



#### SEPTEMBER 2023 MARKET UPDATE & PORTFOLIO REVIEW MEMORIAL HEALTHCARE SYSTEM

#### OCTOBER 2023

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# **SEPTEMBER 30, 2023** THE QUARTER IN REVIEW

NEPC ASSET ALLOCATION



#### **CURRENT MARKET OUTLOOK**



The "higher-for-longer" interest rate environment will test the economy's ability to avoid a recession in 2024



The outlook for U.S. TIPS is favorable with higher real interest rates and attractive breakeven inflation rates



We are concerned about U.S. mega-caps and suggest reducing exposure, while maintaining U.S. large-cap value exposure



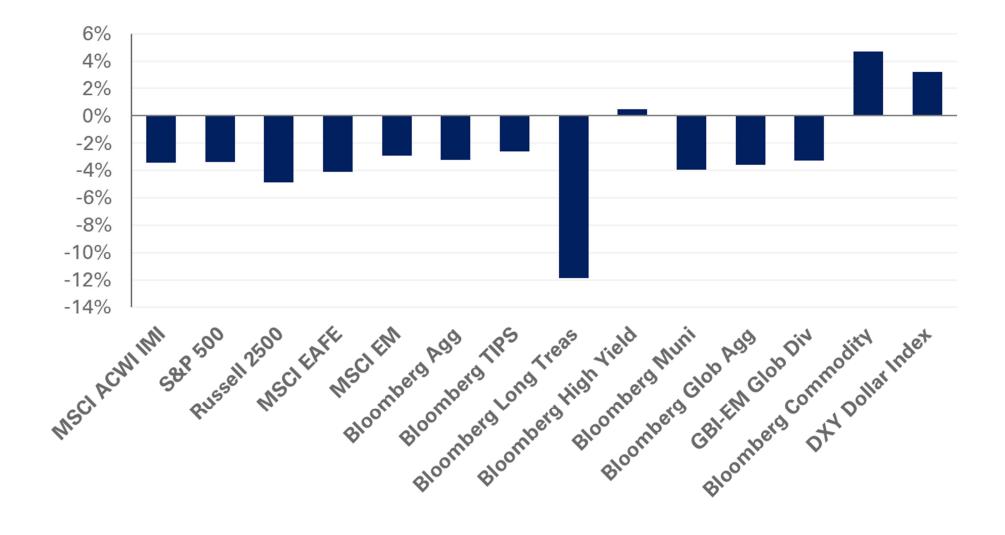
We believe U.S. high yield offers a greater return versus U.S. large-cap equity and we recommend increasing exposure



We recommend a duration-neutral posture relative to policy targets and remain comfortable with elevated levels of cash



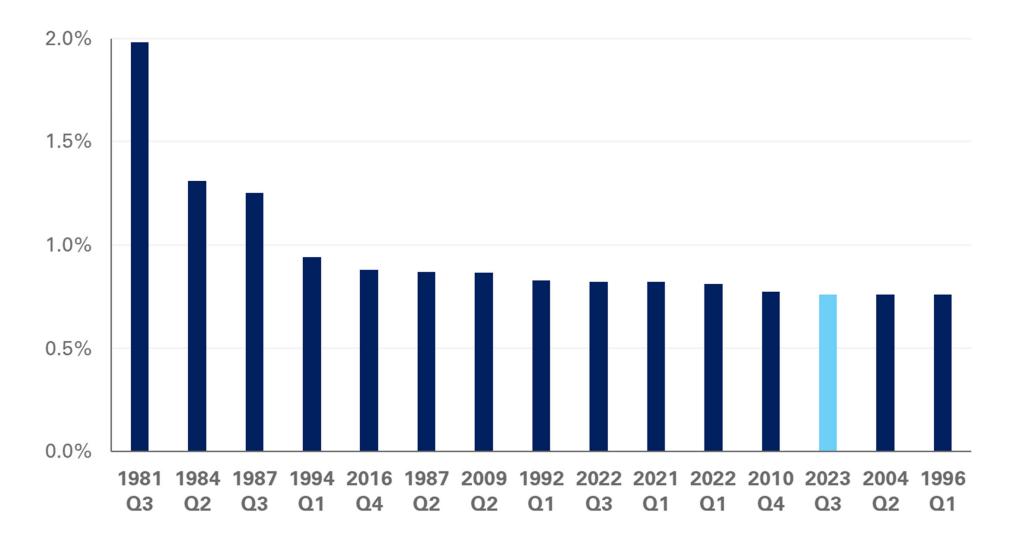
#### **STOCKS AND BONDS SOLD OFF SHARPLY** QUARTERLY TOTAL RETURNS





Source: MSCI, S&P, Russell, Bloomberg, JP Morgan, FactSet

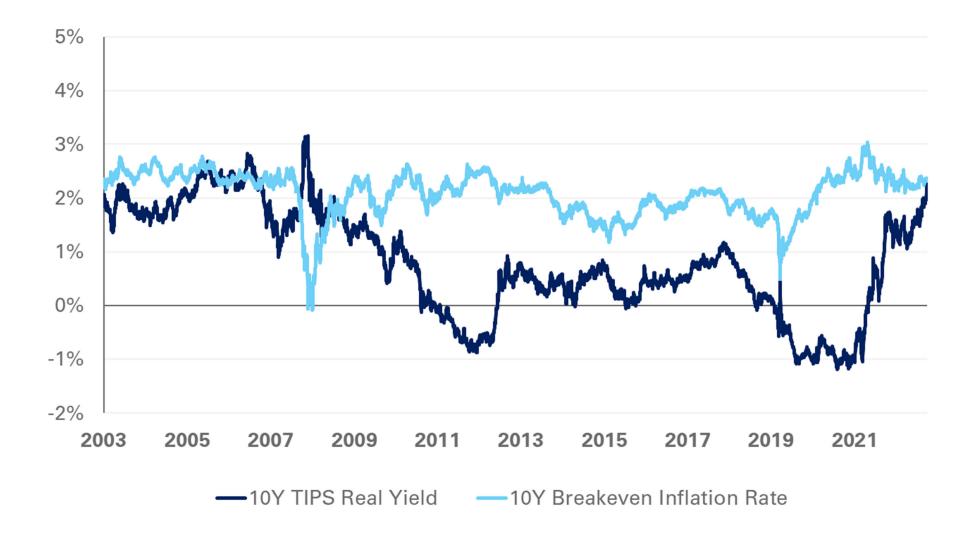
#### **10-YEAR YIELDS ROSE SIGNIFICANTLY** TOP 15 QUARTERLY CHANGE: 10-YEAR U.S TREASURY YIELD





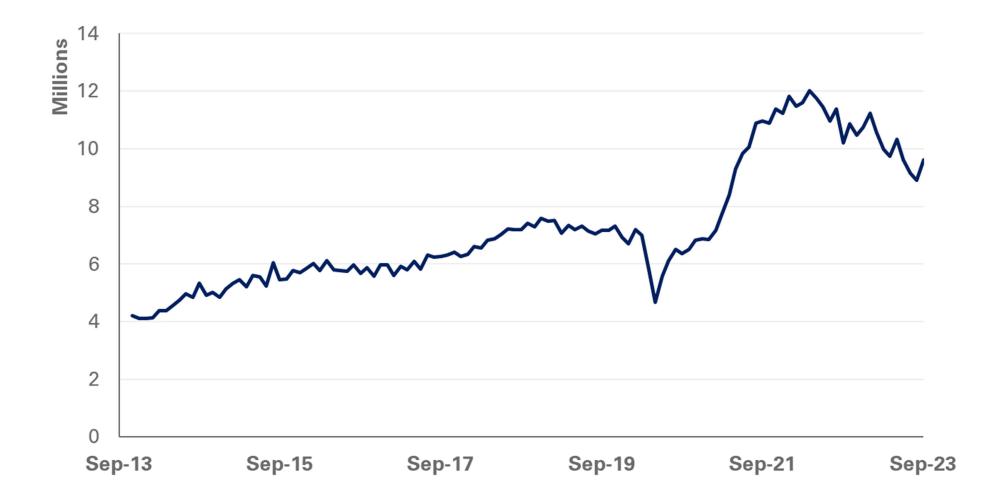
Calculated based on data as of 12/31/1980 Source: FactSet

#### **TIPS ARE ATTRACTIVE IN THIS ENVIRONMENT** 10-YEAR U.S. TIPS REAL YIELD VERSUS BREAKEVEN INFLATION



Source: FactSet

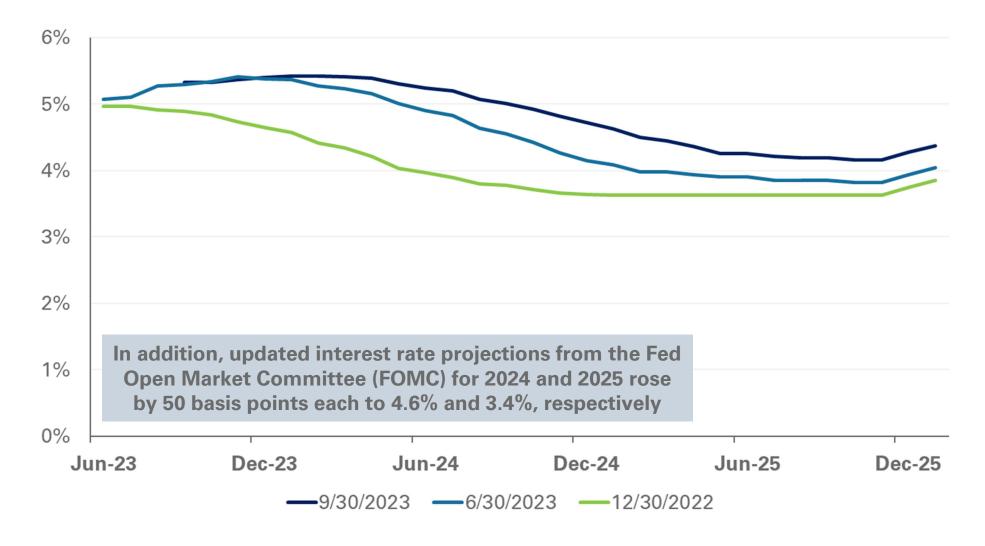
#### **JOB OPENINGS REMAIN ELEVATED** NONFARM JOB OPENINGS AND LABOR TURNOVER SURVEY





