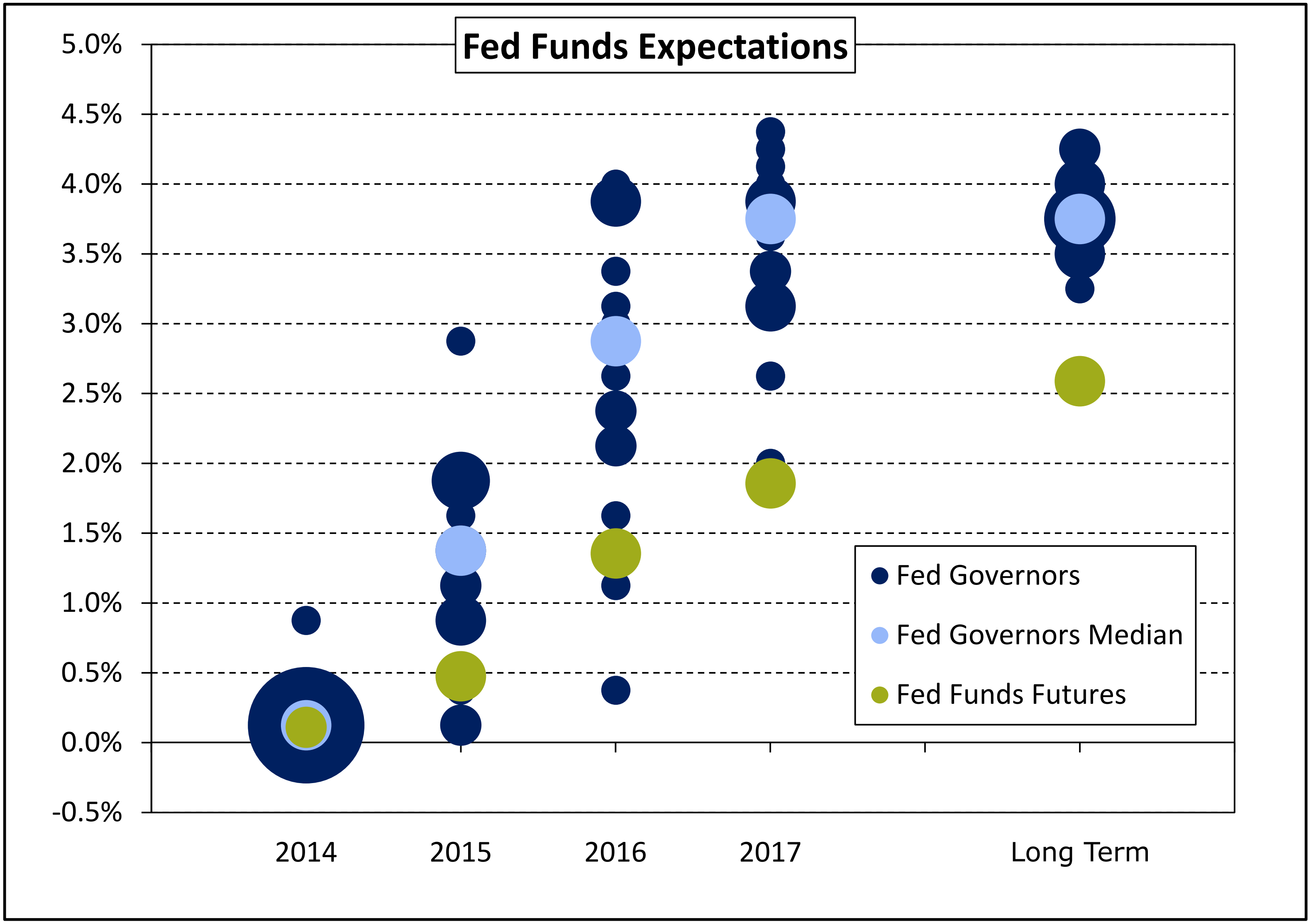
Source: Bloomberg and NEPC as of 9/30

Another Reason for Optimism (Or Is it?)– Low Rates/Inflation Support Higher Valuations…



