

# Board of Trustees Agenda

### Wednesday, November 30, 2016

- 1. Call Meeting to Order (Start time 12:00pm)
- 2. Administrative
  - a. Approval of Minutes October 19, 2016 Attached, Exhibit (A) pages 2-4
  - b. 2017 Meeting Schedule

    Attached, Exhibit (B) page 5
  - c. Quarterly Budget Review

Attached, Exhibit (C) pages 6-7

- d. Year In Review
  - Attached, Exhibit (D) pages 8-16
- e. FEG Update
- f. Fund Cash Flows

Attached, Exhibit (E) page 17

- g. SCT Update
- 3. Research Update
  - a. Income Update

Attached, Exhibit (F) pages 18-67

b. Growth Update

Attached, Exhibit (G) pages 68-89

c. Defensive Update

Attached, Exhibit (H) pages 90-95

4. Investment Review

Attached, Exhibit (I) page 96

5. Adjourn

One or more members of the Board may participate via electronic conference originated by the Chair, and the meeting may be an electronic meeting, and the anchor location shall be as set forth above, within the meanings accorded by Utah law. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations during the meeting may notify SITFO in advance 801-364-0821 or rkulig@utah.gov.



## **Board of Trustees Minutes**

#### October 19, 2016 at 12:00 pm

Board Members Attending: Kent Misener, David Damschen, David Nixon, Duane Madsen.

Board Members Attending via Phone: John Lunt.

Others Attending: Peter Madsen, SITFO; Allen Rollo, Treasurer's Office; Kirt Slaugh, Treasurer's Office; Michael Green, Utah AG; Ryan Kulig, SITFO; Nathan Barnard, SITFO; David Center, FEG; Paula Plant, USBE – SCT; Natalie Gordon, USBE – SCT; Margaret Bird, Univ. of Utah, USU, MH, SM, NS; Tim Donaldson, USBE – SCT; Andrew Fairbanks, SITFO; Jonathan Kowolik, RVK (by phone).

#### 1. Call Meeting to Order

Mr. Damschen called meeting to order. He noted Mr. Lunt is participating via phone. Mr. Peter Madsen also noted that Jonathan Kowolik is participating via phone.

#### 2. Administrative

a. Approval of Minutes – Mr. Misener made the motion to approve both the minutes from August 17, 2016 and from September 21, 2016. Mr. Nixon Seconded the motion. The motion passed unanimously.

#### Record of vote:

Mr. Damschen: Yes

Mr. Lunt: Yes Mr. Nixon: Yes Mr. Misener: Yes

Mr. Duane Madsen: Yes

- b. Fund Cash Flows Mr. Kulig reviewed the fund cash flow table and noted that they plan to continue funding new managers as outlined. Mr. Damschen added he would like to include the year in the column labels in the pro forma table, the staff took note and will update for future reference.
- c. Custody Update Mr. Peter Madsen introduced the custody update slides and outlined the progress made towards implementation. He noted the assets will be held in a pooled

structure at the new custodian bank. Mr. Kulig reviewed the internal transactions necessary to achieve the desired structure. He continued to note that the custodian will be implemented on November 1, 2016.

**d.** Elect Vice-Chair – Mr. Nixon made to motion to nominate Mr. Misener to serve as Vice-Chair of the Board. Mr. Lunt seconded the motion. The motion passed unanimously.

Record of vote:

Mr. Damschen: Yes

Mr. Lunt: Yes Mr. Nixon: Yes Mr. Misener: Yes

Mr. Duane Madsen: Yes

- **e. Board Training** Mr. Green reviewed the annual training for Board members. He noted that the Board shall follow all policies and procedures as outlined.
- f. SCT Update Mr. Donaldson issued an update on Amendment B. He noted the amendment is getting significant support on social media. He also noted a SITLA land auction took place today and will net \$5.51 million in proceeds for the permanent funds. He also previewed a training video used to provide education on the school land trust programs.

#### 3. Research Update

- a. Income Update Mr. Barnard reviewed the Income structure and introduced two investments that are expected to be funded within the next month. He expects to continue funding income managers and to continue to build out the structure into next year.
- b. Real Assets Update Mr. Peter Madsen introduced the real assets structure and reviewed a new manger to be funded in the private natural resource space. He noted he expects to continue evaluating additional managers in the space.
- **c. Growth Update** Mr. Peter Madsen reviewed the growth structure and introduced the second manager to be funded in the private equity space.

#### 4. Investment Review

Mr. Kulig reviewed the current asset allocation of the portfolio as well as the anticipated asset allocation by March 2017. He noted the ongoing reallocation will position the trusts closer to asset allocation targets. He reviewed the current investment performance of the portfolio and noted there is ongoing updates to the performance reporting.

### 5. Adjourn

Mr. Misener made the motion to adjourn. The meeting was adjourned with no debate.

### Record of vote:

Mr. Damschen: Yes

Mr. Lunt: Yes

Mr. Nixon: Yes

Mr. Misener: Yes

Mr. Duane Madsen: Yes



# 2017 Board Meeting Schedule

Board meetings will be held on the third Wednesday of every month. The dates listed below are placeholders and meeting dates may be changed or cancelled per discussion and consideration by the Board.

Wednesday, January 18, 2017 at 12PM

Wednesday, February 15, 2017 at 12PM

Wednesday, March 15, 2017 at 12PM (Tentative)

Wednesday, April 19, 2017 at 12PM

Wednesday, May 17, 2017 at 12PM

Wednesday, June 21, 2017 at 12PM

Wednesday, July 19, 2017 at 12PM (Tentative)

Wednesday, August 16, 2017 at 12PM

Wednesday, September 20, 2017 at 12PM

Wednesday, October 18, 2017 at 12PM

Wednesday, November 15, 2017 at 12PM

Wednesday, December 20, 2017 at 12PM (Tentative)

## **Exhibit C**

Q1 - Fiscal Year 2017	QTD	Budget	D	ifference
AA Personnel Services	\$ 112,531.87	\$ 116,283.15	\$	3,751.28
BB Travel/In State	\$ 39.36	\$ 125.00	\$	85.64
CC Travel/Out of State	\$ 7,382.23	\$ 14,900.00	\$	7,517.77
DD Current Expense	\$ 20,227.61	\$ 34,850.00	\$	14,622.39
EE Data Processing Current Expense	\$ 3,817.14	\$ 6,750.00	\$	2,932.86
GG Capital Expenditure	\$ -	\$ -	\$	-
TOTAL INCOME	\$ 219,800.00	\$ 219,800.00	\$	219,800.00
TOTAL EXPENSE	\$ 143,998.21	\$ 172,908.15		
DIFFERENCE	\$ 75,801.79	\$ 46,891.85	\$	75,801.79

Q1 Snapshot	Ca	itegory	Ju	ly	Au	gust	Se	ptember
AA Personnel Services	\$	112,531.87	\$	23,751.10	\$	44,742.06	\$	44,038.71
BB Travel/In State	\$	39.36	\$	-	\$	39.36	\$	-
CC Travel/Out of State	\$	7,382.23	\$		\$	3,430.11	\$	3,952.12
DD Current Expense	\$	20,227.61	\$	6,174.71	\$	7,807.62	\$	6,245.28
<b>EE Data Processing Current Expense</b>	\$	3,817.14	\$	516.87	\$	748.27	\$	2,552.00
GG Capital Expenditure	-		\$		\$		\$	-
Monthly Totals			\$	30,442.68	\$	56,767.42	\$	56,788.11
YTD Expense	\$	143,998.21						

#### Legend

<del></del>	
Expense at 90-99% of Budget	
Expense at 100%+ of Budget	

Q	1 - Fiscal Year 2017		QTD		Budget	[	Difference
AA Personnel Services		\$	112,531.87	\$	116,283.15	\$	3,751.2
5101 Regular Salaries & W	/ages	\$	71,210.73	\$	74,685.52	\$	3,474.7
5110 Leave Paid		\$	7,378.66	\$	9,000.00	\$	1,621.3
5120 Miscellaneous Earni	ngs	\$	32.70	\$	270.00	\$	237.3
5135 Compensatory/Exce	ess Time Used	\$	2,079.48	\$	1,800.00	\$	(279.4
5140 Compensatory/Exce	ess Time Earned (FLSA Exempt & Non-Exer	\$	922.41	\$	900.00	\$	(22.4
5160 State Retirement	· ·	\$	15,501.71	\$	14,425.34	\$	(1,076.3
5170 FICA/Medicare	-	\$	4,050.20	\$	4,647.67	\$	597.4
,		\$	6,004.78	\$	5,467.78	\$	(537.0
	,	\$	646.12	\$	597.48	\$	(48.6
5300 State Leave Pool		\$	276.72 4,428.36	\$	180.00 4,309.35	\$	(96.7 (119.0
BB Travel/In State		\$	39.36	\$	125.00	\$	85.6
6005 In State Travel-Meal	Reimbursement	\$	39.36	\$	125.00	\$	85.6
CC Travel/Out of State		\$	7,382.23	\$	14,900.00	\$	7,517.7
6053 Out of State Travel-I	Miscellaneous Travel Expense	\$	-	\$	25.00	\$	25.0
6054 Out of State Travel-I	Maximum Auto Mileage Rate	\$	-	\$	125.00	\$	125.0
6055 Out of State Travel-1	Meal Reimbursement	\$	965.00	\$	1,000.00	\$	35.0
6056 Out of State Travel-I		\$	3,742.89	\$	5,000.00	\$	1,257.1
6057 Out of State Travel-	0 0	\$	9.64	\$	8,750.00	\$	8,740.3
6096 Central Travel Clear	· · · · · · · · · · · · · · · · · · ·	\$	2,664.70	\$	-	\$	(2,664.7
OD Current Expense		\$	20,227.61	\$	34,850.00	\$	14,622.3
6115 Human Resource Se	ervices	\$	-	\$	500.00	\$	500.0
6126 Wireless Communic		\$	336.59	\$	562.50	\$	225.9
6132 Communication Ser		\$	411.15	\$	437.50	\$	26.3
6136 Postage & Mailing		\$	5.52	\$	125.00	\$	119.4
			5.52				
		\$	-	\$	1,500.00	\$	1,500.0
6138 Attorney Fees		\$	-	\$	3,125.00	\$	3,125.0
6145 Required Technical		\$	50.00	\$	300.00	\$	250.0
6146 Recruiting Expenses		\$	-	\$	125.00	\$	125.0
6161 Rental of Land & Bu	ildings	\$	11,835.00	\$	12,000.00	\$	165.0
6166 Parking Space Rent	& Bus Pass Cost	\$	350.00	\$	500.00	\$	150.0
6181 Office Supplies		\$	1,626.34	\$	2,500.00	\$	873.6
6182 Printing & Binding		\$	-	\$	375.00	\$	375.0
6185 Books & Subscriptio	ins	\$	335.00	\$	750.00	\$	415.0
6186 Photocopy Expense	S	\$		\$	125.00	\$	125.0
6187 Small Office Equipm		\$	_	\$	375.00	\$	375.0
6188 Office Furnishings Le		\$		\$	1,000.00	\$	1,000.0
=		\$		\$		\$	,
	* *		150.44		1,000.00		1,000.0
6208 Container Plants		\$	152.44	\$	500.00	\$	347.5
6214 Food		\$	100.00	\$	300.00	\$	200.0
6257 Risk Management In		\$	-	\$	500.00	\$	500.0
6260 Purchasing Card Cu	rrent Expenses	\$	915.23	\$	-	\$	(915.2
6271 Reception & Meeting	g Costs	\$	60.50	\$	375.00	\$	314.5
6274 Membership Dues		\$	-	\$	250.00	\$	250.0
		\$	-	\$	625.00	\$	625.0
6277 Employee Relocatio		\$	-	\$	-	\$	-
6282 Employee Education		\$	_	\$	2,625.00	\$	2,625.0
		\$	4,049.84	\$	4,375.00	\$	325.1
6400 Remodel & Improve		\$	-	\$	-	\$	-
E Data Processing Current Ex	mense	\$	3,817.14	\$	6,750.00	\$	2 022 0
	rdware Less Than \$5000-Desktop Comput		- 5,011.14	\$	375.00	\$	<b>2,932.8</b> 375.0
=	rdware Less Than \$5000-besktop Computer		199.00	\$	500.00		301.0
h4hy Hata Proceeding Use			155.00				
=		\$	-	\$	250.00	\$	250.0
6471 Data Processing Har						\$	625.0
6471 Data Processing Har 6472 Data Processing Sof	tware Less Than \$5000	\$	3,618.14	\$	625.00 5,000.00	\$	
6471 Data Processing Hai 6472 Data Processing Sof 6500 Dept of Technology	tware Less Than \$5000	\$	3,618.14	\$		\$	
6471 Data Processing Har 6472 Data Processing Sof 6500 Dept of Technology	tware Less Than \$5000 Services-Data Processing Charges		3,618.14				
6471 Data Processing Har 6472 Data Processing Sof 6500 Dept of Technology 66 Capital Expenditure 6702 Office Furniture & Ed	tware Less Than \$5000 Services-Data Processing Charges	\$ \$	-	\$ \$	5,000.00 - -	\$ \$	1,381.8 - -
6471 Data Processing Han 6472 Data Processing Sof 6500 Dept of Technology	tware Less Than \$5000 Services-Data Processing Charges quipment	\$ \$	-	\$ \$ \$	5,000.00	\$ \$	1,381.8

Exhibit D 30.November.2016

### **Year In Review**



#### 2016 Year in Review

A number of objectives achieved by; SCT, OST, FEG, SITLA, PTA, Board, Staff, et al.

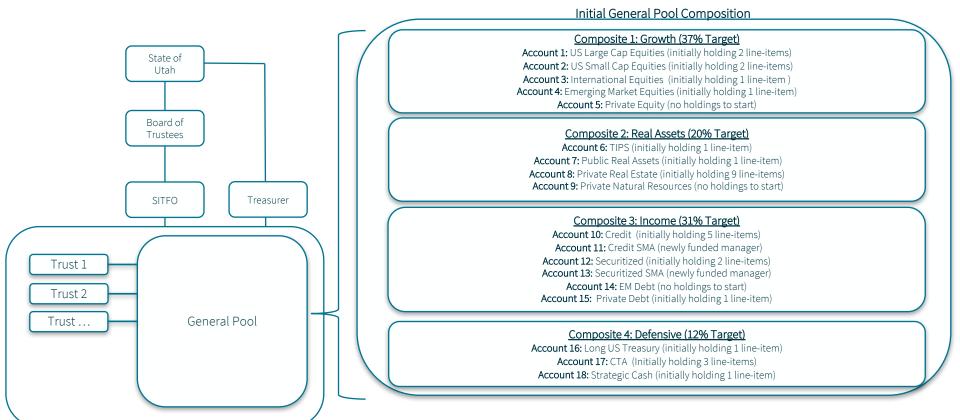
- Planning for a new distribution policy Sep 15 Nov 16
- Documenting our investment beliefs Nov 15 Apr 16
- Hiring *investment consultant* Dec 15 Mar 16
- Writing a new *investment policy* May 16
- Developing a long-term asset allocation Mar 16 July 16
- Implementation of a *custodian* May 16 Nov 16
- Administrative (office buildout, staffing, IT & software, branding & website, accounting and budgeting transition, HR & compliance policies, etc.)



### **Distribution Policy**

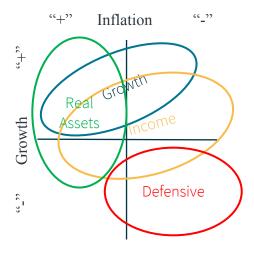
#### Yes on Amendment B!

- FY17 distribution for School Trust based on new policy
  - 50% (1+ CPI + Enrollment Growth) x Previous Year Distribution
  - 50% (4% x 12Q average)
    - 50% (1+ 2.2% CPI + 1.7% enrollment) \* \$49.9M prior year distribution = \$25.9M
    - 50% (4% \* \$1.9B (average of 12Q) = \$38.6M
    - Subject to a cap of 4% against 12Q average (\$77.3M)
  - \$64.6M to be distributed July 2017
- FY18 distribution for other trusts based on new policy
  - Other trusts historically receive distributions throughout the year
  - FY18 implementation for least disruption
  - Quarterly distributions (based on 4% x 12Q average at previous fiscal year end)
    - 4% x 12Q average as of June 30, 2017
    - Distributed in 4 payments (Oct, Jan, Apr, Jun)



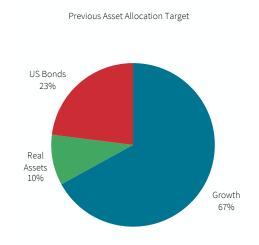
#### **Asset Allocation**

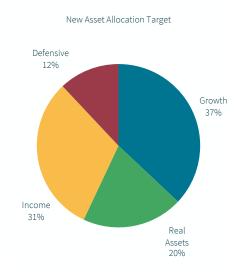
- GIRD (or GRID) A framework to communicate risk and diversification
- Simplification to start the conversation
- Ongoing reminder of sources of risk and intention of allocations

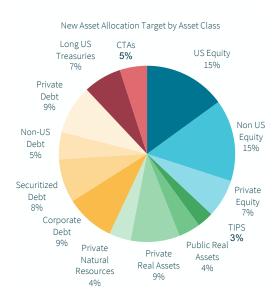


#### **Asset Allocation**

Adding new asset classes, sub-asset classes – diversifying sources of risk & return

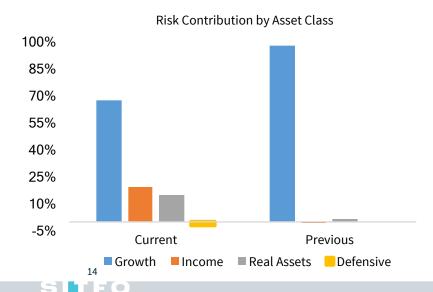


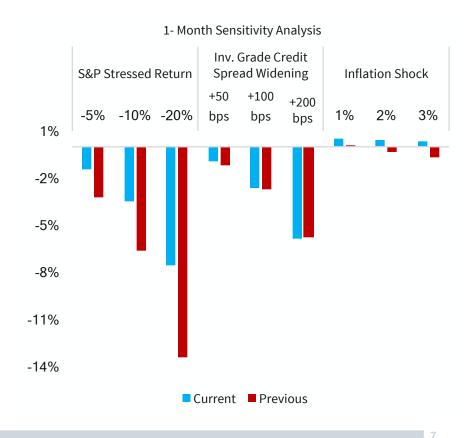




#### **Asset Allocation**

	Current	Previous
Objective (Return), %	8.1	7.1
Risk (StdDev Rtn), %	13.9	15.0
Correlation to S&P 500 Index	0.71	0.93
Beta to S&P 500 Index	0.50	0.70
Annual Sharpe Ratio (Rf= 0.25%)	0.75	0.58





### Implementation 2016 - 2017

- A focus on filling the gaps
  - Private assets, public equity, defensive
- GRID level target alignment by 2Q17
- Next steps include
  - · Defensive build out
  - Active equity satellites
  - Transition cap weighted equities to strategic beta
- Longer-term
  - Continue to build out private assets
  - Vintage year and strategy/sector diversification
- Full alignment to asset allocation delayed by private assets over several years

	Managers (Hired in 2016)	Target # Managers (e.)
Growth	4	18
US Equity		4
International Equity	1	5
Private Equity	3	9
Income	7	17
Credit	2	4
Securitized	3	4
Non-US		2
Private Debt	2	7
Real Assets	3	10
TIPS	1	1
Public Real Assets	1	2
Private Real Estate		4
Private Natural Resources	1	3
Defensive	2	5
Long US Treasury	1	1
CTA	1	4
Cash		
Total	15	50

#### 2017 Year Ahead

### A number of ongoing objectives:

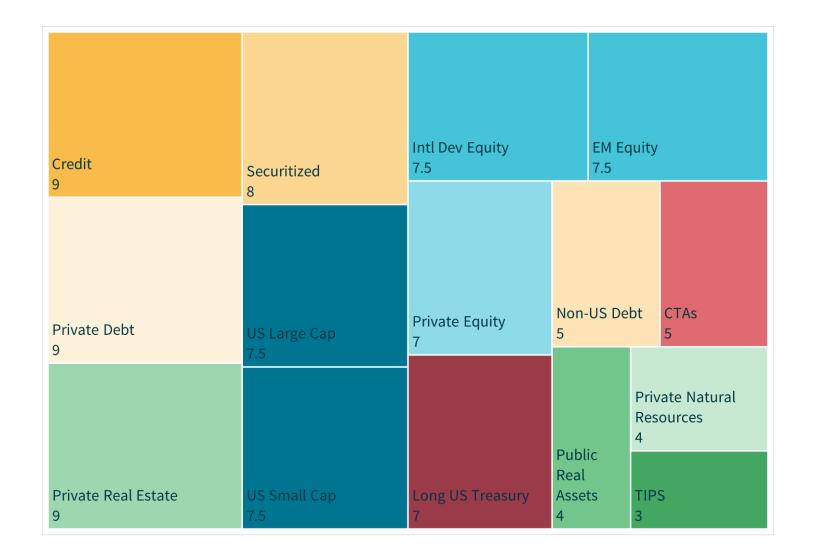
- Finalizing operational protocols
  - Accounting/reporting
  - Furthering policies and protocols
  - Custody implementation continues
- Clean up bill
  - 6 meetings a year, ability to write own procurement policy, "School and Institutional Trust Funds Office"
- Portfolio focus
  - Further develop tools for monitoring processes and risk management
  - Continue diversification
    - Private equity, real assets, debt: Private assets will need 1-2 managers per year across strategies for vintage year diversification
    - · Public equity: Research is ongoing to shift the core holdings to a diversified "smart beta" approach
    - Defensive: Building out the CTA / systematic strategies
    - Income: Non-US debt strategies

## **Exhibit E**

<u>Market Valu</u>	e of Fund		10/31/16	\$ 2,204,055,028	Pro-Forma Cash Flows					
Cash Inflows	Category	Asset Class		Market Value	November	December	January	February	March	April
Beginning Cash Balance					\$ 36,596,147	\$ 86,596,147	\$ 76,702,573	\$ 76,702,573	\$ 76,702,573	\$ 76,702,573
SITLA Contributions					\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000
Redemptions										
Vanguard Total Stock Market	Growth	US Equity		\$ 180,106,427	\$ 125,000,000	\$ 55,106,427				
Vanguard 500 Index	Growth	US Equity		\$ 469,733,046	\$ -	\$ 50,000,000	\$ 60,000,000	\$ 60,000,000	\$ 20,000,000	
Vanguard Short-Term Inv. Grade	Income	Credit		\$ 266,677,515	\$ 50,000,000	\$ 20,000,000	\$ 25,000,000	\$ 25,000,000	\$ 5,000,000	
Vanguard Int. Term Inv. Grade	Income	Credit		\$ 199,714,784	\$ 50,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 10,000,000	\$ 10,000,000
UBS TPF	Real Assets	Private Real Estate		\$ 54,488,249						
Total Redemptions (plus cash)					\$ 266,596,147	\$ 231,702,573	\$ 181,702,573	\$ 181,702,573	\$ 116,702,573	\$ 91,702,573
Cash Outflows										
Subscriptions										
Waterfall Eden	Income	Securitized		\$ 20,000,000	\$ (10,000,000)	)				
DW Value Fund (Class F)	Income	Credit		\$ 20,000,000	\$ (20,000,000)	)				
Sloane Robinson (Frontier Equity)	Growth	Non-US Equity		\$ -	\$ (20,000,000)	)				
Putnam (Separate Account)	Income	Securitized		\$ -	\$ (50,000,000)	(50,000,000	)			
Loomis Sayles (Separate Account)	Income	Credit		\$ -	\$ (50,000,000)	(50,000,000	)			
Vanguard Ext. Duration Treasury Index	Defensive	Long US Treasury		\$ 38,827,538	\$ (20,000,000)	(10,000,000	(10,000,000)	\$ (10,000,000)	\$ (10,000,000)	\$ (10,000,000)
Vanguard Inflation-Protected Sec.	Real Assets	TIPS		\$ 20,361,968	\$ (10,000,000)	(5,000,000	(5,000,000)	\$ (5,000,000)	\$ (5,000,000)	\$ (5,000,000)
Bramshill (Separate Account)	Income	Credit		\$ -		\$ (40,000,000	)			
Sec. LQ Manager 2	Income	Securitized		\$ -			\$ (15,000,000)	\$ (15,000,000)		
CTA Manager 2 (Short Term)	Defensive	CTA		\$ -			\$ (25,000,000)			
HY/Bank Loan Manager (Separate Account)	Income	Credit		\$ -			\$ (50,000,000)	\$ (50,000,000)		
CTA Manager 3 (Short Term)	Defensive	CTA		\$ -				\$ (25,000,000)		
US Equity Micro Cap	Growth	US Equity		\$ -					\$ (25,000,000)	
Total Subscriptions					\$ (180,000,000)	\$ (155,000,000	) \$ (105,000,000)	\$ (105,000,000)	\$ (40,000,000)	\$ (15,000,000)
Capital Calls			Commitment							
WCP New Cold	Growth	Private Equity	\$ 15,000,000	\$ 7,950,000						
Ares ICOF III	Income	Private Debt	\$ 25,000,000	\$ -						
Varsity Healthcare Partners II	Growth	Private Equity	\$ 15,000,000	\$ -						
Rockland Power Partners III	Real Assets	Private Natural Resources	\$ 25,000,000	\$ -						
Total Capital Calls					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET Cash Balance					\$ 86,596,147	\$ 76,702,573	\$ 76,702,573	\$ 76,702,573	\$ 76,702,573	\$ 76,702,573
Cash Balance as % of AA					3.93%	3.48%	3.48%	3.48%	3.48%	3.48%