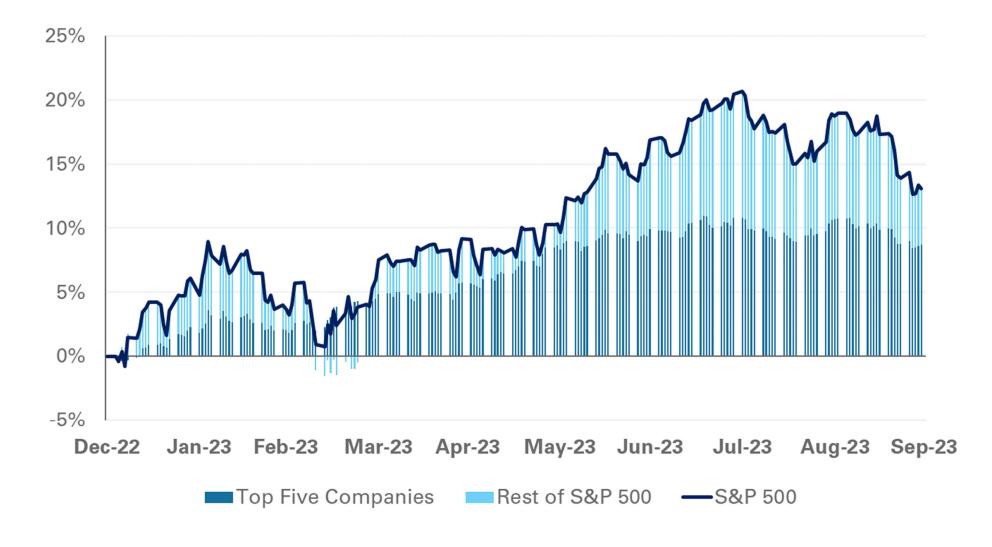
Source: Department of Labor, FactSet

#### THE MARKET IS PRICING IN "HIGHER FOR LONGER" FEDERAL FUND FUTURES



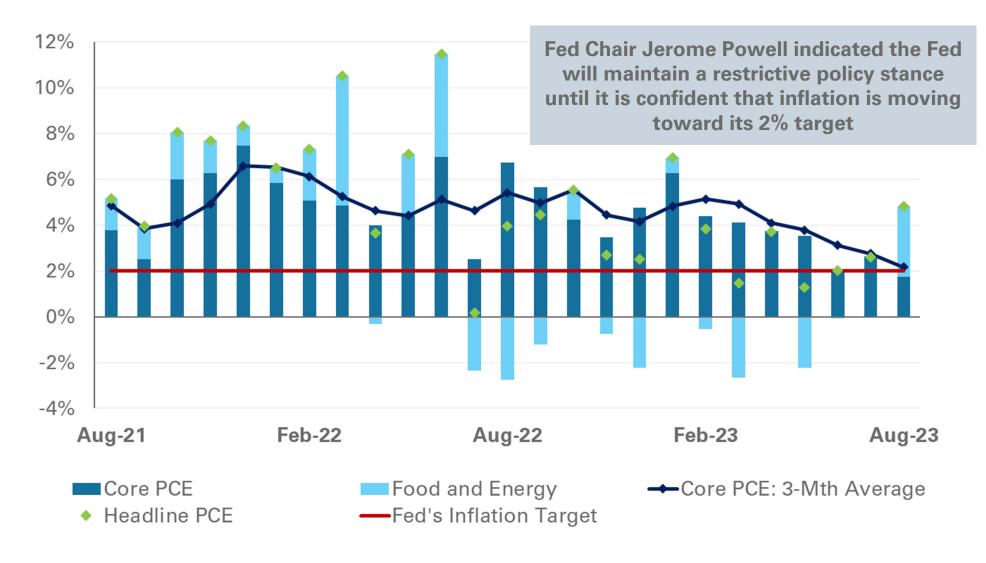


#### TOP FIVE COMPANIES SUPPORTED THE S&P 500 CONTRIBUTIONS TO TOTAL RETURN





#### CORE INFLATION NEAR FED'S INFLATION TARGET ANNUALIZED MONTHLY U.S. PCE PRICE INDEX CHANGES





Sources: Department of Labor, FactSet



#### PERFORMANCE UPDATE

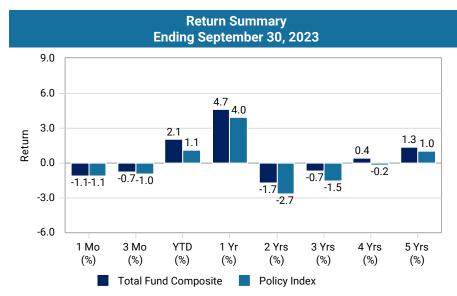
September 30, 2023





SOUTH BROWARD HOSPITAL DISTRICT – OPERATING FUNDS September 30, 2023

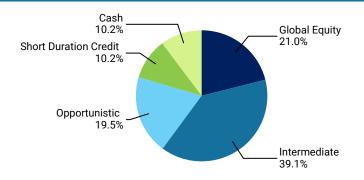
## MHS Operating Plan **EXECUTIVE SUMMARY**



			0.75		arket \ Ending				23		
	3,000.0										
	2,400.0 -										
s)(\$)	1,800.0 -										
(In Millions)(\$)	1,200.0 -										
u)	600.0 -										
	0.0										
	-600.0	12/22	1/23	2/23	3/23	4/23	5/23	6/23	7/23	8/23	9/23

	Current (\$)	Current (%)	Policy (%)	Differences (%)
Global Equity	491,471,907	21.0	20.0	1.0
Intermediate	912,441,221	39.1	35.0	4.1
Opportunistic	454,933,389	19.5	20.0	-0.5
Short Duration Credit	238,295,416	10.2	10.0	0.2
Cash	239,084,207	10.2	15.0	-4.8
Total	2,336,226,140	100.0	100.0	0.0

**Current Allocation** 



Summary of Cash Flows												
1 Month Year To Date 1 Year 3 Years												
Beginning Market Value	2,362,750,209	2,449,882,733	2,388,231,378	2,528,619,780								
Net Cash Flow	-189	-165,127,295	-165,190,843	-145,561,040								
Net Investment Change	-26,523,881	51,470,702	113,185,604	-46,832,600								
Ending Market Value 2,336,226,140 2,336,226,140 2,336,226,140 2,336,226,140												

#### MHS Operating Plan ASSET ALLOCATION VS. POLICY

Asset Allocation vs. Target

## 10.0% 10.2% 35.0% 39.1% 20.0% 19.5% 20.0% 21.0% 15.0% 10.2%

Policy Current

\*Difference between Policy and Current Allocation



	Current (\$)	Current (%)	Policy (%)	Differences* (%)	Policy Range (%)	Within Range
Short Term Composite	238,295,416	10.2	10.0	0.2	5.0 - 15.0	Yes
Intermediate Term Composite	912,441,221	39.1	35.0	4.1	30.0 - 40.0	Yes
Opportunistic Composite	454,933,389	19.5	20.0	-0.5	15.0 - 25.0	Yes
Global Equity Composite	491,471,907	21.0	20.0	1.0	15.0 - 25.0	Yes
Cash Composite	239,084,207	10.2	15.0	-4.8	15.0 - 20.0	No
Total Fund Composite	2,336,226,140	100.0	100.0	0.0		

#### MHS Operating Plan ASSET ALLOCATION VS. POLICY

Asset Allocat	ion vs. Target		Current Balance (\$)	Policy (%)	Current Allocation (%)	Differences (%)	Policy Range (%)	Within Range
		Global Equity	491,471,907	20.0	21.0	1.0	15.0 - 25.0	Yes
20.0%	21.0%	Vanguard Global Minimum Volatility Equity	227,161,506		9.7			
		Parametric Global Defensive Equity	264,310,400		11.3			
		Intermediate	912,441,221	35.0	39.1	4.1	30.0 - 40.0	Yes
		Galliard Intermediate Government	220,165,968		9.4			
		Merganser Intermediate Bond	215,049,899		9.2			
		Fort Washington Intermediate Bond	184,478,486		7.9			
		Lord Abbett Intermediate Bond	212,069,651		9.1			
35.0%	39.1%	PFM - Self Insurance Fund	44,657,213		1.9			
		PFM - Disability Fund	19,782,102		0.8			
		PFM - Workmen's Compensation Fund	10,893,117		0.5			
		PFM - Health & Dental Fund	5,344,785		0.2			
		Opportunistic	454,933,389	20.0	19.5	-0.5	15.0 - 25.0	Yes
		Galliard Opportunistic	139,773,907		6.0			
		Merganser Opportunistic	140,897,222		6.0			
		Fort Washington Active Fixed Income	174,262,260		7.5			
		Short Duration Credit	238,295,416	10.0	10.2	0.2	5.0 - 15.0	Yes
		Lord Abbett Short Duration	119,917,999		5.1			
		Loop Capital Asset Management	118,377,417		5.1			
		Cash	239,084,207	15.0	10.2	-4.8	15.0 - 20.0	No
20.0%		PNC Treasury Management	239,080,213		10.2			
	10 5%	U.S. Bank Cash	3,994		0.0			
	19.5%	Total	2,336,226,140	100.0	100.0	0.0		



\*Difference between Policy and Current Allocation

	Allocati	on		Performance (%)							
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	FYTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)
Total Fund Composite	2,336,226,140	100.0	-1.1	-0.7	2.1	-1.1	4.7	-1.7	-0.7	0.4	1.3
Policy Index			-1.1	-1.0	1.1	-1.8	4.0	-2.7	-1.5	-0.2	1.0
Fixed Income Composite	1,605,670,026	68.7	-1.1	-0.7	1.0	-1.8	2.3	-3.6	-2.5	-0.7	0.6
Short Term Composite	238,295,416	10.2	-0.5	0.3	1.6	-0.7	2.6	-2.2	-1.5	-0.3	0.6
Blmbg. 1-5 Year Gov/Credit			-0.4	0.2	1.4	-0.9	2.6	-2.5	-1.6	0.0	1.1
Lord Abbett Short Duration	119,917,999	5.1	-0.6	0.2	1.7	-0.7	2.7	-2.0			
Blmbg. 1-5 Year Gov/Credit			-0.4	0.2	1.4	-0.9	2.6	-2.5			
Loop Capital Asset Management	118,377,417	5.1	-0.3	0.5	1.7	-0.4	2.8	-2.4	-1.6	-0.3	0.6
Blmbg. 1-5 Year Gov/Credit			-0.4	0.2	1.4	-0.9	2.6	-2.5	-1.6	0.0	1.1
Intermediate Term Composite	912,441,221	39.1	-1.1	-0.7	1.0	-1.8	2.4	-3.6	-2.5	-0.7	0.5
Blmbg. Intermed. U.S. Government/Credit			-1.1	-0.8	0.7	-2.2	2.2	-4.2	-2.9	-0.7	1.0
Galliard Intermediate Government	220,165,968	9.4	-1.1	-0.8	1.0	-1.9	2.2	-3.9	-2.5	-0.7	0.6
Blmbg. Intermed. U.S. Government/Credit			-1.1	-0.8	0.7	-2.2	2.2	-4.2	-2.9	-0.7	1.0
Merganser Intermediate Bond	215,049,899	9.2	-1.1	-0.7	1.1	-1.7	2.4	-3.6	-2.5	-0.7	0.5
Blmbg. Intermed. U.S. Government/Credit			-1.1	-0.8	0.7	-2.2	2.2	-4.2	-2.9	-0.7	1.0
Fort Washington Intermediate Bond	184,478,486	7.9	-1.1	-0.9	1.0	-1.9	2.6	-3.8			
Blmbg. Intermed. U.S. Government/Credit			-1.1	-0.8	0.7	-2.2	2.2	-4.2			
Lord Abbett Intermediate Bond	212,069,651	9.1	-1.3	-0.8	0.9	-2.1	2.3	-3.8			
Blmbg. Intermed. U.S. Government/Credit			-1.1	-0.8	0.7	-2.2	2.2	-4.2			
PFM - Self Insurance Fund	44,657,213	1.9	-0.4	0.3	1.6	-0.7	2.6	-2.1	-1.4	0.1	1.2
ICE BofA 1-5 Yr Treasury & Agency			-0.3	0.2	1.2	-1.0	2.1	-2.4	-1.7	-0.2	0.9
PFM - Disability Fund	19,782,102	0.8	-0.4	0.3	1.6	-0.6	2.7	-2.1	-1.4	0.1	1.2
ICE BofA 1-5 Yr Treasury & Agency			-0.3	0.2	1.2	-1.0	2.1	-2.4	-1.7	-0.2	0.9
PFM - Workmen's Compensation Fund	10,893,117	0.5	0.1	0.9	2.5	0.4	3.3	-0.5	-0.3	0.6	1.3
ICE BofA U.S. Agencies, 1-3yr			0.1	0.8	2.1	0.4	2.9	-1.1	-0.7	0.3	1.0
PFM - Health & Dental Fund	5,344,785	0.2	0.1	0.9	2.4	0.4	3.2	-0.6	-0.4	0.5	1.2
ICE BofA U.S. Agencies, 1-3yr			0.1	0.8	2.1	0.4	2.9	-1.1	-0.7	0.3	1.0