Source: Bloomberg and NEPC

Market and Fed Expect Rates to Remain Low In Short-Term

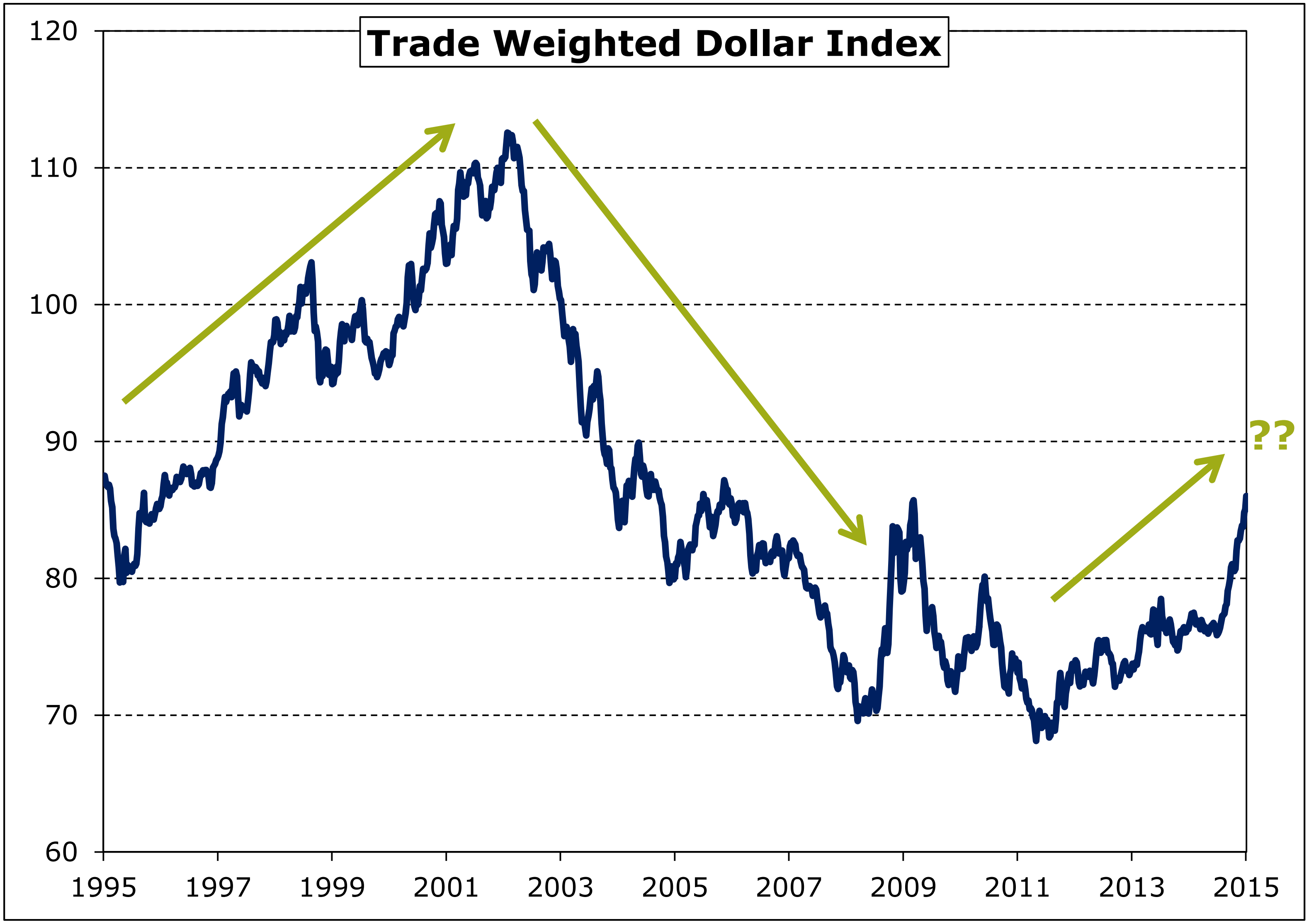


Source: Bloomberg, Federal Reserve

NEPC 2015 General Actions for Clients

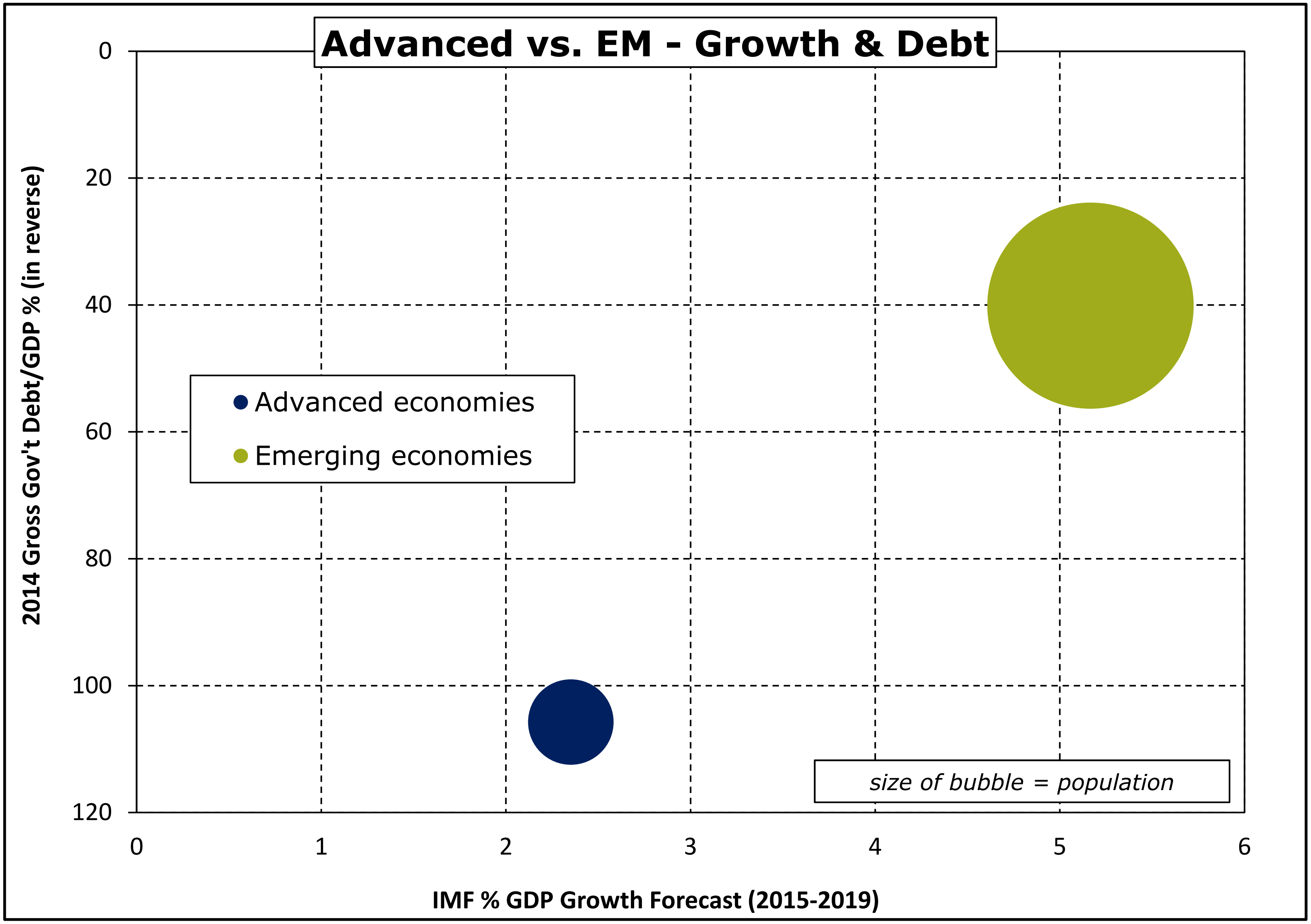
- **Balance desire for increased return with recognition of downside risks**
- **Evaluate impact of expected US dollar strength on non-US allocations**
- **Remain committed to high conviction active manager exposures**
- **Seek niche private strategies to mitigate challenge of high valuations**
- **Confirm alignment of portfolio positioning with long-term objectives**