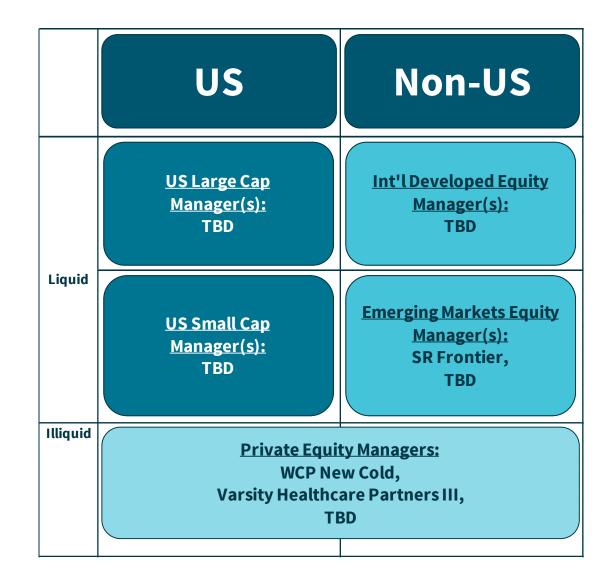
## **Exhibit F**

## **Target Portfolio Structure**



SITEO

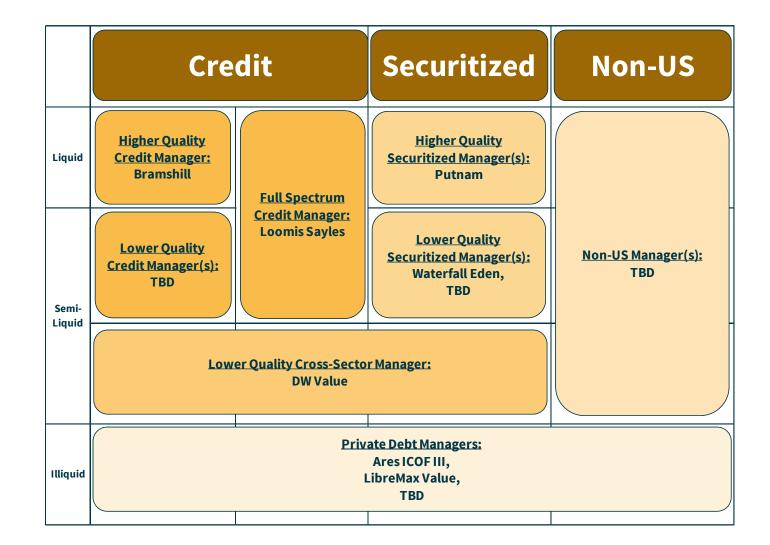
### **Growth Structure**



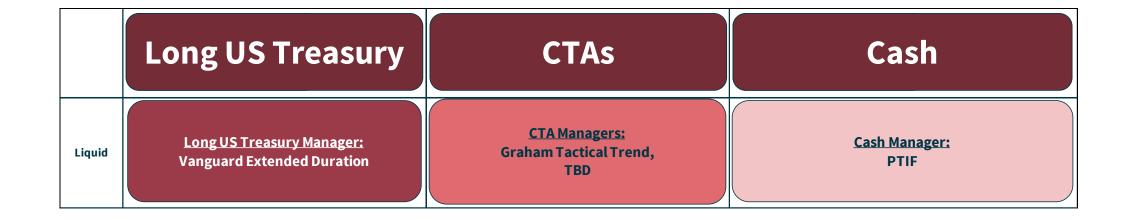
### **Real Assets Structure**

	Real Estate	Natural Resources	Infl. Linked Bonds
Liquid	Public Real Estate Manager: UBS TPI, UBS TPF	Public Natural Resources Manager: Harvest MLP Income	TIPS Manager: Vanguard Inflation-Protected Sec.
Illiquid	Private Real Estate Managers: Colony, LaSalle, Long Wharf	Private Natural Resources Managers: Rockland Power Partners III, TBD	

### **Income Structure**



### **Defensive Structure**



**Strategy Inception** 

\$430

1/1/2009

Credit



# Investment Cover Page - Bramshill

Firm: Bramshill Investments Assets Under Management (\$mm):

Product: Income (Separate Account) Strategy Assets Under Management (\$mm): \$252

**Target** 12/1/2016

Investment Date: Date: Category: Income Asset Class: Credit

Sub-Asset Class: High Quality Credit

Target Portfolio
Weight:

2%

**Benchmark/** T-bills + 5%/Multi-sector

Peer Group: Credit Peer Group Risks:

**Fees:** 0.875% flat fee

**Liquidity:** Daily.

**Analyst:** Nathan Barnard

#### **Investment Thesis/Opportunity:**

- We view the entire credit space as a reasonably attractive opportunity set relative to equities and other asset classes while positioned higher in the capital structure.
- Furthermore, Bramshill's size and flexible mandate allows them to access niche fixed income sectors that larger shops cannot access. In particular, some of the niche areas presenting opportunities are:
  - o Closed-end fund's offer a small, niche opportunity to earn 6%+ yields while purchasing assets at discounts of 5%+ to market prices.
  - o Preferreds yield ~5%.

#### **Rationale for Hiring Manager:**

- We view Bramshill's strategy as an attractive opportunity given their unique strategy that has the ability to rotate between credit sectors and absolute return orientation.
- Their size enables them to access smaller markets such as Closed-End Funds and preferreds.
- While small, we view the current investment staff's experience to be a match to their concentrated and liquidity seeking strategy.

#### **Rationale for Firing Manager:**

- Given the size of the team, any investment personnel departures would be concerning. If either portfolio managers Art DeGaetano or Derek Pines were to leave, it would trigger an immediate review.
- We are aware that Bramshill is "pre-institutional." Therefore, we will be monitoring closely their
  progress in building out their investment team, systems and asset base. If we view their progress has
  stalled, we will review immediately.

#### **Favorable Aspects of Strategy:**

- We view the concentration in the strategy as a positive; on average, they hold 40-50 positions.
- Access to niche fixed income markets.
- Talented staff in place.

#### **Unfavorable Aspects of Strategy:**

- Small investment firm while depth of credit research is not a concern, the small size of the asset base is somewhat concerning and has influenced the sizing of our investment.
- A shorter track record without seeing a major correction is somewhat concerning, however, we view the
  opportunity set as quite attractive and believe the talented team in place can navigate through all
  markets.

#### **Rationale for Overweight:**

- We would not look to overweight Bramshill unless there was meaningful spread widening across credit sectors and in that case, there may opportunities elsewhere with higher expected returns.
- Given the small AUM, we would not want to have more than 10-15% of the firm's asset base.

#### **Rationale for Underweight:**

- If spreads across the credit space were to tighten in to pre-crisis or post-crisis lows, we would look to lower our allocation.
- Given the small AUM, we would not want to have more than 10-15% of the firm's asset base.





To: Utah School and Institutional Land Trust Fund Office (SITFO)

From: Fund Evaluation Group, LLC (FEG)

**Subject:** FEG Six Tenet Review of Bramshill Investments, LLC (Bramshill or the Firm)

Date: November 4, 2016

FEG reviewed Bramshill within the context of the six tenets of FEG's investment philosophy. This is the framework by which FEG evaluates all investment managers. Bramshill is an asset manager that focuses on absolute return generating strategies using credit and relative value analysis. Bramshill incorporates a benchmark-agnostic investment approach, which allows it to focus its efforts on five primary areas in which it believes it has a competitive advantage. Specifically, these areas are preferred stocks, municipal bonds, corporate bonds (U.S. high yield and investment grade), and Treasuries. Additionally, it also considers and has used closed-end funds and exchange traded funds.

The firm is located in Hackensack, New Jersey and was spun out of GLG Partners (now known as Man GLG), a \$33 billion diversified and multi-strategy investment manager, in 2012. Bramshill was founded by Arthur DeGaetano and William Nieporte in May 2012 with initial assets under management of \$190 million. Stephen Selver, a 20 year investment professional (whose father, Malcom, also works at Bramshill as an investment professional) joined the firm as chief executive officer in June 2014. As of October 15, 2016, the firm had grown to \$420 million in assets under management (of which the Bramshill Income Performance strategy comprised 70% of the assets) and employed 9 professionals.

In addition to its flagship Income Performance strategy, it also manages the Bramshill Credit Plus, and Bramshill Diversified Income strategies. The following is a summary of the Bramshill Income Performance strategy (the strategy) within the context of the six tenets of FEG's investment philosophy.

#### **FEG SIX TENET REVIEW**

**CONVICTION** - Bramshill employs a high conviction strategy, holding a maximum of 50 positions while employing a benchmark-agnostic approach. Further adding to conviction is the manager's willingness to use cash as a meaningful part of its asset allocation, which has been as high as 40%. Additionally, a review of the strategy's historical quarterly allocations show a gradual shift in/out of its areas of focus, which shows increasing/decreasing conviction, and is part of its relative value approach.

**CONSISTENCY** – DeGaetano developed the income performance strategy at GLG and managed it with one other analyst starting in 2009. While DeGaetano remains the key decision-maker, the Bramshill team is more developed and should benefit from additional investment personnel. Derek Pines, for example, joined the firm in 2012 after spending ten years as a proprietary trader and portfolio manager in quantitative strategies.

**PRAGMATISM** — The firm's competitive advantage is its experienced investment professionals. Additionally, it spends its time focusing its resources (personnel) on five primary investment areas, where it believes it has a competitive advantage versus its peers. Specifically, to make best use of its personnel

and add value in such broad areas of the market, it limits itself to the most liquid issuers in each asset category.

**INVESTMENT CULTURE** - Bramshill is a boutique investment manager with experienced investment professionals comprising its staff. It is in growth mode and is in the process of building out its resources. It believes the income performance strategy can grow to \$2 billion. The team has built its resources with experienced personnel as opposed to younger hires, which should help develop the investment culture and play a role in establishing the foundation of the firm. There have been three departures since the firm's inception, two of which were portfolio managers. One was focused on municipals and Bramshill deemphasized the space, while the other pursued other options. The third was not focused on fixed income and was an advisor.

RISK CONTROL — The manager employs a higher tracking error/lower correlation strategy relative to "traditional (i.e., benchmark aware)" fixed income strategies (according to Pertrac Analytics, the strategy's tracking error/correlation to the Barclays U.S. Aggregate Bond Index (BAGG) was 5.5% and 0.39 since inception). Bramshill employs a limit of 25% in high yield bonds but has maintained a BBB rating since inception. Overall risk parameters are broad, as would be expected by this type of approach, and should be viewed more as guidelines than hard rules. According to Pertrac Analytics, the strategy's maximum draw-down period showed a loss of 8.1% in four months (April 2013 to August 2013) with a nine-month recovery versus a loss of 3.7% for the BAGG during the same period with a similar nine-month recovery.

**ACTIVE RETURN** – According to eVestment Alliance, the strategy produced annualized net returns of 8.6% with a standard deviation (i.e., volatility) of 5.7%. from inception (January 2009) through September 30, 2016. This performance compares favorably relative to the return of the BAGG, which gained 4.5% with standard deviation of 2.8% during the same period.

#### **CONCERNS** –

- 1) Size/ownership The size of the firm is small at \$420 million and it employs 9 people. The ownership structure is skewed heavily to DeGaetano, who owns 90% of the firm. The only other partner is Nieporte. The firm has no debt on its balance sheet. Bramshill operates in the "traditional" fixed income world as it relates to fees, which are not excessive, but also not as high as hedge funds. As such, the profitability/viability of the firm could come into question if assets were to decline meaningfully if investors exited or there was a prolonged period of underperformance. As such, FEG believes "business risk" exists at Bramshill, but its low correlation to traditional credit sectors offsets this concern somewhat.
- 2) Statistically insignificant track record The inception of the strategy coincided with the "near-bottom" in risk assets coming out of the great financial crisis of 2007-2008. There have been volatile periods in the interim, but it is unknown how this strategy would fare during a recession.
- 3) Limited resources Bramshill invests in relatively large asset categories and limits itself to the most liquid issuers based upon their resources. The result is a more liquid portfolio, but also eliminates many investment opportunities in less liquid areas of the market. In our experience, Bramshill lacks the breadth of personnel to conduct meaningful due diligence on the underlying issuers, which forces their hand to focus on a sub-set of the overall market.

**CONCLUSION** — Bramshill is in its early stages as an investment manager, but has staffed itself with experienced investment professionals. It is aware of its strengths and weaknesses and offers a relatively unique investment strategy versus what is available in the market. The strategy has performed well to date but has yet to encounter a meaningful recession and it is unknown how it would perform (or how investors in the strategy) would react amid a long period of underperformance. A prolonged period of

underperformance could put the firm's viability at risk. At this point, FEG believes Bramshill offers many positive features along with meaningful concerns, many of which could be alleviated over time.

#### **Disclosure**

This was prepared by Fund Evaluation Group, LLC (FEG), a federally registered investment adviser under the Investment Advisers Act of 1940, as amended, providing non-discretionary and discretionary investment advice to its clients on an individual basis. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Fund Evaluation Group, LLC, Form ADV Part 2A & 2B can be obtained by written request directed to: Fund Evaluation Group, LLC, 201 East Fifth Street, Suite 1600, Cincinnati, OH 45202 Attention: Compliance Department. Neither the information nor any opinion expressed in this report constitutes an offer, or an invitation to make an offer, to buy or sell any securities.

The information herein was obtained from various sources. FEG does not guarantee the accuracy or completeness of such information provided by third parties. The information in this report is given as of the date indicated and believed to be reliable. FEG assumes no obligation to update this information, or to advise on further developments relating to it.

This memorandum was prepared at client request for your expressed use and is strictly confidential, only intended for use by the person(s) requesting the information. The investment manager described in this memorandum has not been subjected to FEG's full initial due diligence procedure nor will it be subject to ongoing due diligence as it relates to FEG's 6 tenets. This manager is not considered to be approved by FEG's Investment Policy Committee nor on FEG's Recommended or Covered list. This memorandum was prepared for informational purposes only, and does not address any specific investment objectives.



## Manager Research Report - Bramshill

Firm: Bramshill Investments
Product: Income (Separate Account)

Category: Income
Asset Class: Credit

#### Firm Background:

- Firm was founded in 2012 by Art DeGaetano (CIO) after spinning out of hedge fund manager GLG.
- The firm is 100% employee owned, with more than 90% owned by Art DeGaetano.
- Firm currently manages \$430mm in AUM, the majority being in this strategy or slight variations of thiereof (approximately 70% of AUM).
- They estimate the capacity for the strategy is \$2B.

#### **Team Background:**

- The portfolio is managed by a team of two portfolio managers supported by two analysts and one trader.
- Portfolio managers:
  - Art DeGaetano (Chief Investment Officer and Founder): Before starting Bramshill in May of 2012, Mr. DeGaetano was a Senior Portfolio Manager at GLG Partners from 2007 to 2012. Prior to GLG Partners, he traded at RBS Greenwich Capital where he was a Managing Director and Head of Credit Trading for two years. Prior to RBS, he traded for 12 years for Bear Stearns & Co., Inc. and was a Senior Managing Director and Head Trader on the high yield desk. Mr. DeGaetano has a B.A. from Colgate University.
  - Derek Pines (Portfolio Manager/Analyst): Prior to joining Bramshill Investments in 2012, Mr.
    Pines spent 10 years as a Proprietary Trader and Portfolio Manager specializing in quantitative
    strategies across a variety of asset classes, the bulk of that time with Assent (Sungard
    Financial) and most recently Chimera Securities. He also spent a year with Accenture in their
    Core Trading Services Group. Mr. Pines holds a Masters Graduate Certificate in Algorithmic
    Trading from Stevens University. Mr. Pines graduated cum laude with a B.S. in finance from
    Georgetown University.

#### **Investment Process:**

- The strategy seeks to achieve a positive return by evaluating opportunities across taxable, tax-free, and equity oriented income markets. They rotate the portfolio among various asset classes based on valuation metrics. They are allowed up to 40% in below-investment grade securities.
- The major markets they are involved in are Government Bonds, Municipal Bonds, Corporate Bonds (both investment and below-investment grade), Preferreds, Closed-end funds and ETF's.
- The portfolio is managed through a 3-step process:
  - Assess relative value between asset classes.
    - They look at High Yield as barometer for overall credit strength and risk appetite.
    - Employ a technical model that inputs trading activity, dealer inventories and price momentum.
    - Evaluate credit spreads relative to both a historical and cross-sector basis
  - Once they have determined relative value between sectors, they examine the macroeconomic environment to set the overall credit and duration risk profile of the portfolio based on
    - Federal reserve and monetary policy

- Fiscal policy
- Inflation
- Broad economic data
- The last step in the process is security selection, which is based on credit metrics and structure:
  - Idea generation begins by screening the overall fixed income universe down to an investable universe based on fundamentals, security liquidity and desired sectors
  - The portfolio is concentrated in 40 to 50 names
  - Within High Yield bonds, they screen the universe down to the 100 most liquid names and look for the best credit quality.

#### **Risk Management:**

- Bramshill evaluates and manages risk across both investments and operations:
  - o Investment Risk:
    - Risk management process begins with the portfolio managers by establishing risk metrics for credit quality, fundamentals, and investment sizing
    - Given the concentration of the strategy, Bramshill establishes hard stop-loss levels on positions as another line of defense in managing the risk of the portfolios.
    - Furthermore, the portfolios are stress-tested for liquidity risk, market risk, and event risk.
  - o Operations/Firm Risk:
    - Risk management functions are controlled separately from investment managers and compliance duties are performed internally by a full-time Chief Compliance Officer.
    - Checks and balances across risk limits and back office operations are in place and specific protocols and procedures are in place to remain in compliance with risk metrics.



#### FEG MEMORANDUM

#### FOR INTERNAL USE ONLY

**TO:** Keith Berlin – Vice President – Director of Fixed Income

FROM: The Compliance Department

**SUBJECT:** Initial Compliance Program Evaluation – Bramshill Investments, LLC.

DATE: November 3, 2016

The Compliance Department has received the completed Initial Compliance Program Evaluation Questionnaire for Bramshill Investments, LLC. ("Bramshill" or "the Firm"). In addition to this questionnaire, Compliance has reviewed the following items:

Form ADV Part 1 & 2A
Compliance Manual
Code of Ethics
Organizational Chart
Annual Review Memo

The Compliance Department has found no material concerns with the information listed on the questionnaire, or with the additional items that were reviewed. Bramshill is registered as an investment advisor with the Securities and Exchange Commission. The firm has a designated Chief Compliance Officer (CCO), who appears to have limited experience in a compliance role. The CCO also serves as the Chief Operating Officer and is a partner. Serving in this capacity represents a potential conflict of interest. It is understood that compliance officers in smaller firms often serve in dual capacities. The firm has a process for a review of their compliance program on at least an annual basis. Bramshill has retained the services of Duff and Phelps to assist in conducting that annual review along with other general consulting. Bramshill has in effect outsourced their compliance function to Duff and Phelps. The professional Duff and Phelps named previously served as General Counsel and CCO at Bramshill. As this professional was responsible for Bramshill's current compliance program, it is a potential conflict of interest and may impair his ability to be independent. Based on the data provided, Compliance feels that Bramshill has an adequate compliance program in place. The Compliance Team will reserve the right to re-evaluate the information on this manager in the future as deemed necessary.

If you have any questions, please contact a member of the Compliance Department.

### DUE DILIGENCE SUMMARY

Due Diligence Item	Completed	Comments
Initial Call or On-Site Meeting	Yes	Initial May 3, 2016 / Onsite October 18, 2016
QER	Yes	
RFI Questionnaire/DDQ	Yes	April 2016
FEG Compliance Memo	Yes	
Performance Data	Yes	
References	Yes	
Form ADV	Yes	
Audited Financials	No	Not required for "traditional" managers
SEC Audit Letters	Yes	Bramshill has not yet been audited by the SEC.
GIPS Compliance Report	Yes	Since 2012
Subscription/Offering Documents	No	Not required for "traditional" managers

\$245,000



## Investment Cover Page – Loomis Sayles

Firm: Loomis Sayles Assets Under Management (\$mm):

Product: Full Spectrum Credit Strategy Assets Under \$775

(Separate Account) Management (\$mm):

Target Strategy Inception Date: 3/2009

Category: Income Asset Class: Credit

Sub-Asset Class: Higher and Lower Quality Target Portfolio 5%

Credit Weight:

50% Investment Grade

Benchmark/ Credit, 25% High Yield, 25%

Risks: Credit

Peer Group: Bank Loans/Multi-sector

**Fees:** 0.45% flat fee

**Credit Peer Group** 

**Liquidity:** Daily

**Analyst:** Nathan Barnard

#### **Investment Thesis/Opportunity:**

- We view the entire credit space as a reasonably attractive opportunity set relative to equities and other asset classes while positioned higher in the capital structure.
- The ability for a manager to gauge relative value between higher quality and lower quality credit will better enable the portfolio to achieve its return target.

#### **Rationale for Hiring Manager:**

- Loomis has a very deep investment team something we sought out for a mandate with this level of flexibility. We believe that their depth of resources across the supporting analyst teams, such as credit research and macro strategy groups, gives the portfolio management team an edge.
- Additionally, the lead PM for this account has experience with more absolute return oriented strategies, another desired trait for this mandate given the flexibility.

#### **Rationale for Firing Manager:**

 Keith Kearns is the lead portfolio manager for our account and is supported by an additional PM and 6 staff. His departure would trigger an immediate review.

#### **Favorable Aspects of Strategy:**

- Credit analysis is a specialty of the firm and they have dedicated significant resources to both the team of analysts and to the overall effort.
- Flexibility of the mandate coupled with the unique skillset offered by Loomis Sayles.

#### **Unfavorable Aspects of Strategy:**

• A shorter track record without seeing a major correction is somewhat concerning, however, the broad flexibility of the mandate should allow for downside protection. Furthermore, examining Loomis Sayles' historical track record in Investment Grade Credit, High Yield and Bank Loans gives us confidence that they can manage through a full investment cycle.

#### **Rationale for Overweight:**

• Given the depth of the investment team, we are comfortable with a 5% position. However, we would be hesitant to allocate more of the portfolio than this unless valuations were extreme and in that case, there may opportunities elsewhere with higher expected returns.

#### **Rationale for Underweight:**

• If credit spreads were to tighten dramatically we may look to move underweight. However, given the flexibility of the mandate, valuations would have to be extreme.





