### **MEETING MATERIALS**

### UNITARIAN UNIVERSALIST ASSOCIATION OF CONGREGATIONS

August 16, 2018 Scott Perry, CAIA, Partner Krissy Pelletier, Principal Asher Watson, Consultant Lily Fayerweather, Analyst





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





#### SRIC/IC Meeting—Draft Agenda August 16, 2018 9:00am-3:15pm

#### 9:00am - 10:20am SRIC

- 9:00am Check-ins & welcome to new member Pat Tomaino
- 9:15am Agenda overview & approval of minutes from meeting on May 22, 2018
- 9:30am Report from GA 2018 (Brennan/Tomaino/Mulvey/Brunsting/Skye/Santini)
  - Divestment Business Resolution 2018 Report (Brennan)
  - Advancing Racial Equity through Impact Investing (Tomaino)
  - Update on UUs for Justice for the Middle East (Mulvey)
- 9:45am Shareholder advocacy
  - Custom proxy voting policy & annual voting record (Brennan)
  - Communicating 2018 successes, including Range Resources vote (Brennan)
  - Update on ICCR, SICS, Climate Action 100+ priorities for 2019 (Brennan)
- 10:00am Community investing
  - Quarterly check-in on community investments (Faust)
- 10:15am Agenda items for November 20, 2018 meeting
- 10:20am Break

#### 10:30am - 1:00pm Joint IC/SRIC

10:30am Updated Socially Responsible Investing Policy (Brennan/Gaffney/Mulvey)

- Discuss & refine draft
- SRI Policy for Board review & approval
- Next steps to prepare for presentation to UUA Board
- 11:30am Screening criteria
  - Report from screening subcommittee (Brennan, Gaffney, Lasher, Skye, Tomaino)
  - Next steps (including meeting with Sustainalytics, testing permutations of criteria vs. updated Investment Policy, process for annual review of criteria)
- 11:45am Joint IC/SRIC report to UUA Board in October (Gaffney/Mulvey)
  - Key points to highlight in report
- 12:00pm Performance Review
- 12:15pm Working Lunch
  - Prep for anti-racism training in November (Brennan/Santini)
  - Other agenda items for November 20, 2018 joint meeting
  - Review ESG scorecards for UUCEF fixed income investments

1:00pm Break/Adjourn joint session

#### 1:10pm - 3:15pm IC

- 1:10pm Agenda overview & approval of minutes from meeting on May 22, 2018
- 1:20pm Investment policy statement (opportunistic investment language)
- 1:30pm Opportunistic investing
  - Discuss potential diversifying investment options as part of the Opportunistic Investment allocation
- 2:20pm Private markets opportunities with a focus on impact oriented investments
  - VWH Fund I
  - HCAP Partners IV
  - Reinventure Capital Fund I
- 3:15pm Adjourn meeting

#### **UUA Investment Committee – Minutes - DRAFT**

24 Farnsworth Street, Room 210 Boston, MA 02210 May 22, 2018

Members present: Kathleen Gaffney, Chair, Tim Brennan, John LaPann (by phone), Brian Lasher, Lucia Santini and David Stewart

Members absent: None

Staff: Susan Helbert

NEPC: Lily Fairweather, Melissa Mendenhall, Krissy Pelletier (by phone), Asher Watson

SRI Committee: Vonda Brunsting (by phone), Kristin Faust (by phone), Kathy Mulvey, Julie Skye

Guests: Ken Redd, Pat Tomaino

#### 1. Minutes from February 8, 2018 - Gaffney

**Motion 1:** To approve minutes from the February 8, 2018 meeting. Moved: Gaffney, seconded: Stewart, all approved.

### 2. Revisions to Investment Policy Statement and Compilation of GA Actions with Potential SRIC Implications – Brennan

- Purpose is to ensure our policy covers the actions of GA.
- Hired Simon Billenness to review GA action items from 2002 to present and identify gaps.
- Socially Responsible Investing streamlined policy in 2012 was too high level. Need to go back to 2010 policy and update from there.
- Need to identify what "impact investing" means in terms of our policy.
- Revision of investment policy must be presented to and approved by the Board.
- Review of investment policy should be done annually.

*Action item 1:* Brennan to draft new investment policy using consistent language defining UU values and circulate to committee chairs and NEPC for review. Draft should address engagement as well as screening.

*Action item 2:* Brennan to ask Multicultural Growth and Witness to capture action items at GA annually for potential inclusion in policy.

*Action item 3:* Mulvey to circulate memo from 11/5/2017 on consistent language defining UU values.

#### 3. Sub-committee Report on Sustainalytics Process & UUA Screening Criteria – Brennan, Gaffney, Lasher, Skye

- Had a conversation on the levers/dials we have in defining a screen and how much we can influence it.
- Two types of screening done for us, ESG ratings and controversy ratings
- MSCI did a study on the two ways of screening a portfolio and determined that ESG is a forward-looking screen while controversy ratings are backward looking.
- Socially Responsible Investing Committee considering using an individual ranking of each Environmental, Social and Governance instead of using a blend.
- Sub-committee will be meeting again to discuss various permutations to existing criteria.
- Meet with Sustainalytics again to discuss various permutations to existing rules to see how each would affect the portfolio.
- Pat Tomaino, incoming Socially Responsible Investing member, agreed to serve on sub-committee.

#### 4. Investment in Metro IAF Community Restoration Fund – Joint Committees

- Investment is outside of the guidelines and requires Investment Committee approval.
- Is a start up fund which makes real estate loans to communities affected by the foreclosure crisis.
- Have hired The Reinvestment Fund as their advisor and put together a sophisticated Board. Financials and audits were reviewed.
- Proposing a \$50k investment into Class A representing 2.5% of 1% of the portfolio.

**Motion 2:** To approve an investment of \$50,000 in Metro IAF. Moved Gaffney, seconded Santini, all approved.

#### 5. NEPC ESG Ratings - NEPC, Joint Committees

- NEPC has committed to incorporating ESG into their investment process.
- The ratings framework will allow clients to differentiate between investment managers and strategies as it relates to ESG.
- The approach allows for comparison across managers in all asset classes while providing further detail on unique implementation methods.
- Each assessment involves a firm level and a strategy level component.
- Reviewed an example evaluation.

*Action item 4:* NEPC to provide Carbon Underground 200 exposure showing investments by separately managed accounts and co-mingled accounts.

#### 6. Performance Review: NEPC, Joint Committees

- Endowment returned 1% (gross of fees) during the first quarter of 2018, ranking 2<sup>nd</sup> in the universe, outperforming both the allocation and index indices.
- Over the trailing one-year period, the Endowment returned 13.4% (gross of fees), ranking 1<sup>st</sup> in the universe and outperforming both the allocation and index indices.
- Over the ten-year period, performance ranked in the second quartile of the peer universe.

#### 7. Private Equity Pipeline and Pacing – NEPC, Joint Committees

- For 2018 recommended \$3 million to distressed strategies, have already committed \$2 million to the Canvas Distressed Fund.
- Strategies that provide a combination of capital appreciation as well as near-term income or distribution could provide a balanced approach for maintaining private market exposure while also providing some liquidity.

*Action item 5:* NEPC to provide information on the Tilia Fund and VWH Capital Management.

#### 8. Opportunistic Allocation Discussion – NECP

- Discussed definition of opportunistic investment allocation.
- View opportunistic investments as containing investment opportunities seized as they come up based on market conditions.
- Comfortable leaving the assets in the opportunistic investment allocation as is.

*Action item 6:* NEPC to propose investment policy language defining opportunistic category.

Action item 7: NEPC to schedule a call to discuss Global Macro and Hedged Equity strategies.

Next Meeting Date August 16, 2018



### **UUA Manager Summary**

Manager: Rhumbline Custom Screened Russell 1000 Value
Benchmark: Russell 1000 Value
Asset Class: Large cap domestic equity - value
Role in Portfolio: Growth Assets
Description: The manager optimizes a portfolio of large cap value equities based on their Environmental, Social and Governance ("ESG") ratings. The fund should have relatively low tracking error or variance from the benchmark as it is a largely passive investment.

Manager: Sands Select Growth Equity Benchmark: Russell 1000 Growth Asset Class: Large cap domestic equity - growth Role in Portfolio: Growth Assets

**Description:** The manager uses a fundamental, bottom up research approach to stock investing. Their investment process produces a concentrated portfolio, aggressively seeking equities with high growth opportunities. The manager is currently restricted from investing in certain sectors and industries, including defense, fire arms, tobacco, and nuclear weapons. Also the manager cannot invest in companies that engage in predatory lending practices, have poor environmental practices, and companies that have questionable employment practices and possible human rights offenses.

Manager: Wellington SMID Cap Value

Benchmark: Russell 2500 Value

Asset Class: SMID cap domestic equity - value

Role in Portfolio: Growth Assets

**Description:** Wellington has a bottom-up investment philosophy, believing that individual stock selection is the most predictable way to generate strong returns. The team has a contrarian value investment philosophy, seeking to buy high-quality companies at a discount. The portfolio holds 60-90 names and positions, which typically are initiated at 80 bps and range from 50 bps to 3.5%, depending on the team's conviction.

Manager: Kennedy Capital Small Cap Growth

Benchmark: Russell 2000 Growth

Asset Class: Small cap domestic equity - growth

Role in Portfolio: Growth Assets

**Description:** Kennedy utilizes a fundamental, bottom-up research process that relies on internal sources to generate potential buy candidates. They do this through the ongoing review of news and results across the investable universe on an industry-by-industry, analyst-by-analyst basis and the continual monitoring of trends and factors that would impact company fundamentals. Kennedy's emphasis is on understanding the drivers of returns on invested capital, the opportunities available to companies to deploy additional capital at attractive rates of return, and the ability of management teams to capitalize on those opportunities.



Manager: MFS International Concentrated Equity Benchmark: MSCI EAFE Asset Class: Developed international equity - core Role in Portfolio: Growth Assets

**Description:** The manager focuses on identifying companies with sustainable aboveaverage growth and purchasing those companies at attractive valuations. The manager is a United Nations Principles for Responsible Investment (UNPRI) signatory and integrates their evaluation of a company's key ESG risks and opportunities into their overall security analysis to the extent they believe that such factors are material to and have an economic impact on shareholder value. The manager will invest between 5-10% in emerging markets.

Manager: Boston Common International Equity Benchmark: MSCI EAFE Asset Class: Developed international equity - core Role in Portfolio: Growth Assets

**Description:** The fund seeks to outperform broad international equity markets while employing ESG screens. The fund employs positive ESG screens rather than negative screens and looks to identify progressive companies rather than defensive companies.