	Allocati	on		Performance (%)							
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	FYTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)
Opportunistic Composite	454,933,389	19.5	-1.5	-1.3	0.6	-2.5	2.0	-4.4	-3.1	-0.9	0.8
Blmbg. U.S. Intermediate Aggregate			-1.8	-1.9	-0.3	-3.2	1.4	-5.3	-3.7	-1.4	0.4
Galliard Opportunistic	139,773,907	6.0	-1.6	-1.6	0.2	-2.9	1.5	-4.9	-3.4	-1.0	0.7
Blmbg. U.S. Intermediate Aggregate			-1.8	-1.9	-0.3	-3.2	1.4	-5.3	-3.7	-1.4	0.4
Merganser Opportunistic	140,897,222	6.0	-1.3	-1.1	0.7	-2.3	2.1	-4.1	-3.0	-0.8	0.8
Blmbg. U.S. Intermediate Aggregate			-1.8	-1.9	-0.3	-3.2	1.4	-5.3	-3.7	-1.4	0.4
Fort Washington Active Fixed Income	174,262,260	7.5	-1.4	-1.2	0.8	-2.2	2.3	-4.1			
Blmbg. U.S. Intermediate Aggregate			-1.8	-1.9	-0.3	-3.2	1.4	-5.3			
Global Equity Composite	491,471,907	21.0	-1.9	-1.7	4.9	-0.1	13.5	1.8	5.9	4.1	4.1
MSCI AC World Minimum Volatility Index (Net)			-2.2	-2.5	1.2	-3.1	9.8	-1.8	3.2	2.3	3.7
Vanguard Global Minimum Volatility Equity	227,161,506	9.7	-1.9	-2.4	1.2	-2.1	10.8	1.3	4.7	1.8	3.2
MSCI AC World Minimum Volatility Index (Net)			-2.2	-2.5	1.2	-3.1	9.8	-1.8	3.2	2.3	3.7
Parametric Global Defensive Equity	264,310,400	11.3	-1.9	-1.0	8.7	1.8	16.3	2.4	6.9	5.1	4.4
50% MSCI ACWI / 50% 90 Day T-Bill			-1.8	-1.0	7.0	1.7	12.7	0.6	4.6	5.1	4.5
Cash Composite	239,084,207	10.2									
90 Day U.S. Treasury Bill			0.5	1.3	3.6	2.2	4.5	2.5	1.7	1.6	1.7
PNC Treasury Management	239,080,213	10.2	0.4	1.3	3.6	2.1	4.6	2.5	1.7	1.6	1.7
90 Day U.S. Treasury Bill			0.5	1.3	3.6	2.2	4.5	2.5	1.7	1.6	1.7
U.S. Bank Cash	3,994	0.0									
90 Day U.S. Treasury Bill			0.5	1.3	3.6	2.2	4.5	2.5	1.7	1.6	1.7

\* All data is preliminary.

\* All data prior to 5/2023 was received from Marquette Associates.

\* Policy Index consist of 35% Bloomberg Intermediate U.S. Gov/Credit, 20% Bloomberg U.S. Intermediate Aggregate, 10% Bloomberg 1-5 Year Gov/Credit, 20% MSCI AC World Minimum Volatility Index (Net), and 15% 90 Day U.S. T-Bills.

	Allocati	on			Performance (%)						
	Market Value (\$)	% of Portfolio	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Fund Composite	2,336,226,140	100.0	-5.9	1.1	3.9	5.3	1.2	1.3	1.1	1.1	1.7
Policy Index			-7.1	1.0	3.9	5.7	1.2	0.8	0.9	0.8	1.3
Short Term Composite	238,295,416	10.2	-5.2	-1.0	3.2	3.5	1.6	0.7	0.8	0.6	0.6
Blmbg. 1-5 Year Gov/Credit			-5.5	-1.0	4.7	5.0	1.4	1.3	1.6	1.0	1.4
Lord Abbett Short Duration	119,917,999	5.1	-4.9								
Blmbg. 1-5 Year Gov/Credit			-5.5								
Loop Capital Asset Management	118,377,417	5.1	-5.6	-0.9	3.2	3.5	1.6	0.7	1.0	0.4	0.5
Blmbg. 1-5 Year Gov/Credit			-5.5	-1.0	4.7	5.0	1.4	1.3	1.6	1.0	1.4
Intermediate Term Composite	912,441,221	39.1	-7.5	-1.0	4.8	4.6	1.5	1.3	1.2	1.2	1.9
Blmbg. Intermed. U.S. Government/Credit			-8.2	-1.4	6.4	6.8	0.9	2.1	2.1	1.1	3.1
Galliard Intermediate Government	220,165,968	9.4	-8.1	-0.6	5.1	4.6	1.5	1.4	1.3	1.1	2.0
Blmbg. Intermed. U.S. Government/Credit			-8.2	-1.4	6.4	6.8	0.9	2.1	2.1	1.1	3.1
Merganser Intermediate Bond	215,049,899	9.2	-7.6	-1.0	4.6	4.6	1.5	1.3	1.2	1.0	1.8
Blmbg. Intermed. U.S. Government/Credit			-8.2	-1.4	6.4	6.8	0.9	2.1	2.1	1.1	3.1
Fort Washington Intermediate Bond	184,478,486	7.9	-7.9								
Blmbg. Intermed. U.S. Government/Credit			-8.2								
Lord Abbett Intermediate Bond	212,069,651	9.1	-7.7								
Blmbg. Intermed. U.S. Government/Credit			-8.2								
PFM - Self Insurance Fund	44,657,213	1.9	-5.0	-0.9	4.6	4.6	1.4	1.1	1.3	1.0	1.3
ICE BofA 1-5 Yr Treasury & Agency			-5.2	-1.1	4.2	4.2	1.5	0.7	1.1	1.0	1.2
PFM - Disability Fund	19,782,102	0.8	-5.1	-0.9	4.6	4.6	1.3	1.1	1.3	1.0	1.3
ICE BofA 1-5 Yr Treasury & Agency			-5.2	-1.1	4.2	4.2	1.5	0.7	1.1	1.0	1.2
PFM - Workmen's Compensation Fund	10,893,117	0.5	-3.0	-0.5	2.8	3.5	1.6	0.7	1.0	0.7	0.6
ICE BofA U.S. Agencies, 1-3yr			-3.7	-0.4	2.7	3.5	1.8	0.7	1.0	0.7	0.7
PFM - Health & Dental Fund	5,344,785	0.2	-3.1	-0.5	2.8	3.5	1.7	0.7	1.0	0.7	0.6
ICE BofA U.S. Agencies, 1-3yr			-3.7	-0.4	2.7	3.5	1.8	0.7	1.0	0.7	0.7

	Allocati				Perf	ormance	e (%)				
	Market Value (\$)	% of Portfolio	2022	2021	2020	2019	2018	2017	2016	2015	2014
Opportunistic Composite	454,933,389	19.5	-8.5	-1.4	6.3	5.9	1.3	2.0	1.6	1.5	3.2
Blmbg. U.S. Intermediate Aggregate			-9.5	-1.3	5.6	6.7	0.9	2.3	2.0	1.2	4.1
Galliard Opportunistic	139,773,907	6.0	-9.2	-1.1	6.6	5.9	1.3	2.2	1.6	1.4	3.4
Blmbg. U.S. Intermediate Aggregate			-9.5	-1.3	5.6	6.7	0.9	2.3	2.0	1.2	4.1
Merganser Opportunistic	140,897,222	6.0	-8.3	-1.4	5.9	5.8	1.4	1.7	1.6	1.2	2.5
Blmbg. U.S. Intermediate Aggregate			-9.5	-1.3	5.6	6.7	0.9	2.3	2.0	1.2	4.1
Fort Washington Active Fixed Income	174,262,260	7.5	-8.2								
Blmbg. U.S. Intermediate Aggregate			-9.5								
Global Equity Composite	491,471,907	21.0	-6.0	12.7	1.4	17.0					
MSCI AC World Minimum Volatility Index (Net)			-10.3	13.9	2.7	21.1					
Vanguard Global Minimum Volatility Equity	227,161,506	9.7	-4.5	12.0	-3.9	22.7					
MSCI AC World Minimum Volatility Index (Net)			-10.3	13.9	2.7	21.1					
Parametric Global Defensive Equity	264,310,400	11.3	-7.5	13.1	2.6	14.1					
50% MSCI ACWI / 50% 90 Day T-Bill			-8.5	9.0	9.1	14.1					
Cash Composite	239,084,207	10.2									
PNC Treasury Management	239,080,213	10.2	1.3	0.1	0.8	2.4	1.9	0.9	0.5	0.2	
90 Day U.S. Treasury Bill			1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	
U.S. Bank Cash	3,994	0.0									
90 Day U.S. Treasury Bill			1.5	0.0	0.7	2.3					

\* All data prior to 5/2023 was received from Marquette Associates.