To: Utah School and Institutional Land Trust Fund Office (SITFO)

From: Fund Evaluation Group, LLC (FEG)

**Subject:** FEG Six Tenet Review of Loomis Sayles (Customized Credit Asset Strategy)

Date: November 21, 2016

FEG reviewed Loomis Sayles (Loomis) within the context of the six tenets of FEG's investment philosophy. This is the framework by which FEG evaluates all investment managers. Loomis is a diversified, global asset manager that was formed in 1926. The firm had approximately \$245 billion in assets under management as of September 30, 2016 of which \$202 billion are in fixed income strategies.

Loomis is headquartered in Boston, MA and has offices in San Francisco, Detroit, London, and Singapore. The fixed income team at Loomis consists of more than 53 professionals focuses on credit research, with 5 focused on convertibles and special situations, and 13 quantitative/risk professionals. The following is a summary of the Loomis Sayles Credit Asset Strategy (the strategy) within the context of the six tenets of FEG's investment philosophy.

#### **FEG SIX TENET REVIEW**

**CONVICTION** – Loomis shows conviction through its intense focus on corporate credit research, as its team actively covers more than 97% of the issuers in the Barclays Corporate Index and more than 500 high yield issuers. Additionally, the credit team at Loomis is among the most seasoned, as its analysts average nearly 20 years of investment experience, most of which was obtained at Loomis. Analysts are viewed as career roles at Loomis. Finally, Loomis spent more than \$92 million on proprietary research in 2016, which shows conviction in its credit emphasis.

**CONSISTENCY** — Loomis has managed the Credit Asset strategy in a manner consistent with its unique benchmark (50% Barclays Corporate, 25% Barclays High Yield 2% Capped, 25% S&P LSTA Leveraged Loan Index, since inception in 2009. Kevin Kearns, who joined Loomis in 2007 and has 30 years of investment experience, has co-managed the strategy (along with two other portfolio managers, Matt Eagan and Rick Raczkowski) since its inception. For this separate account, Kearns will have lead portfolio manager responsibility and be assisted by Tom Stolberg, who joined Loomis in 2008 and has more than 20 years of investment experience. The investment philosophy and process remain unchanged since inception.

**PRAGMATISM** – The manager has a competitive advantage in corporate credit based upon the depth and experience of its investment professionals. As a firm, it invests across the corporate capital structure and has a view on the majority of investable credits across the credit quality spectrum. Its portfolio managers are responsible for exploiting this competitive advantage through security selection in conjunction with a top down macro overlay, where Loomis seeks to understand the current stage in the credit cycle to better make security level judgments (i.e., higher or lower in the capital structure – higher/later, lower/earlier).

**INVESTMENT CULTURE** – FEG has recommended multiple fixed income strategies at Loomis and has conducted annual on site meetings with key decision makers at the firm for nearly two decades. The investment culture at the firm is highly focused on credit analysis. There are clear lines of demarcation between portfolio managers and analysts, but both are valued equally at the firm. Analysts are widely respected at the firm for their contributions and in depth knowledge of credit issuers. As such, FEG views the investment culture at Loomis as a strong positive.

**RISK CONTROL** — While Loomis is well-regarded for its corporate credit research, it is also strong in the department of risk control, with clear delineation of duties at the strategy and organization level. Each portfolio undergoes rigorous scenario, correlation, beta, and volatility analyses, which are provided by the quantitative research and risk team. As such, portfolio managers and other team members have daily access to all relevant data regarding the portfolio. FEG believes risk at the strategy and organizational level is well managed.

**ACTIVE RETURN** – FEG reviewed the Loomis Credit Asset Strategy through its commingled fund with an understanding that the guidelines imposed by SITFO will be different (i.e., no structured products). Nevertheless, it provides a reasonable understanding of the team's capabilities. On a gross of fees basis, Loomis produced an annualized return of 10.2% versus the blended benchmark return of 10%. On a net of fees basis, the fund slightly underperformed the benchmark. Because the index is not investable, this fact is not relevant to the analysis. The standard deviation of the strategy was generally in line with that of the benchmark as was the max drawdown for the strategy. The key takeaway is that blended benchmark-like returns with a comparable standard deviation should be expected.

**CONCERNS/CONCLUSION** – There are no material concerns with this recommendation as Loomis is a well-regarded investment organization that is well staffed with seasoned professionals. FEG has had considerable experience investing with Loomis across multiple strategies engaged in the corporate credit space for nearly two decades. It is our opinion and belief that Loomis is well positioned to actively manage the customized credit portfolio as requested by SITFO.

#### Disclosure

This was prepared by Fund Evaluation Group, LLC (FEG), a federally registered investment adviser under the Investment Advisers Act of 1940, as amended, providing non-discretionary and discretionary investment advice to its clients on an individual basis. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Fund Evaluation Group, LLC, Form ADV Part 2A & 2B can be obtained by written request directed to: Fund Evaluation Group, LLC, 201 East Fifth Street, Suite 1600, Cincinnati, OH 45202 Attention: Compliance Department. Neither the information nor any opinion expressed in this report constitutes an offer, or an invitation to make an offer, to buy or sell any securities.

The information herein was obtained from various sources. FEG does not guarantee the accuracy or completeness of such information provided by third parties. The information in this report is given as of the date indicated and believed to be reliable. FEG assumes no obligation to update this information, or to advise on further developments relating to it.

This memorandum was prepared at client request for your expressed use and is strictly confidential, only intended for use by the person(s) requesting the information. The investment manager described in this memorandum has not been subjected to FEG's full initial due diligence procedure nor will it be subject to ongoing due diligence as it relates to FEG's 6 tenets. This manager is not considered to be approved by FEG's Investment Policy Committee nor on FEG's Recommended or Covered list. This memorandum was prepared for informational purposes only, and does not address any specific investment objectives.



## Manager Research Report – Loomis Sayles

Firm: Loomis Sayles

**Product:** Full Spectrum Credit (Separate Account)

Category: Income
Asset Class: Credit

#### Firm Background:

- Global investment manager in existence for 90 years with headquarters in Boston.
- As of 9/30/2016, the firm had \$245bn in AUM, \$202bn of which is in Fixed Income and \$135bn in Credit.
- Loomis Sayles is 100% owned by parent company Natixis.

#### **Team Background:**

- The portfolio will be run by the Kevin Kearns (lead PM) and Tom Stolberg (backup PM). Their biographies:
  - Kevin Kearns is a vice president, portfolio manager and senior derivatives strategist in the absolute return and credit opportunity area at Loomis, Sayles & Company. As leader of the firm's alpha strategies group, Kevin co-manages the Loomis Sayles credit long short, real return, strategic alpha and world credit asset strategies as well as the Loomis Sayles Strategic Alpha, Inflation Protected Securities, and Multi-Asset Income funds. He has 29 years of investment industry experience and joined Loomis Sayles in 2007. Prior to Loomis Sayles, Kevin was the director of derivatives, quantitative analysis and risk management at Boldwater Capital Management, where he was responsible for the development and implementation of a credit-focused relative value hedge fund. Kevin managed derivative-based strategies focused on capital structure arbitrage, event-driven, risk arbitrage and relative value strategies. Previously, he spent 14 years with Fleet Boston as the managing director and group head of credit derivatives. Kevin earned a degree in physics from Bridgewater State College and an MBA from Bryant College.
  - o Tom Stolberg is a vice president of Loomis, Sayles & Company and co-portfolio manager for the Loomis Sayles US high yield strategy and credit long short strategy. He is also the absolute return senior analyst for the Loomis Sayles fixed income group. Tom began his investment industry career at State Street Research & Management in 1994, first as a trader, and later as a senior high yield analyst. He was also a credit hedge fund analyst at Boldwater Capital Management, and a high yield portfolio manager for State Street Global Advisors. Tom is a member of the Boston Security Analysts Society and the CFA Institute. He earned a BA from Middlebury College.
- In addition to the PM's, there are 6 additional staff directly supporting the management of this account.
- Research is conducted by the analyst sector teams: Asset Allocation, US Yield Curve, Sovereigns, Emerging Markets, High Yield, Bank Loans, Securitized Assets, Inv. Grade/Global Credit and Convertibles.
- Additionally, they can tap firm-wide resource groups across: Credit Research, Securitized Research, Convertible and Special Situations, Macro Strategies, Sovereign Research and Quantitative Research and Risk Analysis.

#### **Investment Process:**

- The strategy attempts to achieve a 6% return through a full market cycle by investing across the Credit spectrum. The strategy is flexible, allowing for up to a 75% allocation in below investment-grade fixed income and up to 100% in investment grade fixed income. This level of flexibility is intended to enable Loomis Sayles to invest in the most attractive issuers in the investment grade credit, high yield credit, and bank loan markets based on the current phase of the credit cycle.
- The process tends to be more top down and tactical in asset allocation, while relying on bottom-up research from the dedicated sector research teams. The Portfolio construction process is supported by extensive economic, market, sector, issuer, security, trading and quantitative analysis. Portfolio implementation is conducted through a five-step process:
  - o Allocation of Beta:
    - Top-down macro and sector analysis is conducted to assess the prospective macroeconomic and capital markets environment to seek to identify key driving factors. This analysis is generated by the Macro Strategies team, with input from individual sector teams. The output of this analysis is shared across all Loomis Sayles strategies.
  - o Idiosyncratic opportunities:
    - Bottom-up security selection whereby portfolios managers gain insight into individual credits using the broader Loomis Sayles research effort.
  - o Identify market inefficiencies:
    - Attempt to find alpha drivers that they expect to generate incremental returns.
  - o Portfolio construction:
    - Portfolio construction and optimization combines the bottom-up and top-down frameworks to identify alpha picks based on portfolio objectives and guidelines.
  - o Risk management: see below.

### **Risk Management:**

- Risk management is conducted both at the investment level (security selection and portfolio construction) as well as outside the portfolio management team by the separate quantitative risk group.
- This risk group is responsible for overseeing risk alongside portfolio managers, providing reports to
  portfolio managers to assess the risk across various measures, contributors and factors as well as
  giving attribution analysis and ex-ante modeling of portfolio risk.

# DUE DILIGENCE SUMMARY

Due Diligence Item	Completed	Comments
Initial Call or On-Site Meeting	Yes	Onsite June 7, 2016
QER	Yes	
RFI Questionnaire/DDQ	Yes	
FEG Compliance Memo	Yes	
Performance Data	Yes	
References	No	Not required for "traditional" managers
Form ADV	Yes	
Audited Financials	No	Not required for "traditional" managers
SEC Audit Letters	Yes	
GIPS Compliance Report	Yes	
Subscription/Offering Documents	No	Not required for "traditional" managers

# **Bramshill Investments, LLC**Bramshill Income Performance Strategy

# 9/2016 eVestment Global Unconstrained Fixed Income





			Efficiency	Stats		
40						
20						
0		<b>→</b>	•		*	<b>♦</b>
-20	Excess Returns 5 Years	Annualized Alpha 5 Years	Sharpe Ratio 5 Years	Sortino Ratio 5 Years	Conditional VaR @ 99% 5 Years	Max Drawdown 5 Years

	5 Years	7 Years	10 Years
<b>Excess Returns</b>	1.25	-0.08	
Alpha	2.50	1.58	
Standard Deviation	4.03	4.09	
<b>Semi Deviation</b>	3.94	4.27	
Skewness	-0.28	-0.45	
Kurtosis	1.65	1.07	
Max Drawdown	8.09	8.09	
<b>Sharpe Ratio</b>	1.49	1.36	
Sortino Ratio	2.82	2.41	
<b>Calmar Ratio</b>	0.75	0.70	
CVaR @ 99%	-3.29	-2.82	

## **Correlation: 5 Years**

	Bramshill Income Performance Strategy	Barclays US Credit	Equities	High Yield	Commodities	Long Treasuries
Bramshill Income Performance Strategy	1.00	0.74	0.30	0.52	0.21	0.45
Barclays US Credit	0.74	1.00	0.29	0.58	0.19	0.63
Equities	0.30	0.29	1.00	0.80	0.49	-0.41
High Yield	0.52	0.58	0.80	1.00	0.60	-0.12
Commodities	0.21	0.19	0.49	0.60	1.00	-0.30
Long Treasuries	0.45	0.63	-0.41	-0.12	-0.30	1.00

# Loomis, Sayles & Company, L.P. Full Spectrum Credit

# 9/2016 eVestment Global Unconstrained Fixed Income

**Returns: Trailing** 



# Credit Asset Blend - IG50,HY25,BL25 YTD 11.59 10.20 3 Years 5.40 5.65 5 Years 7.35 6.71 7 Years 7.85 7.13

# Returns: Calendar Years

	<b>Credit Asset</b>	Blend - IG50,HY25,BL25
2015	-2.36	-0.59
2014	4.89	5.19
2013	4.73	3.25
2012	14.56	12.23
2011	3.82	5.79
2010	14.24	11.37

## **Efficiency Stats**

mineral of states		
	5 Years	7 Years
Credit Asset - Excess Returns	2.52	2.11
Blend - IG50,HY25,BL25 - Excess Returns	1.88	1.39
Credit Asset - Annualized Alpha	3.42	3.69
Blend - IG50,HY25,BL25 - Annualized Alpha	2.81	2.76
Credit Asset - Sharpe Ratio	1.71	1.72
Blend - IG50,HY25,BL25 - Sharpe Ratio	1.74	1.83
Credit Asset - Sortino Ratio	3.60	3.32
Blend - IG50,HY25,BL25 - Sortino Ratio	3.67	3.66
Credit Asset - Conditional VaR @ 99%		-2.96
Blend - IG50,HY25,BL25 - Conditional VaR @ 99%	-2.15	-2.11
Credit Asset - Max Drawdown	5.43	5.43
Blend - IG50,HY25,BL25 - Max Drawdown	3.76	3.76

## **Efficiency Stats**

40						
20						
0						
-20	Excess Returns 5 Years	Annualized Alpha 5 Years	Sharpe Ratio 5 Years	Sortino Ratio 5 Years	Conditional VaR @ 99% 5 Years	Max Drawdown 5 Years

### **Correlation: 5 Years**

	Credit Asset	Blend - IG50,HY25,BL25	Barclays US Credit	Equities	High Yield	Commodities	Long Treasuries
Credit Asset	1.00	0.98	0.76	0.73	0.95	0.51	0.07
Blend - IG50,HY25,BL25	0.98	1.00	0.85	0.66	0.92	0.46	0.20
Barclays US Credit	0.76	0.85	1.00	0.29	0.58	0.19	0.63
Equities	0.73	0.66	0.29	1.00	0.80	0.49	-0.41
High Yield	0.95	0.92	0.58	0.80	1.00	0.60	-0.12
Commodities	0.51	0.46	0.19	0.49	0.60	1.00	-0.30
Long Treasuries	0.07	0.20	0.63	-0.41	-0.12	-0.30	1.00



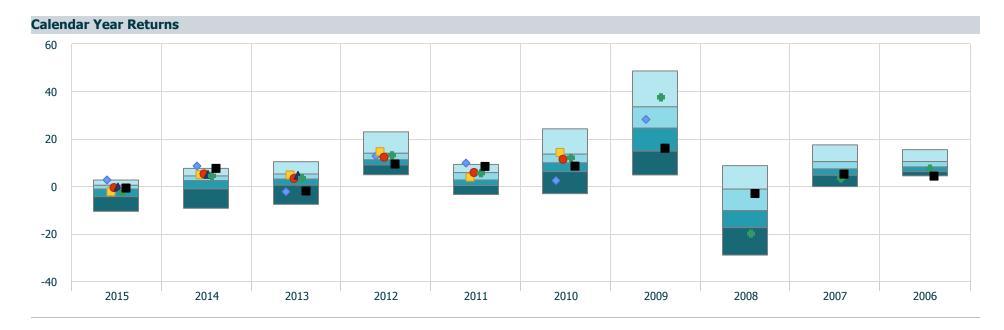
Bramshill Investments LLC: Bramshill Income Performance Strategy PIMCO: Blend - IG30,HY35,LINC35

Loomis Sayles: Credit Asset
Western Asset Management Company: Blend - IG50,HY25,BL25

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25 Barclays Index: Barclays US Credit

Trailing Returns													
Firm Name	Product Name	YTD	Rank	1 Year	Rank	3 Years	Rank	5 Years	Rank	7 Years	Rank	10 Years	Rank
Bramshill Investments, LLC	Bramshill Income Performance Strategy	7.00	42	8.39	28	6.44	4	6.08	18	5.66	40		
Loomis, Sayles & Company, L.P.	Credit Asset	11.59	9	9.61	20	5.40	11	7.35	7	7.85	9		
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	10.20	16	9.07	23	5.65	7	6.71	11	7.13	14		
PIMCO	Blend - IG30,HY35,LINC35	11.01	11	9.98	17	5.96	5						
Western Asset Management Company	Blend - IG50,HY25,BL25	10.52	15	8.71	25	4.71	20	6.34	15	7.01	15	6.12	36
Barclays Index	Barclays US Credit	8.86	27	8.30	29	5.44	10	4.83	34	5.74	38	5.77	45

## **eVestment Global Unconstrained Fixed Income**



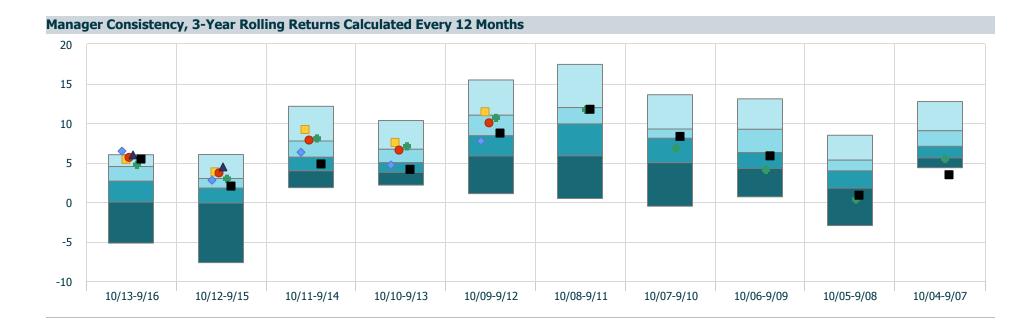
Bramshill Investments LLC: Bramshill Income Performance Strategy PIMCO: Blend - IG30,HY35,LINC35

Loomis Sayles: Credit Asset
Western Asset Management Company: Blend - IG50,HY25,BL25

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25 Barclays Index: Barclays US Credit

Calendar Year Returns																					
Firm Name	Product Name	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	2010	Rank	2009	Rank	2008	Rank	2007	Rank	2006	Rank
Bramshill Investments, LLC	Bramshill Income Performance Strategy	2.65	5	8.53	2	-2.33	91	12.74	35	9.77	2	2.38	86	28.19	41						
Loomis, Sayles & Company, L.P.	Credit Asset	-2.36	61	4.89	18	4.73	29	14.56	19	3.82	39	14.24	21								
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	-0.59	40	5.19	16	3.25	44	12.23	40	5.79	24	11.37	41								
PIMCO	Blend - IG30,HY35,LINC35	-0.30	36	5.00	17	4.62	29														
Western Asset Management Company	Blend - IG50,HY25,BL25	-2.50	62	4.37	24	3.39	43	13.08	34	5.51	26	12.01	35	37.54	20	-20.00	80	3.35	85	7.45	60
Barclays Index	Barclays US Credit	-0.77	42	7.53	5	-2.01	89	9.37	70	8.35	7	8.47	60	16.04	72	-3.08	31	5.11	73	4.26	95

## **Bramshill / Loomis Sayles**



♦ Bramshill Investments LLC: Bramshill Income Performance Strategy

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25

Western Asset Management Company: Blend - IG50,HY25,BL25

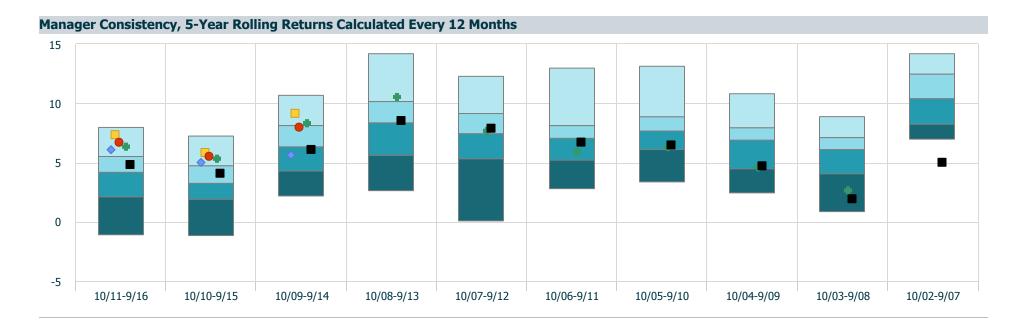
Loomis Sayles: Credit Asset

▲ PIMCO: Blend - IG30,HY35,LINC35 ■ Barclays Index: Barclays US Credit

## 3- Year Rolling Returns

5- real Rolling Returns																					
Firm Name	Product Name	Returns (10/2013 - 09/2016)	Rank	Returns (10/2012 - ( 09/2015)	Rank	Returns (10/2011 - ( 09/2014)	Rank	Returns (10/2010 - ( 09/2013)	Rank	Returns (10/2009 - (09/2012)	Ran	Returns (10/2008 - k 09/2011)	Rani	Returns (10/2007 - k 09/2010)	Ran	Returns (10/2006 - k 09/2009)	Ran	Returns (10/2005 - k 09/2008)	Rani	Returns (10/2004 - k 09/2007)	Rank
Bramshill Investments, LLC	Bramshill Income Performance Strategy	6.44	4	2.76	30	6.30	42	4.69	59	7.73	57										
Loomis, Sayles & Company, L.P.	Credit Asset	5.40	11	3.82	17	9.18	15	7.54	16	11.43	19										
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	5.65	7	3.69	18	7.84	23	6.57	26	10.02	37										
PIMCO	Blend - IG30,HY35,LINC35	5 5.96	5	4.45	9																
Western Asset Management Company	Blend - IG50,HY25,BL25	4.71	20	2.95	25	8.06	21	7.06	20	10.65	28	11.68	28	6.80	66	4.08	77	0.33	86	5.44	78
Barclays Index	Barclays US Credit	5.44	10	2.02	44	4.82	62	4.13	70	8.73	46	11.74	27	8.30	48	5.84	54	0.86	81	3.45	100

## **Bramshill / Loomis Sayles**



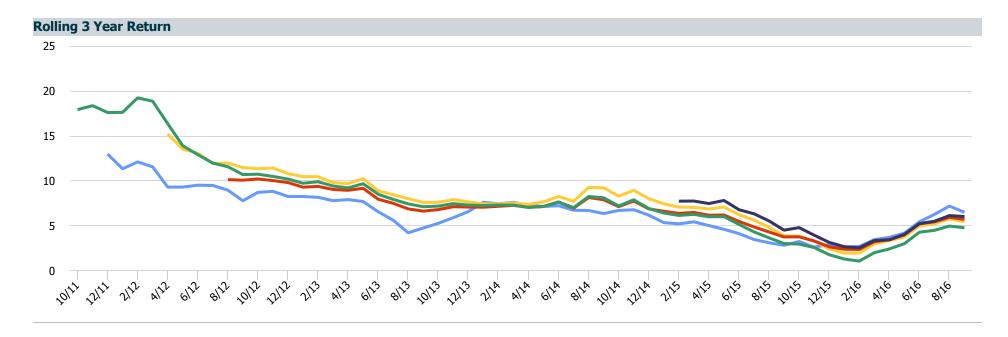
- ♦ Bramshill Investments LLC: Bramshill Income Performance Strategy
- Loomis, Sayles & Company, L.P.: Blend IG50,HY25,BL25
- Western Asset Management Company: Blend IG50,HY25,BL25