Manager: SEG Baxter Street Fund

Benchmark: MSCI ACWI ex USA

Asset Class: Developed international equity (mid/small cap focus)

Role in Portfolio: Growth Assets

**Description:** The Baxter Street Strategy is an international long only strategy that invests in companies across the market cap spectrum. The portfolio is benchmark agnostic and highly concentrated, with roughly 45 names in the portfolio, 15 of which will comprise almost 50% of the portfolio. SEG seeks to identify businesses with steady predictable growth, high returns on capital and well established barriers to competition. SEG does have the ability to opportunistically hedge currency exposure.

Manager: RBC Emerging Market Equity

Benchmark: MSCI Emerging Markets index

Asset Class: Emerging market equity

Role in Portfolio: Growth Assets

**Description:** RBC utilizes top down thematic thinking to influence the stock selection process into more attractive areas of the market. The strategy seeks to identify growth themes within country, industry, or region and will invest in those companies with high cash flow and industry dominance. The process of utilizes both bottom up and top down research to lead to a competitive advantage. The strategy is focused on identifying strong company managements especially those that have delivered in the past. Attractive companies are those that have strong franchises and a real sustainable competitive edge.



Manager: Breckinridge Capital Advisors Sustainable Fixed Income & Treasury

Benchmark: Barclays Gov't/Credit Intermediate

Asset Class: Domestic Fixed Income

Role in Portfolio: Deflation hedging assets

**Description:** Sustainable fixed income is a high quality, intermediate term fixed income strategy that incorporates both fundamental credit analysis as well as ESG analysis into the decision making process. The strategy will invest across the corporate, taxable municipal, US gov't/agency and supranational sectors. Breckinridge will analyze ESG data in an effort to identify investments they feel are well suited to meet future obstacles. Additionally, the strategy will adhere to specific sector and security restrictions set forth by UUA in an effort to align the portfolios strategy with the mission and values of the organization.

Manager: Loomis Sayles Strategic Alpha Trust

Benchmark: Barclays Aggregate

Asset Class: Unconstrained Bonds

Role in Portfolio: Absolute Return

**Description:** Strategic Alpha is an opportunistic global fixed income strategy with flexible guidelines that invests across multiple fixed income sectors. The strategy seeks to take advantage of short-term tactical opportunities and longer-term structural opportunities within the broad fixed income market. The Loomis Sayles Strategic Alpha Trust strategy takes on active long/short exposures to global yield curves, credit, and currencies with extensive tail-risk hedges. The strategy also has the ability to shift duration, ranging from -2 years to +5 years.

Manager: Franklin Templeton Global Multi Sector

Benchmark: Barclays US Govt/Credit

Asset Class: Opportunistic Fixed Income

Role in Portfolio: Absolute Return

**Description:** The global bond team employs a bottom-up, research-driven investment process characterized by fundamental research of investment opportunities. The strategy is formulated by combining qualitative macroeconomic analysis with quantitative tools to determine the most attractive opportunities across duration, currency, and credit. The team applies an active, benchmark-agnostic style, pursuing absolute returns over a one- to three-year time horizon. While securitized bonds are included in the opportunity set, they have not been a large component of the strategy historically.



Manager: Brandywine Global Opportunistic Fixed Income Benchmark: CITI WGBI Asset Class: Global Multi Sector Role in Portfolio: Growth Assets Description: Brandywine undertakes a macro-economic analysis on a country-by-country basis in order to rank opportunities according to real interest rate levels. Inflation trends,

basis in order to rank opportunities according to real interest rate levels. Inflation trends, political risks, monetary trends, business cycle, and liquidity measures are all considered. Further analysis is centered on those countries that exhibit the highest real interest rates with sustainable economic conditions. Currency valuations are then examined relative to historical averages and differentials in an effort to determine if that valuation supports an investment. The majority of investments are allocated to sovereign government debt. When credit spreads are perceived to be a compelling value, however, Brandywine may allocate to spread sectors such as mortgage-backed securities and corporate bonds. Duration is determined at the country level, although adjustments may be made at the portfolio level according to the overall outlook.

Manager: Loomis Sayles Multi Sector Full Discretion

Benchmark: Barclays US Govt/Credit

Asset Class: Global Multi Sector

Role in Portfolio: Growth Assets

**Description:** The Multisector Full Discretion strategy seeks to exploit the complete range of global fixed income insights generated by the Loomis Sayles Fixed Income organization with return maximization as the primary objective. Benchmarks do not play a significant role in constructing the portfolios. Guidelines are very flexible providing the opportunity to pursue investment ideas in a wide range of global fixed income sectors. Investment flexibility authorizes significant non-dollar, emerging markets and convertible debt investments. Opportunistic investments in these non-benchmark sectors are incorporated to manage portfolio credit quality and for total return contribution.

Manager: GMO Benchmark Free Allocation Fund

Benchmark: 65% MSCI World and 35% BC Aggregate

Asset Class: Global asset allocation

**Role in Portfolio:** Growth assets (with some inflation & deflation hedging assets) **Description:** The manager has the ability to invest in both equities and fixed income, and tactically shift allocations as opportunities present themselves. The fund is managed by a team, where quantitative forecasts identify opportunities for high real returns across capital markets. Overweight's to attractive asset classes and underweights to less attractive asset classes are driven entirely by the judgment of the asset allocation team with positions generally scaled to reflect the magnitude of mispricing.

**Manager:** Entrust Capital Diversified Fund **Benchmark:** HFRI Fund of Funds Composite index

Asset Class: Hedge funds

Role in Portfolio: Growth assets

**Description:** The manager invests primarily in event-driven, directional-credit, activist, and equity long/short strategies in blue chip, brand name hedge managers while providing investors with a high amount of transparency into the underlying investments.



Manager: Cevian Capital II Benchmark: HFRX Event Driven Index Asset Class: Hedge funds Role in Portfolio: Growth assets

**Description:** Cevian Capital II is a concentrated activist hedge fund that hedges currency exposure and will invests in mid to large cap companies listed in the Nordic region [Sweden, Finland, Denmark, and Norway], UK, and other western parts of Europe. Their strategy is to target undervalued companies, where the perceived undervaluation stems from mismanaged operations, inefficient capital structure, and/or poor corporate governance structure. Cevian quantifies 'value' in terms of the company's enterprise value, operating margins, corporate governance, or equity value. The fund tries to improve this value by targeting those specific areas of weaknesses.

Manager: Brockton Capital Fund III Benchmark: NCREIF Property Index Asset Class: Private Markets/Opportunistic Role in Portfolio: Growth assets

**Description:** Brockton Capital Fund III will follow a value-add/opportunistic strategy of buying distressed or neglected assets, repositioning them and, once stabilized, selling them in the institutional market. They will invest across various asset types, including office, residential, industrial, retail, mixed use, and other specialty real estate (for example, senior housing). Brockton invests across the United Kingdom although, due to the dominant market size of the South East, has a focus on Greater London and the surrounding areas.

#### Manager: SJF Ventures

**Benchmark:** US Private Equity **Asset Class:** Private Markets/Opportunistic **Role in Portfolio:** Growth assets

**Description:** SJF will pursue a fundamental investment strategy that will look to invest in companies in the expansion stage business in the clean energy and efficiency, asset recovery and recycling, food and sustainable agriculture, education, health and wellness, and workforce development/software industries. SJF primarily focuses on companies with innovative social and environmental solutions embedded within their business models. The firm seeks values-driven entrepreneurial teams and looks for positive impact business models that can simultaneously scale impact and financial results, most often seen in impactful product and service delivery.

Manager: Orchard Landmark Benchmark: JP Morgan Corporate EMBI Asset Class: Private Markets/Opportunistic Role in Portfolio: Growth assets

**Description:** Orchard Landmark structures private credit transactions for family-owned businesses in Asia Pacific, leveraging long-standing local teams with investment and legal talent, established deal structuring track-records; and established borrower relationships. They play off the demand-supply imbalance in Asia Pacific capital markets for short-term credit to both small-to-medium enterprises and corporations looking for growth capital. As such, Asian private credit affords a potential return premium for illiquidity, higher inflation, and emerging market risk.



# Manager: Canvas Distressed Fund Benchmark: HFRI Event Driven: Distressed/Restructuring Index Asset Class: Private Markets/Opportunistic Role in Portfolio: Growth assets Description: Canvas Distressed Fund will invest in Brazil-focused single name distressed

**Description:** Canvas Distressed Fund will invest in Brazil-rocused single name distressed corporate debt and judicial claims (federal claims and quasi-government claims). The Fund intends to buy single name corporate debt at steep discounts. Canvas does not attempt to restructure distressed companies; it will instead sell or auction the debt's collateral assets to recover value. The Fund will also invest in federal claims, which are referred to as Precatorio, and quasi-government and private claims against entities such as the state-owned utility companies. This strategy benefits from several key macro factors in Brazil: High interest rates, shrinking credit facilities, lack of large investment management competitors post 2008-09, a drastic increase in corporate bankruptcies, and reduced foreign direct investment following the 2015 Brazilian debt downgrade.





### HIGHLIGHTS OF SECOND QUARTER HAPPENINGS AT NEPC

	CHINA AND BEARS - OH MY!
CONCERNS	S ABROAD
	91%
89%	of investors have
are concerned about	some exposure to China
a trade war with China	7%
	tensions and political
uncertainity are th	ne greatest threats to
	nts near term
BUT STAVE	NG THE COURSE
BUT STATI	IG THE COURSE
75%	90%
haven't changed their portfolios	l l
due to recent market volatility	believe the economy is the same or in a better place than last year
HEDGE FUNDS &	PRIVATE EQUITY
	OBENEFIT
50%	<b>59%</b>
think hedge funds will benefit most from a	believe private equity will be the top performer
return of market volatility	over the next 3 - 5 years
ABOUT THE SURVEY The 2018 NEPC Survey was conducted online by held by NEPC.	the Endowment & Foundation Practice Group in February 2018. Copyright is
evaluation, and investment policy services. We work with discerning in	c consulting firm, providing asset allocation, manager search, performance reesters on both an advisory and discretionary basis. We service over 100 ndowment/foundation assets, from our offices in Boston, Atlanta, Charlotte,
Stelese as of ELGO/2018	@NEPC_EandF
nepc.com	@NEPC_EandF

#### **NEPC INSIGHTS**

- Taking Stock: Globalization Backlash: Tariffs are a Dangerous Game
- Taking Stock: A Millennial's Take on ESG and Defined Contribution Plans
- The Need for Investment Discipline: Review, Revise and Repeat
- 2018 First Quarter Market Thoughts
- The State of Strategic Investing in Healthcare
- Taking Stock: Corporate Pension Plans: A Changing Yield Curve and Q1 Liability Performance
- Nothing Ventured, Nothing Gained: The European VC Opportunity
- Taking Stock: Megatrends The Forces Driving Our Future
- May 2018 Endowment & Foundation Survey Results & Infographic
- Taking Stock: A Roundup of NEPC's 2018 Investment Conference
- Taking Stock: Holding the Investment Industry to a Higher Standard
- Taking Stock: China's Demographic Solution: Too Little Too Late?
- Putting the Pieces Together: Equity Portfolio Construction for Private Wealth Clients
- Taking Stock: Is This the Ghost of Taper Tantrums Past?
- Taking Stock: What's 'Appening with Financial Wellness?