Hedging Foreign Currency Can Be An Effective Risk Control



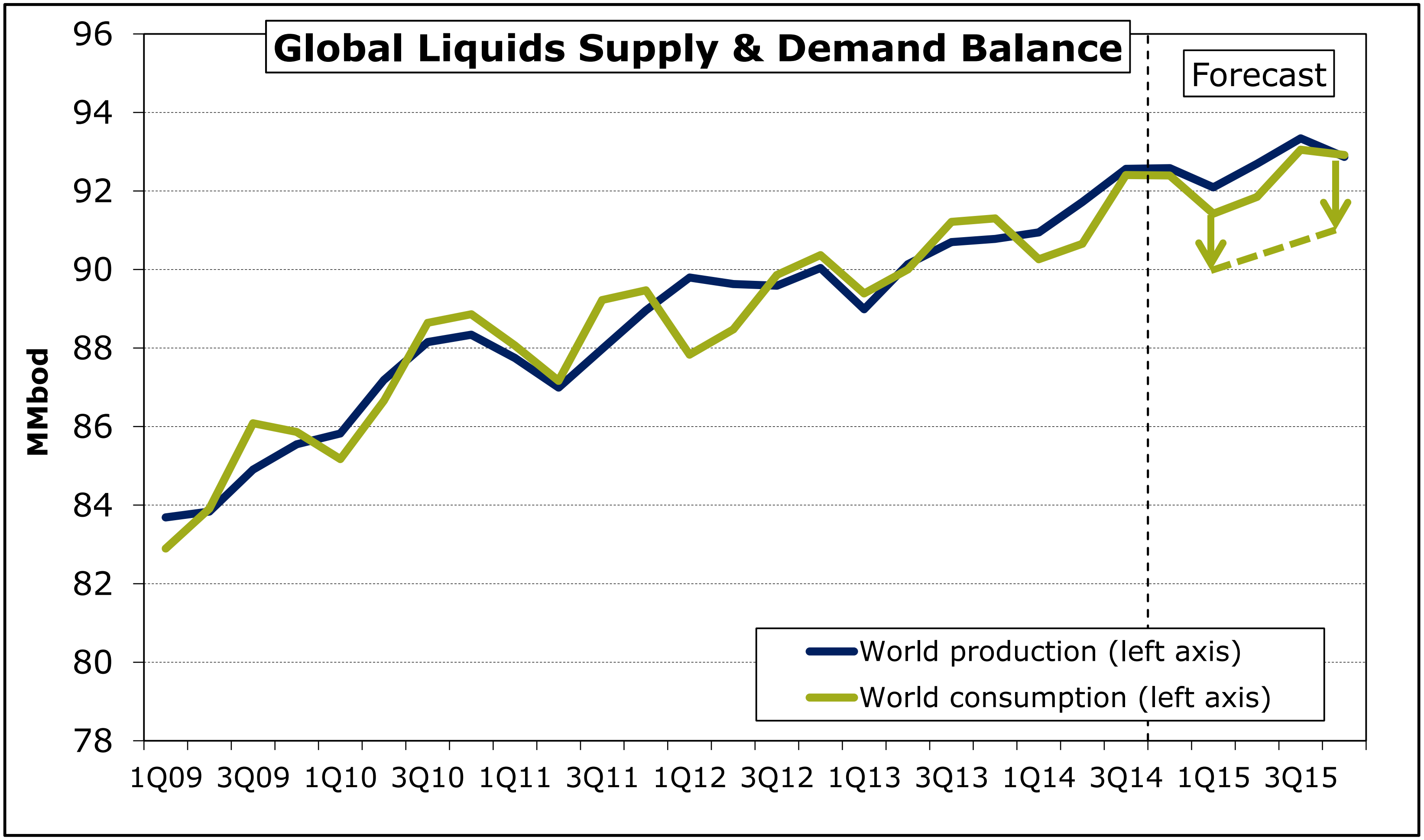
Source: Bloomberg

Structural Long-Term Positives of Emerging Markets Remain

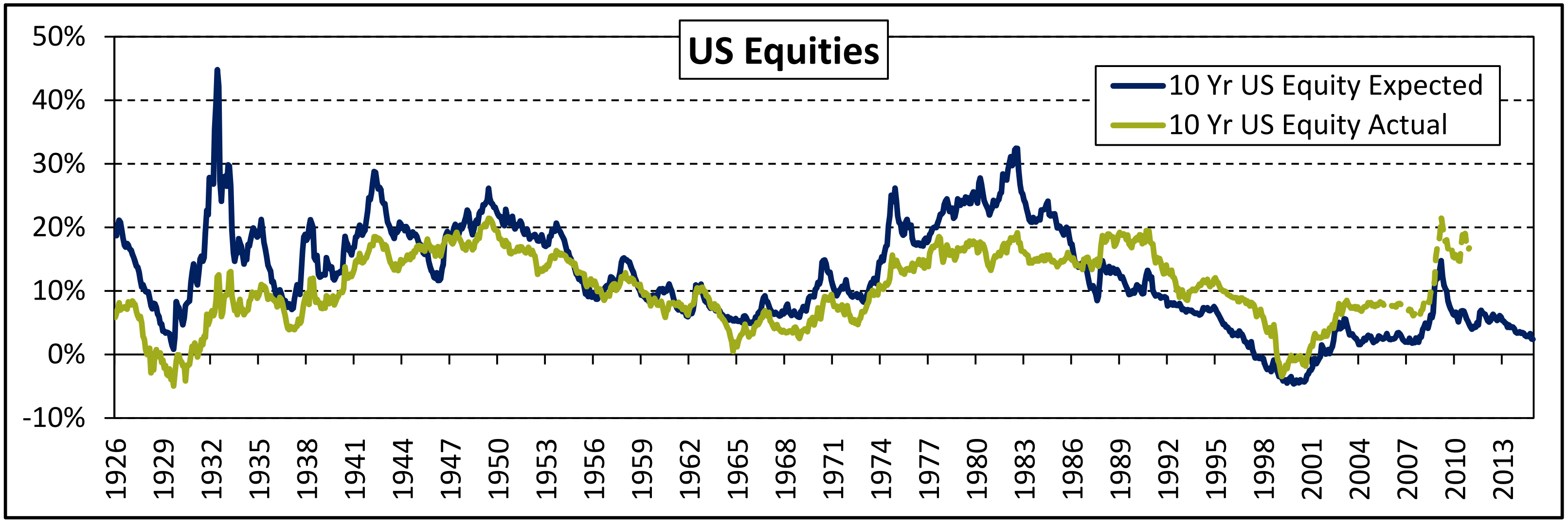