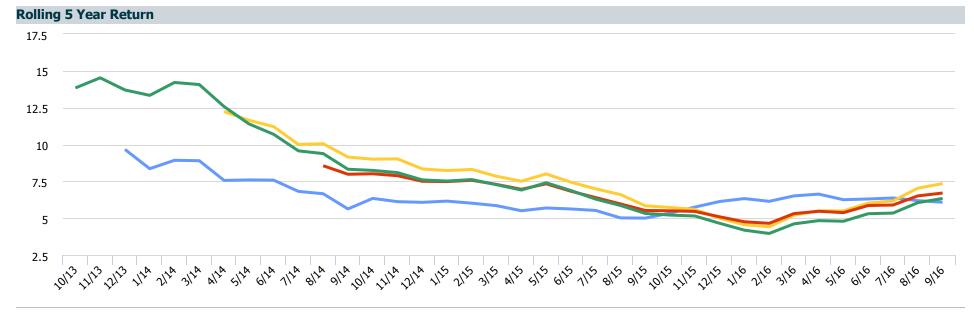
Loomis Sayles: Credit Asset

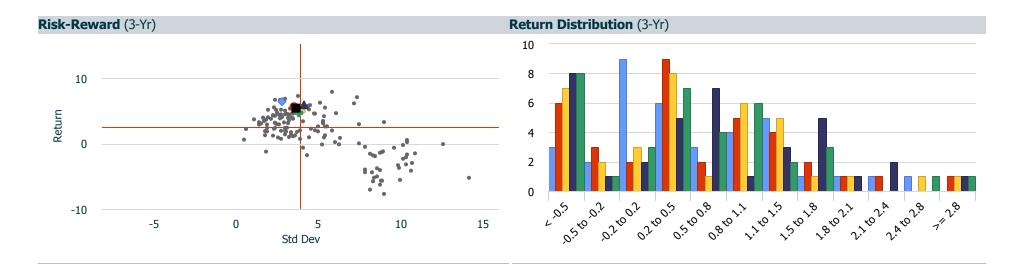
▲ PIMCO: Blend - IG30,HY35,LINC35
■ Barclays Index: Barclays US Credit

## **5-Year Rolling Returns**

5 real Rolling Returns																					
Firm Name	Product Name	Returns (10/2011 - 09/2016)	Rank	Returns (10/2010 - 09/2015)	Rank	Returns (10/2009 - 09/2014)	Rank	Returns (10/2008 - 09/2013)	Rank	Returns (10/2007 - 09/2012)	Rank	Returns (10/2006 - 09/2011)	Rank	Returns (10/2005 - 09/2010)	Rank	Returns (10/2004 - 09/2009)	Rank	Returns (10/2003 - 09/2008)	Rank	Returns (10/2002 - 09/2007)	Rank
Bramshill Investments, LLC	Bramshill Income Performance Strategy	6.08	18	5.00	22	5.63	59														
Loomis, Sayles & Company, L.P.	Credit Asset	7.35	7	5.84	14	9.15	16														
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	6.71	11	5.52	16	7.98	28														
PIMCO	Blend - IG30,HY35,LINC35																				
Western Asset Management Company	Blend - IG50,HY25,BL25	6.34	15	5.32	20	8.32	22	10.53	19	7.67	46	5.91	68	6.31	69	4.60	<i>7</i> 3	2.64	92		
<b>Barclays Index</b>	Barclays US Credit	4.83	34	4.09	38	6.10	54	8.54	47	7.90	43	6.72	59	6.48	64	4.72	72	1.94	93	5.02	98







Universe: eVestment Global Unconstrained Fixed Income

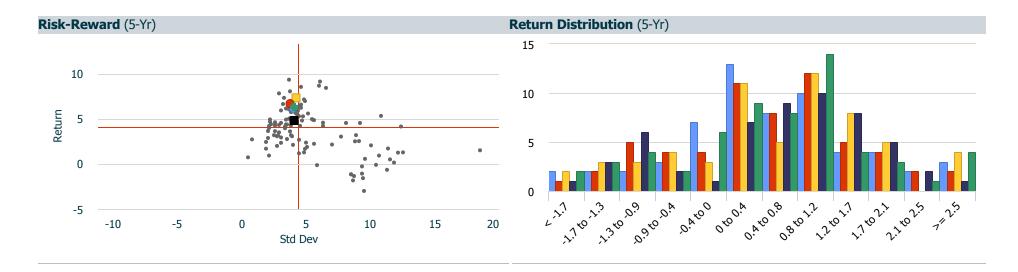
Bramshill Investments LLC: Bramshill Income Performance Strategy PIMCO: Blend - IG30,HY35,LINC35
Universe Median

Loomis Sayles: Credit Asset
Western Asset Management Company: Blend - IG50,HY25,BL25

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25
Barclays Index: Barclays US Credit

Risk-Reward (3-Yr)

` '													
Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Bramshill Investments, LLC	Bramshill Income Performance Strategy	6.44	2.83	0.69	0.29	0.58	0.89	91.16	39.16	2.24	8.00	7.24	4.35
Loomis, Sayles & Company, L.P.	Credit Asset	5.40	3.99	0.31	0.70	0.82	5.43	86.01	62.05	1.33	2.70	0.99	2.11
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	5.65	3.52	0.25	0.14	0.78	3.76	86.70	55.03	1.58	3.50	1.50	2.44
PIMCO	Blend - IG30,HY35,LINC35	5.96	4.15	-0.06	-0.28	0.76	4.43	87.75	46.54	1.42	2.77	1.35	2.17
Western Asset Management Company	Blend - IG50,HY25,BL25	4.71	3.86	0.36	0.54	0.80	5.92	77.04	60.97	1.20	2.42	0.80	1.92
<b>Barclays Index</b>	<b>Barclays US Credit</b>	5.44	3.64	0.23	-0.09	1.00	3.51	100.00	100.00	1.47	3.29	1.55	2.29



Universe: eVestment Global Unconstrained Fixed Income

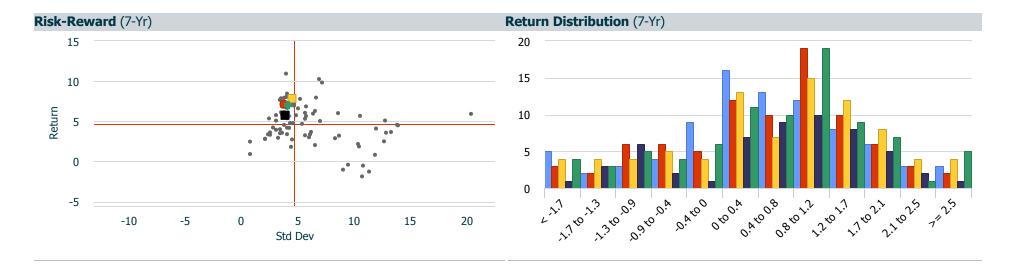
Bramshill Investments LLC: Bramshill Income Performance Strategy PIMCO: Blend - IG30,HY35,LINC35
Universe Median

Loomis Sayles: Credit Asset
Western Asset Management Company: Blend - IG50,HY25,BL25

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25
Barclays Index: Barclays US Credit

Risk-Reward (5-Yr)

` '													
Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Bramshill Investments, LLC	Bramshill Income Performance Strategy	6.08	4.03	-0.28	1.65	0.73	8.09	97.31	61.08	1.49	2.82	0.75	2.59
Loomis, Sayles & Company, L.P.	Credit Asset	7.35	4.26	0.07	0.33	0.80	5.43	106.45	47.11	1.71	3.60	1.35	2.79
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	6.71	3.81	-0.04	0.17	0.79	3.76	101.15	52.67	1.74	3.67	1.78	2.81
PIMCO	Blend - IG30,HY35,LINC35												
Western Asset Management Company	Blend - IG50,HY25,BL25	6.34	4.09	0.07	0.23	0.81	5.92	97.31	54.08	1.53	3.12	1.07	2.50
<b>Barclays Index</b>	Barclays US Credit	4.83	4.08	-0.32	0.35	1.00	5.24	100.00	100.00	1.16	2.06	0.92	1.94



Universe: eVestment Global Unconstrained Fixed Income

Bramshill Investments LLC: Bramshill Income Performance Strategy PIMCO: Blend - IG30,HY35,LINC35
Universe Median

Loomis Sayles: Credit Asset
Western Asset Management Company: Blend - IG50,HY25,BL25

Loomis, Sayles & Company, L.P.: Blend - IG50,HY25,BL25
Barclays Index: Barclays US Credit

Risk-Reward (7-Yr)

` '													
Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Bramshill Investments, LLC	Bramshill Income Performance Strategy	5.66	4.09	-0.45	1.07	0.71	8.09	85.83	65.72	1.36	2.41	0.70	2.26
Loomis, Sayles & Company, L.P.	Credit Asset	7.85	4.52	-0.34	0.23	0.71	5.43	101.66	41.41	1.72	3.32	1.44	2.72
Loomis, Sayles & Company, L.P.	Blend - IG50,HY25,BL25	7.13	3.85	-0.33	0.06	0.75	3.76	97.29	51.60	1.83	3.66	1.89	2.84
PIMCO	Blend - IG30,HY35,LINC35												
Western Asset Management Company	Blend - IG50,HY25,BL25	7.01	4.20	-0.32	0.20	0.76	5.92	95.73	50.97	1.65	3.15	1.18	2.59
<b>Barclays Index</b>	Barclays US Credit	5.74	3.96	-0.30	0.13	1.00	5.24	100.00	100.00	1.43	2.72	1.09	2.28

# **Bramshill / Loomis Sayles**

Corre	lation	<b>Matrix</b>	(3-Yr)
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	Bramshill Investments, LLC	Loomis, Sayles & Company, L.P.	Loomis, Sayles & Company, L.P.	PIMCO	Western Asset Management Company	Barclays US Credit	Equities	High Yield	Commodities	Long Treasuries
Bramshill Investments, LLC	1.00	0.79	0.83	0.75	0.78	0.74	0.46	0.70	0.33	0.38
Loomis, Sayles & Company, L.P.	0.79	1.00	0.99	0.96	0.98	0.74	0.68	0.94	0.46	0.23
Loomis, Sayles & Company, L.P.	0.83	0.99	1.00	0.96	0.98	0.81	0.66	0.91	0.45	0.30
PIMCO	0.75	0.96	0.96	1.00	0.93	0.67	0.75	0.95	0.44	0.17
Western Asset Management Company	0.78	0.98	0.98	0.93	1.00	0.76	0.66	0.92	0.50	0.22
Barclays US Credit	0.74	0.74	0.81	0.67	0.76	1.00	0.26	0.52	0.14	0.77
Equities	0.46	0.68	0.66	0.75	0.66	0.26	1.00	0.78	0.33	-0.27
High Yield	0.70	0.94	0.91	0.95	0.92	0.52	0.78	1.00	0.59	-0.04
Commodities	0.33	0.46	0.45	0.44	0.50	0.14	0.33	0.59	1.00	-0.26
Long Treasuries	0.38	0.23	0.30	0.17	0.22	0.77	-0.27	-0.04	-0.26	1.00

<b>Correlation Matrix</b> (5	-Yr	)
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(-	/									
	Bramshill Investments, LLC	Loomis, Sayles & Company, L.P.	Loomis, Sayles & Company, L.P.	PIMCO	Western Asset Management Company	Barclays US Credit	Equities	High Yield	Commodities	Long Treasuries
Bramshill Investments, LLC	1.00	0.65	0.70		0.67	0.74	0.30	0.52	0.21	0.45
Loomis, Sayles & Company, L.P.	0.65	1.00	0.98		0.98	0.76	0.73	0.95	0.51	0.07
Loomis, Sayles & Company, L.P.	0.70	0.98	1.00		0.99	0.85	0.66	0.92	0.46	0.20
PIMCO				1.00						
Western Asset Management Company	0.67	0.98	0.99		1.00	0.81	0.67	0.92	0.51	0.14
Barclays US Credit	0.74	0.76	0.85		0.81	1.00	0.29	0.58	0.19	0.63
Equities	0.30	0.73	0.66		0.67	0.29	1.00	0.80	0.49	-0.41
High Yield	0.52	0.95	0.92		0.92	0.58	0.80	1.00	0.60	-0.12
Commodities	0.21	0.51	0.46		0.51	0.19	0.49	0.60	1.00	-0.30
Long Treasuries	0.45	0.07	0.20		0.14	0.63	-0.41	-0.12	-0.30	1.00

\$154,000

\$660

8/2009

5%



# Investment Cover Page - Putnam

**Firm:** Putnam Investments

Dedicated Mortgage (Separate Account)

**Target** 

**Product:** 

Investment Date: 12/1/2016

Category: Income

Sub-Asset Class: Higher Quality Securitized

Benchmark/ 3 month LIBOR

**Peer Group:** +5%/Mortgage Peer Group

**Fees:** 0.55% flat fee

**Liquidity:** Daily

**Analyst:** Nathan Barnard

Assets Under

Management (\$mm):

Strategy Assets Under

Management (\$mm):

**Strategy Inception** 

Date:

Asset Class: Securitized

**Target Portfolio** 

Weight:

Risks: Securitized

#### **Investment Thesis/Opportunity:**

- Improving consumer balance sheets post-crisis creates a major tailwind for improving credit quality in this sector.
- Lower correlations than Credit sectors to Equity Risk.
- As post-financial crisis spreads for credit-sensitive securitized sectors are still wider than the lows, we view these sectors as a relatively attractive opportunity set.

## **Rationale for Hiring Manager:**

- Experienced and deep team within the securitized space.
- Relatively unique strategy that matches uncorrelated prepayment risk and securitized credit risk within an absolute return orientation.

### **Rationale for Firing Manager:**

- If any of the key investment decision makers were to leave (Michael Salm, Brett Kozlowski, or Jatin Misra) it would trigger an immediate review.
- Given the prominence of sector specialists in the investment research and decision making process, a departure of any of these individuals would also trigger an immediate review.

## **Favorable Aspects of Strategy:**

- Absolute return orientation while investing across the entire Securitized space gives us more confidence that they can achieve their return target.
- Exposure to off-the-run, but higher quality securitized bonds is attractive.

## **Unfavorable Aspects of Strategy:**

- A shorter track record without seeing a major correction is somewhat concerning, however, the
  flexibility of the mandate should allow for some downside protection. Furthermore, Putnam's track
  record in Securitized within other strategies gives us confidence that they can manage through a full
  investment cycle.
- The portfolio management team has recently seen the departure of a portfolio manager. However, we are confident that the current team is deep enough to overcome the departure.

## **Rationale for Overweight:**

• Given the depth of the investment team, we are comfortable with a 5% position. However, we would be hesitant to allocate more of the portfolio than this unless valuations were extreme and in that case, there may be opportunities elsewhere with higher expected returns.

## **Rationale for Underweight:**

• If Securitized spreads were to tighten dramatically we may look to move underweight. However, given the flexibility of the mandate, valuations would have to be extreme.





To: Utah School and Institutional Land Trust Fund Office (SITFO)

From: Fund Evaluation Group, LLC (FEG)

Subject: FEG Six Tenet Review of Putnam Investments (Custom Dedicated Mortgage

Strategy)

Date: November 21, 2016

FEG reviewed Putnam Investments within the context of the six tenets of FEG's investment philosophy. This is the framework by which FEG evaluates all investment managers. Putnam is a diversified, global asset manager with more than 75 years of investment experience. The firm had approximately \$150 billion in assets under management as of September 30, 2016. Of the \$150 billion in assets under management, approximately \$70 billion (46%) are in fixed income strategies, \$65 billion (44%) are in equity strategies, and \$15 billion are in global asset allocation strategies. From a client type perspective, nearly half of the firm's assets are retail, 40% are institutional, and 10% is defined contribution.

The firm employs a collaborative culture that actively promotes cross-functional and cross-asset-class communication. Putnam is headquartered in Boston, MA and has offices in London, Tokyo, Frankfurt, Amsterdam, Sydney, and Singapore. The fixed income team at Putnam consists of more than 90 members, of which 15 investment professionals are dedicated to the structured products markets. The following is a summary of the Putnam Dedicated Mortgage Strategy (the strategy) within the context of the six tenets of FEG's investment philosophy.

#### **FEG SIX TENET REVIEW**

**CONVICTION** — Putnam will emphasize the higher quality segment of the structured products market in this strategy. It is targeting a gross return of 5% to 8% over a 3-5 year (full market) cycle and comparing itself against the BofA Merrill Lynch U.S. Treasury Bill Index, as few benchmarks exist that in any way meaningfully replicate this strategy. In other words, this is a high conviction, benchmark-agnostic, absolute return strategy. Putnam will seek its return target with an average annualized volatility (i.e., standard deviation) of 5% to 8%. Because the investment grade components of the structured products markets (i.e., RMBS, CMBS, and ABS) are priced at or near par and yield between 2% and 3%, it will emphasize investing in the higher quality part of the capital structure in more esoteric areas of the market where it has a high degree of conviction and can find securities that meet its return target. As of this review, those areas include the non-agency residential mortgage-backed securities (RMBS) space, the commercial mortgage-backed securities (CMBS) space, and derivatives in the collateralized mortgage obligation (CMO) space, where it will be investing in interest only (IO) and inverse IO bonds to isolate prepayment risk.

**CONSISTENCY** – The liquid markets and securitized products component of the fixed income platform at Putnam is overseen by Michael Salm (co-head of fixed income), a 25+ year investment veteran, who has been at Putnam since 1997, lending consistency to the investment process. Putnam has built out and maintained a dedicated team to this space, with a verifiable track record going back to 2009. Brett Kozlowski, CFA joined the team in 2008, with nearly 20 years of investment experience, primarily focused

on structured products. There has been minimal turnover on the team since the beginning of the track record, although Zachary Harrison left the team in the middle of 2016. His role was essentially that of a co-portfolio manager, and Putnam opted to back fill his responsibilities with younger personnel on the team. His departure does not detract from the overall consistency of the investment process or philosophy of the strategy.

**PRAGMATISM** — Putnam shows pragmatism through its ability to identify and retain talented, experienced investment professionals in niche areas of the market where it has the potential to add alpha. As it relates to structured products specifically, the team at Putnam has considerable depth and experience and are "model-driven" experts. The team is model-driven in the sense that its members fully understand the complex models used to derive key components of risk within structured products, including inherent biases and regulations that can change cash flows. As such, this understanding allows them to better exploit their competitive advantage.

**INVESTMENT CULTURE** – Like many larger investment organizations in major cities, Putnam suffers from the same challenges facing the others, namely, the potential for its employees to go "across the street" for additional compensation. This has largely not been the case as it relates to their structured products team. Aside from Harrison, there has been little turnover among key personnel since 2009. In FEG's multiple meetings and interactions with the team, we found them to be engaged, focused, and confident that the compensation structure in place at Putnam aligned them well with their investors. Specifically, it is performance based (centered around 3 years of performance), quantifiable, and professionals understand the structure, which aligns their interests with investors on performance. The key investment professionals dedicated to the management of this account are Salm, Kozlowski, and Jatin Misra, Ph.D., CFA.

**RISK CONTROL** – The team incorporates the work of William Schmitt, Ph.D., CFA and his team of 4 risk management professionals for oversight and analysis of the portfolio. Putnam's current risk framework has been in place for more than 15 years and each account is available to everyone on the team for review daily. Schmitt and his team are responsible for maintaining all risk models and reports to Brian Lenhardt, chief operating officer at Putnam. Schmitt's team acts independently, but sits in on all meetings and discussions regarding the portfolios and Schmitt physically sits on the trading floor at Putnam.

**ACTIVE RETURN** — FEG reviewed the Putnam Dedicated Mortgage Strategy performance with an understanding that the guidelines imposed by SITFO will somewhat different. Nevertheless, it provides a reasonable understanding of the team's capabilities. On a gross of fees basis, Putnam produced an annualized return of 10.3%. Using the Barclays U.S. Mortgage-Backed Securities Index (a high quality, RMBS only index), we note an annualized return of 3.6% over the same time. The standard deviation of Putnam's strategy was 5.7% versus 2.1% for the Index. Additionally, the max drawdown for the strategy was -10.9% versus -2.9% for the Index. The key takeaway is that the return target and standard deviation target for the strategy is in line with the where the structured products market is today and what Putnam has done historically.

**CONCERNS/CONCLUSION** – There are no material concerns with this recommendation as Putnam is a well-regarded investment organization that is well staffed with seasoned professionals. Despite one departure of significance in 2016, FEG notes the capabilities of the other team members more than offsets the departure. Furthermore, Putnam's investment philosophy and process suggest competence, which is bolstered by a track record that merits investment.

#### Disclosure

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# Manager Research Report - Putnam

Firm: Putnam

**Product:** Dedicated Mortgage (Separate Account)

Category: Income
Asset Class: Securitized

## Firm Background:

- Large investment management firm founded in 1937 with investments across Fixed Income, Equities and Asset Allocation strategies.
- \$154B in AUM as of 9/30/2016, with 49% in Fixed Income assets. They manage \$16.8B in Securitized assets.
- The firm is 90% owned by Great West Life Insurance, Inc. and 10% by employees.

## **Team Background:**

- The Fixed Income team is co-headed by Michael Salm who has ultimate decision making ability for the portfolio, while sector specialists are intimately involved in the bottom-up security selection. The key investment individuals for the account are:
  - o Michael Salm: Mr. Salm is a Co-Head of Fixed Income, specializing in liquid markets and securitized strategies. In this role, he oversees investment strategies related to mortgage and securitized products, interest-rate and volatility derivatives, and money markets. In addition, he manages trading operations and Putnam's Fixed Income quantitative teams. He is a portfolio manager of core global, core plus, global government, fixed income global alpha, and dedicated mortgage strategies, as well as fixed income hedge funds. Mr. Salm joined Putnam in 1997 and has been in the investment industry since 1989. Prior to joining Putnam, Mr. Salm was a Mortgage Specialist at BlackRock Financial Management from 1996 to 1997, a Vice President and Trader at Nomura Securities from 1994 to 1996, a Vice President and Structurer at Nikko Securities from 1993 to 1994, and an Analyst at Fitch Investor Services from 1991 to 1992. Mr. Salm earned a B.S. from Cornell University.
  - o Brett Kozlowski: Mr. Kozlowski is a Portfolio Manager in the Fixed Income Structured Credit group. He is responsible for developing investment strategies within securitized sectors, including agency mortgage-backed securities (MBS); non-agency residential mortgage-backed securities (RMBS); commercial mortgage-backed securities (CMBS); and asset-backed securities (ABS). In addition, he is a Portfolio Manager of Putnam Income Fund and assists in the management of several institutional client portfolios. He joined Putnam in 2008 and has been in the investment industry since 1997. Prior to joining Putnam, Mr. Kozlowski held roles of increasing responsibility at Fidelity Investments including Portfolio Manager from 2006 to 2008; Research Analyst from 2003 to 2006; Trader from 2001 to 2003; Portfolio Analyst from 2000 to 2001; and Research Associate from 1997 to 2000. He earned a B.S. from Massachusetts Institute of Technology.
  - Jatin Misra: Dr. Misra is a Quantitative Research Analyst in the Fixed Income Group. He
    provides quantitative research support, developing relative value strategies, risk models, and
    portfolio construction tools. Dr. Misra has three years of investment industry experience.
- RMBS Analyst Team: includes 2 sector specialist analysts and 3 surveillance focused analysts
- CMBS/ABS Analyst Team: includes 1 sector specialist analyst and 3 surveillance focused analysts

• In addition, the securitized team will be supported by the full Putnam investment infrastructure including the Macroeconomic Team (4 people), Risk Management (4 people), Global Investment Strategies (Product Management, 8 people), and Trading Operations (6 people)

#### **Investment Process:**

- The strategy seeks a return of 3 month LIBOR +5-8% over a full investment cycle by investing across a broad opportunity set of Residential mortgage-backed securities (RMBS), Commercial mortgage-backed securities (CMBS), Collateralized mortgage obligations (CMOs), Agency mortgage-backed securities (MBS), Asset-backed securities (ABS), and Derivatives (used to hedge undesired interest-rate risk in the strategy and to hedge volatility risk in our CMO holdings).
- The investment process is mostly bottom-up model-driven:
  - The investment process is built around sector specialists utilizing data driven models calibrated on historical and projected data, across multiple scenarios, to understand the factors which impact cash flows. The sector specialists attempt to identify potential alphagenerating strategies in their areas of expertise by finding mispriced risk:
    - Mortgage credit risk reflects the impact of delinquencies, defaults, and eventual recoveries in both residential and commercial mortgage pools (CMBS and RMBS).
    - Mortgage prepayment risk reflects the impact of changes in expected refinancing behavior.
  - Once suitable investments have been identified, the sector specialists provide a forward-looking return and risk (volatility) distribution on each strategy for use during portfolio construction. The strategy has preferences for sub-sectors and securities for which they have confidence in the underlying data and model outputs, as well as the ability to trade based on market activity.