#### **WEBINAR REPLAYS**

- 8<sup>th</sup> Annual Investment Manager Webinar Replay
- NEPC Q1 2018 Quarterly Markets Call

#### To download NEPC's recent insights and webinar replays, visit: www.NEPC.com/insights



### HIGHLIGHTS OF SECOND QUARTER HAPPENINGS AT NEPC

#### **RECENT UPDATES**

- As part of our ongoing efforts to keep you informed of market conditions and allow you to hear directly from our talented investment professionals, NEPC will begin hosting quarterly investment webinars. We hope you will join us for the first in this new series of webinars on **Wednesday**, July 25, 2018 at 1:00 PM EST. Keep an eye out for an email with more details to register!
- We are excited to announce the release of NEPC's new ClientHUB web portal designed with our clients in mind. The revamped client portal provides a cleaner, easierto-use, and more customized tool for your team and you. Please share any feedback you might have with your consultant along the way.
- **SAVE THE DATE!** NEPC will host our 24<sup>th</sup> Annual Investment Conference in May 2019. More details to come!



BOSTON PARK PLAZA MAY 7-8, 2019 24TH ANNUAL NEPC INVESTMENT CONFERENCE

#NEPC\_CONFERENCE

To view materials from NEPC's 23<sup>rd</sup> Annual Investment Conference visit: <u>https://info.nepc.com/clientconference2018</u>

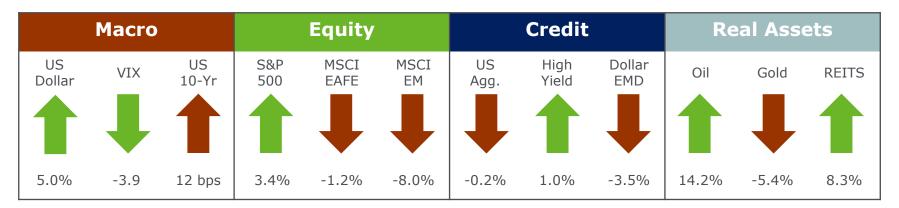


## MARKET ENVIRONMENT & OUTLOOK



### **PERFORMANCE OVERVIEW**

### **Q2** Market Summary



- US stocks increased on the quarter, supported by strong earnings growth
- Emerging market equities and currencies weakened this quarter as trade concerns and Federal Reserve interest rate increases weighed on markets
  - The US dollar reversed its first quarter decline and increased relative to a basket of major developed market currencies

### • The US yield curve continued to flatten as the second Fed rate hike of 2018 pushed short-term interest rates higher

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



### **MACRO PERFORMANCE OVERVIEW**

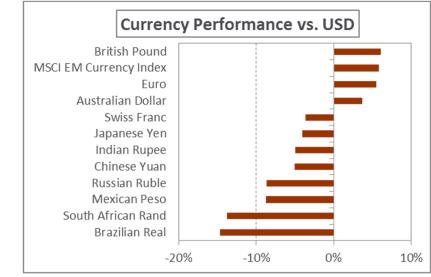
### **Q2 Macro Market Summary**

- The global growth outlook remains strong, particularly in the US
- Global equity market volatility fell, despite escalating tensions related to the US-China trade dispute
- The US Treasury curve continued to flatten raising concerns of an inverted curve should the Fed hike rates beyond market expectations

	Yield 03/31/18	Yield 06/30/18	4
US 10-Yr	2.74%	2.86%	0.12%
US 30-Yr	2.97%	2.99%	0.02%
US Real 10-Yr	0.68%	0.74%	0.05%
German 10-Yr	0.50%	0.30%	-0.20%
Japan 10-Yr	0.05%	0.04%	-0.01%
China 10-Yr	3.75%	3.48%	-0.27%
EM Local Debt	6.00%	6.59%	0.59%

Source: Bloomberg

Central Banks	Current Rate	СРІ ҮОҮ	Notes from the Quarter
Federal Reserve	1.75% - 2.00%	2.9%	The Fed increased its benchmark interest rate to 1.75% - 2.00% in June and is expected to hike rates two more times in 2018
European Central Bank	0.0%	1.7%	The ECB maintained its current benchmark interest rate, while indicating rates would remain steady at least through mid-2019.
Bank of Japan	-0.1%	1.3%	The BoJ will continue its ultra-easy QE program with inflation remaining well below target.





Source: Bloomberg

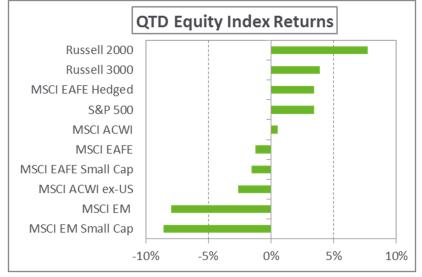
### EQUITY PERFORMANCE OVERVIEW

### **Q2 Equity Market Summary**

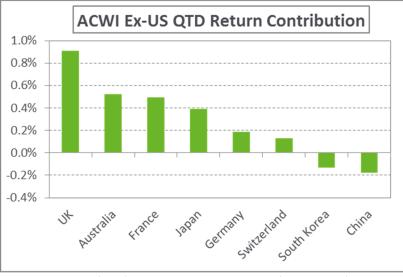
- US small cap outperformed large cap as tax reform benefits helped boost earnings
- Trade concerns and yuan weakness weighed on Chinese returns as equity markets neared bear market territory

Russell 3000 QTD Sector Return Contribution					
Information Technology	1.5%				
Consumer Discretionary	0.0%				
Financials	0.1%				
Industrials	0.4%				
Consumer Staples	0.9%				
Energy	0.4%				
Materials	0.1%				
Health Care	0.2%				
Real Estate	0.0%				
Telecommunication	-0.0%				
Utilities	-0.1%				

Source: Russell, Bloomberg



Source: MSCI, Russell, S&P, Bloomberg



Source: MSCI, Bloomberg. QTD top country contributors to index return

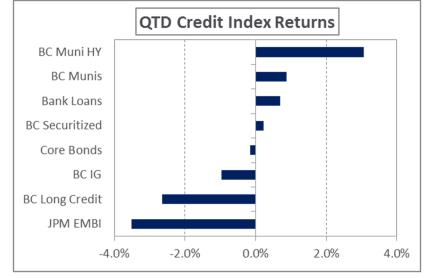


### **CREDIT PERFORMANCE OVERVIEW**

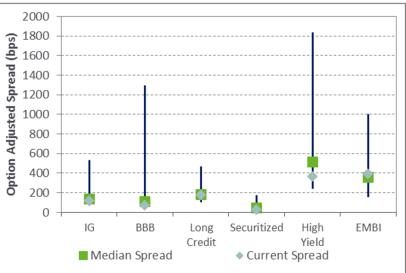
### **Q2** Credit Market Summary

- Credit spreads increased slightly, but remain below medians in most areas of the credit market
- Dollar-denominated EMD spreads increased 62 bps during the quarter, resulting in a decline of 3.5%
- Local currency EMD declined 10.4% as currency weakness weighed on returns

Credit Spread (Basis Points)	03/31/18	06/30/18	Δ
BC IG Credit	103	116	13
BC Long Credit	148	174	26
BC Securitized	29	28	-1
BC High Yield	354	363	9
Muni HY	253	198	-55
JPM EMBI	326	388	62
Bank Loans - Libor	257	303	46



Source: Barclays, JPM, S&P, Bloomberg





Source: Barclays, Merrill Lynch, JPM, Bloomberg, NEPC

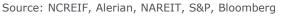
Source: Barclays, JPM, S&P, Bloomberg. As of 01/31/2000

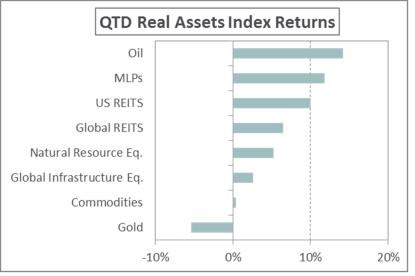
### **REAL ASSETS PERFORMANCE OVERVIEW**

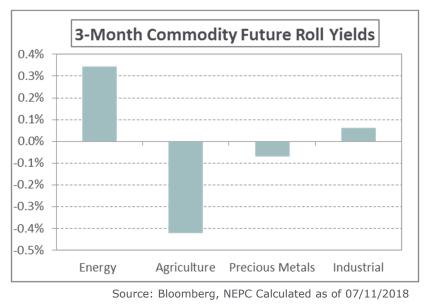
#### **Q2** Real Assets Market Summary

- Crude oil increased 14.2% during the quarter as a result of tighter global supply and US-imposed sanctions on Iran
- Agricultural commodities broadly declined, as Chinese tariffs specifically targeted soybeans
- MLPs reversed steep losses from earlier in the year as industry consolidation and simplification continues

Real Asset Yields	03/31/18	06/30/18		
MLPs	8.9%	8.1%		
Core Real Estate	4.5%	4.2%		
US REITS	4.6%	4.4%		
Global REITs	4.0%	3.7%		
Global Infrastructure Equities	3.9%	4.4%		
Natural Resource Equities	3.6%	3.5%		
US 10-Yr Breakeven Inflation	2.1%	2.1%		
Commodity Index Roll Yield	-1.6%	0.1%		