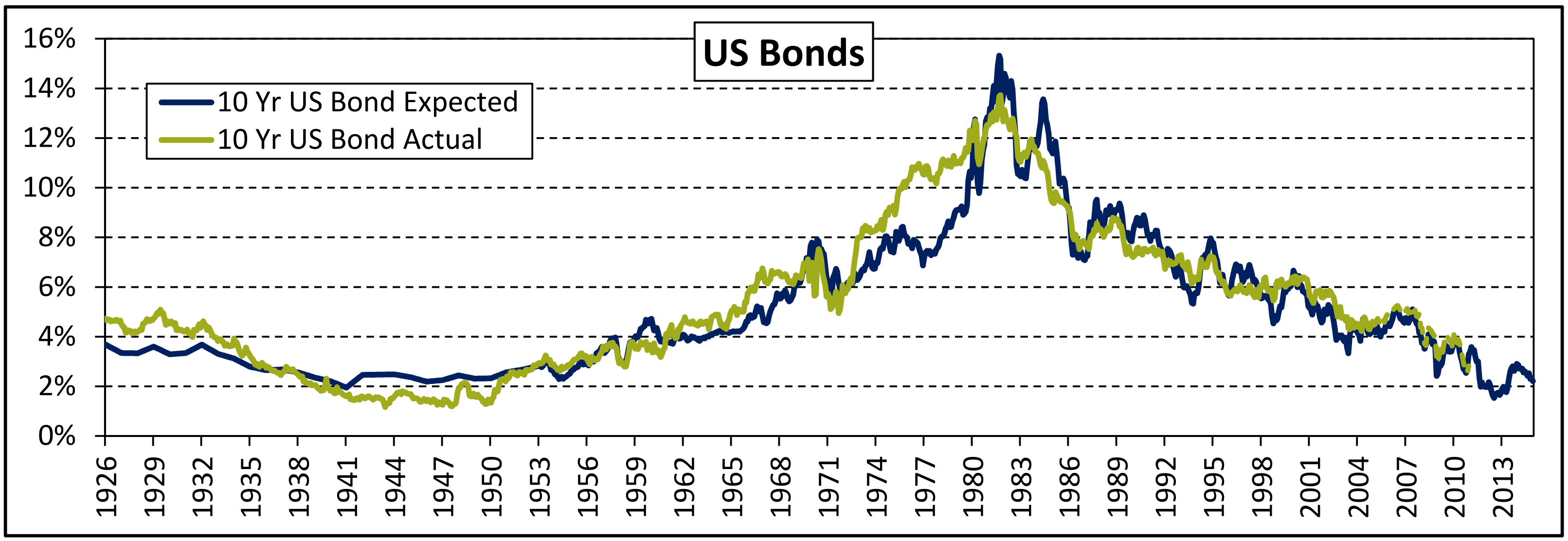
Source: IMF

- **Current oil demand of 92.4 million barrels of oil per day ("MMbod")**
- **Current oversupply of 1 to 2 MMbod (~2% of current demand)**