### **Risk Management:**

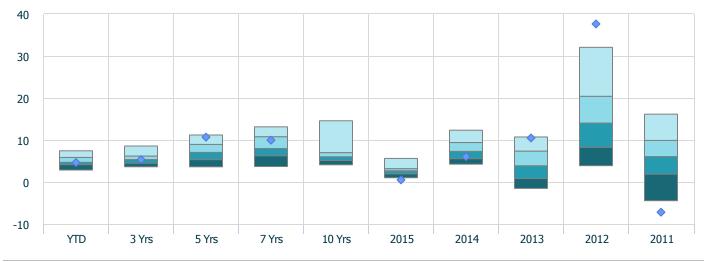
- From a portfolio management perspective, they see the world through four major risk lenses where portfolio construction is centered around these four risks and sizing them appropriately:
  - o Term structure risk
  - Credit risk
  - o Prepayment risk
  - Liquidity risk
- In addition to modeling the above portfolio risks, they utilize historical simulation, stress testing, VaR, and back-testing of the risk models.
- Risk for the portfolio is overseen by a 5-person team, headed by William Schmidt, Ph.D., who are
  responsible for maintaining the risk modeling and reporting. They report directly to the Chief
  Operating Officer.

# DUE DILIGENCE SUMMARY

Due Diligence Item	Completed	Comments
Initial Call or On-Site Meeting	Yes	Onsite June 1, 2016
QER	Yes	
RFI Questionnaire/DDQ	Yes	
FEG Compliance Memo	Yes	
Performance Data	Yes	
References	No	Not required for "traditional" managers
Form ADV	Yes	
Audited Financials	No	Not required for "traditional" managers
SEC Audit Letters	Yes	
GIPS Compliance Report	Yes	
Subscription/Offering Documents	No	Not required for "traditional" managers

## eVestment US Mortgage Fixed Income - Non-Traditional

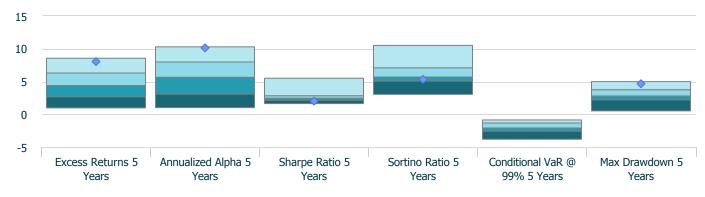
# **Putnam Investments**Putnam Dedicated Mortgage Strategy



Returns: Trailing						
	Putnam Dedicated Mortgage Strategy					
YTD	4.63					
3 Years	5.33					
5 Years	10.68					
7 Years	9.96					
10 Years						

Reti	urns: Calendar Years
	Putnam Dedicated Mortgage Strategy
2015	0.50
2014	6.03
2013	10.49
2012	37.64
2011	-7.19
2010	16.07
2009	
2008	
2007	
2006	

## **Efficiency Stats**



## **Efficiency Stats**

	5 Years	7 Years	10 Years	
<b>Excess Returns</b>	8.03	6.47		
Alpha	10.14	10.41		
Standard Deviation	5.30	5.76		
<b>Semi Deviation</b>	4.31	5.32		
Skewness	0.58	0.15		
Kurtosis	0.89	1.42		
Max Drawdown	4.66	10.86		
Sharpe Ratio	2.00	1.71		
Sortino Ratio	5.33	3.65		
Calmar Ratio	2.29	0.92		
CVaR @ 99%		-4.45		

## **Correlation: 5 Years**

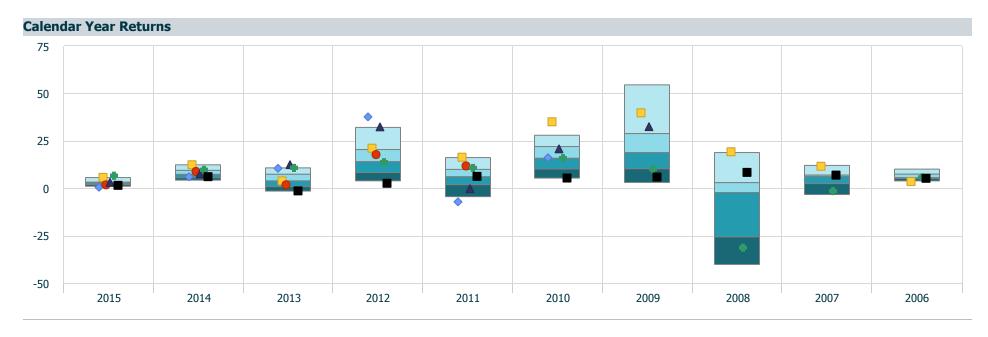
	Putnam Dedicated Mortgage Strategy	Barclays US Mortgage Backed Securities	Equities	High Yield	Commodities	Long Treasuries
Putnam Dedicated Mortgage Strategy	1.00	0.09	0.29	0.36	0.24	-0.12
Barclays US Mortgage Backed Securities	0.09	1.00	-0.02	0.19	-0.02	0.71
Equities	0.29	-0.02	1.00	0.80	0.49	-0.41
High Yield	0.36	0.19	0.80	1.00	0.60	-0.12
Commodities	0.24	-0.02	0.49	0.60	1.00	-0.30
Long Treasuries	-0.12	0.71	-0.41	-0.12	-0.30	1.00

**Putnam Dedicated Mortgage Strategy** 



Trailing Returns													
Firm Name	Product Name	YTD	Rank	1 Year	Rank	3 Years	Rank	5 Years	Rank	7 Years	Rank	10 Years	Rank
Putnam Investments	Putnam Dedicated Mortgage Strategy	4.63	52	3.58	83	5.33	50	10.68	10	9.96	40		
DoubleLine	Strat MBS (TCW Link)	6.99	12	6.57	12	8.57	5	10.13	13	14.61	1	16.90	1
Manulife Asset Management	Absolute Return Mortgage	4.90	43	4.51	54	5.93	32	7.44	41				
TCW	TCW Opportunistic MBS	4.40	62	5.03	40	6.44	18	11.08	7	11.78	15		
Schroder Investment Management	Enhanced MBS Investment Strategy	5.10	36	5.26	33	7.88	8	9.33	21	10.55	31	4.09	95
Barclays Index	Barclays US Mortgage Backed Securities	3.72	81	3.61	82	3.61	95	2.65	100	3.49	97	4.65	88

**Putnam Dedicated Mortgage Strategy** 



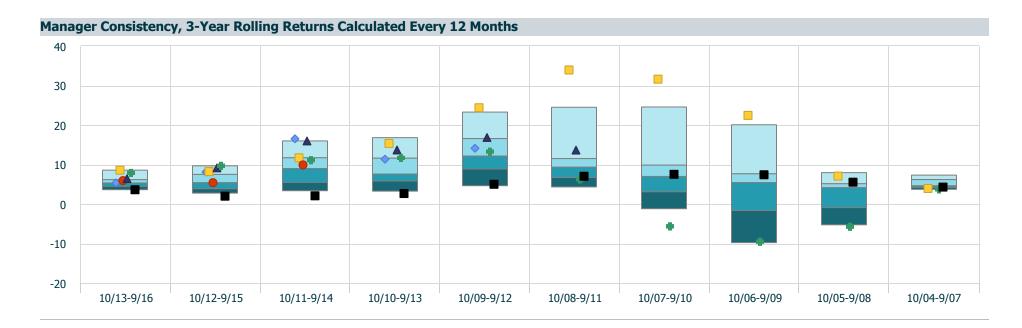
Putnam: Putnam Dedicated Mortgage Strategy Schroders: Enhanced MBS Investment Strategy DoubleLine: Strat MBS (TCW Link)
Barclays Index: Barclays US Mortgage Backed Securities

Manulife AM: Absolute Return Mortgage

TCW: TCW Opportunistic MBS

Calendar Year Re	eturns																				
Firm Name	Product Name	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	2010	Rank	2009	Rank	2008	Rank	2007	Rank	2006	Rank
Putnam Investments	Putnam Dedicated Mortgage Strategy	0.50	98	6.03	66	10.49	9	37.64	3	-7.19	100	16.07	44								
DoubleLine	Strat MBS (TCW Link)	5.70	5	12.37	5	3.85	51	21.08	22	16.36	5	35.03	2	39.76	14	19.21	4	11.58	8	3.51	100
Manulife Asset Management	Absolute Return Mortgage	1.77	81	8.85	30	1.78	65	17.72	35	11.74	10										
TCW	TCW Opportunistic MBS	3.10	28	7.59	39	12.46	1	32.37	5	-0.22	81	20.79	34	32.49	17						
Schroder Investment Management	Enhanced MBS Investment Strategy	6.60	2	9.70	20	10.74	5	13.73	54	10.70	16	15.90	47	10.09	77	-31.35	81	-1.51	88	5.71	31
Barclays Index	Barclays US Mortgage Backed Securities	1.51	86	6.08	65	-1.41	93	2.59	100	6.23	49	5.37	95	5.89	93	8.34	12	6.90	31	5.22	71

**Putnam Dedicated Mortgage Strategy** 



Putnam: Putnam Dedicated Mortgage Strategy
TCW: TCW Opportunistic MBS

DoubleLine: Strat MBS (TCW Link)

Schroders: Enhanced MBS Investment Strategy

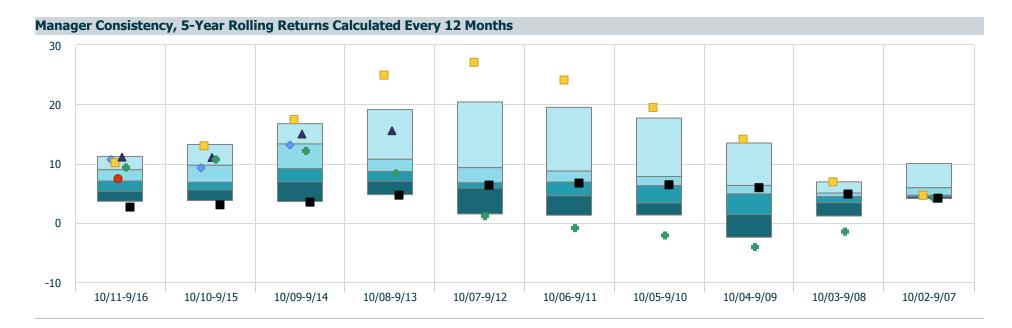
Manulife AM: Absolute Return Mortgage

■ Barclays Index: Barclays US Mortgage Backed Securities

## 3- Year Rolling Returns

5- Year Ko	ning keturn	5																			
Firm Name	Product Name	Returns (10/2013 - 09/2016)	Ran	Returns (10/2012 - k 09/2015)	Rank	Returns (10/2011 - (09/2014)	Rani	Returns (10/2010 - k 09/2013)	Rani	Returns (10/2009 - k 09/2012)	Ran	Returns (10/2008 - k 09/2011)	Rani	Returns (10/2007 - (09/2010)	Ran	Returns (10/2006 - k 09/2009)	Ran	Returns (10/2005 - k 09/2008)	Ran	Returns (10/2004 - k 09/2007)	Rank
Putnam Investments	Putnam Dedicated Mortgage Strategy		50	8.10	22	16.51	3	11.35	27	14.11	35										
DoubleLine	Strat MBS (TCW Link)	8.57	5	8.21	20	11.68	27	15.34	9	24.37	4	33.92	1	31.60	1	22.43	4	7.06	13	3.93	86
Manulife Asset Management	Absolute Return Mortgage	5.93	32	5.40	50	9.90	42														
TCW	TCW Opportunistic MBS	6.44	18	9.16	10	15.97	5	13.68	13	16.85	23	13.66	14								
Schroder Investment Management	Enhanced MBS Investment Strategy	7.88	8	9.68	5	11.10	35	11.67	23	13.26	43	6.24	82	-5.65	100	-9.55	92	-5.74	95	3.69	95
Barclays Index	Barclays US Mortgage Backed Securities	3.61	95	1.98	99	2.07	100	2.65	100	4.99	94	7.02	73	7.51	45	7.40	27	5.52	21	4.28	73

**Putnam Dedicated Mortgage Strategy** 



Putnam: Putnam Dedicated Mortgage StrategyTCW: TCW Opportunistic MBS

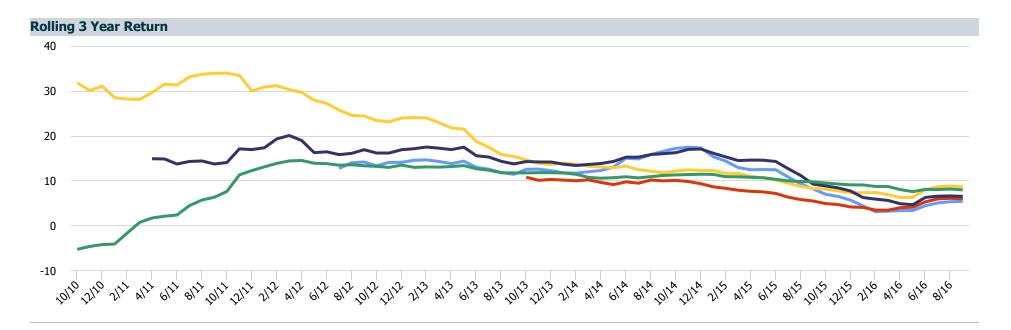
DoubleLine: Strat MBS (TCW Link)

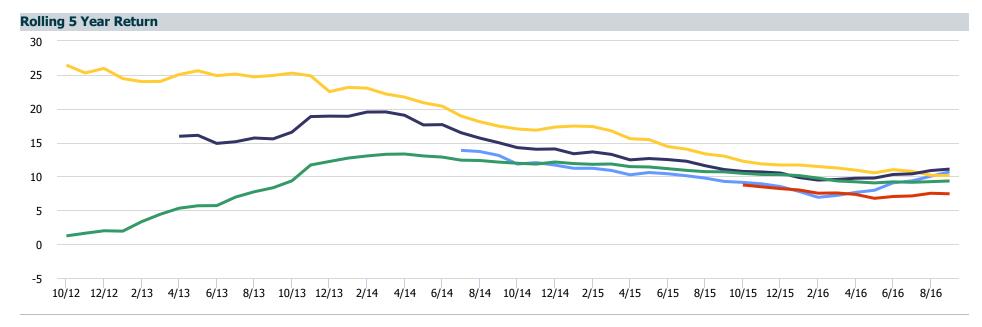
Schroders: Enhanced MBS Investment Strategy

Manulife AM: Absolute Return Mortgage
 Barclays Index: Barclays US Mortgage Backed Securities

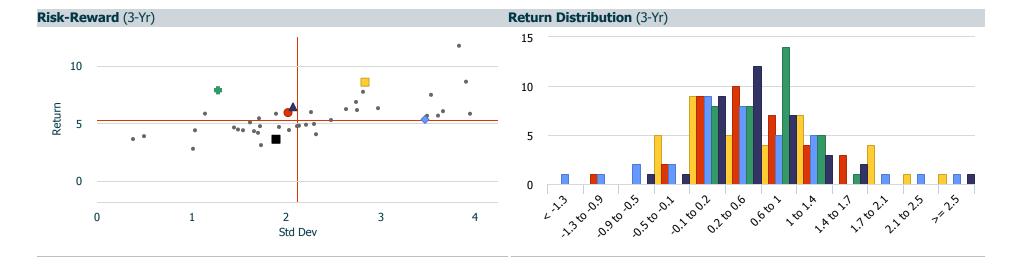
5-Year Rol	ling Return	S																			
Firm Name	Product Name	Returns (10/2011 - 09/2016)	Rank	Returns (10/2010 - 09/2015)	Rank	Returns (10/2009 - 09/2014)	Rank	Returns (10/2008 - 09/2013)	Rank	Returns (10/2007 - 09/2012)	Rank	Returns (10/2006 - 09/2011)	Rank	Returns (10/2005 - 09/2010)		Returns (10/2004 - 09/2009)	Rank	Returns (10/2003 - 09/2008)	Rank	Returns (10/2002 - 09/2007)	Rank
Putnam Investments	Putnam Dedicated Mortgage Strategy	10.68	10	9.26	29	13.11	30														
DoubleLine	Strat MBS (TCW Link)	10.13	13	13.00	7	17.43	2	24.91	1	27.08	1	24.09	1	19.46	3	14.11	4	6.90	5	4.63	47
Manulife Asset Management	Absolute Return Mortgage	7.44	41																		
TCW	TCW Opportunistic MBS	11.08	7	11.02	15	14.99	18	15.55	14												
Schroder Investment Management	Enhanced MBS Investment Strategy	9.33	21	10.68	18	12.12	39	8.33	60	1.12	100	-0.90	100	-2.14	100	-4.10	100	-1.49	100	4.10	89
	Barclays US Mortgage Backed																				
Barclays Index	Securities	2.65	100	3.03	100	3.48	97	4.66	96	6.35	70	6.69	51	6.41	48	5.92	32	4.84	36	4.14	84

**Putnam Dedicated Mortgage Strategy** 





**Putnam Dedicated Mortgage Strategy** 



Universe: eVestment US Mortgage Fixed Income - Non-Traditional

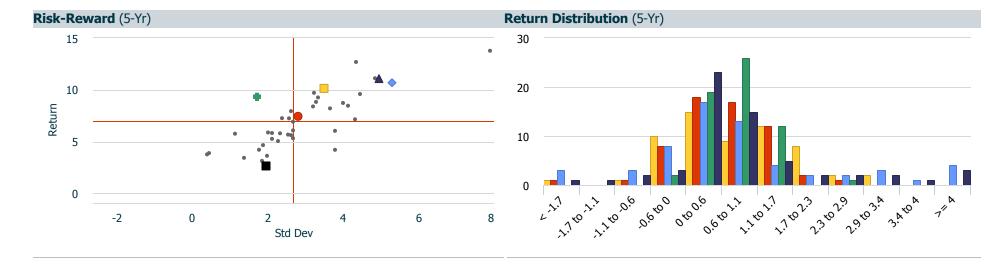
Putnam: Putnam Dedicated Mortgage Strategy TCW: TCW Opportunistic MBS Universe Median DoubleLine: Strat MBS (TCW Link)
Schroders: Enhanced MBS Investment Strategy

Manulife AM: Absolute Return Mortgage
Barclays Index: Barclays US Mortgage Backed Securities

Risk-Reward (3-Yr)

Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Putnam Investments	Putnam Dedicated Mortgage Strategy	5.33	3.48	0.16	3.85	-0.02	4.66	89.65	-96.17	1.51	2.97	1.14	2.60
DoubleLine	Strat MBS (TCW Link)	8.57	2.84	0.74	0.04	1.29	0.49	186.85	20.50	2.99	18.98	17.49	9.07
Manulife Asset Management	Absolute Return Mortgage	5.93	2.02	-0.21	0.16	0.23	1.05	101.66	-99.01	2.89	8.00	5.65	5.57
TCW	TCW Opportunistic MBS	6.44	2.08	1.74	5.68	0.09	0.90	99.86	-153.58	3.05	16.11	7.13	11.75
Schroder Investment Management	Enhanced MBS Investment Strategy	7.88	1.28	-0.07	-0.61	0.39	0.11	137.51	-121.15	6.09	119.32	71.60	62.21
Barclays Index	Barclays US Mortgage Backed Securities	3.61	1.90	0.24	-0.20	1.00	1.09	100.00	100.00	1.85	4.64	3.31	2.63

**Putnam Dedicated Mortgage Strategy** 



Universe: eVestment US Mortgage Fixed Income - Non-Traditional

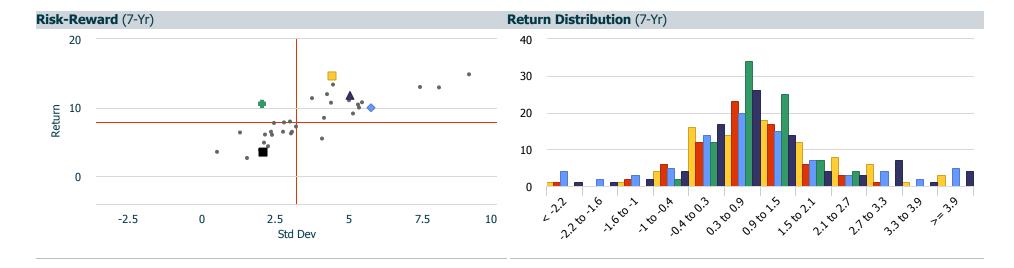
Putnam: Putnam Dedicated Mortgage Strategy TCW: TCW Opportunistic MBS Universe Median DoubleLine: Strat MBS (TCW Link)
Schroders: Enhanced MBS Investment Strategy

Manulife AM: Absolute Return Mortgage
Barclays Index: Barclays US Mortgage Backed Securities

## Risk-Reward (5-Yr)

Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Putnam Investments	Putnam Dedicated Mortgage Strategy	10.68	5.30	0.58	0.89	0.24	4.66	230.79	-89.37	2.00	5.33	2.29	4.67
DoubleLine	Strat MBS (TCW Link)	10.13	3.51	-0.31	1.44	1.16	3.70	256.35	15.85	2.86	7.58	2.74	7.03
Manulife Asset Management	Absolute Return Mortgage	7.44	2.83	-0.73	3.08	0.48	3.55	165.58	-47.26	2.60	5.57	2.09	5.05
TCW	TCW Opportunistic MBS	11.08	4.96	0.73	3.53	0.28	3.85	224.61	-134.50	2.22	5.87	2.88	6.83
Schroder Investment Management	Enhanced MBS Investment Strategy	9.33	1.73	0.59	2.27	0.31	0.54	185.78	-122.17	5.34	37.23	17.28	40.72
Barclays Index	Barclays US Mortgage Backed Securities	2.65	1.96	-0.18	1.06	1.00	2.85	100.00	100.00	1.31	2.47	0.93	1.92

**Putnam Dedicated Mortgage Strategy** 



Universe: eVestment US Mortgage Fixed Income - Non-Traditional

Putnam: Putnam Dedicated Mortgage Strategy TCW: TCW Opportunistic MBS Universe Median DoubleLine: Strat MBS (TCW Link)
Schroders: Enhanced MBS Investment Strategy

Manulife AM: Absolute Return Mortgage
 Barclays Index: Barclays US Mortgage Backed Securities

## Risk-Reward (7-Yr)

Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Putnam Investments	Putnam Dedicated Mortgage Strategy	9.96	5.76	0.15	1.42	-0.07	10.86	166.18	-131.08	1.71	3.65	0.92	3.32
DoubleLine	Strat MBS (TCW Link)	14.61	4.43	0.33	0.96	1.21	3.70	293.68	-26.50	3.28	11.82	3.95	10.56
Manulife Asset Management	Absolute Return Mortgage												
TCW	TCW Opportunistic MBS	11.78	5.04	0.55	2.00	0.23	4.21	198.86	-146.63	2.32	6.40	2.80	6.25
Schroder Investment Management	Enhanced MBS Investment Strategy	10.55	2.08	0.46	0.85	0.40	0.66	185.16	-106.37	5.04	31.90	15.98	35.27
Barclays Index	Barclays US Mortgage Backed Securities	3.49	2.11	-0.31	0.51	1.00	2.85	100.00	100.00	1.62	3.20	1.23	2.37