Source: S&P, NAREIT, Alerian, Bloomberg

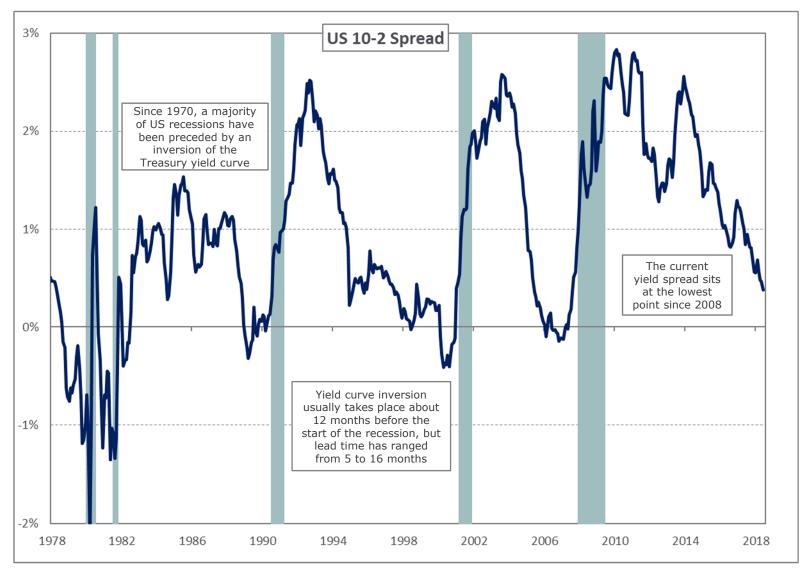
### **US-CHINA TRADE ESCALATION**



The US proposes 25% tariffs on \$50B of Chinese goods totaling 1300 products (Implemented in July)	April	Retaliatory tariffs of ~\$3B worth of US exports. In response to implementation of US tariffs in Q1 on solar panels, washing machines, steel, and aluminum
US appears to reach broad agreement with China and holds off on additional tariffs. Agreement is never finalized.	Мау	China offers to cut import duties on cars and remove tariffs on US farm products
US restricts Chinese acquisition of US firms with sensitive technology US threatens tariffs on another \$200 billion worth of Chinese goods	June	China details tariff on \$50 billion worth of exports on 659 US goods in response to the US April announcement (Implemented in July)
25% tariff levied on \$34 billion of imports from China with tariffs expected on another \$16 billion in two weeks. Potential tariffs on \$200B worth of imports from China is announced with possible implementation in late Q3	July	China responds with tariffs of 25% on \$34 billion worth of US exports with soybeans being a sizable target. Tariffs on \$16 billion worth of goods dependent on US response. Micro Technology ordered to temporarily halt sales in China due to a patent dispute



### THE YIELD CURVE IS A STRONG SIGNAL



Source: FRED Light blue shading indicates recession; 10-2 spread is calculated as 10-year minus 2-year Treasury



### **IMPLICATIONS OF US DOLLAR STRENGTH**

#### Corporate Competitiveness

- Competitiveness improves for non-US companies reliant on exports due to weaker currency
- Though, a stronger dollar may help counteract cost increases for non-US firms from potential tariffs
- A headwind to US corporate profit margins and exports

### **Financial Conditions**

- A stronger dollar translates to tightening financial conditions for financial markets given the currency's dominance in global financing and trading
- As the US rises, dollardenominated debt becomes more expensive to service for non-US issuers

### Hedging

- Strategic 50% hedge ratio supports risk reduction for developed market equities
- However, NEPC's modeling incorporates dollar weakness over the long-term – indicating more tactical investors may underhedge to capitalize on the potential return benefit

### **EM Economies**

- There may be sustained pressure on capital flows to EM economies as more capital will flow to higheryielding US assets
- In response, EM central banks may try to support their currencies by stalling rate cuts or even tightening monetary policy
- Dollar-denominated debt exposure is sizable

#### The Federal Reserve

- If the Fed continues to gradually raise rates, this would support near-term dollar strength
- However, the Fed may need to slow the pace of future rate increases should the dollar continue to strengthen
- The dollar would likely weaken in response to a more rapid tightening from other major central banks

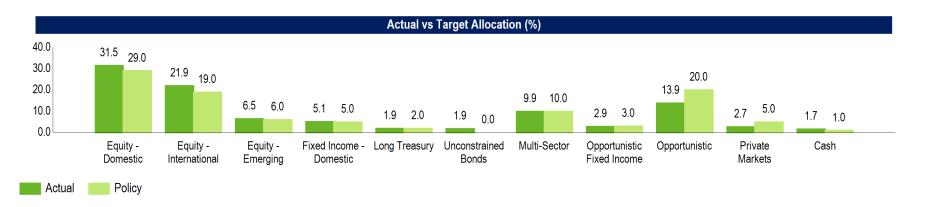


## INVESTMENT PROGRAM REVIEW



### **TOTAL FUND PERFORMANCE SUMMARY - GROSS**

	Market Value	3 Mo	Rank	YTD	Rank	Fiscal YTD	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
Composite	\$190,154,806	1.1%	32	2.1%	11	9.9%	5	6.7%	26	7.3%	49	6.5%	66	6.6%	36
Allocation Index		0.3%	55	-0.4%	91	7.6%	58	6.3%	49	6.9%	61	5.9%	86	6.0%	45
Policy Index		0.8%	41	0.4%	50	8.4%	31	6.7%	27	7.3%	49	6.3%	69	5.8%	55
InvestorForce All Endowment \$50mm-\$250mm Gross Median		0.5%		0.4%		7.9%		6.2%		7.2%		6.8%		6.0%	



#### **Total Fund Performance**

- The Endowment returned +1.1% (gross of fees) during Q2 of 2018, ranking 32nd in the universe, outperforming the allocation index and the policy index
- Over the trailing one-year period, the Endowment returned +9.9% (gross of fees), ranking 5th in the universe and outperforming both the allocation and policy index
- Over the ten-year time period, performance ranked in the second quartile of the peer universe
  - Manager selection and tactical allocations have been the primary driver of overall performance

#### **Recent Decisions & Action Items -**

No actions taken at the prior meeting

Fiscal Year End: 6/30



### **GOALS & OBJECTIVES**

#### **Investment Return Objective**

 "The overall investment objective of the UUA, as manager of the UUCEF, is to increase the UUCEF's asset value in order to maintain real purchasing power while allowing for regular endowment distributions. With the guiding lens of Unitarian Universalist values and principles, the Fund seeks to achieve consistent returns within a moderate risk tolerance over the long term, sufficient to allow UU Congregations to take regular distributions and maintain the value of principal after adjustment for inflation and after all expenses."

Spending Draw	5.00%
Inflation	2.75%
Total Return Goal	7.25%

### Risk Tolerance

- Time Horizon: The time horizon of the portfolio is perpetuity and therefore we seek to balance continued growth with a moderate risk tolerance.
- Liquidity Needs: The cash flow needs of the portfolio are often known in advance and are managed throughout the year. The portfolio can withstand some illiquidity risk.
- Capital Preservation: While the portfolio can withstand drawdowns, a primary objective is to maintain real purchasing power while allowing for regular distributions.
- Other Considerations: The UUCEF shall be managed in a manner consistent with UU values as well as the achievement of return and risk objectives. The UUA is committed to an investment program which utilizes tools of socially responsible investment (SRI) to optimize the alignment of its financial assets with its values.



### **DUE DILIGENCE MONITOR**

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

Investment Option	Commentary	NEPC Rating
<b>OCP Asia Limited</b> Orchard Landmark Strategy	OCP Asia Limited has changed the wording of its key-man provision for the Orchard Landmark Funds effective April 1, 2018. NEPC Research worked with OCP Asia on this change and believes that the new wording reflects the increased maturation of the organization as a whole. The revised key-man provision states that should any two of Teall Edds, Stuart Wilson and Dan Simmons cease to act as senior portfolio managers of the Fund or, ii) at any time prior to December 31, 2022, Teal Edds ceases to act as a senior portfolio manager of the Fund other than by reason of his death or physical or mental incapacity, then investors have a special redemption/withdrawal right. The previous key man provision focused exclusively on Teal Edds and was triggered on his departure. Dan Simmons is a full Partner of OCP Asia and has been a co-Portfolio Manager of the Orchard Landmark Funds for a number of years. Stuart Wilson is also a Partner of OCP Asia and is actively involved in portfolio management. NO ACTION is recommended as a result of the update to the key-man provision.	1
Wellington Management Company LLP SMID Cap Value	<ul> <li>Wellington has announced changes to the guidelines for their Small Cap Value and SMID Cap Value strategies to more closely align the portfolios to the underlying benchmarks. Effective June 30, 2018, they have increased the upper end of their market capitalization range at the time of purchase. For Small Cap Value, the upper limit at time of purchase will go from a maximum of \$2.0 billion to the greater of \$3.0 billion or the upper end of either the Russell 2000 or S&amp;P 600. Wellington is also changing the upper market capitalization limit of stocks that they hold to \$6.0 billion, from the current level of \$4.0 billion. For SMID Cap Value, the upper limit at time of purchase will go from a maximum of \$5.0 billion to the greater of \$7.0 billion or the upper end of either the Russell 2500. Wellington is also changing the upper market capitalization limit of stocks that they hold to \$14.0 billion, from the current level of \$10.0 billion.</li> <li>Wellington does not anticipate any material changes to the portfolios. However, because they are structuring both Small Cap Value and SMID Cap Value to include the range of their respective universes, they will likely find new non-overlapping names for the SMID portfolio over time. NEPC Research is comfortable with this decision and recommends NO ACTION.</li> </ul>	1



### **DUE DILIGENCE MONITOR**

	NEPC Due Diligence Status Key
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
<b>Client Review</b>	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.
	NEPC Due Diligence Rating Key
1	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager's viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager's ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Terminate Due Diligence status for client-owned
	products.