\* Policy Index consist of 35% Bloomberg Intermediate U.S. Gov/Credit, 20% Bloomberg U.S. Intermediate Aggregate, 10% Bloomberg 1-5 Year Gov/Credit, 20% MSCI AC World Minimum Volatility Index (Net), and 15% 90 Day U.S. T-Bills.



## MHS Operating Plan CASH FLOW SUMMARY BY MANAGER

	1 Month End	ding September 3	0, 2023			
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Gain/ Loss	Ending Market Value
Lord Abbett Short Duration	\$120,675,413	-	-	-	-\$757,414	\$119,917,999
Loop Capital Asset Management	\$118,721,208	-	-	-	-\$343,791	\$118,377,417
Galliard Intermediate Government	\$222,654,857	-	-	-	-\$2,488,889	\$220,165,968
Merganser Intermediate Bond	\$217,385,135	-	-	-	-\$2,335,236	\$215,049,899
Fort Washington Intermediate Bond	\$186,552,337	-	-	-	-\$2,073,851	\$184,478,486
Lord Abbett Intermediate Bond	\$214,963,143	-	-	-	-\$2,893,492	\$212,069,651
PFM - Self Insurance Fund	\$44,821,281	-	-	-	-\$164,068	\$44,657,213
PFM - Disability Fund	\$19,853,685	-	-	-	-\$71,583	\$19,782,102
PFM - Workmen's Compensation Fund	\$10,886,700	-	-	-	\$6,418	\$10,893,117
PFM - Health & Dental Fund	\$5,341,915	-	-	-	\$2,870	\$5,344,785
Galliard Opportunistic	\$142,099,195	-	-	-	-\$2,325,288	\$139,773,907
Merganser Opportunistic	\$142,807,063	-	-	-	-\$1,909,841	\$140,897,222
Fort Washington Active Fixed Income	\$176,748,268	-	-	-	-\$2,486,008	\$174,262,260
Vanguard Global Minimum Volatility Equity	\$231,663,944	-	-	-	-\$4,502,437	\$227,161,506
Parametric Global Defensive Equity	\$269,513,942	-	-	-	-\$5,203,541	\$264,310,400
PNC Treasury Management	\$238,057,959	-	-	-	\$1,022,255	\$239,080,213
U.S. Bank Cash	\$4,166	\$17	-\$205	-\$189	\$16	\$3,994
Total	\$2,362,750,209	\$17	-\$205	-\$189	-\$26,523,881	\$2,336,226,140

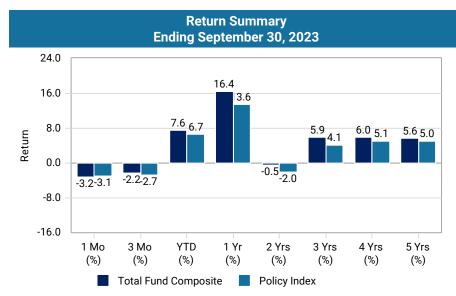




SOUTH BROWARD HOSPITAL DISTRICT – RETIREMENT PLAN September 30, 2023



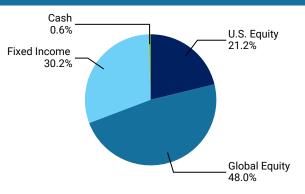
## MHS Retirement Plan **EXECUTIVE SUMMARY**



	Market Value History 0.75 Year Ending September 30, 2023											
	1,000.0											
	750.0 -											
(In Millions)(\$)	500.0 -											
(In Mi	250.0 -											
	0.0											
	-250.0	12/22	1/23	2/23	3/23	4/23	5/23	6/23	7/23	8/23	9/23	

	Current (\$)	Current (%)	Policy (%)	Differences (%)
U.S. Equity	189,625,382	21.2	20.0	1.2
Global Equity	429,737,783	48.0	45.0	3.0
Fixed Income	270,488,906	30.2	35.0	-4.8
Cash	4,945,764	0.6	0.0	0.6
Total	894,797,834	100.0	100.0	0.0

**Current Allocation** 



Summary of Cash Flows										
	1 Month	Year To Date	1 Year	3 Years						
Beginning Market Value	923,866,270	833,725,298	769,910,451	755,199,395						
Net Cash Flow	261,066	-2,423,500	-2,325,678	-7,781,313						
Net Investment Change	-29,329,501	63,496,037	127,213,061	147,379,752						
Ending Market Value	894,797,834	894,797,834	894,797,834	894,797,834						

#### MHS Retirement Plan ASSET ALLOCATION VS. POLICY

#### Asset Allocation vs. Target

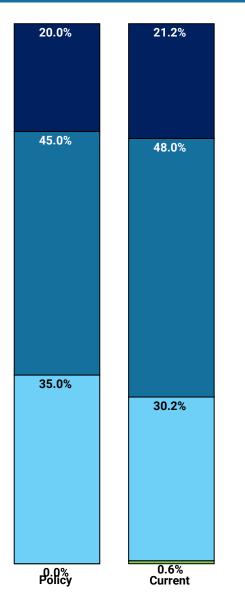


	Current (\$)	Current (%)	Policy (%)	Differences* (%)	Policy Range (%)	Within Range
C.S. McKee Aggregate Fixed Income	175,668,687	19.6	25.0	-5.4	20.0 - 30.0	No
Chartwell High Yield	44,583,306	5.0	5.0	0.0	2.5 - 7.5	Yes
Artistotle Floating Rate Income	50,224,318	5.6	5.0	0.6	2.5 - 7.5	Yes
Vanguard Total Stock Market Fund	90,877,707	10.2	10.0	0.2	5.0 - 15.0	Yes
Parametric Defensive Equity	98,747,675	11.0	10.0	1.0	5.0 - 15.0	Yes
Dodge & Cox	178,039,659	19.9	17.5	2.4	12.5 - 22.5	Yes
Walter Scott & Partners	205,809,057	23.0	22.5	0.5	17.5 - 27.5	Yes
Vanguard Global Minimum Volatility	45,889,066	5.1	5.0	0.1	2.5 - 7.5	Yes
Total Fund Composite	894,797,834	100.0	100.0	0.0		

\*Difference between Policy and Current Allocation

#### MHS Retirement Plan ASSET ALLOCATION VS. POLICY

#### Asset Allocation vs. Target



	Current Balance (\$)	Policy (%)	Current Allocation (%)	Differences (%)	Policy Range (%)	Within Range
U.S. Equity	189,625,382	20.0	21.2	1.2	15.0 - 25.0	Yes
Vanguard Total Stock Market Fund	90,877,707		10.2			
Parametric Defensive Equity	98,747,675		11.0			
Global Equity	429,737,783	45.0	48.0	3.0	40.0 - 50.0	Yes
Dodge & Cox	178,039,659		19.9			
Walter Scott & Partners	205,809,057		23.0			
Vanguard Global Minimum Volatility	45,889,066		5.1			
Fixed Income	270,488,906	35.0	30.2	-4.8	30.0 - 40.0	Yes
C.S. McKee Aggregate Fixed Income	175,668,687		19.6			
Chartwell High Yield	44,583,306		5.0			
Artistotle Floating Rate Income	50,224,318		5.6			
Wellington LCP Legacy Portfolio	12,595		0.0			
Cash	4,945,764	0.0	0.6	0.6	0.0 - 0.0	No
Money Market	1,190,179		0.1			
Vanguard Treasury Money Market	3,755,585		0.4			
Total	894,797,834	100.0	100.0	0.0		

\*Difference between Policy and Current Allocation

## MHS Retirement Plan TOTAL FUND PERFORMANCE DETAIL

	Allocat	tion		Performance (%)							
	Market	% of	1 Mo	3 Mo	YTD	FYTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
	Value (\$)	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Total Fund Composite	894,797,834	100.0	-3.2	-2.2	7.6	0.7	16.4	-0.5	5.9	6.0	5.6
Policy Index			-3.1	-2.7	6.7	0.0	13.6	-2.0	4.1	5.1	5.0
Fixed Income Composite	270,488,906	30.2	-1.7	-1.4	1.9	-1.6	4.5	-4.0	-2.3	-0.4	1.3
Custom Index			-1.7	-1.7	1.2	-2.3	3.3	-4.5	-2.5	-0.5	1.2
C.S. McKee Aggregate Fixed Income	175,668,687	19.6	-2.7	-3.2	-0.7	-4.0	1.8	-7.1	-5.1	-2.2	0.1
Blmbg. U.S. Aggregate Index			-2.5	-3.2	-1.2	-4.6	0.6	-7.3	-5.2	-2.3	0.1
Chartwell High Yield	44,583,306	5.0	-0.2	1.0	3.9	1.4	6.6	0.5	2.0	2.1	2.7
ICE BofA U.S. High Yield Cash Pay BB 1-3 Year			-0.2	1.1	4.7	1.6	7.5	1.0	2.8	2.9	3.6
Artistotle Floating Rate Income	50,224,318	5.6	0.7	3.2	10.2	5.1	13.2	5.0	5.6	4.2	4.0
Credit Suisse Leveraged Loan Index			0.9	3.4	9.9	5.6	12.5	4.7	5.9	4.6	4.3
Wellington LCP Legacy Portfolio	12,595	0.0									
U.S. Equity Composite	189,625,382	21.2	-3.7	-1.8	11.7	3.7	19.4	1.7	9.3	9.2	7.8
CRSP U.S. Total Market TR Index			-4.8	-3.3	12.3	3.7	20.4	-0.6	9.3	10.7	9.1
Vanguard Total Stock Market Fund	90,877,707	10.2	-4.8	-3.2	12.4	3.7	20.3	-0.7	9.3	10.6	9.0
CRSP U.S. Total Market TR Index			-4.8	-3.3	12.3	3.7	20.4	-0.6	9.3	10.7	9.1
Parametric Defensive Equity	98,747,675	11.0	-2.6	-1.1	10.4	3.0	17.8	3.8	8.6	7.0	6.0
50% S&P 500/50% 90 Day T-Bill			-2.2	-1.0	8.4	3.0	13.1	2.4	6.3	6.8	6.2
Global Equity Composite	429,737,783	48.0	-3.9	-3.0	9.7	0.8	24.2	0.8	10.0	8.7	7.4
MSCI AC World Index (Net)			-4.1	-3.4	10.1	1.1	20.8	-2.1	6.9	7.8	6.5
Dodge & Cox	178,039,659	19.9	-2.8	0.6	11.6	4.0	26.4	4.2	16.3	10.5	7.8
MSCI AC World Index Value (Net)			-2.6	-1.8	2.4	-0.6	17.0	0.3	9.7	5.0	4.0
Walter Scott & Partners	205,809,057	23.0	-5.3	-6.0	10.2	-1.2	25.7	-2.1	6.2	8.1	7.5
MSCI World Growth (Net)			-5.7	-4.9	20.9	3.3	26.6	-3.8	5.3	11.1	9.4
Vanguard Global Minimum Volatility	45,889,066	5.1	-1.9	-2.5	1.2	-2.1	10.7	1.2	4.7	1.8	3.2
MSCI AC World Minimum Volatility Index (Net)			-2.2	-2.5	1.2	-3.1	9.8	-1.8	3.2	2.3	3.7
Cash Composite	4,945,764	0.6	0.3	1.1	2.5	1.9	3.0	1.6	1.1	1.0	1.2
90 Day U.S. Treasury Bill			0.5	1.3	3.6	2.2	4.5	2.5	1.7	1.6	1.7

\* All data is preliminary.