Source: EIA Short-Term Energy Outlook; data as of December 2014





Sources: Shiller Data, Morningstar Direct, NEPC as of 12/31

- **Return expectations are diverging**
  - Equity market return forecasts are lower
  - Higher return expectation for non-US equities
  - Bond return expectations reflect lower rates

Asset Class	Long-Term Return[1]	2014	2015	Change
Core Bonds	7.9%	2.50%	2.25%	-0.25%
High Yield Bonds	9.3%	4.50%	4.00%	-0.50%
US Large Cap Equity	11.6%	6.25%	6.00%	-0.25%
Non-US Developed Equity	9.6%	7.25%	7.00%	-0.25%
Emerging Equity	10.0%	9.50%	9.00%	-0.50%

5-7 Year Expected Returns

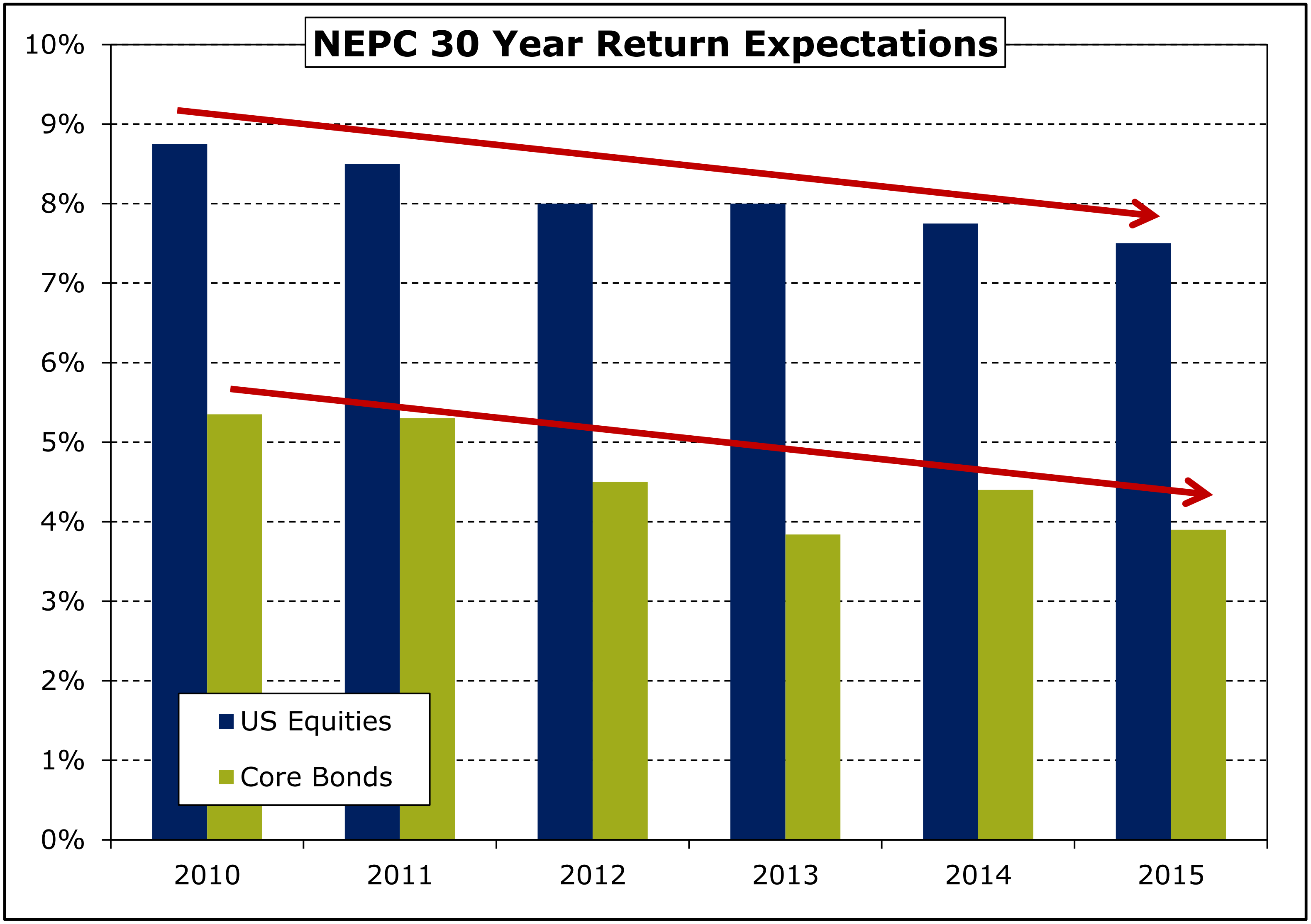
1 – Annualized returns since January 1, 1976 (or full index return history if shorter)