## TOTAL FUND SUMMARY

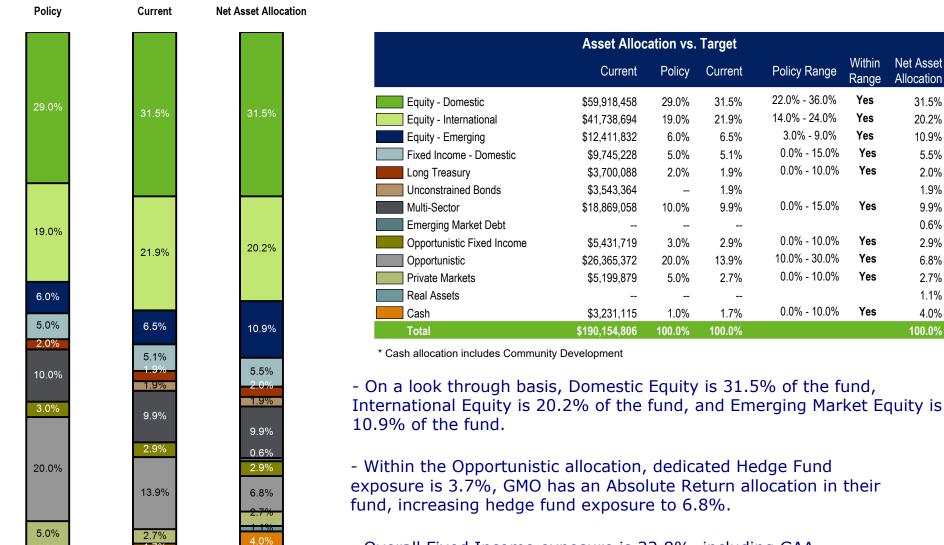


### **TOTAL FUND ASSET GROWTH SUMMARY**

	Quarter Ending June 30, 2018								
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value			
Baxter Street	\$10,473,534	\$0	\$0	\$0	-\$18,817	\$10,454,718			
Boston Common	\$15,342,649	\$0	-\$6,592	-\$6,592	-\$242,772	\$15,093,284			
Brandywine Global Opportunistic	\$10,135,202	\$0	\$0	\$0	-\$667,371	\$9,467,831			
Breckinridge - Corporate	\$9,734,203	\$0	-\$576	-\$576	\$11,601	\$9,745,228			
Breckinridge-Treasury	\$3,686,063	\$0	-\$217	-\$217	\$14,242	\$3,700,088			
Brockton Capital Fund III	\$1,141,702	\$0	-\$216,379	-\$216,379	\$67,319	\$992,643			
Cash Account	\$954,916	\$3,639,789	-\$3,062,256	\$577,533	\$11,500	\$1,543,949			
Cevian Capital II	\$6,046,095	\$0	\$0	\$0	\$261,415	\$6,307,510			
Community Development	\$1,576,294	\$106,778	-\$571	\$106,208	\$4,664	\$1,687,166			
Entrust Capital Diversified Fund Holdback	\$201,577	\$0	\$0	\$0	\$0	\$201,577			
Entrust Class X	\$583,848	\$0	\$0	\$0	-\$5,893	\$577,955			
FEG Private Opportunties Fund	\$1,567,404	\$0	-\$40,000	-\$40,000	\$100,803	\$1,628,207			
Franklin Templeton GMS	\$5,676,620	\$0	\$0	\$0	-\$244,901	\$5,431,719			
GMO Benchmark Free Allocation Fund	\$19,735,298	\$0	\$0	\$0	-\$456,968	\$19,278,330			
Kennedy Capital	\$9,144,463	\$0	-\$555	-\$555	\$517,457	\$9,661,366			
Loomis Multi Sector	\$9,492,991	\$0	\$0	\$0	-\$91,764	\$9,401,227			
Loomis Sayles Strategic Alpha	\$3,545,701	\$0	-\$5,229	-\$5,229	\$2,893	\$3,543,364			
MFS International Concentrated	\$15,879,170	\$0	\$0	\$0	\$311,522	\$16,190,692			
OCP Orchard Landmark	\$2,103,398	\$0	\$0	\$0	\$61,679	\$2,165,077			
RBC Global Emerging Equity	\$13,265,744	\$0	\$0	\$0	-\$853,912	\$12,411,832			
Rhumbline	\$19,621,044	\$0	-\$787	-\$787	\$269,296	\$19,889,553			
Sands	\$21,867,421	\$0	-\$2,101,456	-\$2,101,456	\$2,142,405	\$21,908,370			
SJF Ventures	\$429,297	\$0	\$0	\$0	-\$15,345	\$413,952			
Wellington SMID	\$7,833,205	\$0	\$0	\$0	\$625,965	\$8,459,170			
Total	\$190,037,839	\$3,746,567	-\$5,434,618	-\$1,688,051	\$1,805,018	\$190,154,806			



### TOTAL FUND ASSET ALLOCATION VS. POLICY



- Overall Fixed Income exposure is 22.8%, including GAA exposure.



1 0%

1 7%

Net Asset

Allocation

31.5%

20.2%

10.9%

5.5%

2.0%

1.9%

9.9%

0.6%

2.9%

6.8%

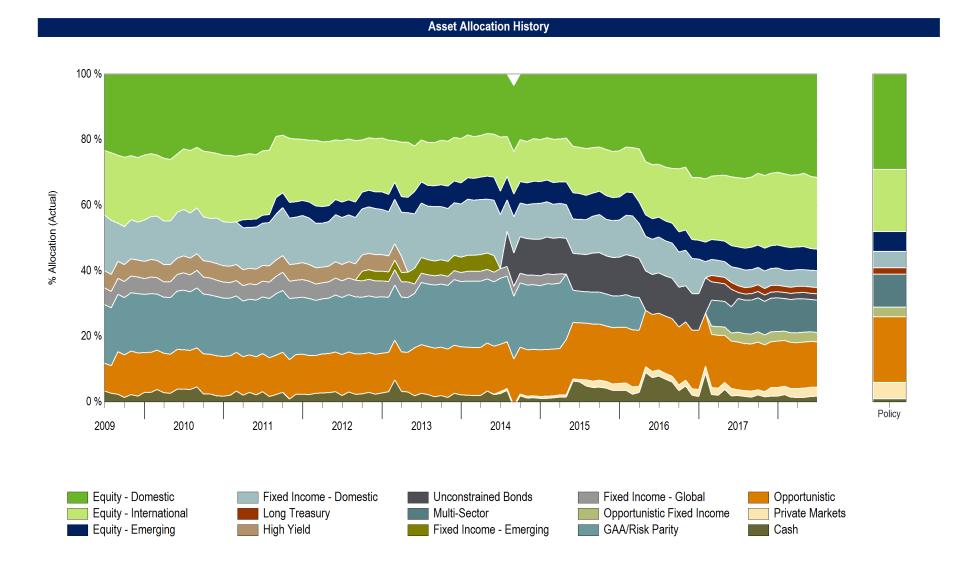
2.7%

1.1%

4.0%

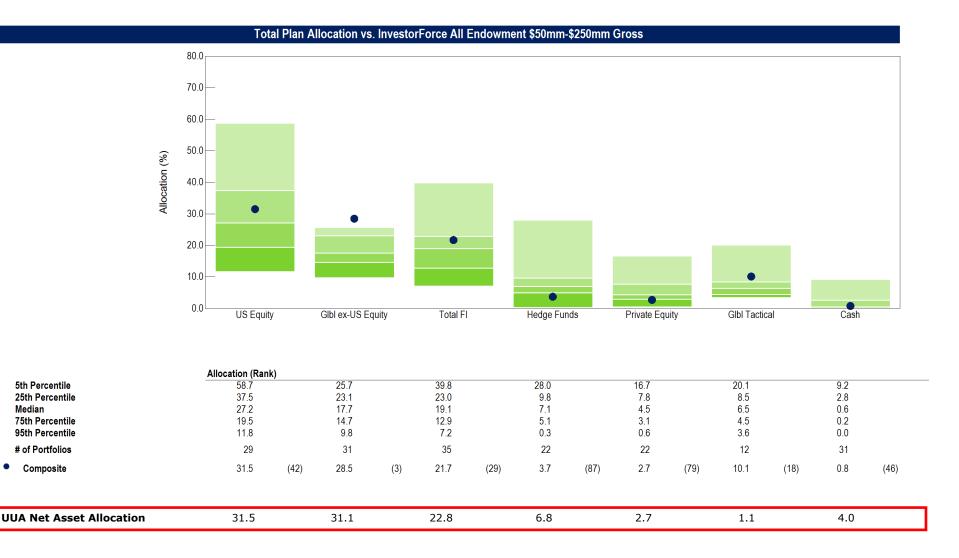
100.0%

### **TOTAL FUND ASSET ALLOCATION HISTORY**





### **TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE**



Above analytic does not include Community Develpment, whereas UUA Net Asset Allocation does



### **TOTAL FUND PERFORMANCE DETAIL - NET**

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	190,154,806	100.0	100.0	0.8	1.5	8.7	5.6	6.1	5.4	5.5	6.2	Jul-02
Allocation Index				0.3	-0.4	7.6	6.3	6.9	5.9	6.0	6.8	Jul-02
Policy Index				0.8	0.4	8.4	6.7	7.3	6.3	5.8		Jul-02
Domestic Equity Composite	59,918,458	31.5	29.0	6.1	9.4	21.0	11.9	13.8	13.4	12.4	10.6	Jul-02
Russell 3000				3.9	3.2	14.8	11.6	13.3	13.0	10.2	9.0	Jul-02
Rhumbline	19,889,553	10.5	10.5	1.3	0.1	10.6	10.2	11.2	11.4	9.0	7.3	Aug-05
Russell 1000 Value				1.2	-1.7	6.8	8.3	10.3	11.3	8.5	7.1	Aug-05
Sands	21,908,370	11.5	10.5	10.5	21.0	34.0	16.0	17.6	16.7	15.3	12.5	Dec-03
Russell 1000 Growth				5.8	7.3	22.5	15.0	16.4	14.9	11.8	9.8	Dec-03
Wellington SMID	8,459,170	4.4	4.0	7.7	5.0	10.9					11.2	Apr-16
Russell 2500 Value				5.8	3.0	11.5	9.8	10.8	11.1	10.1	15.3	Apr-16
Kennedy Capital	9,661,366	5.1	4.0	5.4	8.6						8.6	Jan-18
Russell 2000 Growth				7.2	9.7	21.9	10.6	13.6	12.5	11.2	9.7	Jan-18
International Equity Composite	54,150,526	28.5	25.0	-1.5	-1.9	7.5	5.1	5.6	3.1	1.5	6.1	Jul-02
MSCI ACWI ex USA				-2.6	-3.8	7.3	5.1	6.0	3.8	2.5	6.9	Jul-02
MFS International Concentrated	16,190,692	8.5	7.0	1.7	0.5	8.8	7.5	7.4			6.8	Apr-13
MSCI EAFE				-1.2	-2.7	6.8	4.9	6.4	4.9	2.8	5.9	Apr-13
Boston Common	15,093,284	7.9	7.0	-1.7	-1.7	7.1	5.3	6.3	5.1		5.9	May-10
MSCI EAFE				-1.2	-2.7	6.8	4.9	6.4	4.9	2.8	5.9	May-10
Baxter Street	10,454,718	5.5	5.0	-0.2	0.8	8.6					12.4	Apr-16
MSCI ACWI ex USA				-2.6	-3.8	7.3	5.1	6.0	3.8	2.5	11.7	Apr-16
RBC Global Emerging Equity	12,411,832	6.5	6.0	-6.4	-7.3	5.5					9.9	Jul-16
MSCI Emerging Markets				-8.0	-6.7	8.2	5.6	5.0	1.4	2.3	15.7	Jul-16