\* All data prior to 5/2023 was received from Marquette Associates.

\* All accounts except for Chartwell High Yield and Walter Scott & Partners are preliminary as July statements are not available.

\* Policy Index consist of 40% MSCI ACWI, 5% MSCI ACWI Minimum Volatility, 25% Barclays U.S. Aggregate, 10% CRSP US Total Market Index, 10% CBOE Put Write Index, 5% BofAML 1-3 Year High Yield BB, and 5% Credit Suisse Leveraged Loan Index.

\* Custom Index consist of 71.4% Bloomberg U.S. Aggregate, 14.3% BofA Merrill Lynch 1-3 Yrs High Yield BB, and 14.3% Credit Suisse Leveraged Loan Index.



## MHS Retirement Plan TOTAL FUND PERFORMANCE DETAIL

	Allocat	ion		Performance (%)					
	Market Value (\$)	% of Portfolio	2022	2021	2020	2019	2018		
Total Fund Composite	894,797,834	100.0	-11.9	13.4	11.0	19.5	-3.7		
Policy Index			-13.9	12.6	11.7	19.6	-4.7		
Fixed Income Composite	270,488,906	30.2	-9.5	-0.2	6.3	8.6	-0.6		
Custom Index			-10.0	0.1	6.7	8.7	0.5		
C.S. McKee Aggregate Fixed Income	175,668,687	19.6	-12.9	-1.8	7.6	8.9			
Blmbg. U.S. Aggregate Index			-13.0	-1.5	7.5	8.7			
Chartwell High Yield	44,583,306	5.0	-3.0	2.3	4.2	7.0	0.7		
ICE BofA U.S. High Yield Cash Pay BB 1-3 Year			-3.1	3.2	5.4	8.7	1.3		
Artistotle Floating Rate Income	50,224,318	5.6	-0.8	4.6	1.6	8.3			
Credit Suisse Leveraged Loan Index			-1.1	5.4	2.8	8.2			
Wellington LCP Legacy Portfolio	12,595	0.0							
U.S. Equity Composite	189,625,382	21.2	-13.8	21.8	13.6	23.5	-4.1		
CRSP U.S. Total Market TR Index			-19.5	25.7	21.0	30.8	-5.2		
Vanguard Total Stock Market Fund	90,877,707	10.2	-19.5	25.7	21.0	30.7	-5.2		
CRSP U.S. Total Market TR Index			-19.5	25.7	21.0	30.8	-5.2		
Parametric Defensive Equity	98,747,675	11.0	-7.7	17.2	5.0	16.0	-2.9		
50% S&P 500/50% 90 Day T-Bill			-8.2	13.7	10.1	16.3	-1.0		
Global Equity Composite	429,737,783	48.0	-12.8	19.0	12.4	27.1	-6.2		
MSCI AC World Index (Net)			-18.4	18.5	16.3	26.6	-9.4		
Dodge & Cox	178,039,659	19.9	-5.8	20.8	6.0	23.8	-12.6		
MSCI AC World Index Value (Net)			-7.5	19.6	-0.3	20.6	-10.8		
Walter Scott & Partners	205,809,057	23.0	-19.6	18.7	18.9	30.5	-2.3		
MSCI World Growth (Net)			-29.2	21.2	33.8	33.7	-6.7		
Vanguard Global Minimum Volatility	45,889,066	5.1	-4.5	12.0	-3.9	22.7	-1.7		
MSCI AC World Minimum Volatility Index (Net)			-10.3	13.9	2.7	21.1	-1.6		
Cash Composite	4,945,764	0.6	0.7	0.0	0.4	2.0	1.6		
90 Day U.S. Treasury Bill			1.5	0.0	0.7	2.3	1.9		

\* All data prior to 5/2023 was received from Marquette Associates.

\* Policy Index consist of 40% MSCI ACWI, 5% MSCI ACWI Minimum Volatility, 25% Barclays U.S. Aggregate, 10% CRSP US Total Market Index, 10% CBOE Put Write Index, 5% BofAML 1-3 Year High Yield BB, and 5% Credit Suisse Leveraged Loan Index.

\* Custom Index consist of 71.4% Bloomberg U.S. Aggregate, 14.3% BofA Merrill Lynch 1-3 Yrs High Yield BB, and 14.3% Credit Suisse Leveraged Loan Index.



## MHS Retirement Plan CASH FLOW SUMMARY BY MANAGER

	1 Month Ending September 30, 2023											
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Gain/ Loss	Ending Market Value						
C.S. McKee Aggregate Fixed Income	\$180,514,400	-	-	-	-\$4,845,713	\$175,668,687						
Chartwell High Yield	\$44,662,942	-	-	-	-\$79,636	\$44,583,306						
Artistotle Floating Rate Income	\$49,866,922	-	-	-	\$357,396	\$50,224,318						
Wellington LCP Legacy Portfolio	\$12,542	-	-	-	\$53	\$12,595						
Vanguard Total Stock Market Fund	\$95,810,714	-	-\$341,588	-\$341,588	-\$4,591,418	\$90,877,707						
Parametric Defensive Equity	\$101,420,253	-	-	-	-\$2,672,579	\$98,747,675						
Dodge & Cox	\$183,101,592	-	-	-	-\$5,061,932	\$178,039,659						
Walter Scott & Partners	\$217,339,357	-	-	-	-\$11,530,299	\$205,809,057						
Vanguard Global Minimum Volatility	\$46,799,430	-	-	-	-\$910,364	\$45,889,066						
Money Market	\$749,948	\$445,611	-\$8,734	\$436,877	\$3,354	\$1,190,179						
Vanguard Treasury Money Market	\$3,588,171	\$3,808,858	-\$3,643,081	\$165,777	\$1,637	\$3,755,585						
Total	\$923,866,270	\$4,254,469	-\$3,993,404	\$261,066	-\$29,329,501	\$894,797,834						



MEMORIAL<br/>HEALTHCARE<br/>SYSTEM<br/>DEFINED<br/>CONTRIBUTION<br/>PLANSSeptember 30, 2023

## Memorial Health System DC Plans **ASSET ALLOCATION VS. POLICY**

Current Allocation		Current (\$)	Current (%)
60.4%	JPMorgan Target Date Funds	810,036,623	60.4
00.470	Transamerica Stable Value	948,431	0.1
	Transamerica Guaranteed Investment Option	147,506,413	11.0
	MetWest Total Return Bond (MWTIX)	28,117,788	2.1
	Vanguard Inflation Protected Securites Fund (VIPIX)	15,649,829	1.2
	American Beacon Large Cap Value Fund (AALRX)	18,676,210	1.4
	Fidelity Spartan 500 Index (FXAIX)	92,852,380	6.9
	Neuberger Berman Socially Responsive Investing (NRSRX)	12,024,853	0.9
	Vanguard Russell 1000 Growth Index (VIGIX)	61,778,388	4.6
	Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	34,009,024	2.5
	Dimensional US Targeted Value Strategy (DFFVX)	20,620,800	1.5
	T. Rowe Price New Horizons (PRJIX)	37,849,531	2.8
	Dodge & Cox International (DODFX)	21,561,791	1.6
	Vanguard International-Growth (VWILX)	23,716,953	1.8
	Charles Schwab Personal Choice	16,578,989	1.2
	Total Fund Composite	1,341,928,004	100.0
11.6%			
2.1% 1.3% 6.9%			
<b>4.8%</b> <b>2.5%</b>			
2.5% 1.5% 2.8% 1.6%			

Current



## Memorial Healthcare System RSP Gold 403(b) Plan MULTI PERIOD ASSET ALLOCATION

	Total Fund			
	\$	%		
Total Fund Composite	1,134,335,724	100.0		
JP Morgan Target Date Funds	676,505,078	59.6		
JPMorgan SmartRetirement Blend Income (JIYBX)	37,802,466	3.3		
JPMorgan SmartRetirement Blend 2020 (JSYRX)	65,135,160	5.7		
JPMorgan SmartRetirement Blend 2025 (JBYSX)	112,104,082	9.9		
JPMorgan SmartRetirement Blend 2030 (JRBYX)	118,372,119	10.4		
JPMorgan SmartRetirement Blend 2035 (JPYRX)	98,698,179	8.7		
JPMorgan SmartRetirement Blend 2040 (JOBYX)	75,671,910	6.7		
JPMorgan SmartRetirement Blend 2045 (JMYAX)	65,853,004	5.8		
JPMorgan SmartRetirement Blend 2050 (JNYAX)	58,918,013	5.2		
JPMorgan SmartRetirement Blend 2055 (JTYBX)	29,655,280	2.6		
JPMorgan SmartRetirement Blend 2060 (JAAYX)	14,294,864	1.3		
Core Funds	443,579,481	39.1		
Transamerica Stable Value	815,881	0.1		
Transamerica Guaranteed Investment Option	134,977,186	11.9		
MetWest Total Return Bond (MWTIX)	24,050,347	2.1		
Vanguard Inflation Protected Securites Fund (VIPIX)	12,681,111	1.1		
American Beacon Large Cap Value Fund (AALRX)	15,887,543	1.4		
Fidelity Spartan 500 Index (FXAIX)	78,217,571	6.9		
Neuberger Berman Socially Responsive Investing (NRSRX)	10,203,557	0.9		
Vanguard Russell 1000 Growth Index (VIGIX)	49,990,840	4.4		
Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	28,793,529	2.5		
Dimensional US Targeted Value Strategy (DFFVX)	17,846,984	1.6		
T. Rowe Price New Horizons (PRJIX)	31,620,423	2.8		
Dodge & Cox International (DODFX)	18,880,842	1.7		
Vanguard International-Growth (VWILX)	19,613,667	1.7		
Brokerage	14,251,166	1.3		
Charles Schwab Personal Choice	14,251,166	1.3		