A Broadly Diversified Portfolio is More Efficient than an Equity-Heavy Portfolio

Sample Diversified Portfolio	65/35 Allocation	Diversified Allocation
Total Equity	65%	35%
Total Fixed Income	35%	20%
Total Alternatives	0%	25%
Global Asset Allocation	0%	20%
5-7 Year Expected Return	*5.7%*	*6.7%*
Volatility	*12.4%*	*12.4%*
Sharpe Ratio	*0.32*	*0.40*

Source: NEPC

Long-Term (30 Year) Return Expectations Continue To Trend Lower



Source: NEPC

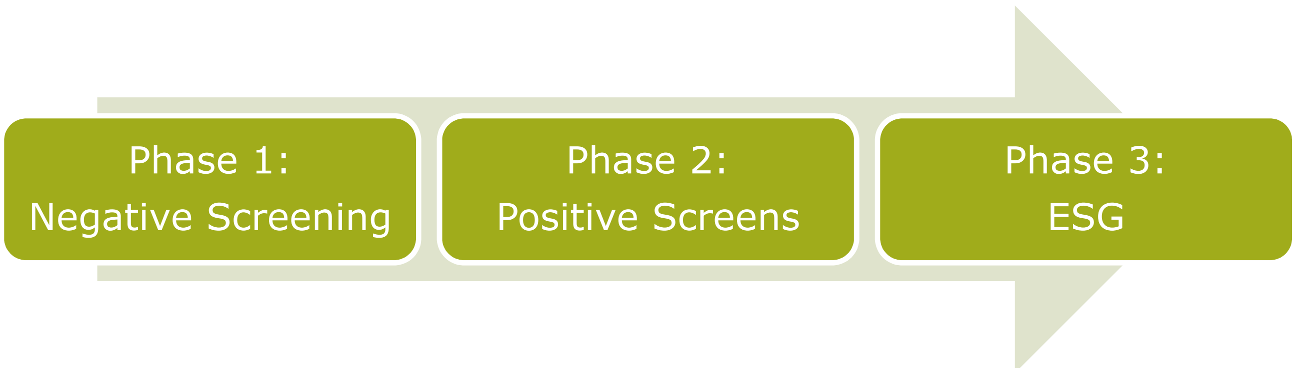
NEPC Outlook

- **Investment programs are generally healthier given strength of recent returns**
- **Monetary policy has been a meaningful driver of markets**
  - Likely to diverge as Fed moderates while ECB/Bank of Japan pursue further stimulation
- **Expectations are lower over medium and long-term**
  - Short-term optimism may continue
- **Most markets appear fairly valued**
- **Opportunities beginning to emerge, particularly in Energy markets**

Impact Investing

- **Virtually all investor types have been active in the space at one time or another**

- **The investment management community then began to focus on positive screening with a focus on ESG factors**



- **More recently, investors have become more engaged around proxy voting, company dialogues and public policy work**

Impact Investing Today

- **Terminology varies and market remains fragmented**

- **The sub-categories of impact investing have also expanded and overlap to some degree**

Impact Investing

Environmental, Social & Governance (**ESG**)	Mission Related Investing (**MRI**)	Sustainable Investing	Community Investing	Program Related Investing (**PRI**)
Example: Including ESG as part of the investment process	Example: A faith based organization that invests with specific guidelines	Example: Investing in a Water Resources Fund	Example: Investing in a community housing project	Example: Health related foundation investing in a company that provides healthy school lunches