## **TOTAL FUND PERFORMANCE DETAIL - NET**

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fixed Income Composite	41,289,457	21.7	20.0	-2.4	-1.9	-0.2	1.9	2.6	3.1	4.8	4.3	Jul-02
BBgBarc US Aggregate TR				-0.2	-1.6	-0.4	1.7	2.3	2.6	3.7	4.2	Jul-02
Brandywine Global Opportunistic	9,467,831	5.0	5.0	-6.7	-3.1	-0.5					4.0	Mar-17
Citi WGBI				-3.4	-0.9	1.9	2.8	1.1	0.5	2.1	3.7	Mar-17
Loomis Multi Sector	9,401,227	4.9	5.0	-1.1	-1.6	1.2					2.7	Mar-17
BBgBarc US Govt/Credit TR				-0.3	-1.9	-0.6	1.8	2.3	2.8	3.8	0.7	Mar-17
Franklin Templeton GMS	5,431,719	2.9	3.0	-4.5	-2.7	-3.1					-1.3	Mar-17
BBgBarc Multiverse				-2.8	-1.6	1.3	2.8	1.7	1.3	2.8	3.1	Mar-17
Breckinridge - Corporate	9,745,228	5.1	5.0	0.1	-0.9	-0.3	1.4				1.5	Nov-14
BBgBarc US Govt/Credit Int TR				0.0	-1.0	-0.6	1.2	1.6	1.9	3.1	1.2	Nov-14
Breckinridge-Treasury	3,700,088	1.9	2.0	0.1	-3.4	-1.2					1.5	Mar-17
BBgBarc US Treasury Long TR				0.3	-3.0	-0.1	3.4	4.5	6.1	6.1	2.4	Mar-17
Loomis Sayles Strategic Alpha	3,543,364	1.9	0.0	-0.1	0.8	2.8	2.1				2.0	Aug-14
BBgBarc US Aggregate TR				-0.2	-1.6	-0.4	1.7	2.3	2.6	3.7	1.9	Aug-14
3-Month LIBOR + 3%				1.3	2.6	4.8	4.1	3.8	3.7	3.8	3.9	Aug-14
Opportunistic Investments	26,365,372	13.9	20.0	-0.8	-1.4	3.2	2.8	4.0	4.1			Jan-08
CPI + 5% (Unadjusted)				2.2	4.7	8.0	6.9	6.6	6.7	6.5	6.8	Jan-08
GMO Benchmark Free Allocation Fund	19,278,330	10.1	10.0	-2.3	-1.6	3.4	2.9	3.5	3.9	4.5	4.1	Jan-08
65% MSCI World (Net) /35% BBgBarc Aggregate				1.1	-0.2	7.0	6.2	7.3	6.8	5.7	4.7	Jan-08
CPI + 5% (Unadjusted)				2.2	4.7	8.0	6.9	6.6	6.7	6.5	6.8	Jan-08
Cevian Capital II	6,307,510	3.3	3.0	4.3	-0.9	3.1	6.5				4.3	Apr-15
HFRX Event Driven Index				0.3	-4.5	-2.8	1.2	1.4	1.9	1.1	1.1	Apr-15
MSCI EAFE				-1.2	-2.7	6.8	4.9	6.4	4.9	2.8	4.7	Apr-15
Entrust Class X Entrust Capital Diversified Fund Holdback	577,955 201,577	0.3 0.1	2.0 5.0	-1.0	-1.2	-3.4					-3.7	Jan-17



## **TOTAL FUND PERFORMANCE DETAIL - NET**

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Markets/Opportunistic	5,199,879	2.7	5.0	4.1	4.1	15.0	9.0				8.8	May-14
Private Markets Custom Benchmark				3.4	10.0	20.7	14.7				13.7	May-14
OCP Orchard Landmark	2,165,077	1.1		2.9	4.0						8.3	Nov-17
JP Morgan Corporate EMBI Broad TR USD				-1.8	-2.8	0.1	4.2	4.7	4.7	6.2	-2.6	Nov-17
FEG Private Opportunties Fund	1,628,207	0.9										
Brockton Capital Fund III	992,643	0.5										
SJF Ventures	413,952	0.2										
Community Development	1,687,166	0.9	1.0	0.3	0.9	1.1	1.1	1.1	1.3	1.6	1.7	Jul-07
91 Day T-Bills				0.5	0.8	1.4	0.7	0.4	0.3	0.3	0.5	Jul-07
Cash	1,543,949	0.8	0.0									

Fiscal Year End: 6/30

GMO Benchmark Free Allocation Fund returns are from the GMO Global Balanced Fund since May 2013.

Private Markets Custom Benchmark consists of Cambridge Associates US Private Equity Index prior to 4/1/2015 and Cambridge Associates Global All Private Equity Vintage Year 2013+ 1 Qtr Lag benchmark post 4/1/2015.

SJF Ventures is benchmarked to its own return within the allocation index from 11/1/2016 to 10/31/2018.

Cash market Value includes \$329,202.73 adjustment for pending capital additions into the UUA Endowment Fund.

Net returns for the UUCEF Composite incorporates both investment management fees and UUA administrative fees/expenses.



#### Unitarian Universalist Association of Congregations

Performance Analysis

3/31/2018

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
1 Brockton Capital Fund III	2015	4,591,253	2,715,940	1,875,312	16,095	1,893,773	1,210,738	3,104,511	372,476	59%	0.69	1.14	8.20%
2 FEG Private Opportunities Fund	2012	2,000,000	1,897,000	103,000	2,707	822,647	1,668,207	2,490,854	591,147	95%	0.43	1.31	8.91%
3 SJF Ventures IV	2016	2,500,000	500,000	2,000,000	0	0	413,952	413,952	-86,048	20%	0.00	0.83	-25.03%
Total: Unitarian Universalist Association Congregations	of	9,091,253	5,112,940	3,978,312	18,802	2,716,420	3,292,897	6,009,317	877,575	56%	0.53	1.17	7.72%

### **TOTAL FUND RETURN VS PEER UNIVERSE - GROSS**



	Return (Rank)									
5th Percentile	2.0	2.7		9.6	8.1		9.5	8.5	7.5	
25th Percentile	1.3	1.0		8.5	6.8		7.7	7.5	6.7	
Median	0.5	0.4		7.9	6.2		7.2	6.8	6.0	
75th Percentile	-0.1	0.1		7.0	5.6		6.5	6.2	5.2	
95th Percentile	-0.4	-0.7		5.6	5.1		5.7	5.6	3.2	
# of Portfolios	39	38		38	38		35	32	32	
Composite	1.1	(32) 2.1	(11)	9.9	(5) 6.7	(26)	7.3 (4	9) 6.5	(66) 6.6	(36)
Allocation Index	0.3	(55) -0.4	(91)	7.6 (	58) 6.3	(49)	6.9 (6	1) 5.9	(86) 6.0	(45)
× Policy Index	0.8	(41) 0.4	(50)	8.4 (	31) 6.7	(27)	7.3 (4	9) 6.3	(69) 5.8	(55)



### **TOTAL FUND RETURN VS PEER UNIVERSE - GROSS**

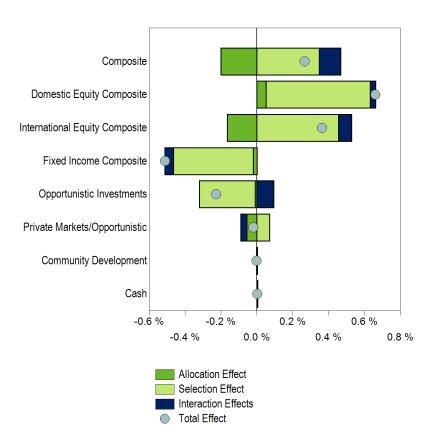


	Return (Rank)										
5th Percentile	18.4	10.1	0.9	7.5	19.9	14.6	3.6	14.6	27.6	-16.3	
25th Percentile	17.0	8.3	-0.3	5.5	16.9	13.4	1.3	13.7	24.1	-23.8	
Median	15.3	6.9	-1.5	4.4	15.2	12.5	-0.6	12.5	21.6	-26.7	
75th Percentile	14.2	5.7	-2.3	3.6	12.2	11.7	-1.5	11.2	17.3	-29.4	
95th Percentile	11.9	2.8	-3.9	2.0	8.4	9.4	-3.6	8.8	11.6	-33.1	
# of Portfolios	76	79	80	90	81	83	82	77	75	71	
Composite	18.5 (5	) 5.1 (84)	-2.4 (76)	3.8 (74)	12.3 (74)	14.2 (11)	-1.4 (73)	15.2 (3)	28.3 (5	5) -24.7 (31	1)
<ul> <li>Allocation Index</li> </ul>	16.8 (27	) 6.8 (54	-1.4 (49)	4.5 (46)	12.1 (76)	11.7 (74)	-2.6 (88)	11.8 (65)	27.9 (5	5) -24.2 (27	7)
× Policy Index	16.6 (32	) 7.0 (48	-1.1 (41)	4.4 (52)	12.6 (70)	12.1 (66)	-1.6 (79)	11.6 (67)	23.0 (36	6) -25.3 (37	7)



### **TOTAL FUND ATTRIBUTION ANALYSIS - GROSS**

#### Attribution Effects 3 Months Ending June 30, 2018



Attribution Summary 3 Months Ending June 30, 2018												
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Ir Effect	nteraction Effects	Total Effects				
Domestic Equity Composite	29.0%	6.3%	4.3%	2.0%	0.6%	0.1%	0.0%	0.7%				
International Equity Composite	25.0%	-1.3%	-3.2%	1.8%	0.5%	-0.2%	0.1%	0.4%				
Fixed Income Composite	20.0%	-2.3%	-0.1%	-2.2%	-0.4%	0.0%	0.0%	-0.5%				
Opportunistic Investments	20.0%	-0.6%	1.0%	-1.5%	-0.3%	0.0%	0.1%	-0.2%				
Private Markets/Opportunistic	5.0%	4.8%	3.4%	1.5%	0.1%	-0.1%	0.0%	0.0%				
Community Development	1.0%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%				
Cash	0.0%	1.1%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%				
Total	100.0%	1.1%	0.8%	0.3%	0.3%	-0.2%	0.1%	0.3%				

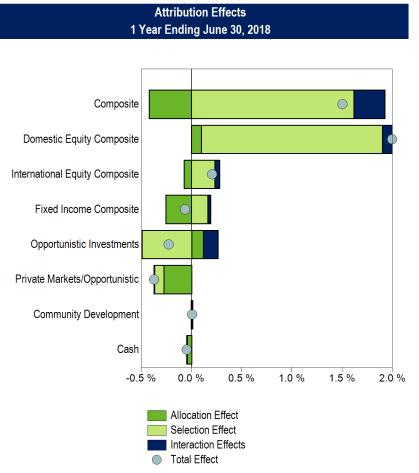
**Allocation Effect:** Measure the effects of overweighting or underweighting managers and asset classes.

**Selection Effect:** Measures the managers' ability to add excess return relative to the policy index.

**Interaction Effect:** Measures the cross correlation of both selection and allocation affects and is often referred to as an "error term."