## **Putnam Dedicated Mortgage Strategy**

<b>Correlation Matrix (3-Y</b>	r)									
	Putnam Investments	DoubleLine	Manulife Asset Management	TCW	Schroder Investment Management	Barclays US Mortgage Backed Securities	Equities	High Yield	Commodities	Long Treasuries
<b>Putnam Investments</b>	1.00	0.08	0.72	0.86	0.36	-0.01	0.40	0.51	0.32	-0.21
DoubleLine	0.08	1.00	0.28	0.20	0.74	0.87	-0.28	0.00	-0.17	0.82
Manulife Asset Management	0.72	0.28	1.00	0.71	0.42	0.22	0.25	0.41	0.24	0.07
TCW	0.86	0.20	0.71	1.00	0.35	0.08	0.29	0.37	0.12	-0.06
Schroder Investment Management	0.36	0.74	0.42	0.35	1.00	0.58	-0.27	0.03	-0.02	0.50
Barclays US Mortgage Backed Securities	-0.01	0.87	0.22	0.08	0.58	1.00	-0.12	0.14	-0.02	0.77
Equities	0.40	-0.28	0.25	0.29	-0.27	-0.12	1.00	0.78	0.33	-0.27
High Yield	0.51	0.00	0.41	0.37	0.03	0.14	0.78	1.00	0.59	-0.04
Commodities	0.32	-0.17	0.24	0.12	-0.02	-0.02	0.33	0.59	1.00	-0.26
Long Treasuries	-0.21	0.82	0.07	-0.06	0.50	0.77	-0.27	-0.04	-0.26	1.00

Correlation Matrix (5-Y	r)									
	Putnam Investments	DoubleLine	Manulife Asset Management	TCW	Schroder Investment Management	Barclays US Mortgage Backed Securities	Equities	High Yield	Commodities	Long Treasuries
Putnam Investments	1.00	0.56	0.72	0.84	0.59	0.09	0.29	0.36	0.24	-0.12
DoubleLine	0.56	1.00	0.59	0.67	0.72	0.65	0.01	0.20	0.05	0.51
Manulife Asset Management	0.72	0.59	1.00	0.60	0.41	0.33	0.17	0.37	0.24	0.16
TCW	0.84	0.67	0.60	1.00	0.66	0.11	0.32	0.35	0.26	-0.09
Schroder Investment Management	0.59	0.72	0.41	0.66	1.00	0.35	0.06	0.19	0.08	0.24
Barclays US Mortgage Backed Securities	0.09	0.65	0.33	0.11	0.35	1.00	-0.02	0.19	-0.02	0.71
Equities	0.29	0.01	0.17	0.32	0.06	-0.02	1.00	0.80	0.49	-0.41
High Yield	0.36	0.20	0.37	0.35	0.19	0.19	0.80	1.00	0.60	-0.12
Commodities	0.24	0.05	0.24	0.26	0.08	-0.02	0.49	0.60	1.00	-0.30
Long Treasuries	-0.12	0.51	0.16	-0.09	0.24	0.71	-0.41	-0.12	-0.30	1.00



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\$1,170/\$25

\$300

# Investment Cover Page – SR Frontier

Firm: Sloane Robinson, LLP Firm / Strategy

AUM (\$mm):

**Product:** SR Global Fund (Class M)

Frontier

**Target Fund Size** 

(\$mm):

Category: Growth Strategy April 2011

**Inception Date:** 

**Asset Class:** Emerging Markets **Target Portfolio** 1% - 2%

Weight:

**Sub-Asset Class:** Frontier Markets **Liquidity** Monthly / 90 days' notice

**Benchmark/** MSCI Frontier Index / Frontier **Risks:** Political risk, equity beta /

Peer Group: Equity Managers market risk

**Fees:** 1% and 15% (Incentive fee payable at the end of 2 year rolling periods if both

outperformance versus the index and the high-water mark (net of all fees) has been

achieved)

**Analyst:** Peter Madsen

## **Investment Thesis / Opportunity:**

- Frontier market equity valuations are inexpensive relative to emerging and developed markets
- Frontier markets have higher growth rates relative to developed and many emerging markets
- Aside from beta driven tailwinds of demographic and economic growth and possible multiple expansion, active management has been successful in these markets to offset the volatility and add value

## **Rationale for Hiring Manager:**

- Firm and team have significant experience in global and emerging markets
- Commitment to keep AUM size small enough to stay diversified and be selective within the frontier market segment
- Macroeconomic analysis is a priority at the firm. The detailed country by country framework provides a strong supporting backdrop for the fundamental analysis / stock selection

### **Rationale for Firing Manager:**

• While the firm is comprised of several important senior contributors, the strategy relies primarily on CJ Morrell (Portfolio Manager) and Ed Butchart (CIO). Either of these individuals leaving would give us reason to terminate the relationship.

## **Favorable Aspects of Strategy:**

- The strategy is benchmark agnostic. This is important in frontier markets as the benchmarks are not well diversified
- A concentrated portfolio is of interest to us in this strategy as we intend to have significant core/passive allocations to emerging markets including frontier
- The strategy allows for hedging currency and equity risk. The hedging component is small given the limited ability and cost to short in frontier markets. Exposures are adjusted mostly through holding cash.
- The firm's location in London is appealing as it provides an important global context
- The significant effort put into the macroeconomic backdrop is quite supportive of the strategy

### **Unfavorable Aspects of Strategy:**

- In general, frontier markets carry liquidity risk. The liquidity terms of Sloane Robinson provide adequate protection, but it is important to keep this in mind.
- We appreciate the volatility of frontier markets and the potential for flows to shape the returns of this asset class, and thus are staring with a 1% allocation and not anticipating more than 2%.
- The fund has only \$25M in current AUM. We will be first institutional client and represent almost half of the fund. The firm has more than \$1bn in total assets, is just now starting to raise assets for this strategy with an excellent 5-year track record run by an experienced team. We believe this qualitative risk is offset by these characteristics, as well as by the expected returns from this capacity constrained strategy.

#### **Rationale for Overweight:**

• We are investing \$20M or approximately 1%. We view this as a "satellite" position within emerging equity. Based on potential market opportunity and continued success of SR, we may increase our allocation to as much as 2%.

## **Rationale for Underweight:**

• Significant outperformance or high valuations

For ODD and additional quantitative analysis (see FEG memo)

## Sloane Robinson Frontier Portfolio

Sloane Robinson LLP

FRONTIER MARKETS ALL CAP- RECOMMENDED

## MANAGER SUMMARY

Sloane Robinson LLP (Sloane Robinson) is an asset manager investing in developed, emerging, and frontier markets equities. The Firm was founded in 1993 by Hugh Sloane and George Robinson. Significant changes occurred in 2012 when a new CIO and CEO were appointed, the emerging markets and Asian mandates were restructured into a global equities mandate, and the investment process was modified. The Manager experienced significant redemptions as a result of the changes. Despite the role changes all key investment professionals remained with the Firm. Sloane Robinson is majority owned by Sloane, Robinson, and Richard Chenevix-Trench. An early investor in the firm owns less than 10% of the firm. Sloane Robinson's investor base includes institutions, individuals, and family offices, in addition to their own capital. The firm is headquartered and nearly all employees work in the London office.

## STRATEGY SUMMARY

Sloane Robinson follows an equity based market direction approach to investing. The investment process is based upon detailed bottom-up fundamental analysis of companies that may lead to investible themes. Top-down analysis is another source of investment opportunities, as well as a risk management tool. Where deemed appropriate, the Manager can utilize index and currency derivative overlays for hedging and investment purposes. Index overlays are typically driven by shorter term tactical views on markets where time to implement is important. Foreign exchange overlays can be used to hedge or an active view is taken to maximize the base currency return. The portfolio is concentrated in a limited number of stocks to create a competition for capital to help ensure investments are the team's best ideas at any time.

The investment process is designed to identify companies that have characteristics of either compounders, dynamic change, or deep value. Sloane Robinson believes these three types of companies combined in a portfolio will generate better returns than the index. Compounders are companies with defensive market share and have sustainable competitive advantages, while dynamic change companies are those where consensus does not appropriately account for an important aspect of the operating environment. Deep value companies simply are cheap versus their ability to generate cash flow.

## FFG'S SIX-TENET PERSPECTIVE

**CONVICTION /** Sloane Robinson manages a concentrated portfolio comprised of 30-40 stocks. The Manager also has conviction to vary exposures based on the team's top-down macro views. Focusing on one philosophy and process across the firm demonstrates conviction in their investment approach. The manager also has shown a willingness to limit assets under management in the strategy.

**CONSISTENCY /** Sloane Robinson has an experienced and stable investment team. The founders of the Firm have successfully transitioned investment team and corporate leadership through ongoing involvement in portfolio management at the Firm. The core of the investment process has remained consistent over time.

**PRAGMATISM /** The Manager recognizes their ability to identify attractive investment opportunities and manage risk through bottomup and top-down analysis is their competitive advantage. Sloane Robinson's flexible mandate allows the team to identify differentiated investments in an inefficient area of the equity markets.

**INVESTMENT CULTURE /** Sloane Robinson maintains a collegial yet competitive culture where the team is focused on generating the best absolute returns for their investors. The culture is developed out of what the founders of the Firm established and the new generation of leadership. Sloane Robinson has a strong reputation and respect among peers in the industry.

RISK CONTROL / Risk is assessed at the investment and firm level. Sloane Robinson has a risk committee as a central point for all risks at the Firm to be measured. The committee is responsible for helping to ensure that appropriate systems and controls exist for the management of each identified risk. The risks associated with a particular investment is an important component of every investment decision and the Manager has controls in place to manage risk exposures.

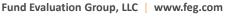
ACTIVE RETURN / Sloane Robinson has generated a strong track record of adding value relative to the broad frontier markets index. Stock selection and top-down macro decisions have been the primary drivers of long-term returns as designed and should be expected.

#### **FUND TERMS LOCATION** FIRM / STRATEGY DETAILS AUM (\$M) Status Lockup: None **Sloane Robinson LLP** 36 Queen Street **Redemptions:** Monthly Firm \$1,313.0M London, England EC4R 1BN Notice: 90 days \$26.8M Open Strategy United Kingdom **Openings:** Monthly Management Fee: 1.00% **SERVICE PROVIDERS** Incentive Fee: 15.0% Auditor: PricewaterhouseCoopers Hurdle: MSCI Frontier Markets Index Legal Advisor(s): Dechert LLP (English and U.S. law) and Mourant Minimum: \$1 million Ozannes (Cayman law)

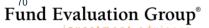
**KEY PEOPLE** 

Other investment vehicles or classes may be available. Terms, performance, and portfolio characteristics may differ.

Confidential - Not for Redistribution Report Date: October 2016



Ed Butchart - CIO & Portfolio Manager



Christopher (C.J.) Morrell - Managing Executive & Portfolio Manager

Prime Broker(s): Morgan Stanley and Credit Suisse

Administrator: Morgan Stanley Fund Services

## RECOMMENDATION SUMMARY

Fund Evaluation Group, LLC. (FEG) recommends Sloane Robinson Frontier Portfolio for investors seeking an unconstrained allocation to frontier markets within a globally diversified equity portfolio. The Fund could serve as a core allocation to frontier markets or augment a portfolio of long/short equity hedge funds. FEG expects the fund to deliver strong risk-adjusted returns versus the frontier markets index over a full market cycle, but investors may experience short-term periods of underperformance relative to benchmarks given the concentrated and benchmark-agnostic portfolio. An investment in the Frontier Portfolio should also have lower correlation to other equity-related investments. While the unconstrained approach is attractive, Sloane Robinson's primary value add is stock selection and top-down macro analysis, therefore, we would be concerned if shorting and managing gross and net exposures became more prevalent and a bigger driver of returns. Additionally, FEG believes C.J. Morrell or Ed Butchart are the key decision makers responsible for the strong track record of the strategy. If they were no longer involved in the management of the Fund, FEG would revisit the recommendation. Sloane Robinson does not have a key-man provision in place for either individual.

#### **INVESTMENT MERITS /**

- Sloane Robinson has demonstrated over multiple decades an ability to generate attractive absolute returns in non-U.S. equity markets through an unconstrained investment approach. While the track record of the Frontier Portfolio is shorter, the inefficiencies in the markets and the Manager's ability to exploit the inefficiencies are apparent in the returns generated. Frontier markets are in earlier stages of development as are frontier markets indexes allowing for significant value add for managers unconstrained by benchmark exposures.
- The investment approach is disciplined and straightforward. Combining bottom-up and top-down analysis is important in an area like frontier markets where macro issues can have as much of an impact on equity market performance as company fundamentals.
- Sloane Robinson exhibits a depth of knowledge and expertise of companies through their fundamental research that is necessary to develop differentiated views and add value relative to the index and other frontier markets funds. Morrell and Butchart have distinguished backgrounds that form their views and were the basis for forming the investment approach that has generated an impressive track record. Their factor-agnostic approach of identifying compounders and companies undergoing dynamic change in addition to deep value opportunities helps to prevent stylistic headwinds to performance.

#### **INVESTMENT CHALLENGES /**

- Frontier markets are less liquid markets, thus managing a long/short equity strategy can be challenging. Sloane Robinson has historically effectively managed these risks associated with long/short equity investing in emerging and frontier markets, but the lack of development and liquidity in frontier markets constrains the amount of shorting and hedging a manager can implement in portfolios.
- Given frontier markets are less liquid, careful consideration must be given to liquidity of individual positions and the capacity of the Frontier Portfolio. The Manager has stressed the willingness to close early to preserve their ability to implement their approach, but capping the Fund to the expected capacity of \$250-300 million could be difficult for Sloane Robinson. Limiting assets under management is challenging especially when there is great interest in the approach or the asset class.
- Despite the investment case that can be made for frontier markets over the medium- to long-term, there are substantial risks. As is the case with many emerging markets, investors need to be comfortable with unpredictable events and the possibility for negative returns. Sloane Robinson's absolute return approach historically has limited losses, but there could be periods where the Manager is unable to produce positive absolute or relative returns.

#### PORTFOLIO CONSTRUCTION /

- Morrell, as portfolio manager, is ultimately responsible for all decisions as it pertains to whether stocks are purchased or sold, position sizing, and other portfolio construction issues. The portfolio manager relies on analysts to provide detailed research on companies, however, Morrell is also engrained in researching companies independently or alongside analysts. Thus, investment decisions are often discussed with members of the team and not made in isolation.
- While the Manager has an unconstrained approach to where and what they will invest in, the Fund will always be concentrated with 30-40 holdings. Sloane Robinson believes this provides an appropriate amount of diversification while preserving the importance each position has in the Fund.
- Sizing of positions is a function of risk and return expectations. Average position size is approximately 3%, with high conviction positions with attractive risk and return prospects typically weighted at 5-6%. Rarely do positions exceed 7% of the Fund.
- Country and sector exposures are typically the residual of the underlying equity positions held, although the portfolio manager will work in conjunction with the CIO to develop top-down macroeconomic views. Macro analysis can identify attractive investment opportunities and potential risks, thus guiding research efforts and influencing positioning in sectors or countries. Where deemed appropriate by the manager, Sloane Robinson will implement index and currency derivative overlays for hedging and investment purposes. These can have significant impacts on net exposures to countries and sectors. Typically sector exposures are less than 30%.
- While shorting individual equities is not expected and historically has not been a significant part of the portfolio, Sloane Robinson reserves the ability to short in the Frontier Portfolio. Individual equity shorts have never surpassed 10% of the Fund. Index shorts have been used to a greater extent with the intent to reduce exposure or risk. Derivative instruments used could include options, futures, ETFs, and forwards. The Manager prefers options due to limited expected downside risk (typically the premium). When hedging, Sloane Robinson often seeks to maintain the long equity positions through a short term period of uncertainty but mitigate potential downside risk through a hedge. There often is a bet mismatch, however, between the available instrument for hedging purposes and the underlying portfolio held. A clear understanding and knowledge of the different characteristics is important. Sloane Robinson has a favorable view on frontier markets over full market cycles, therefore, shorting is not expected to dominate the fund and is often only used for brief periods.
- Cash is considered the low risk asset the Manager can allocate to during structural shifts in market environment in order to adjust exposures. This is due to the lack of availability of derivatives to adjust exposures. If risks are more structural in nature and likely to persist beyond the near term, the Manager's preference is to avoid expanding the gross exposure when reducing the net position and allocate to cash. The maximum cash exposure was approximately 40% in December 2014.

#### **RISK MANAGEMENT AND OPERATIONS /**

- Sloane Robinson employs a risk committee approach to managing risk. The committee is chaired by the CEO who is functionally independent from the investment team and has responsibility for risk across all aspects of the Firm. The CIO, head of legal and compliance, and the head of trading are members of the risk committee.
- The risk committee is responsible for 1) allocation of day to day management of each risk to the appropriate team function or committee within the Firm, 2) appropriate policies and procedures and other controls are in place to help ensure that the relevant risks are managed in a prudent manner, 3) appropriate reporting and escalation is carried out by the relevant team or committee to which responsibility has been allocated. The processes underpinning the risk committee are the investment team meeting (addresses potential impact of market events and individual stock positions and macro views held), formal portfolio risk reviews (monthly meetings between portfolio manager, CIO, and CEO to analyze portfolio composition alongside analysis of potential risks to positioning going forward), counterparty risks review (weekly assessment of the counterparty and credit risk exposures across the Firm and Funds by the head of trading), and the operations meeting (biweekly meetings addressing issues related to operational systems and procedures).
- Sloane Robinson has instituted sufficient backup and contingency plans should a problematic event occur.
- The Manager has established an institutional-caliber operational infrastructure. The Firm utilizes highly regarded service providers. FEG's on-site review and references (including service providers such as prime brokers) found the Firm's policies and procedures to be appropriate.
- ISDA (International Swaps and Derivatives Association) agreements are in place with Morgan Stanley, Deutsche Bank, and Goldman Sachs. There are differences in the exact wording used across the counterparties according to their standards, but NAV (net asset value) triggers are set at declines of (i) 15% or more of NAV in a month; (ii) 25% or more of NAV over 3 months; and (iii) 35% or more of NAV over 12 months. In some cases, definitions of NAV may exclude withdrawals and redemptions (so as to focus on performance related declines), although in those cases an absolute NAV floor or absolute 12 month trigger has been agreed to.

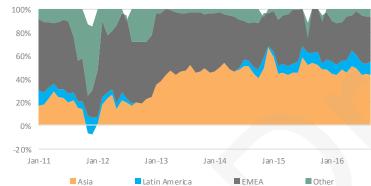
## EXPOSURE ANALYSIS

Exposures are a direct result of the investment team's views on individual companies and markets. Sloane Robinson combines top-down macro views and bottom-up research to identify high conviction investments, and thus the portfolio weighting decision. The fund's sector and country/regional exposures are expected to vary significantly over time. The Manager sets price targets with a 12-month horizon, which can lead to significant turnover. Historical turnover has averaged between 100-175%. When changes occur they are often meaningful given the concentration of the Fund. Sector allocations are expected to be less than 30% of the Fund. With the index currently constructed with approximately 50% in the financials sector, there may be times where the manager has greater than 30% exposure in a sector. Historically, the financials sector exposure has only modestly eclipsed the 30% level. Market cap allocation is expected to vary over time, with periods where small cap comprises a significant portion of the fund and periods where large cap comprises a significant portion of the fund. FEG would expect small cap and less liquid stocks to continue to be meaningful weights in the Fund. Should Sloane Robinson grow assets under management meaningfully past their expected capacity of \$250-300 million, FEG believes that could prevent greater allocations to small cap stocks. Cash levels may increase to reduce risk if the Manager has structural concerns about frontier markets. Cash will infrequently comprise a significant portion of the Fund since the approach is expected to be net long. Some short-term periods of high cash can also be driven by the liquidation of large positions and persist until suitable investment opportunities are identified.

In general the portfolio has not hedged currency. This is mainly due to the inability or high costs associated with hedging frontier currencies. When currency hedging has been used it is typically via a forward contract. The lack of derivative instruments means that it has also been rare that underlying equity exposures have been hedged. When they have been it has been through more plain vanilla instruments such as an MSCI index (Frontier Markets and UAE indexes used in recent years). Selectively, attractive option structures are available (over the counter options have been used to gain long exposure to Qatar and Argentina in recent years). These options may be at a stock or index level.

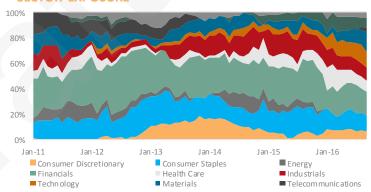
The team's focus on balancing the portfolio across compounders, companies undergoing dynamic change, and deep value investment opportunities helps eliminate the myopic views many investors have because they are focused on one style of investing. This creates a truly diversified portfolio while maintaining a concentrated portfolio in terms of number of holdings.

#### **GEOGRAPHIC EXPOSURE**



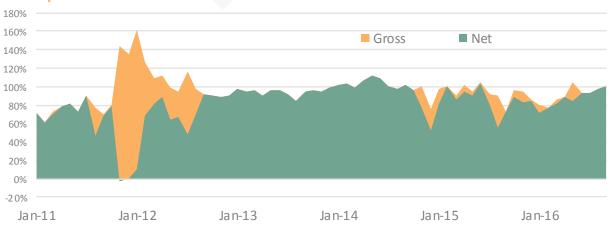
#### Data Source: FEG, Sloane Robinson; monthly exposures as of September 30, 2016

### SECTOR EXPOSURE



Data Source: FEG, Sloane Robinson; monthly exposures as of September 30, 2016

## **GROSS/NET EXPOSURE**



Data Source: FEG, Sloane Robinson; monthly exposures as of September 30, 2016

# PERFORMANCE SUMMARY

Absolute and relative performance has been strong despite a period of modest positive returns for the MSCI Frontier Markets Index over the last six years. Sloane Robinson also has an attractive track record versus frontier markets peers. Sloane Robinson's incorporation of bottom-up and top-down macro analysis has added value in the less efficient frontier markets. The fund has added value through protecting capital in down markets (e.g., 2011 and 2015) and capturing the periods of appreciation in frontier markets (e.g., 2012 and 2013). We would expect Sloane Robinson to be among the top quartile of frontier markets equity managers over most long-term periods, however, there could be periods of significant underperformance. The Manager has the flexibility and used single stock and index shorts, as well as foreign exchange overlays to add value and manage risk. Historically, the team's use of these has added value, but shorting and currency management is not easily implemented in frontier markets. Frontier markets have less developed and liquid exchanges making shorting a difficult endeavor. Currency management can be expensive in markets other than developed markets, thus eroding the potential value added or reduction in risk. Sloane Robinson has demonstrated skill in utilizing shorting and currency management moderately and effectively, however, returns are primarily driven by stock selection and top-down macro analysis. Sloane Robinson is not beholden to one investment style (e.g., value or growth), therefore, style exposures are not a significant or primary source of relative performance.

ISDA (International Swaps and Derivatives Association) agreements are in place with Morgan Stanley, Deutsche Bank, and Goldman Sachs. There are differences in the exact wording used across the counterparties according to their standards, but NAV (net asset value) triggers are set at declines of (i) 15% or more of NAV in a month; (ii) 25% or more of NAV over 3 months; and (iii) 35% or more of NAV over 12 months. In some cases, definitions of NAV may exclude withdrawals and redemptions (so as to focus on performance related declines), although in those cases an absolute NAV floor or absolute 12 month trigger has been agreed to.

#### STATISTICAL MEASURES (Since December 2010)

			Standard	Sharpe	Tracking		Down
	Beta	Alpha	Deviation	Ratio	Error	<b>Up Capture</b>	Capture
Sloane Robinson Frontier Portfolio	-	-	13.0	0.7	-	-	-
MSCI Frontier Markets Index	0.7	9.1	12.0	0.0	8.6	101.6	51.1
MSCI Emerging Markets Index	0.3	10.1	18.2	-0.1	17.0	55.3	39.5
CALENDAR YEAR PERFORMANCE							
	2015	2014	2013	2012	2011	2010	2009
Sloane Robinson Frontier Portfolio	1.6	3.6	42.8	15.2	-13.3	-	-
MSCI Frontier Markets Index	-14.5	6.8	25.9	8.9	-18.7	23.8	11.6
MSCI Emerging Markets Index	-14.9	-2.2	-2.6	18.2	-18.4	18.9	78.5
TRAILING PERFORMANCE (As Of Sept	ember 2016	)					
	QTR	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Sloane Robinson Frontier Portfolio	4.8	13.1	14.4	9.8	14.7	-	-
MSCI Frontier Markets Index	2.6	2.2	0.9	-0.2	4.6	2.2	-0.3
MSCI Emerging Markets Index	9.0	16.0	16.8	-0.6	3.0	2.3	3.9

Data Source: Sloane Robinson

# PERFORMANCE SUMMARY

Attribution analysis confirms the manager's ability to consistently generate alpha. As is expected, most of the alpha comes from long positions.