#### Memorial Healthcare System 401(a) Plan MULTI PERIOD ASSET ALLOCATION

	Total Fund			
	\$	%		
Total Fund Composite	75,251,823	100.0		
JPMorgan Target Date Funds	64,032,294	85.1		
JPMorgan SmartRetirement Blend Income (JIYBX)	918,886	1.2		
JPMorgan SmartRetirement Blend 2020 (JSYRX)	2,029,693	2.7		
JPMorgan SmartRetirement Blend 2025 (JBYSX)	4,817,506	6.4		
JPMorgan SmartRetirement Blend 2030 (JRBYX)	6,339,624	8.4		
JPMorgan SmartRetirement Blend 2035 (JPYRX)	8,378,599	11.1		
JPMorgan SmartRetirement Blend 2040 (JOBYX)	8,639,312	11.5		
JPMorgan SmartRetirement Blend 2045 (JMYAX)	10,567,098	14.0		
JPMorgan SmartRetirement Blend 2050 (JNYAX)	11,231,299	14.9		
JPMorgan SmartRetirement Blend 2055 (JTYBX)	7,908,660	10.5		
JPMorgan SmartRetirement Blend 2060 (JAAYX)	3,201,616	4.3		
Core Funds	11,219,529	14.9		
Transamerica Stable Value	128,375	0.2		
Transamerica Guaranteed Investment Option	1,128,307	1.5		
MetWest Total Return Bond (MWTIX)	405,492	0.5		
Vanguard Inflation Protected Securites Fund (VIPIX)	442,846	0.6		
American Beacon Large Cap Value Fund (AALRX)	381,413	0.5		
Fidelity Spartan 500 Index (FXAIX)	2,853,979	3.8		
Neuberger Berman Socially Responsive Investing (NRSRX)	107,366	0.1		
Vanguard Russell 1000 Growth Index (VIGIX)	1,716,425	2.3		
Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	479,243	0.6		
Dimensional US Targeted Value Strategy (DFFVX)	955,716	1.3		
T. Rowe Price New Horizons (PRJIX)	837,866	1.1		
Dodge & Cox International (DODFX)	900,742	1.2		
Vanguard International-Growth (VWILX)	881,759	1.2		
Brokerage		0.0		
Charles Schwab Personal Choice		0.0		



#### Memorial Healthcare System 457(b) Plan MULTI PERIOD ASSET ALLOCATION

	Total Fund			
	\$	%		
Total Fund Composite	112,441,955	100.0		
JPMorgan Target Date Funds	52,336,918	46.5		
JPMorgan SmartRetirement Blend Income (JIYBX)	3,119,869	2.8		
JPMorgan SmartRetirement Blend 2020 (JSYRX)	4,819,493	4.3		
JPMorgan SmartRetirement Blend 2025 (JBYSX)	9,564,510	8.5		
JPMorgan SmartRetirement Blend 2030 (JRBYX)	9,508,203	8.5		
JPMorgan SmartRetirement Blend 2035 (JPYRX)	7,839,887	7.0		
JPMorgan SmartRetirement Blend 2040 (JOBYX)	5,931,396	5.3		
JPMorgan SmartRetirement Blend 2045 (JMYAX)	5,821,083	5.2		
JPMorgan SmartRetirement Blend 2050 (JNYAX)	4,149,267	3.7		
JPMorgan SmartRetirement Blend 2055 (JTYBX)	1,268,511	1.1		
JPMorgan SmartRetirement Blend 2060 (JAAYX)	314,698	0.3		
Core Funds	57,777,214	51.4		
Transamerica Stable Value	2,255	0.0		
Transamerica Guaranteed Investment Option	10,541,407	9.4		
MetWest Total Return Bond (MWTIX)	3,653,442	3.2		
Vanguard Inflation Protected Securites Fund (VIPIX)	2,262,062	2.0		
American Beacon Large Cap Value Fund (AALRX)	1,895,981	1.7		
Fidelity Spartan 500 Index (FXAIX)	11,474,139	10.2		
Neuberger Berman Socially Responsive Investing (NRSRX)	1,706,020	1.5		
Vanguard Russell 1000 Growth Index (VIGIX)	9,577,960	8.5		
Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	4,654,296	4.1		
Dimensional US Targeted Value Strategy (DFFVX)	1,818,100	1.6		
T. Rowe Price New Horizons (PRJIX)	5,228,119	4.6		
Dodge & Cox International (DODFX)	1,776,136	1.6		
Vanguard International-Growth (VWILX)	3,187,299	2.8		
Brokerage	2,327,824	2.1		
Charles Schwab Personal Choice	2,327,824	2.1		



#### Memorial Healthcare System SERP 457(f) Plan MULTI PERIOD ASSET ALLOCATION

	Total Fu	nd
	\$	%
Total Fund Composite	19,898,501	100.0
JPMorgan Target Date Funds	17,162,333	86.2
JPMorgan SmartRetirement Blend Income (JIYBX)	195,813	1.0
JPMorgan SmartRetirement Blend 2020 (JSYRX)	898,607	4.5
JPMorgan SmartRetirement Blend 2025 (JBYSX)	6,161,225	31.0
JPMorgan SmartRetirement Blend 2030 (JRBYX)	4,901,866	24.6
JPMorgan SmartRetirement Blend 2035 (JPYRX)	2,925,238	14.7
JPMorgan SmartRetirement Blend 2040 (JOBYX)	1,325,008	6.7
JPMorgan SmartRetirement Blend 2045 (JMYAX)	754,577	3.8
JPMorgan SmartRetirement Blend 2050 (JNYAX)		0.0
JPMorgan SmartRetirement Blend 2055 (JTYBX)		0.0
JPMorgan SmartRetirement Blend 2060 (JAAYX)		0.0
Core Funds	2,736,168	13.8
Transamerica Stable Value	1,920	0.0
Transamerica Guaranteed Investment Option	859,514	4.3
MetWest Total Return Bond (MWTIX)	8,507	0.0
Vanguard Inflation Protected Securites Fund (VIPIX)	263,811	1.3
American Beacon Large Cap Value Fund (AALRX)	511,274	2.6
Fidelity Spartan 500 Index (FXAIX)	306,691	1.5
Neuberger Berman Socially Responsive Investing (NRSRX)	7,910	0.0
Vanguard Russell 1000 Growth Index (VIGIX)	493,164	2.5
Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	81,956	0.4
Dimensional US Targeted Value Strategy (DFFVX)		0.0
T. Rowe Price New Horizons (PRJIX)	163,123	0.8
Dodge & Cox International (DODFX)	4,072	0.0
Vanguard International-Growth (VWILX)	34,227	0.2
Brokerage		0.0
Charles Schwab Personal Choice		0.0



## Memorial Health System DC Plans PERFORMANCE DETAIL

	Allocation					Perform	nance (%)			
	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total Fund Composite	1,341,928,004	100.0								
JPMorgan Target Date Funds	810,036,623	60.4								
JPMorgan SmartRetirement Blend Income (JIYBX)	42,037,034	3.1	-2.9	-2.8	3.6	8.3	0.5	2.5	3.3	3.7
S&P Target Date Retirement Income Index			-2.6	-2.6	2.8	7.4	0.2	2.6	3.1	3.5
JPMorgan SmartRetirement Blend 2020 (JSYRX)	72,882,953	5.4	-2.8	-2.7	3.8	8.6	0.7	2.7	3.9	4.5
S&P Target Date 2020 Index			-2.9	-2.7	4.0	10.0	1.9	3.4	4.7	5.0
JPMorgan SmartRetirement Blend 2025 (JBYSX)	132,647,323	9.9	-3.2	-3.1	4.4	10.3	1.8	3.3	4.7	5.2
S&P Target Date 2025 Index			-3.0	-2.8	4.4	11.0	3.0	4.0	5.4	5.6
JPMorgan SmartRetirement Blend 2030 (JRBYX)	139,121,813	10.4	-3.6	-3.4	5.4	12.5	3.0	4.0	5.6	5.9
S&P Target Date 2030 Index			-3.3	-3.0	5.3	13.0	4.1	4.5	6.2	6.1
JPMorgan SmartRetirement Blend 2035 (JPYRX)	117,841,903	8.8	-3.8	-3.5	6.5	14.8	4.4	4.7	6.4	6.5
S&P Target Date 2035 Index			-3.6	-3.1	6.3	15.2	5.2	5.1	6.9	6.7
JPMorgan SmartRetirement Blend 2040 (JOBYX)	91,567,626	6.8	-4.0	-3.6	7.3	16.5	5.4	5.2	7.1	7.0
S&P Target Date 2040 Index			-3.8	-3.2	7.2	17.1	6.2	5.5	7.4	7.1
JPMorgan SmartRetirement Blend 2045 (JMYAX)	82,995,762	6.2	-4.2	-3.8	7.9	17.9	6.3	5.6	7.4	7.2
S&P Target Date 2045 Index			-4.0	-3.3	7.8	18.3	6.7	5.8	7.8	7.4
JPMorgan SmartRetirement Blend 2050 (JNYAX)	74,298,580	5.5	-4.3	-3.9	8.0	18.1	6.3	5.6	7.4	7.3
S&P Target Date 2050 Index			-4.1	-3.4	8.0	18.8	7.0	5.9	8.0	7.6
JPMorgan SmartRetirement Blend 2055 (JTYBX)	38,832,451	2.9	-4.3	-3.9	8.0	18.1	6.3	5.6	7.4	7.3
S&P Target Date 2055 Index			-4.1	-3.4	8.0	19.0	7.1	6.0	8.1	7.7
JPMorgan SmartRetirement Blend 2060 (JAAYX)	17,811,178	1.3	-4.2	-3.8	8.0	18.1	6.4			
S&P Target Date 2060 Index			-4.1	-3.4	8.1	19.1	7.1			