## **TOTAL FUND ATTRIBUTION ANALYSIS - GROSS**



Attribution Summary 1 Year Ending June 30, 2018											
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Ir Effect	nteraction Effects	Total Effects			
Domestic Equity Composite	29.0%	21.8%	15.1%	6.7%	1.8%	0.1%	0.1%	2.0%			
International Equity Composite	25.0%	8.4%	7.3%	1.1%	0.2%	-0.1%	0.1%	0.2%			
Fixed Income Composite	20.0%	0.3%	-0.4%	0.8%	0.2%	-0.2%	0.0%	-0.1%			
Opportunistic Investments	20.0%	3.9%	6.3%	-2.4%	-0.5%	0.1%	0.1%	-0.2%			
Private Markets/Opportunistic	5.0%	18.9%	20.7%	-1.8%	-0.1%	-0.3%	0.0%	-0.4%			
Community Development	1.0%	1.1%	1.4%	-0.3%	0.0%	0.0%	0.0%	0.0%			
Cash	0.0%	1.7%	1.4%	0.3%	0.0%	0.0%	0.0%	0.0%			
Total	100.0%	9.9%	8.4%	1.5%	1.6%	-0.4%	0.3%	1.5%			

**Allocation Effect:** Measure the effects of overweighting or underweighting managers and asset classes.

**Selection Effect:** Measures the managers' ability to add excess return relative to the policy index.

**Interaction Effect:** Measures the cross correlation of both selection and allocation affects and is often referred to as an "error term."



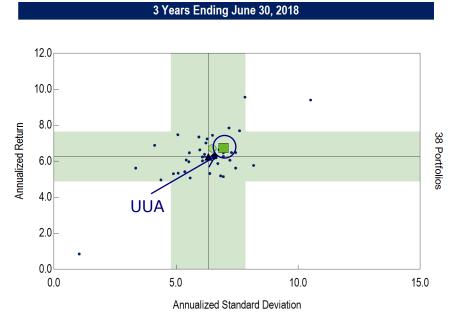
## **TOTAL FUND RISK STATISTICS**

3 Years Ending June 30, 2018											
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank		
Composite	100.00%	6.73%	26	6.95%	76	0.87	58	0.30	38		
Allocation Index		6.28%	49	6.57%	56	0.85	60				
Domestic Equity Composite	31.51%	12.52%	27	11.66%	54	1.01	34	0.26	24		
Russell 3000		11.58%	40	10.30%	26	1.06	29				
International Equity Composite	28.48%	5.87%	64	11.98%	47	0.43	64	0.33	56		
MSCI ACWI ex USA		5.07%	78	12.17%	59	0.36	78				
Fixed Income Composite	21.71%	2.39%	76	2.12%	10	0.80	40	0.28	64		
BBgBarc US Aggregate TR		1.72%	86	2.65%	17	0.39	70				
Opportunistic Investments	13.87%	3.64%		6.38%		0.46		-0.53			

5 Years Ending June 30, 2018											
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank		
Composite	100.00%	7.26%	49	6.61%	66	1.03	68	0.27	39		
Allocation Index		6.91%	61	6.17%	52	1.05	64				
Domestic Equity Composite	31.51%	14.42%	26	11.25%	50	1.24	31	0.30	21		
Russell 3000		13.29%	43	9.96%	20	1.29	26				
International Equity Composite	28.48%	6.35%	82	11.44%	40	0.52	81	0.16	82		
MSCI ACWI ex USA		5.99%	86	11.65%	56	0.48	86				
Fixed Income Composite	21.71%	3.03%	50	2.46%	13	1.06	34	0.32	44		
BBgBarc US Aggregate TR		2.27%	65	2.70%	18	0.68	51				
Opportunistic Investments	13.87%	4.79%		6.10%		0.71		-0.30			



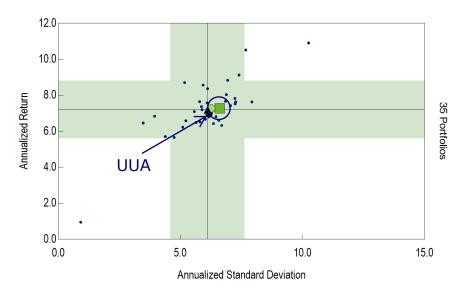
### **TOTAL FUND RISK/RETURN - GROSS**



- Composite
- Allocation Index
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce All Endowment \$50mm-\$250mm Gross

3 Years Ending June 30, 2018											
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank			
Composite	6.73%	26	6.95%	76	0.87	58	0.30	38			
Allocation Index	6.28%	49	6.57%	56	0.85	60					
Policy Index	6.71%	27	6.49%	54	0.93	40	0.85	11			
InvestorForce All Endowment \$50mm- \$250mm Gross Median	6.25%		6.33%		0.89		0.04	-			

#### 5 Years Ending June 30, 2018

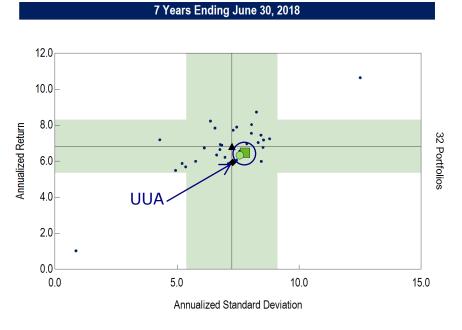


- Composite
- Allocation Index
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce All Endowment \$50mm-\$250mm Gross

5 Years Ending June 30, 2018											
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank			
Composite	7.26%	49	6.61%	66	1.03	68	0.27	39			
Allocation Index	6.91%	61	6.17%	52	1.05	64					
Policy Index	7.27%	49	6.26%	53	1.09	52	0.72	16			
InvestorForce All Endowment \$50mm- \$250mm Gross Median	7.19%		6.11%		1.10		0.21				



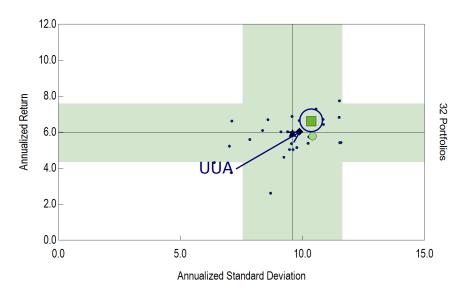
### **TOTAL FUND RISK/RETURN - GROSS**



- Composite
- Allocation Index
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce All Endowment \$50mm-\$250mm Gross

7 Years Ending June 30, 2018											
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank			
Composite	6.47%	66	7.79%	67	0.79	84	0.41	18			
Allocation Index	5.93%	86	7.28%	52	0.77	94					
Policy Index	6.33%	69	7.57%	62	0.79	83	0.65	10			
InvestorForce All Endowment \$50mm- \$250mm Gross Median	6.82%		7.25%	-	0.90		0.14	-			

#### 10 Years Ending June 30, 2018



- Composite
- Allocation Index
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce All Endowment \$50mm-\$250mm Gross

10 Years Ending June 30, 2018								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Info Ratio	Rank
Composite	6.62%	36	10.36%	67	0.61	45	0.38	21
Allocation Index	6.03%	45	9.87%	59	0.58	53		
Policy Index	5.77%	55	10.41%	69	0.53	69	-0.19	62
InvestorForce All Endowment \$50mm- \$250mm Gross Median	5.96%		9.59%		0.59		-0.06	



# OPPORTUNISTIC INVESTMENT IDEAS



- In May, NEPC and the Investment Committee discussed the Opportunistic Investment allocation and looked to determine the primary role of these strategies in the context of the broader portfolio
  - Ultimately, the Committee agreed the Opportunistic allocation should contain investments that are positioned to perform in the current market environment
    - The Committee agreed they were comfortable with the existing investments, GMO and Cevian
- Based on this definition, and the current market environment, NEPC and the Committee elected to focus on opportunities that may provide the portfolio with low correlations to other assets, downside protection and crisis alpha
  - From this, NEPC recommended that the Committee focus on Global Macro and Long Vol strategies that exhibit these characteristics
- As part of our quarterly research update NEPC maintains a list of "current opportunities" which we believe clients should consider for their portfolios.
  - We have discussed these opportunities with the Committee in the past and believe two
    of them should be considered in the context of the Opportunistic Investment allocation
    - Add Macro Hedge Funds
    - Add Long Volatility Exposure
      - Additional information on these opportunities can be found on the following two pages



### **Add Macro Hedge Funds**

## Macro hedge fund strategies offer broad benefits to a total portfolio

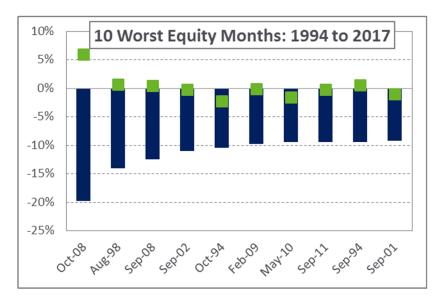
Allocations of size (e.g. 5%) help to mitigate the left-tail of a portfolio return distribution

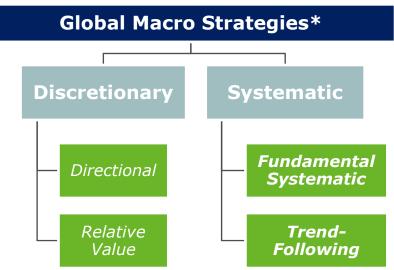
Investors should be targeted in their approach to portfolio construction as manager selection is paramount

### Fund systematic global macro from broad based GAA and hedge fund of fund strategies

Systematic strategies tend to exhibit low correlation to equity markets and are strong diversifiers within a total portfolio

Many systematic macro strategies exhibit "crisis alpha" or excess performance in riskoff periods





Source: (Top) eVestment, HFRI \*Not intended to be an all inclusive Macro sub-strategy list



### Add Long Volatility Exposure

## Volatility levels for markets outside equities remain near historic lows

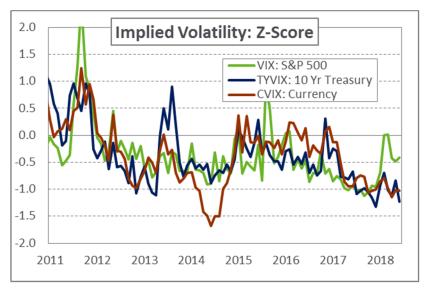
Long volatility exposure positively benefits from rising asset class volatility and an allocation of 1% to 2% can provide a significant return contribution should volatility normalize across global markets

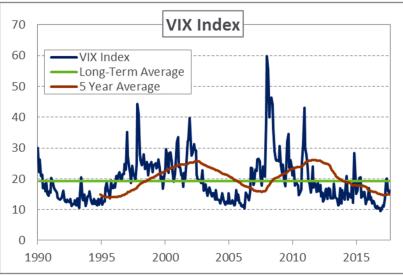
Exposure is not without risk. Losses would be expected if market volatility declines. Discipline of a multi-year time horizon is required should volatility levels move slowly back to normal levels

### Long volatility strategies with positive carry are the only implementation option we recommend

Purchasing S&P VIX is a costly method to implement long volatility exposure due to the negative roll yield of the VIX curve