			Sloane Robins	son Frontier			
		Gross Performa	nce Attributio	n vs. MSCI Fronti	er Markets		
_			E	quity Attribution			
	Long Alpha	Short Alpha	Total Alpha	Strategic Beta	Tactical Beta	Total Beta	Leverage
3Q16	3.0%	0.0%	3.0%	2.3%	0.3%	2.7%	-0.2%
YTD 2016	20.1%	-0.6%	19.5%	1.9%	0.3%	2.2%	-2.7%
2015	16.7%	3.7%	20.4%	-12.8%	-3.1%	-15.9%	-0.7%
2014	-2.6%	1.4%	-1.2%	6.1%	1.1%	7.1%	-0.2%
2013	18.8%	0.0%	18.8%	23.0%	2.9%	25.9%	-2.6%
2012	27.0%	-19.2%	7.8%	7.8%	5.4%	13.2%	-6.0%
2011	-10.7%	19.8%	9.1%	-16.6%	-10.4%	-27.0%	7.2%
ITD (a)	8.9%	2.1%	9.2%	0.7%	2.1%	2.8%	0.4%

Data Source: FEG, as of September 30, 2016

The attribution analysis also illustrates a shift away from aggressively adjusting gross and net exposures. Since 2011, the fund has maintained a more consistent gross and net exposure, with hedging playing a more minor role. Attribution analysis omitting 2011 to account for the different approach is also shown below.

	Sloane Robinson Frontier												
		Gross Performa	nce Attributio	n vs. MSCI Fronti	er Markets								
	Equity Attribution												
	Long Alpha	Short Alpha	Total Alpha	Strategic Beta	Tactical Beta	Total Beta	Leverage						
3Q16	3.0%	0.0%	3.0%	2.4%	0.2%	2.7%	-0.2%						
YTD 2016	20.1%	-0.6%	19.5%	2.0%	0.3%	2.2%	-2.7%						
2015	16.7%	3.7%	20.4%	-13.1%	-2.8%	-15.9%	-0.7%						
2014	-2.6%	1.4%	-1.2%	6.2%	0.9%	7.1%	-0.2%						
2013	18.8%	0.0%	18.8%	23.5%	2.4%	25.9%	-2.6%						
2012	27.0%	-19.2%	7.8%	8.0%	5.2%	13.2%	-6.0%						
ITD (a)	13.3%	-0.5%	11.7%	4.9%	1.6%	6.5%	-0.3%						

Data Source: FEG, as of September 30, 2016

Cost of borrow can have a significant impact on the manager's ability to hedge and returns. The lack of availability often places a high premium for borrowing costs. On an annual equivalent percentage basis, the cost of borrow Sloane Robinson has paid for shorts held since inception has ranged from 0.3% to 6.5%. The cost to borrow should be evaluated on a absolute and relative basis to the downside opportunity available. For the individual positions held, over time the cost to borrow has ranged wildly. For example, one stock has only ever been offered at 6.5% since Jan 2013, while another has ranged from 0.3 - 6.5%.

# SUMMARY OF KEY TERMS

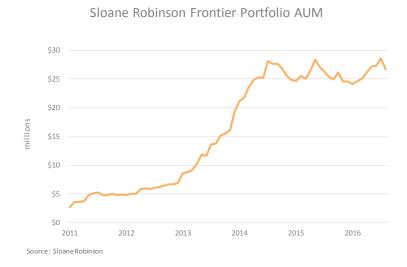
Fund Name	Sloane Robison Frontier Portfolio
Inception Date	January 1, 2011
Vehicle Type(s)	Cayman Islands Limited Partnership
Expected Capacity	The manager expects to close the frontier markets strategy to new investments between \$250-300 million. Depending on the pace at which inflows occur, it is possible that a soft close may be considered before reaching that level. Currently the portfolio is managed with this capacity constraint in mind such that Sloane Robinson can evaluate the days to build and exit positions based upon recent average daily volumes.
Minimum Flexibility	There is some flexibility around the stated \$1 million minimum investment for the fund and is considered on a case by case basis.
High water mark	Yes
High water mark Lockup	Yes None
Ü	
Lockup	None
Lockup Hurdle rate	None  MSCI Frontier Markets Index  None (Sloane Robinson has never gated, side-pocketed, or suspended redemptions, as evidenced by the prospectus

# SUMMARY OF ASSETS UNDER MANAGEMENT

The following charts detail assets under management for the Frontier Portfolio over time and the breakdown by client type as of September 30, 2016. While the Fund has a successful long-term track record, the Frontier Portfolio remains small in terms of assets under management due to the organizational changes that occurred in 2012 and a lack of marketing in order to allow the team to focus on establishing a competitive track record. Individuals comprise a significant percentage of the Fund, however, that is expected to change over time as Sloane Robinson's broader client base is primarily comprised of institutions. There has been minimal turnover of investors in the Fund.

Frontier markets is slowly garnering additional attention by institutional investors and the Manager's organizational changes occurred nearly five years ago, therefore, Sloane Robinson could see increasing interest from institutional investors and receive substantial investments into the Fund. It will be important to monitor the growth in assets under management to understand the impact on the liquidity of the Fund and any portfolio changes that could force on the manager given the less liquid nature of frontier markets.

Sloane Robinson had significant drawdowns and asset outflows after the Firm's 2008 peak assets under management. Assets under management eclipsed \$15 billion in 2008. Poor performance and changes in personnel and roles was attributable for the significant outflows. The Manager has stabilized and produced strong returns across strategies that could lead to asset inflows in the coming years.





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# KEY PEOPLE BACKGROUNDS

The following list of investment professionals comprise the senior members of the investment team responsible for management of all Sloane Robinson portfolios. Research priorities are determined in collaboration between analysts, the CIO, and the Managing Executive based upon areas of opportunity and individual stocks of interest. Both analysts and portfolio managers may be responsible for idea generation, as their roles are generalists with a regional bias. Some team members have developed areas of expertise (country or sector specialization) which Sloane Robinson will utilize. While everyone contributes to the portfolio, Morrell and Butchart are the key individuals and are vital to FEG's recommendation of the Frontier Portfolio. Sloane Robinson demonstrates a commitment to the current team and management structure, however, given the historical changes that have taken place with the team we would be concerned if further changes across the team occurred in the next five years. Prior changes have meaningfully impacted the business, as investors quickly redeemed capital and Sloane Robinson's assets under management declined substantially. Below is a summary of the historical changes that have transpired.

2000: Richard Chenevix-Trench was appointed CIO (prior to 2000 Hugh Sloane and George Robinson retained all senior investment and corporate responsibilities).

2012: Chenevix-Trench was replaced as CIO by Ed Butchart (who had served as Chenevix-Trench's deputy) and David Gale was appointed CEO

Name	Title	Age	Year Joined	Years Exp	Education / Professional Background
Christopher (C.J.) Morrell	Managing Executive and Portfolio Manager	51	2010	29	J.P. Morgan Asset Management – Investment Manager Merrill Lynch London – Head of Emerging Market Equity Sales
					Westminster School
Ed Butchart	CIO and Portfolio Manager	46	2011	19	Gemstrat Advisory – Director Moore Capital – Portfolio Manager
					St. John's College Oxford University
Marcin Gieniusz	Associate Portfolio Manager and Research Analyst	30	2012	4	Sloane Robinson – Associate Portfolio Manager and Research Analyst
					Bath University Cambridge University
Richard Chenevix-Trench	Portfolio Manager	58	1996	33	Baring Asset Management – Head of Emerging Markets Warburg Securities – Research Analyst
					Imperial College London
Richard Atherton	Portfolio Manager and Research Analyst	49	2003	23	Robert Fleming – Equity sales Barclays de Zoete Wedd – UK corporate finance
					Cambridge University
Hugh Sloane	Portfolio Manager	60	1993	37	GT Management London – Investment Director and Chairman of European Investment Committee GT Management Japan – Investment Director and Chairman of Asian Investment Committee
					Bristol University
George Robinson	Portfolio Manager	60	1993	32	WI Carr – Director of Research Swire Group Hong Kong
					Oxford University

# DUE DILIGENCE SUMMARY

Due Diligence Item	Completed	Comments
Initial Call or On-Site Meeting	Yes	
QER	Yes	
RFI Questionnaire/DDQ	Yes	
FEG Compliance Memo	Yes	Memo dated October 31, 2016
Performance Data	Yes	
References	Yes	
Form ADV	No	Sloane Robinson is not registered with the SEC. The manager is a limited liability partnership authorized and regulated in the United Kingdom by the FCA. Sloane Robinson expects to register with the SEC.
Audited Financials	Yes	
SEC Audit Letters	No	Sloane Robinson is not registered with the SEC. The manager is a limited liability partnership authorized and regulated in the United Kingdom by the FCA. Sloane Robinson expects to register with the SEC.
GIPS Compliance Report	No	Sloane Robinson does not claim GIPS compliance, although the Firm's expects to review the topic in the near future.
Subscription/Offering Documents	Yes	

# DISCLOSURES

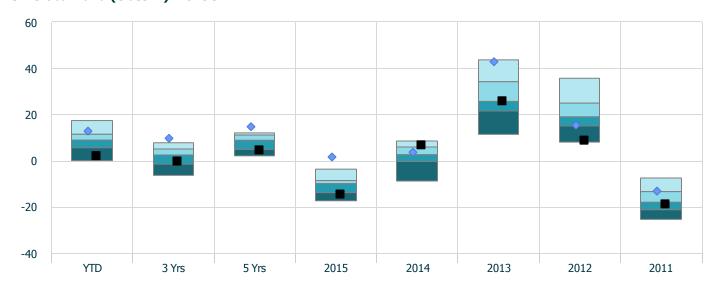
This report was prepared by Fund Evaluation Group, LLC (FEG), a federally registered investment adviser under the Investment Advisers Act of 1940, as amended, providing non-discretionary and discretionary investment advice to its clients on an individual basis. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Fund Evaluation Group, LLC, Form ADV Part 2A & 2B can be obtained by written request directed to: Fund Evaluation Group, LLC, 201 East Fifth Street, Suite 1600, Cincinnati, OH 45202 Attention: Compliance Dept.

Past Performance is not indicative of future results. Any return expectations provided are not intended as, and must not be regarded as, a representation, warranty or predication that the investment will achieve any particular rate of return over any particular time period or that investors will not incur losses. Investments in private funds are speculative, involve a high degree of risk, and are designed for sophisticated investors. The information herein was obtained from various sources. FEG does not guarantee the accuracy or completeness of such information provided by third parties. Data represents the most current available at the time of report publication. FEG assumes no obligation to update this information, or to advise on further developments relating to it. Index performance results do not represent any portfolio returns. An investor cannot invest directly in a presented index, as an investment vehicle replicating an index would be required. An index does not charge management fees or brokerage expenses, and no such fees or expenses were deducted from the performance shown.

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FEG Manager Coverage: Recommended - Strategies subject to FEG's full due diligence and included on FEG's recommended list of managers for consultant and client use. A1: Rated Coverage - Strategies subject to FEG's due diligence principles and considered quality, but not listed by FEG as recommended. A2: Rated Coverage - Strategies determined to be reputable through focused due diligence by FEG. Fundamental Coverage - All managers/funds that FEG clients are invested, which do not fall into recommended or rated coverage.

# 9/2016 eVestment Frontier Mkts Equity



	Returns:	Trailing				
	SR Global Fund (Class M) Frontier	MSCI Frontier Markets-ND				
YTD	12.76	2.16				
1 Year	14.15	0.91				
2 Years	1.61	-12.53				
3 Years	9.65	-0.17				
5 Years	14.66	4.64				

#### **Efficiency Stats**

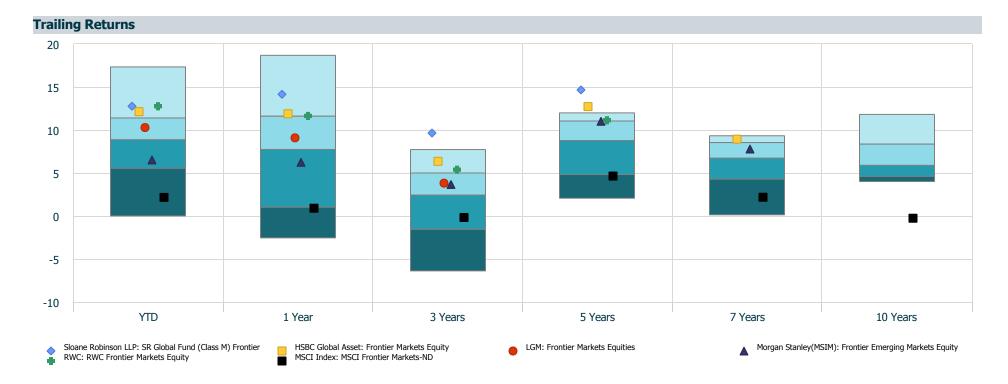
#### 30 20 10 -10 Sharpe Ratio 5 Sortino Ratio 5 Excess Returns 5 Annualized Alpha 5 Max Drawdown 5 Conditional VaR @ Years Years Years Years 99% 5 Years Years

#### **Efficiency Stats**

	iciciicy c	tats	
	1 Year	3 Years	5 Years
<b>Excess Returns</b>	13.25	9.82	10.02
Alpha	13.86	9.75	10.90
Standard Deviation	7.29	8.87	11.08
Semi Deviation	6.52	8.67	12.07
Skewness	0.36	-0.03	-0.10
Kurtosis	-1.28	-0.68	0.04
Max Drawdown	2.16	11.33	11.33
<b>Sharpe Ratio</b>	1.91	1.08	1.32
Sortino Ratio	6.09	2.09	2.52
<b>Calmar Ratio</b>	6.56	0.85	1.29
CVaR @ 99%			-6.45

#### **Correlation: 5 Years**

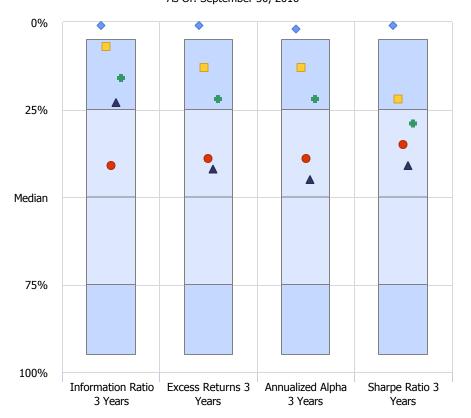
	SR Global Fund (Class M) Frontier	MSCI Frontier Markets-ND	<b>Equities</b>	High Yield	Commodities	Long Treasuries
SR Global Fund (Class M) Frontier	1.00	0.79	0.38	0.45	0.41	0.49
MSCI Frontier Markets-ND	0.79	1.00	0.54	0.52	0.55	0.58
Equities	0.38	0.54	1.00	0.49	0.72	0.85
High Yield	0.45	0.52	0.49	1.00	0.42	0.62
Commodities	0.41	0.55	0.72	0.42	1.00	0.75
Long Treasuries	0.49	0.58	0.85	0.62	0.75	1.00



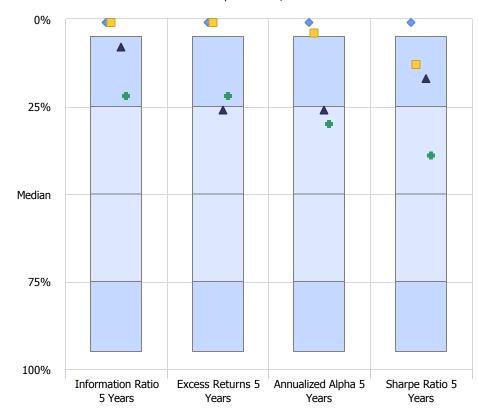
Trailing Returns													
Firm Name	Product Name	YTD	Rank	1 Year	Rank	3 Years	Rank	5 Years	Rank	7 Years	Rank	10 Years	Rank
	SR Global Fund (Class M)						·			·cars	TQIII.	· Cui 3	Kank
Sloane Robinson LLP	Frontier	12.76	18	14.15	14	9.65	1	14.66	1				
HSBC Global Asset Management	Frontier Markets Equity	12.13	22	11.89	20	6.36	13	12.72	1	8.93	7		
LGM Investments Ltd.	Frontier Markets Equities	10.29	35	9.09	40	3.82	39						
Morgan Stanley Investment Management	Frontier Emerging Markets Equity	6.52	65	6.25	57	3.67	42	11.01	26	7.79	33		
RWC Partners Ltd	<b>RWC Frontier Markets Equity</b>	12.77	18	11.64	23	5.39	22	11.14	22				
MSCI Index	MSCI Frontier Markets-ND	2.16	85	0.91	78	-0.17	62	4.64	76	2.18	83	-0.26	100

# Sloane Robinson LLP SR Global Fund (Class M) Frontier

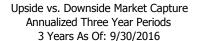
MPT Statistic Analysis Annualized Three Year Periods As Of: September 30, 2016

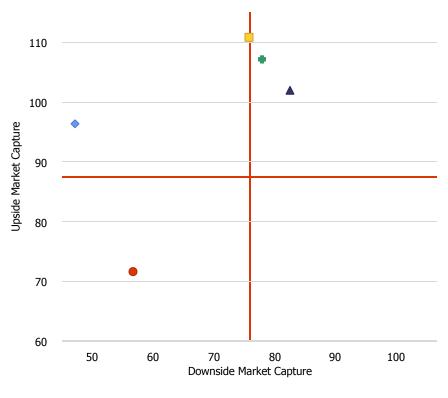


MPT Statistic Analysis Annualized Five Year Periods As Of: September 30, 2016



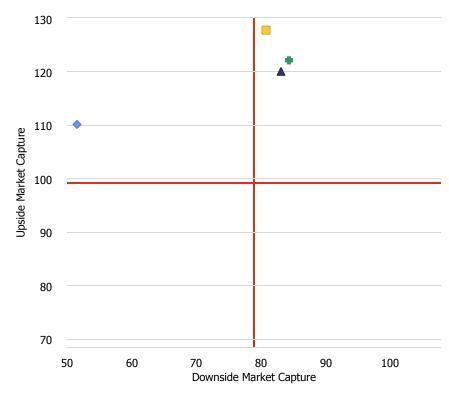
# Sloane Robinson LLP SR Global Fund (Class M) Frontier



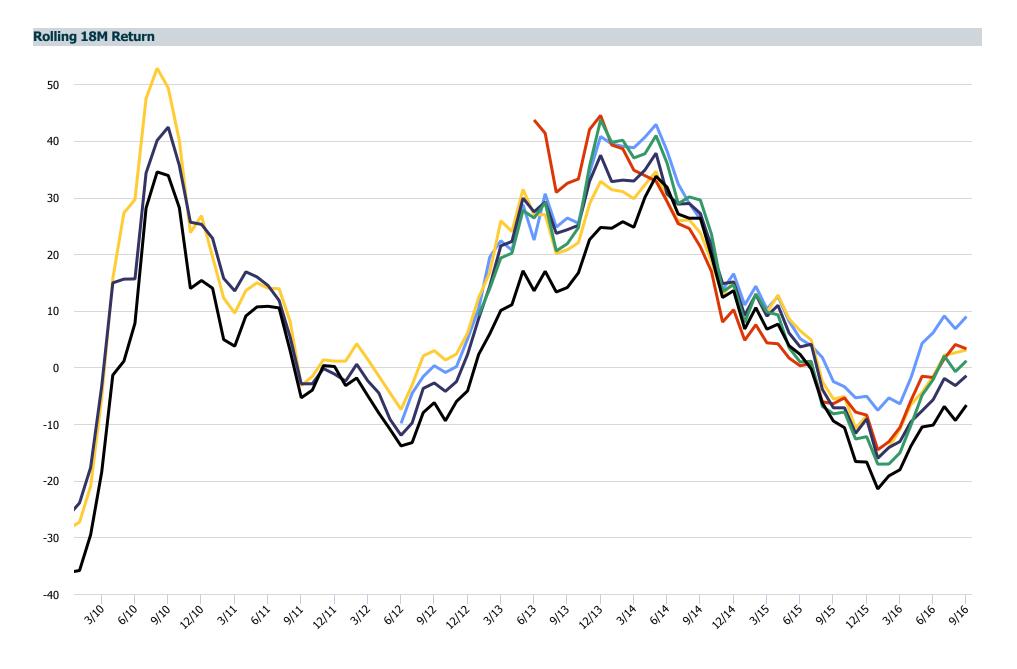


- Sloane Robinson LLP: SR Global Fund (Class M) Frontier
- LGM Investments Ltd.: Frontier Markets Equities
- RWC Partners Ltd: RWC Frontier Markets Equity
- HSBC Global Asset
   Management: Frontier
   Markets Equity
- Morgan Stanley Investment Management: Frontier Emerging Markets Equity
- + Frontier Mkts Equity

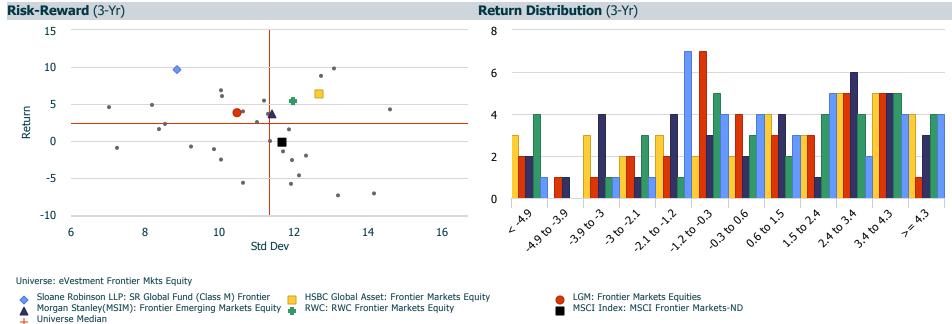
#### Upside vs. Downside Market Capture Annualized Five Year Periods 5 Years As Of: 9/30/2016



- Sloane Robinson LLP: SR Global Fund (Class M) Frontier
- LGM Investments Ltd.: Frontier Markets Equities
- RWC Partners Ltd: RWC Frontier Markets Equity
- HSBC Global Asset Management: Frontier Markets Equity
- Morgan Stanley Investment Management: Frontier Emerging Markets Equity
- + Frontier Mkts Equity

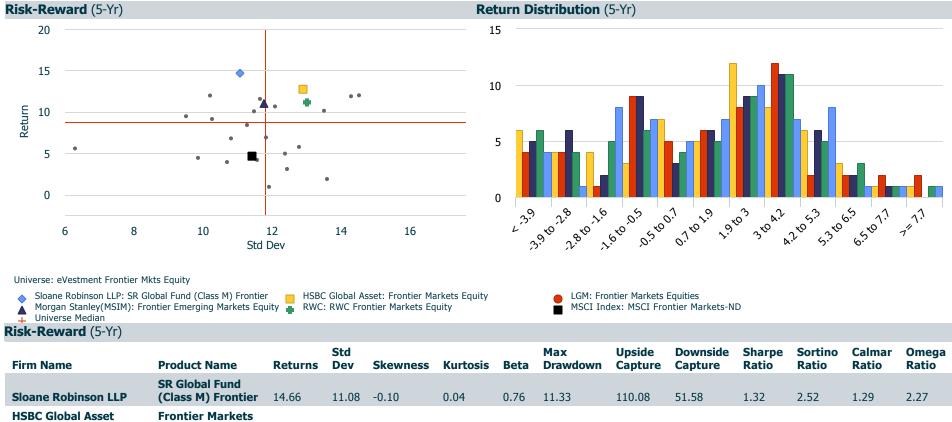


SR Global Fund (Class M) Frontier



Risk-Reward (3-Yr)