#### Memorial Health System DC Plans PERFORMANCE DETAIL

	Allocation			Performance (%)						
	Market	% of	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
	Value (\$)	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Core Funds	515,312,392	38.4								
Transamerica Stable Value	948,431	0.1	0.2	0.6	1.8	2.4	1.6	1.5	1.4	1.3
90 Day U.S. Treasury Bill			0.5	1.3	3.6	4.5	1.7	1.7	1.5	1.1
Transamerica Guaranteed Investment Option	147,506,413	11.0	0.2	0.6	1.8	2.4	2.3	2.0	1.7	1.5
90 Day U.S. Treasury Bill			0.5	1.3	3.6	4.5	1.7	1.7	1.5	1.1
MetWest Total Return Bond (MWTIX)	28,117,788	2.1	-2.9	-3.6	-1.4	0.3	-5.6	0.1	0.0	1.2
Blmbg. U.S. Aggregate Index			-2.5	-3.2	-1.2	0.6	-5.2	0.1	-0.1	1.1
Vanguard Inflation Protected Securites Fund (VIPIX)	15,649,829	1.2	-1.8	-2.6	-0.8	1.0	-2.0	2.0	1.3	1.7
Blmbg. U.S. TIPS			-1.8	-2.6	-0.8	1.2	-2.0	2.1	1.5	1.7
American Beacon Large Cap Value Fund (AALRX)	18,676,210	1.4	-3.5	-1.6	2.9	17.8	14.6	7.0	9.4	8.6
Russell 1000 Value Index			-3.9	-3.2	1.8	14.4	11.1	6.2	7.9	8.4
Fidelity Spartan 500 Index (FXAIX)	92,852,380	6.9	-4.8	-3.3	13.1	21.6	10.1	9.9	12.2	11.9
S&P 500 Index			-4.8	-3.3	13.1	21.6	10.2	9.9	12.2	11.9
Neuberger Berman Socially Responsive Investing (NRSRX)	12,024,853	0.9	-3.9	-3.2	11.8	21.5	9.6	8.1	10.3	9.9
S&P 500 Index			-4.8	-3.3	13.1	21.6	10.2	9.9	12.2	11.9
Vanguard Russell 1000 Growth Index (VIGIX)	61,778,388	4.6	-5.8	-3.7	28.3	28.1	6.8	11.9	14.5	13.6
CRSP U.S. Large Cap Growth TR Index			-5.8	-3.7	28.3	28.2	6.8	12.0	14.6	13.6
Vanguard Mid-Cap Index Fund Institutional Shares (VMCIX)	34,009,024	2.5	-4.9	-5.1	3.3	12.6	7.3	6.5	8.7	9.1
CRSP U.S. Mid Cap TR Index			-4.9	-5.1	3.3	12.6	7.3	6.5	8.7	9.1
Dimensional US Targeted Value Strategy (DFFVX)	20,620,800	1.5	-4.7	-1.2	4.3	17.5	22.4	6.8	9.0	8.3
Russell 2000 Value Index			-5.2	-3.0	-0.5	7.8	13.3	2.6	5.9	6.2
T. Rowe Price New Horizons (PRJIX)	37,849,531	2.8	-5.9	-4.5	10.7	11.2	-3.8	6.7	12.4	11.5
Russell 2000 Growth Index			-6.6	-7.3	5.2	9.6	1.1	1.6	6.8	6.7
Dodge & Cox International (DODFX)	21,561,791	1.6	-2.7	-1.3	9.3	26.7	12.1	4.4	5.9	4.1
MSCI EAFE (Net)			-3.4	-4.1	7.1	25.6	5.8	3.2	5.3	3.8
MSCI AC World ex USA (Net)			-3.2	-3.8	5.3	20.4	3.7	2.6	4.7	3.3
Vanguard International-Growth (VWILX)	23,716,953	1.8	-6.3	-9.2	3.1	16.1	-4.7	4.9	8.2	6.7
MSCI AC World ex USA (Net)			-3.2	-3.8	5.3	20.4	3.7	2.6	4.7	3.3
Brokerage	16,578,989	1.2								
Charles Schwab Personal Choice	16,578,989	1.2								
All data prior to 5/2023 was received from Marquette Associates										

- All data prior to 5/2023 was received from Marquette Associates

- Transamerica Stable Value Fund is not an open option for plan participants

- Assets include: Memorial Healthcare System RSP Gold 403(b) Plan, Memorial Healthcare System 401(a) Plan, Memorial Healthcare System 457(b) Plan, Memorial Healthcare System SERP 457(f Plan

- Performance is net of fees and is annualized for periods longer than one year. Performance is ranked within PARis's style-specific universes, where "1" refers to the top percentile and "100" th bottom percentile.



# Memorial Health System DC Plans TOTAL FUND PERFORMANCE DETAIL

	Allocati	on				Perfo	ormanc	e (%)			
	Market Value (\$)	% of Portfolio	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Fund Composite	1,341,928,004										
JPMorgan SmartRetirement Blend Income (JIYBX)	42,037,034		-13.7	6.3	9.6	14.1	-3.8	10.7	5.8	-0.7	4.7
S&P Target Date Retirement Income Index			-11.2	5.1	8.8	13.3	-2.5	8.5	5.0	-0.2	4.9
JPMorgan SmartRetirement Blend 2020 (JSYRX)	72,882,953		-13.7	6.4	10.1	15.5	-4.5	13.4	6.8	-0.7	6.3
S&P Target Date 2020 Index			-12.8	8.8	10.2	16.5	-4.2	12.8	7.2	-0.2	5.7
JPMorgan SmartRetirement Blend 2025 (JBYSX)	132,647,323		-15.2	9.1	11.3	18.3	-5.7	15.6	7.2	-0.7	6.7
S&P Target Date 2025 Index			-13.1	10.7	11.2	18.4	-5.0	14.6	7.8	-0.3	5.6
JPMorgan SmartRetirement Blend 2030 (JRBYX)	139,121,813		-16.1	11.3	12.2	20.4	-6.6	17.4	7.9	-0.8	6.9
S&P Target Date 2030 Index			-14.0	12.6	11.9	20.4	-6.0	16.2	8.3	-0.3	5.6
JPMorgan SmartRetirement Blend 2035 (JPYRX)	117,841,903		-16.7	14.1	12.6	22.3	-7.4	18.9	8.3	-1.0	6.9
S&P Target Date 2035 Index			-15.0	14.9	12.8	22.2	-6.9	17.8	8.9	-0.3	5.7
JPMorgan SmartRetirement Blend 2040 (JOBYX)	91,567,626		-17.2	15.9	13.0	23.8	-8.0	20.3	8.8	-1.1	7.0
S&P Target Date 2040 Index			-15.6	16.5	13.4	23.4	-7.4	18.9	9.2	-0.4	5.7
JPMorgan SmartRetirement Blend 2045 (JMYAX)	82,995,762		-17.6	17.7	13.1	24.6	-8.3	20.5	8.8	-1.0	7.0
S&P Target Date 2045 Index			-15.8	17.5	13.7	24.0	-7.7	19.6	9.5	-0.5	5.7
JPMorgan SmartRetirement Blend 2050 (JNYAX)	74,298,580		-17.6	17.8	13.4	24.6	-8.3	20.5	8.8	-1.1	7.0
S&P Target Date 2050 Index			-16.0	18.0	13.9	24.4	-7.9	20.2	9.7	-0.5	5.7
JPMorgan SmartRetirement Blend 2055 (JTYBX)	38,832,451		-17.6	17.8	13.2	24.7	-8.4	20.4	8.8	-1.0	7.2
S&P Target Date 2055 Index			-16.0	18.2	13.9	24.5	-8.0	20.5	9.9	-0.5	5.6
JPMorgan SmartRetirement Blend 2060 (JAAYX)	17,811,178		-17.4	<b>17.8</b>							
S&P Target Date 2060 Index			-16.0	18.0							
Transamerica Stable Value	948,431		1.6	1.0	1.2	1.8	1.3	1.0	1.0	1.0	1.0
90 Day U.S. Treasury Bill			1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0
Transamerica Guaranteed Investment Option	147,506,413		2.2	2.3	1.6	1.8	1.3	1.0	1.0	1.0	1.0
90 Day U.S. Treasury Bill			1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0
MetWest Total Return Bond (MWTIX)	28,117,788		-14.8	-1.1	9.1	9.1	0.2	3.4	2.5	0.3	6.0
Blmbg. U.S. Aggregate Index			-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0
Vanguard Inflation Protected Securites Fund (VIPIX)	15,649,829		-11.9	5.7	11.0	8.2	-1.4	3.0	4.6	-1.7	4.1
Blmbg. U.S. TIPS			-11.8	6.0	11.0	8.4	-1.3	3.0	4.7	-1.4	3.6