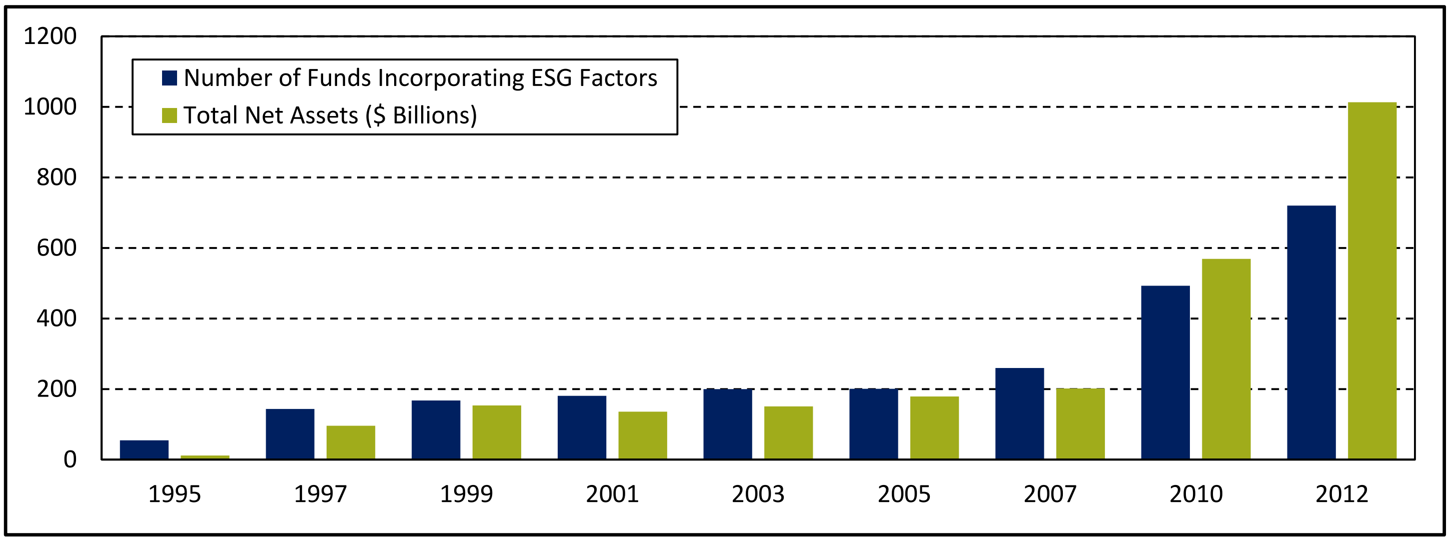
- **NEPC is committed to proactively sourcing ideas for clients in all of these areas**

- **NEPC is a signatory of the PRI and is actively involved in the development of research and awareness around ESG**

- **Principles of Responsible Investing (PRI) began in 2006 as a network of investors working together to integrate the 'six principles' into common practice in an effort to create a more sustainable financial system**

- **The 'six principles' that signatories pledge to implement:**
  1. We will **incorporate** ESG issues into investment analysis and decision-making processes
  2. We will **be active** owners and incorporate ESG issues into our ownership policies and practices
  3. We will **seek appropriate disclosure** on ESG issues by the entities in which we invest
  4. We will **promote** acceptance and implementation of the Principles within the investment industry
  5. We will **work together** to enhance our effectiveness in implementing the Principles
  6. We will each **report** on our activities and progress towards implementing the Principles

- **A growing percentage of investments integrate ESG factors in their respective strategies**
- **Traditional equity and fixed income strategies offer the largest investment universe**
- **Private market investments are substantial in number, but typically small in size**



Source: US SIF Foundation

Your Questions

- **Save the date**
  - Tuesday May 19, 2015 & Wednesday May 20, 2015
- **Details**
  - Location: Boston Convention and Exhibition Center, 415 Summer Street, Boston, MA
  - Hotel: Renaissance Waterfront Hotel
  - Registration: Available on the NEPC website in early March
- **Headline speakers**
  - Liz Ann Sonders, Windhaven Investment Management
  - Stay tuned for additional speaker announcements…

Information Disclaimer

- **Past performance is no guarantee of future results.**
- **Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.**
- **The goal of this report is to provide a basis for substantiating asset allocation recommendations.**
- **All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.**
- **This report is provided as a management aid for the client's internal use only. This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.**