Suited for opportunistic investors and ideally funded from hedge fund of fund strategies and traditional GAA strategies





Source: (Top) Bloomberg Source: (Bottom) Bloomberg



- In addition to Global Macro and Long Volatility strategies, there may be other investments that could fit within the Opportunistic Investment allocation
  - Hedged Equity
  - Liquid Global Macro
  - Credit Linked
- On the next several pages we have provided a correlation matrix of seven strategies relative to the UUCEF portfolio and market indices
  - ADG: Systematic Global Macro
  - Broad Reach: Thematic Global Macro
  - Ionic: Long Volatility
  - 400 Credit: Structured Credit
  - Nut Tree: Distressed Credit
  - Renaissance: Hedged Equity
  - William Blair: Liquid Global Macro
- Following the correlation analysis we have provided a tear sheet for each opportunity mentioned above, NEPC would recommend interviewing potential candidates prior to, or at, the next Investment Committee meeting







## **EQUITY-LINKED STRATEGIES: DEFINITION**

• Definition: Equity-Linked hedge funds invest in equity securities across sectors and geographies in an unconstrained manner. Funds have the ability to invest both long and short and utilize leverage

### • Key characteristics:

- Can be classified as unconstrained long only equity investing
- Managers can utilize three main levers to increase returns
  - Active adjustment of market exposure
  - Alpha generation through both long and short stock selection
  - Pursuing investments in a broadly unconstrained universe of equity and equity-related investments

### • Risk factors:

- Leverage (gross exposure greater than 100%) can be used to amplify returns
- Funds do not generally manage to a benchmark
- Performance can be difficult to understand due to unconstrained nature
- Peer grouping is difficult due to varying profiles and expectations of funds
- Transparency is generally worse than traditional long only investments but is getting better
- Fees include the use of incentive fees and are generally higher

### • Specialization:

- Can be sector, geography focused
  - Example: Healthcare, Biotech, Financials; Asia-Pacific, Europe



## **EQUITY-LINKED STRATEGIES**

Long Only	Enhanced	Generalist Equity-Linked		Specialist E	quity-Linked
Benchmark Oriented	130/30	Multi-Sector	Thematic	Sector	Region
<ul> <li>Generally benchmark aware or constrained; can be fundamental or quantitative</li> <li>Constrained to investing \$100 long for each \$100 of client assets</li> <li>Tools: long only security selection, cash to adjust net exposure</li> <li>Excess return and tracking error metrics</li> </ul>	<ul> <li>Generally benchmark aware or constrained; generally quantitative</li> <li>Slightly relaxed constraint; ability to invest \$130 dollars long and short \$30 of assets per \$100 of client assets</li> <li>Tools: long security selection, short security selection, generally limited cash and beta around 1</li> <li>Generally higher tracking error</li> </ul>	<ul> <li>Unconstrained; can be fundamental or quantitative</li> <li>Varying net and gross exposure; ability to invest any amount of \$ long and short per the strategy guidelines</li> <li>Tools: long security selection, short security selection, short security selection, ability to adjust beta and net exposure due to market environment</li> </ul>	<ul> <li>Unconstrained; generally invest across equities, credit, macro instruments</li> <li>Varying net and gross exposure; ability to invest any amount of \$ long and short per the strategy guidelines</li> <li>Tools: long security selection, short security selection, ability to adjust beta and net exposure due to market environment, ability to invest outside of equities</li> </ul>	<ul> <li>Sector expertise required; healthcare, technology and consumer are examples</li> <li>Varying net and gross exposure; ability to invest any amount of \$ long and short per the strategy guidelines</li> <li>Tools: long security selection, short security selection, ability to adjust beta and net exposure due to market environment</li> </ul>	<ul> <li>Regional expertise required; e.g. Chinese A- Shares; European focused; Brazil Only</li> <li>Varying net and gross exposure; ability to invest any amount of \$ long and short per the strategy guidelines</li> <li>Tools: long security selection, short security selection, ability to adjust beta and net exposure due to market environment</li> </ul>



### **CREDIT-LINKED STRATEGIES: DEFINITION**

 Definition: Credit-linked hedge funds invest across the spectrum of fixed-income/credit assets ranging from sovereign bonds and corporate debt to securitized products seeking to capitalize on both yield/income and capital appreciation.

### Sub-strategies

- Corporate credit
- Structured credit
- Relative-value
- Multi-sector
- Opportunistic credit
- Emerging markets

### • Value proposition

- Alpha generation and risk mitigation through fundamental security selection, active trading and the ability to express short views
- Potential to capture illiquidity premia through opportunistic investing and valueadd/activist approaches to the credit cycle



## **CREDIT-LINKED STRATEGIES**

Corporate Credit			Structured Credit		
Value-Biased Long/Short	Trading-Biased Long/Short	Relative Value	Multi-Sector	Single-Sector	
<ul> <li>Invest in securities trading at prices that are below perceived value</li> <li>Focused on high current yield and capital appreciation</li> <li>Often event- driven in nature including stressed/ distressed investing</li> <li>Typically long- biased</li> </ul>	<ul> <li>Trade actively based on macro views and technical factors, as well as fundamental factors</li> <li>Active management of gross and net exposure</li> <li>Seek to capture market volatility</li> </ul>	<ul> <li>Seek to capture spreads between related securities</li> <li>Historically utilized high leverage when exploiting small mispricings</li> </ul>	<ul> <li>Invest across securitized asset classes (RMBS, CMBS, ABS, CLOs) strategically or tactically</li> <li>May take longer- term investment views or actively trade the portfolio</li> </ul>	<ul> <li>Target specific securitized asset class on a dedicated basis</li> <li>May take longer- term investment views or actively trade the portfolio</li> </ul>	

- **Multi-sector credit strategies:** may strategically and tactically invest across both corporate and structured assets employing a variety of investment strategies
- **Opportunistic credit strategies:** may tactically invest across both corporate and structured credit assets with a focus on less liquid securities; often structured as a less liquid investment vehicle (hybrid drawdown model)



## **GLOBAL MACRO STRATEGIES: DEFINITION**

 Definition: Managers trade long and short currencies, interest rates, equity indices, commodities and credit derivatives based on fiscal and monetary policy, historical price data, country specific fundamentals and population behavior. Managers look exploit patterns, trends and imbalances in asset prices.

#### • Value proposition

- Low to zero correlation to traditional and other alternative strategies
- Performance during market crises
  - Long volatility bias performs well when market volatility spikes
  - Smaller drawdowns compared to traditional asset classes
  - Potential for positive performance "crisis alpha"
- Broad, flexible investment mandate
- Relatively liquid compared to other hedge fund strategies
  - Instruments include futures, forwards, and options
  - Managers generally trade in only the most liquid markets to maintain liquidity profile

### • Sub-strategies

- Discretionary: portfolio managers make trade decisions
- Systematic: computer models make trade decisions
- Volatility: trading long and short volatility derivatives



## SUMMARY OF GLOBAL MACRO STRATEGIES

	Discretionary	Syste	matic	
Multi-PM	Single-PM	Thematic	Technical	Fundamental
<ul> <li>Discretionary trading based primarily on fundamental data</li> <li>Top-down worldview to forecast market movements; bottom-up trade selection based on risk/reward</li> <li>Active trading while pursuing strict risk control</li> <li>Use a broad analysis of economic, financial, demographic, social, and political trends to identify investable themes</li> </ul>			<ul> <li>Computer model based market movement based</li> <li>No top-down worldview</li> <li>Risk management is b</li> <li>Models primarily formupositions in the various discipline</li> </ul>	ed on historical data w uilt into models Jlate entry and exit
<ul> <li>Multiple risk takers</li> <li>Employs a platform model with strict risk controls</li> <li>Diversified by trading style, time horizon, asset class</li> <li>Low volatility, minimize drawdowns</li> </ul>	<ul> <li>One primary risk taker</li> <li>Tends to employ one style of trading, time horizon</li> <li>Portfolio can be well diversified across asset classes and themes</li> <li>Higher volatility</li> </ul>	<ul> <li>Tends to have single risk taker</li> <li>Research intensive</li> <li>Longer time horizon</li> <li>Higher volatility</li> <li>Less diversified; concentrated in geography or asset class</li> <li>Lumpier returns on positive and negative side</li> </ul>	<ul> <li>Employs analysis historical price and chart patterns</li> <li>Types: trend- following, momentum, mean reversion, contrarian, etc.</li> <li>Time horizon: high frequency, days, weeks, months, years</li> </ul>	<ul> <li>Employs analysis of fundamental data such as supply and demand, balance sheet analysis</li> <li>Time horizon: tends to be longer due to timing of data releases</li> </ul>



### **GLOSSARY OF TERMS**

The calculation methodology for each measure of performance is outlined below.

Measurement	Description	Equation
Policy Target	Measures policy allocation decisions.	= Target Asset Weights x Index Returns
Allocation Index	Measures actual allocation decisions. Deviations from the policy target can be derived. (Allocation Index – Policy Index)	= Actual Asset Weights x Index Returns
Composite (Total Return)	Measures actual performance and can derive active management decisions. (Composite – Allocation Index)	= Actual Asset Weights x Actual Returns

The calculation methodology for each measure of attribution is outlined below.

Measurement	Description	Equation
Allocation Effect	Measure the effects of overweighting or underweighting managers and asset classes.	= (Actual Manager Weight – Policy Target Weight) X Policy Index Return
Selection Effect	Measures the managers' ability to add excess return relative to the policy index.	= (Actual Manager Return –Index Return) x Policy Target Weight
Interaction Effect	Measures the cross correlation of both selection and allocation affects and is often referred to as an "error term".	= (Actual Manager Return x (Actual Manager Weight – Policy Target Weight)) – ((Manager Weight – Policy Target Weight) X Index Return)



### **GLOSSARY OF TERMS**

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

**Beta** - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

#### Formula:

(Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return – Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

**R-Squared** – Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

**Sharpe Ratio** - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

**Sortino Ratio** - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

#### Formula:

Calculation Average (X-Y)/Downside Deviation (X-Y) \* 2 Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills) Standard Deviation - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

#### Formula:

(Annualized Return of Portfolio – Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

**Tracking Error** - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

#### Formula:

Tracking Error = Standard Deviation (X-Y) \*  $\sqrt{(\# of periods per year)}$ Where X = periods portfolio return and Y = the period's benchmark return For monthly returns, the periods per year = 12 For quarterly returns, the periods per year = 4

**Treynor Ratio** - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

#### Formula:

(Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

**Up/Down Capture Ratio** - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark <0

Data Source: InvestorForce



#### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other 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.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

#### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



## **ALTERNATIVE INVESTMENT DISCLAIMER**

### It is important to note the following characteristics of many nontraditional 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 are not 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. Limited partnership 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.