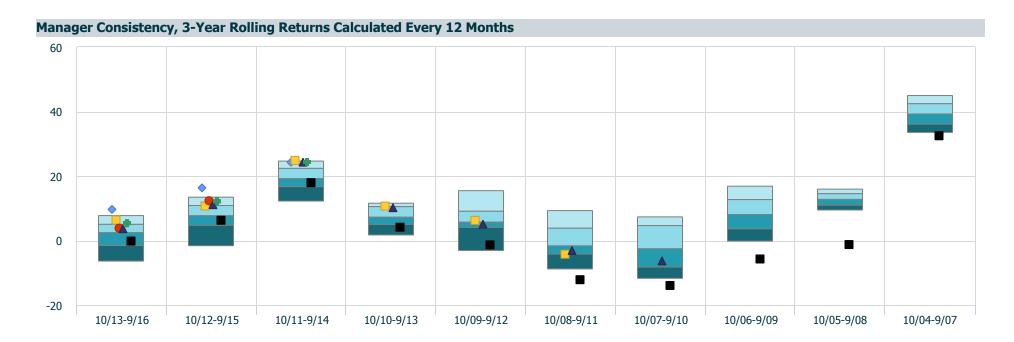
Kisk-Kewara (5 II)													
Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Sloane Robinson LLP	SR Global Fund (Class M) Frontier	9.65	8.87	-0.03	-0.68	0.56	11.33	96.28	47.15	1.08	2.09	0.85	1.88
HSBC Global Asset Management	Frontier Markets Equity	6.36	12.68	-0.73	0.14	0.93	23.47	110.76	75.92	0.49	0.72	0.27	1.31
LGM Investments Ltd.	Frontier Markets Equities	3.82	10.48	-0.80	0.62	0.68	21.28	71.53	56.83	0.36	0.50	0.18	1.18
Morgan Stanley Investment Management	Frontier Emerging Markets Equity	3.67	11.43	-0.56	-0.48	0.87	23.36	101.89	82.63	0.31	0.45	0.16	1.16
RWC Partners Ltd	RWC Frontier Markets Equity	5.39	11.98	-0.72	-0.13	0.88	26.54	107.08	77.96	0.44	0.64	0.20	1.26
MSCI Index	MSCI Frontier Markets-ND	-0.17	11.70	-0.27	-0.93	1.00	30.39	100.00	100.00	-0.02	-0.03	-0.01	0.92



Firm Name	Product Name	Returns	Std Dev	Skewness	Kurtosis	Beta	Max Drawdown	Upside Capture	Downside Capture	Sharpe Ratio	Sortino Ratio	Calmar Ratio	Omega Ratio
Sloane Robinson LLP	SR Global Fund (Class M) Frontier	14.66	11.08	-0.10	0.04	0.76	11.33	110.08	51.58	1.32	2.52	1.29	2.27
HSBC Global Asset Management	Frontier Markets Equity	12.72	12.90	-0.64	-0.01	0.99	23.47	127.73	80.81	0.98	1.56	0.54	1.83
LGM Investments Ltd.	Frontier Markets Equities												
Morgan Stanley Investment Management	Frontier Emerging Markets Equity	11.01	11.78	-0.53	-0.55	0.93	23.36	120.01	83.12	0.93	1.51	0.47	1.73
RWC Partners Ltd	RWC Frontier Markets Equity	11.14	13.03	-0.25	0.04	0.99	26.54	122.10	84.38	0.85	1.40	0.42	1.69
MSCI Index	MSCI Frontier Markets-ND	4.64	11.45	-0.29	-0.58	1.00	30.39	100.00	100.00	0.40	0.60	0.15	1.25



Calendar Ye	ar Returns																				
Firm Name	Product Name	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	2010	Rank	2009	Rank	2008	Rank	2007	Rank	2006	Ran
Sloane Robinson LLP	SR Global Fund (Class M) Frontier	1.56	1	3.59	38	42.80	7	15.31	70	-13.21	20										
HSBC Global Asset Management	Frontier Markets Equity	-8.00	21	7.05	14	30.55	36	26.57	14	-17.43	38	27.24	56	42.86	20						
LGM Investments Ltd.	Frontier Markets Equities	-7.61	18	-0.51	77	40.19	11	42.89	1												
Morgan Stanley Investment Management	Frontier Emerging Markets Equity	-8.91	32	5.09	31	35.18	22	25.11	23	-21.28	75	28.67	44	20.63	50	-46.82	40				
RWC Partners Ltd	RWC Frontier Markets Equity	-10.98	56	2.09	53	43.61	3	18.93	50												
MSCI Index	MSCI Frontier Markets-ND	-14.46	77	6.84	16	25.89	49	8.85	94	-18.73	55	23.75	72	11.61	93	-54.15	98	41.94	39	-8.91	100



- Sloane Robinson LLP: SR Global Fund (Class M) Frontier HSBC Global Asset: Frontier Markets Equity Morgan Stanley(MSIM): Frontier Emerging Markets Equity RWC: RWC Frontier Markets Equity
- LGM: Frontier Markets Equities MSCI Index: MSCI Frontier Markets-ND

3- Year Rol	Year Rolling Returns																				
	Product	Returns (10/2013	3	Returns (10/2012	2	Returns (10/2011		Returns (10/2010	0	Returns (10/2009	)	Returns (10/2008	3	Returns (10/2007	,	Returns (10/2006	5	Returns (10/200!	5	Returns (10/2004	4
Firm Name	Name	09/2016	) Rank		) Rank	- (09/2014)	Rank	- (09/2013)	) Rank	- (09/2012)	) Rank	- (09/2011)	Rank	- (09/2010)	Rank	- (09/2009)	) Rank		) Rank		) Rank
Sloane Robinson LLP	SR Global Fund (Class M) Frontier		1	16.33	1	24.28	14	_				_		_		_		_		_	
HSBC Global Asset Management	Frontier Markets Equity	6.36	13	10.71	27	24.82	4	10.67	19	6.24	38	-4.26	77								
LGM Investments Ltd.	Frontier Markets Equities	3.82	39	12.34	13																
Morgan Stanley Investment Management	Frontier Emerging Markets Equity	3.67	42	11.11	20	24.30	14	10.18	29	5.08	62	-3.10	56	-6.32	60						
RWC Partners	RWC Frontier Markets Equity	5.39	22	12.16	16	24.34	8														
87 MSCI Index	MSCI Frontier Markets-ND	-0.17	62	6.28	58	17.93	59	4.12	85	-1.35	92	-12.16	100	-13.94	100	-5.73	100	-1.26	100	32.47	100

# **Sloane Robinson LLP** SR Global Fund (Class M) Frontier

# **Correlation Matrix** (3-Yr)

	SR Global Fund (Class M) Frontier	Frontier Markets Equity	Frontier Markets Equities	Frontier Emerging Markets Equity	RWC Frontier Markets Equity	MSCI Frontier Markets-ND	MSCI EM-ND	S&P Goldman Sachs Commodity	Russell 3000	Barclays Global High Yield
SR Global Fund (Class M) Frontier	1.00	0.68	0.61	0.76	0.74	0.74	0.30	0.53	0.18	0.42
Frontier Markets Equity	0.68	1.00	0.87	0.94	0.88	0.85	0.66	0.48	0.49	0.64
Frontier Markets Equities	0.61	0.87	1.00	0.84	0.87	0.76	0.59	0.48	0.54	0.62
Frontier Emerging Markets Equity	0.76	0.94	0.84	1.00	0.90	0.89	0.61	0.45	0.50	0.58
RWC Frontier Markets Equity	0.74	0.88	0.87	0.90	1.00	0.86	0.58	0.51	0.59	0.64
MSCI Frontier Markets-ND	0.74	0.85	0.76	0.89	0.86	1.00	0.55	0.59	0.46	0.59
MSCI EM-ND	0.30	0.66	0.59	0.61	0.58	0.55	1.00	0.48	0.69	0.80
S&P Goldman Sachs Commodity	0.53	0.48	0.48	0.45	0.51	0.59	0.48	1.00	0.26	0.68
Russell 3000	0.18	0.49	0.54	0.50	0.59	0.46	0.69	0.26	1.00	0.73
Barclays Global High Yield	0.42	0.64	0.62	0.58	0.64	0.59	0.80	0.68	0.73	1.00

## **Correlation Matrix** (5-Yr)

	•									
	SR Global Fund (Class M) Frontier	Frontier Markets Equity	Frontier Markets Equities	Frontier Emerging Markets Equity	RWC Frontier Markets Equity	MSCI Frontier Markets-ND	MSCI EM-ND	S&P Goldman Sachs Commodity	Russell 3000	Barclays Global High Yield
SR Global Fund (Class M) Frontier	1.00	0.76		0.80	0.81	0.79	0.38	0.45	0.41	0.49
Frontier Markets Equity	0.76	1.00		0.95	0.89	0.87	0.68	0.49	0.62	0.68
Frontier Markets Equities			1.00							
Frontier Emerging Markets Equity	0.80	0.95		1.00	0.92	0.90	0.60	0.46	0.58	0.60
RWC Frontier Markets Equity	0.81	0.89		0.92	1.00	0.87	0.54	0.48	0.58	0.57
MSCI Frontier Markets-ND	0.79	0.87		0.90	0.87	1.00	0.54	0.52	0.55	0.58
MSCI EM-ND	0.38	0.68		0.60	0.54	0.54	1.00	0.49	0.72	0.85
S&P Goldman Sachs Commodity	0.45	0.49		0.46	0.48	0.52	0.49	1.00	0.42	0.62
Russell 3000	0.41	0.62		0.58	0.58	0.55	0.72	0.42	1.00	0.75
Barclays Global High Yield	0.49	0.68		0.60	0.57	0.58	0.85	0.62	0.75	1.00

SR Global Fund (Class M) Frontier

# **Correlation Matrix (3-Yr) Excess Returns**

	SR Global Fund (Class M) Frontier	Frontier Markets Equity	Frontier Markets Equities	Frontier Emerging Markets Equity	RWC Frontier Markets Equity	MSCI Frontier Markets-ND	MSCI EM-ND	S&P Goldman Sachs Commodity	Russell 3000	Barclays Global High Yield
SR Global Fund (Class M) Frontier	1.00	0.19	0.39	0.41	0.36		-0.01	0.10	0.20	0.54
Frontier Markets Equity	0.19	1.00	0.64	0.76	0.57		0.46	-0.07	0.25	0.28
Frontier Markets Equities	0.39	0.64	1.00	0.59	0.66		0.38	0.03	0.50	0.56
Frontier Emerging Markets Equity	0.41	0.76	0.59	1.00	0.60		0.37	-0.22	0.33	0.31
RWC Frontier Markets Equity	0.36	0.57	0.66	0.60	1.00		0.30	0.00	0.46	0.35
MSCI Frontier Markets-ND										
MSCI EM-ND	-0.01	0.46	0.38	0.37	0.30		1.00	0.22	0.59	0.54
S&P Goldman Sachs Commodity	0.10	-0.07	0.03	-0.22	0.00		0.22	1.00	-0.03	0.24
Russell 3000	0.20	0.25	0.50	0.33	0.46		0.59	-0.03	1.00	0.76
Barclays Global High Yield	0.54	0.28	0.56	0.31	0.35		0.54	0.24	0.76	1.00

## **Correlation Matrix (5-Yr) Excess Returns**

	SR Global Fund (Class M) Frontier	Frontier Markets Equity	Frontier Markets Equities	Frontier Emerging Markets Equity	RWC Frontier Markets Equity	MSCI Frontier Markets-ND	MSCI EM-ND	S&P Goldman Sachs Commodity	Russell 3000	Barclays Global High Yield
SR Global Fund (Class M) Frontier	1.00	0.22		0.38	0.39		-0.02	0.10	0.12	0.34
Frontier Markets Equity	0.22	1.00		0.75	0.57		0.51	0.09	0.30	0.29
Frontier Markets Equities			1.00							
Frontier Emerging Markets Equity	0.38	0.75		1.00	0.62		0.33	0.00	0.27	0.27
RWC Frontier Markets Equity	0.39	0.57		0.62	1.00		0.17	0.06	0.23	0.12
MSCI Frontier Markets-ND										
MSCI EM-ND	-0.02	0.51		0.33	0.17		1.00	0.30	0.60	0.59
S&P Goldman Sachs Commodity	0.10	0.09		0.00	0.06		0.30	1.00	0.19	0.34
Russell 3000	0.12	0.30		0.27	0.23		0.60	0.19	1.00	0.72
Barclays Global High Yield	0.34	0.29		0.27	0.12		0.59	0.34	0.72	1.00

Exhibit H November 2016

# Defensive Mandate – Custom Solution



## **Defensive - Mandate Review**

- Our portfolio return objective is demanding
- Our time horizon and risk tolerance allow for volatility and illiquidity
- Thus, "defensive" is expected to be the smallest asset category
- Thus, Keep it pure, keep it positive, make it count

Criteria	Rationale	Comment
Negative correlation	To meaningfully offset the bias to "risk" strategies (equity, credit, and real assets).	Fair few options have strongly negative correlations to risk/equity.
Positive carry	To the extent possible, the overall category should have a positive return over time to limit the drag on performance.	While some of these criteria are easier to meet than others, meeting all of them and including positive expected return is challenging
High negative equity beta	Given intent as well as size of the allocation, it needs to provide a strong return when equity and related risk premiums are expanding.	Beta is related to correlation, but reflective of magnitude. Volatility is not a concern. In fact, there is a relationship with high negative beta (desirable) and higher volatility.
Liquid	Rebalancing, monetizing, and repurposing gains in times of crisis will be important	

# **Defensive - Mandate Potential Options**

- Target return = Cash + 2.5% (with negative equity beta)
- Cash & Government bonds are straightforward fit
  - But we are cautious to allocate at these levels
  - Gov'ts potentially not sufficiently negatively correlated
- CTAs and other systematic strategies are a priority
- Greater complexity and specialization = greater time and expertise

Asset	Negative Correlation	Positive Carry	Negative (Equity) Beta	Liquid	Est. Fees
Cash & Short Duration	Neutral	Neutral	Neutral	Yes	0.0% - 0.15%
Long Duration Treasurys	Yes	Yes	Yes	Yes	0.0% - 0.15% (higher if active mgr incl.)
Agency Related	Neutral	Yes	Neutral	Yes	0.3% - 0.6%
CTAs	Yes	Yes	Yes	Yes	0.5%/15% - 2%/20%
Global Macro	Neutral	Yes	Neutral	Yes	1%/10% - 2%/20%
Dedicated Short Sellers	Yes	Neutral / Negative	Yes	Neutral	1%/10% - 2%/20%
Tail Risk / Insurance	Yes	Negative	Yes	Yes / Neutral	Varied

## **Defensive Mandate - Proposal**

- Outsourcing for efficiency and additional expertise
  - Target implementation date of Feb 1, 2017
  - Diversified set of strategies across 5-7 managers
  - Mindful of potential additional costs
- Possible candidates multi-manager and multi-strategy
  - 1. Consultants who specialize in hedge funds (open architecture)
  - 2. Custom mandate managers with specialized experience / consultative approach (open architecture)
  - 3. CTA/Systematic managers who have multiple strategies
  - 4. Hybrid: Large platform firm with internal as well as external capabilities (blend of 2 and 3)

# **Defensive Mandate - Candidates for Comparison**

 Sample data from 5 conversations with firms that are working on similar mandates for other clients

	# of Strategies	Equity Correlation	Return	Volatility	Fee Range	Vehicle
Range across 5 Proposals	4 – 8* per	-40% to -10%	5% to 10%	7% - 15%	1% - 1.7% / 13%	Funds held at Northern, Fund of One, Sep Act
Average CTA or Systematic Fund	1 per	-10%	Similar	Similar	Similar	Fund held at Northern
Average Tail Risk Fund	Similar	-70% to -40%	-5% to -10%	Higher	Similar	Fund held at Northern
Non Typical CTA or Systematic	Similar	-40% to -10%	Similar	Higher	Higher	Fund held at Northern

 A custom mandate with a 3<sup>rd</sup> party manager can be expected to meet our needs (risk / return / correlation) profile at similar fees, with additional benefits

# **Defensive Mandate - Proposed Solution**

#### Pro:

- Greater diversification
- Greater specialization
- Speed of implementation
- Behavioral benefits from a bundled solution
  - The more effectively defensive the strategy, the more misunderstood/feared it is likely to be
- If a multi-manager solution, additional oversight

#### Contra:

- If using a single firm, potentially fewer strategy options, greater concentration risk
  - An open architecture platform would not be limited
- If using a multi-manager approach, an additional layer of fees
  - Mitigating factors from a large enough platform should offset fees (managed accounts, scale, etc.)

# **Exhibit I**

SITFO Curent Allocation vs. Target									Pro-F	orma				
	1	arget Ran	ge		As of 10/31/201	5	November	December	January	February	March	April		
	Min	Target	Max		Market Value	Weight (%)	Weight(%)	Weight(%)	Weight(%)	Weight(%)	Weight(%)	Weight(%)		
Growth	25.0	37.0	50.0	\$	1,154,197,943	52.4	48.4	43.4	40.6	37.7	37.9	37.8		
US Equity	9.0	15.0	21.0	\$	764,643,622	34.7	29.5	24.6	21.8	19.0	19.2	19.1		
Vanguard Total Stock Market				\$	180,106,427	8.2	2.5	0.0	0.0	0.0	0.0	0.0		
US Large Cap	4.5	7.5	10.5	\$	469,733,046	21.3	21.7	19.3	16.5	13.7	12.8	12.7		
Vanguard 500 Index				\$	469,733,046	21.3	21.7	19.3	16.5	13.7	12.8	12.7		
US Small Cap	4.5	7.5	10.5	\$	114,804,150	5.2	5.3	5.3	5.3	5.3	6.4	6.4		
Vanguard Strategic Equity Fund				\$	114,804,150	5.2	5.3	5.3	5.3	5.3	5.2	5.2		
US Equity Micro Cap				\$	-	0.0	0.0	0.0	0.0	0.0	1.1	1.1		
International Equity	9.0	15.0	21.0	\$	381,604,321	17.3	18.5	18.5	18.4	18.4	18.3	18.3		
International Developed Equity	4.5	7.5	10.5	\$	381,604,321	17.3	17.6	17.6	17.5	17.5	17.4	17.4		
Vanguard Total Int'l Stock Index				\$	381,604,321	17.3	17.6	17.6	17.5	17.5	17.4	17.4		
Emerging Markets Equity	4.5	7.5	10.5	\$	-	0.0	0.9	0.9	0.9	0.9	0.9	0.9		
Non-US Frontier Equity				\$	-	0.0	0.9	0.9	0.9	0.9	0.9	0.9		
Private Equity	4.0	7.0	10.0	\$	7,950,000	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
WCP NewCold				\$	7,950,000	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
Varsity Healthcare Partners II				\$	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Income	20.0	31.0	40.0	\$	531,392,299	24.1	24.0	28.8	29.9	31.0	30.2	29.7		
Credit	6.0	9.0	12.0	\$	466,392,299	21.2	19.2	21.7	22.1	22.5	21.8	21.3		
Higher Credit Quality				\$	466,392,299	21.2	19.2	21.7	19.8	17.9	17.2	16.7		
Vanguard Short-Term Inv. Grade				\$	266,677,515	12.1	10.0	9.0	7.9	6.7	6.5	6.5		
Vanguard Int. Term Inv. Grade				\$	199,714,784	9.1	6.9	6.2	5.5	4.8	4.3	3.9		
Credit Full Spectrum (Separate Account)				\$	-	0.0	2.3	4.6	4.6	4.6	4.6	4.6		
Credit High Quality (Separate Account)				\$	-	0.0	0.0	1.8	1.8	1.8	1.8	1.8		
Lower Credit Quality				\$	-	0.0	0.0	0.0	2.3	4.6	4.6	4.6		
HY/Bank Loan Manager				\$	-	0.0	0.0	0.0	2.3	4.6	4.6	4.6		
Securitized	5.0	8.0	11.0	\$	20,000,000	0.9	3.7	6.0	6.7	7.3	7.3	7.3		
Higher Credit Quality				\$	-	0.0	2.3	4.6	4.6	4.6	4.6	4.6		
Sec. HQ Manager (Separate Account)				\$	-	0.0	2.3	4.6	4.6	4.6	4.6	4.6		
Lower Credit Quality				\$	20,000,000	0.9	1.4	1.4	2.1	2.7	2.7	2.7		
Waterfall Eden				\$	20,000,000	0.9	1.4	1.4	1.4	1.4	1.4	1.4		
Sec. LQ Manager 2				\$	-	0.0	0.0	0.0	0.7	1.4	1.4	1.4		
Non-US	2.0	5.0	8.0	\$	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other				\$	20,000,000	0.9								
DW Value Fund				\$	20,000,000	0.9	1.8	1.8	1.8	1.8	1.8	1.8		
Private Debt	6.0	9.0	12.0	\$	25,000,000	1.1	1.2	1.1	1.1	1.1	1.1	1.1		
LibreMax Value Fund				\$	25,000,000	1.1	1.2	1.1	1.1	1.1	1.1	1.1		
Ares ICOF III				\$	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Real Assets	15.0	20.0	25.0	\$	394,625,453	17.9	18.7	18.8	19.0	19.2	19.4	19.6		
TIPS	0.0	3.0	6.0	\$	20,361,968	0.9	1.4	1.6	1.9	2.1	2.3	2.5		
Vanguard Inflation-Protected Sec.				\$	20,361,968	0.9	1.4	1.6	1.9	2.1	2.3	2.5		
Public Real Assets	1.0	4.0	7.0	\$	87,964,437	4.0	4.1	4.0	4.0	4.0	4.0	4.0		
Harvest MLP Income Fund				\$	87,964,437	4.0	4.1	4.0	4.0	4.0	4.0	4.0		
Private Real Estate	6.0	9.0	12.0	\$	286,299,048	13.0	13.2	13.2	13.1	13.1	13.1	13.0		
UBS Trumbull Property Fund				\$	54,488,249	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
UBS Trumbull Property Income Fund				\$	79,817,890	3.6	3.7	3.7	3.7	3.7	3.6	3.6		
LaSalle Income & Growth Fund V				\$	216,610	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Fidelity Real Estate Growth Fund III				\$	1,793,806	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Colony Realty Partners III				\$	12,531,115	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
Long Wharf Real Estate Partners IV				\$	44,345,041	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Colony Realty Partners IV				\$	56,234,624	2.6	2.6	2.6	2.6	2.6	2.6	2.6		
LaSalle Income & Growth Fund VI				\$	32,290,829	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
Long Wharf Real Estate Partners V				\$	4,580,883	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Private Natural Resources	1.0	4.0	7.0	\$	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Rockland Power Partners III				\$	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Defensive	10.0	12.0	20.0	\$	123,839,333	5.6	8.9	8.9	10.5	12.1	12.5	12.9		
Long US Treasury	5.0	7.0	15.0	\$	38,827,538	1.8	2.7	3.2	3.6	4.1	4.5	5.0		
Vanguard Ext. Duration Treasury Index				\$	38,827,538	1.8	2.7	3.2	3.6	4.1	4.5	5.0		
CTA	3.0	5.0	7.0	\$	48,415,648	2.2	2.2	2.2	3.4	4.5	4.5	4.5		
Graham Tactical Trend Capped Beta				\$	48,415,648	2.2	2.2	2.2	2.2	2.2	2.2	2.2		
CTA Manager 2 (Short Term)				\$	-	0.0	0.0	0.0	1.1	1.1	1.1	1.1		
CTA Manager 3 (Short Term)				\$	-	0.0	0.0	0.0	0.0	1.1	1.1	1.1		
	0.0	0.0	5.0	\$	36,596,147	1.7	4.0	3.5	3.5	3.5	3.5	3.5		
Cash	0.0	0.0	5.0	~	30,390,147	1.1	7.0	3.5	3.0		0.0			