#### **Memorial Health System DC Plans TOTAL FUND PERFORMANCE DETAIL**

Allocati	on				Perfo	rformance (%)								
Market Value (\$)	% of Portfolio	2022	2021	2020	2019	2018	2017	2016	2015	2014				
18,676,210		-5.2	28.0	3.4	29.7	-12.0	17.1	16.0	-6.1	10.6				
		-7.5	25.2	2.8	26.5	-8.3	13.7	17.3	-3.8	13.5				
92,852,380		-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7				
		-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7				
12,024,853		-18.4	23.7	19.7	26.2	-5.6	18.8	10.4	-0.1	10.8				
		-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7				
61,778,388		-33.1	27.3	40.2	37.3	-3.3	27.8	6.1	3.3	13.6				
		-33.1	27.3	40.3	37.3	-3.3	27.9	6.2	3.4	13.7				
34,009,024		-18.7	24.5	18.3	31.0	-9.2	19.3	11.2	-1.3	13.8				
		-18.7	24.5	18.2	31.1	-9.2	19.3	11.2	-1.3	13.8				
20,620,800		-4.6	38.8	3.8	21.5	-15.8	9.6	26.9	-5.7	2.9				
		-14.5	28.3	4.6	22.4	-12.9	7.8	31.7	-7.5	4.2				
37,849,531		-36.9	9.8	<b>57.9</b>	37.8	4.2	31.7	7.9	4.5	6.1				
		-26.4	2.8	34.6	28.5	-9.3	22.2	11.3	-1.4	5.6				
21,561,791		-6.8	11.0	2.1	22.8	-18.0	23.9	8.3	-11.4	0.1				
		-14.5	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9				
		-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9				
23,716,953		-30.8	-0.7	<b>59.7</b>	31.5	-12.6	43.2	1.8	-0.5	-5.5				
		-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9				
16,578,989														
	Market Value (\$) 18,676,210 92,852,380 12,024,853 61,778,388 34,009,024 20,620,800 37,849,531 21,561,791 23,716,953	Value (\$)         Portfolio           18,676,210	Market Value (\$)         % of Portfolio         2022           18,676,210         -5.2           -7.5         -7.5           92,852,380         -18.1           -18,1         -18.1           12,024,853         -18.4           -18,1         -33.1           61,778,388         -33.1           34,009,024         -18.7           -18,7         -18.7           20,620,800         -4.6           -14.5         -36.9           -26.4         -14.5           21,561,791         -6.8           -14.5         -16.0           23,716,953         -30.8           -16.0         -16.0	Market Value (\$)         % of Portfolio         2022         2021           18,676,210         -5.2         28.0           -7.5         25.2           92,852,380         -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.1         28.7           -18.7         28.7           -18.7         28.7           -33.1         27.3           -34,009,024         -18.7           -18.7         24.5           -18.7         24.5           20,620,800         -4.6           -14.5         28.3           37,849,531         -36.9           -26.4         2.8           21,561,791         -6.8           -14.5         11.3           -16.0         7.8           23,716,953 <td< td=""><td>Market Value (\$)         % of Portfolio         2022         2021         2020           18,676,210         -5.2         28.0         3.4           -7.5         25.2         2.8           92,852,380         -18.1         28.7         18.4           -18.1         28.7         18.4           12,024,853         -18.4         23.7         19.7           -18.1         28.7         18.4           61,778,388         -33.1         27.3         40.2           -33.1         27.3         40.3           34,009,024         -18.7         24.5         18.3           -18.7         24.5         18.2           20,620,800         -4.6         38.8         3.8           -14.5         28.3         4.6           37,849,531         -36.9         9.8         57.9           -26.4         2.8         34.6           21,561,791         -6.8         11.0         2.1           -14.5         11.3         7.8         10.7           23,716,953         -30.8         -0.7         59.7           -16.0         7.8         10.7</td><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019           18,676,210         -5.2         28.0         3.4         29.7           -7.5         25.2         2.8         26.5           92,852,380         -18.1         28.7         18.4         31.5           12,024,853         -18.1         28.7         18.4         31.5           12,024,853         -18.4         23.7         19.7         26.2           -18.1         28.7         18.4         31.5           61,778,388         -33.1         27.3         40.2         37.3           -33.1         27.3         40.3         37.3           34,009,024         -18.7         24.5         18.3         31.0           -18.7         24.5         18.3         31.1           20,620,800         -4.6         38.8         3.8         21.5           -14.5         28.3         4.6         22.4           37,849,531         -36.9         9.8         57.9         37.8           -26.4         2.8         34.6         28.5         21,56           21,561,791         -6.8         11.0         2.1         22.8<td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018           18,676,210         -5.2         28.0         3.4         29.7         -12.0           -7.5         25.2         2.8         26.5         -8.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4           -18.1         28.7         18.4         31.5         -4.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6           -18.1         28.7         18.4         31.5         -4.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3           -33.1         27.3         40.3         37.3         -3.3         -3.3           34,009,024         -18.7         24.5         18.3         31.0         -9.2           -18.7         24.5         18.3         31.0         -9.2         -18.7         24.5         18.2         31.1         -9.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         -14.5         28.3         4.6         22.4         -12.9</td><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1           -7.5         25.2         2.8         26.5         -8.3         13.7           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.9           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3           -18.7         24.5         18.2         31.1         -9.2         19.3           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6           <td< td=""><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           61,778,388         -33.1         27.3         40.3         37.3         -3.3         27.9         6.2           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3         11.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6         26.9           -14.5         28.3         4.6</td><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016         2015           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0         -6.1           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3         -3.8           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4         -0.1           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.8         6.1         3.3           -33.1         27.3         40.3         37.3         -3.3         27.9         6.2         3.4           34,009,024         -18.7         24.5         18.3         &lt;</td></td<></td></td></td<>	Market Value (\$)         % of Portfolio         2022         2021         2020           18,676,210         -5.2         28.0         3.4           -7.5         25.2         2.8           92,852,380         -18.1         28.7         18.4           -18.1         28.7         18.4           12,024,853         -18.4         23.7         19.7           -18.1         28.7         18.4           61,778,388         -33.1         27.3         40.2           -33.1         27.3         40.3           34,009,024         -18.7         24.5         18.3           -18.7         24.5         18.2           20,620,800         -4.6         38.8         3.8           -14.5         28.3         4.6           37,849,531         -36.9         9.8         57.9           -26.4         2.8         34.6           21,561,791         -6.8         11.0         2.1           -14.5         11.3         7.8         10.7           23,716,953         -30.8         -0.7         59.7           -16.0         7.8         10.7	Market Value (\$)         % of Portfolio         2022         2021         2020         2019           18,676,210         -5.2         28.0         3.4         29.7           -7.5         25.2         2.8         26.5           92,852,380         -18.1         28.7         18.4         31.5           12,024,853         -18.1         28.7         18.4         31.5           12,024,853         -18.4         23.7         19.7         26.2           -18.1         28.7         18.4         31.5           61,778,388         -33.1         27.3         40.2         37.3           -33.1         27.3         40.3         37.3           34,009,024         -18.7         24.5         18.3         31.0           -18.7         24.5         18.3         31.1           20,620,800         -4.6         38.8         3.8         21.5           -14.5         28.3         4.6         22.4           37,849,531         -36.9         9.8         57.9         37.8           -26.4         2.8         34.6         28.5         21,56           21,561,791         -6.8         11.0         2.1         22.8 <td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018           18,676,210         -5.2         28.0         3.4         29.7         -12.0           -7.5         25.2         2.8         26.5         -8.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4           -18.1         28.7         18.4         31.5         -4.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6           -18.1         28.7         18.4         31.5         -4.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3           -33.1         27.3         40.3         37.3         -3.3         -3.3           34,009,024         -18.7         24.5         18.3         31.0         -9.2           -18.7         24.5         18.3         31.0         -9.2         -18.7         24.5         18.2         31.1         -9.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         -14.5         28.3         4.6         22.4         -12.9</td> <td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1           -7.5         25.2         2.8         26.5         -8.3         13.7           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.9           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3           -18.7         24.5         18.2         31.1         -9.2         19.3           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6           <td< td=""><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           61,778,388         -33.1         27.3         40.3         37.3         -3.3         27.9         6.2           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3         11.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6         26.9           -14.5         28.3         4.6</td><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016         2015           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0         -6.1           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3         -3.8           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4         -0.1           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.8         6.1         3.3           -33.1         27.3         40.3         37.3         -3.3         27.9         6.2         3.4           34,009,024         -18.7         24.5         18.3         &lt;</td></td<></td>	Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018           18,676,210         -5.2         28.0         3.4         29.7         -12.0           -7.5         25.2         2.8         26.5         -8.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4           -18.1         28.7         18.4         31.5         -4.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6           -18.1         28.7         18.4         31.5         -4.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3           -33.1         27.3         40.3         37.3         -3.3         -3.3           34,009,024         -18.7         24.5         18.3         31.0         -9.2           -18.7         24.5         18.3         31.0         -9.2         -18.7         24.5         18.2         31.1         -9.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         -14.5         28.3         4.6         22.4         -12.9	Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1           -7.5         25.2         2.8         26.5         -8.3         13.7           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           -18.1         28.7         18.4         31.5         -4.4         21.8           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.9           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3           -18.7         24.5         18.2         31.1         -9.2         19.3           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6 <td< td=""><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           61,778,388         -33.1         27.3         40.3         37.3         -3.3         27.9         6.2           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3         11.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6         26.9           -14.5         28.3         4.6</td><td>Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016         2015           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0         -6.1           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3         -3.8           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4         -0.1           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0         1.4           61,778,388         -33.1         27.3         40.2         37.3         -3.3         27.8         6.1         3.3           -33.1         27.3         40.3         37.3         -3.3         27.9         6.2         3.4           34,009,024         -18.7         24.5         18.3         &lt;</td></td<>	Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0           -7.5         25.2         2.8         26.5         -8.3         13.7         17.3           92,852,380         -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           12,024,853         -18.4         23.7         19.7         26.2         -5.6         18.8         10.4           -18.1         28.7         18.4         31.5         -4.4         21.8         12.0           61,778,388         -33.1         27.3         40.3         37.3         -3.3         27.9         6.2           34,009,024         -18.7         24.5         18.3         31.0         -9.2         19.3         11.2           20,620,800         -4.6         38.8         3.8         21.5         -15.8         9.6         26.9           -14.5         28.3         4.6	Market Value (\$)         % of Portfolio         2022         2021         2020         2019         2018         2017         2016         2015           18,676,210         -5.2         28.0         3.4         29.7         -12.0         17.1         16.0         -6.1           -7.5         25.2         2.8         26.5         -8.3    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All data prior to 5/2023 was received from Marquette Associates
 Transamerica Stable Value Fund is not an open option for plan participants

- Assets include: Memorial Healthcare System RSP Gold 403(b) Plan, Memorial Healthcare System 401(a) Plan, Memorial Healthcare System 457(b) Plan, Memorial Healthcare System SERP 457(f) Plan

- Performance is net of fees and is annualized for periods longer than one year. Performance is ranked within PARis's style-specific universes, where "1" refers to the top percentile and "100" th bottom percentile.

# **INVESTMENT RECOMMENDATIONS**



# **RECOMMENDATION (GLOBAL EQUITY)**

- Replace Vanguard Global Minimum Volatility Equity with a passive MSCI ACWI Index option
  - Positions the portfolio to participate more broadly in positive market environments and improves long-term return expectations
  - Ability to lower fee as Vanguard fee is 0.14% while SSgA ACWI Index Commingled Fund is ~3.4bps\*
    - Fee savings is estimated as \$538k annually based on current values
  - Vanguard is ~10% (\$227M) of the MHS Operating Portfolio and ~5% of the MHS Retirement Plan (\$46M)
    - Recommend SSgA ACWI be funded at 10% in each portfolio
    - Additional allocation within Pension to be funded from active global equity managers (Dodge & Cox and Walter Scott) to reduce overall portfolio tracking error)
    - Subject to completion of legal and investment vehicle review



\*SSgA proposed a tiered fee schedule of 5bps for the first \$50M, 4bps for the next \$100M, 2.5 bps thereafter for their commingled offering with securities lending. Fee breaks will apply to the combined asset value invested.

# **RECOMMENDATIONS (HIGH YIELD)**

### Hire Arena Short Duration High Yield in the Operating and Retirement

- Attractive risk/return profile with yield over 10% as of 6/30
- Modest risk given shorter duration positioning (1.6 years as of 6/30)
- Attractive historical returns vs. peers
- Subject to completion of legal and investment vehicle review

### Operating

- Recommend an initial allocation of 5% (\$117M)
- Funding to come from Intermediate and Opportunistic managers
- Currently there is no allocation to high yield in the Operating

### Retirement

- Replace Chartwell High Yield with Arena Short Duration High Yield
- Chartwell is currently 5% allocation (\$44.6M)



# **ARENA SHORT DURATION HIGH YIELD**

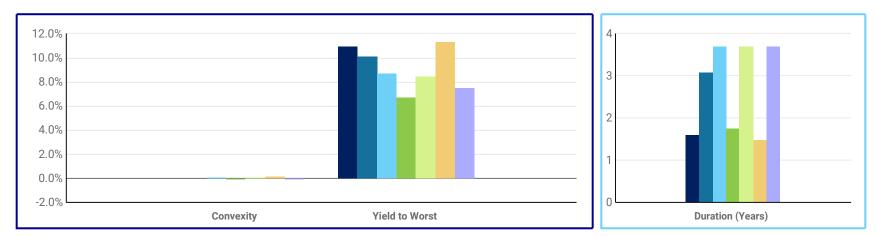
Firm/Product	NEPC Investment Thesis
High Yield	
Arena - SDHY Composite	We expect Arena Capital's Short Duration High Yield strategy to outperform the broader short duration credit market through credit selection and industry rotation. The ability to invest in floating rate leveraged loans is a value-add in this space that we feel can combat rising interest rates and protect capital with higher recoveries, while enjoying senior security in the capital structure. Arena Capital has taken what senior personnel had built at Post Advisory, and constructed a more nuanced process, philosophy, and approach to the short duration high yield investing that we believe will lead to future success of the strategy.

Firm/Product	Investment Style/Strategy	Performance Expectations	Portfolio Positioning
High Yield			
Arena - SDHY Composite	Arena strives to construct diversified portfolios of short duration high yield fixed income instruments focusing on downside protection and lower volatility while still exposed to the full high yield credit spectrum.	Strategy seeks to generate attractive risk- adjusted returns through bottom-up fundamental and technical analysis as well as active management.	Portfolio positioning is expected to be diversified across corporate bonds and leveraged loans with maturities of less than 5 years and credit quality below BBB



# **FUND COMPOSITION**

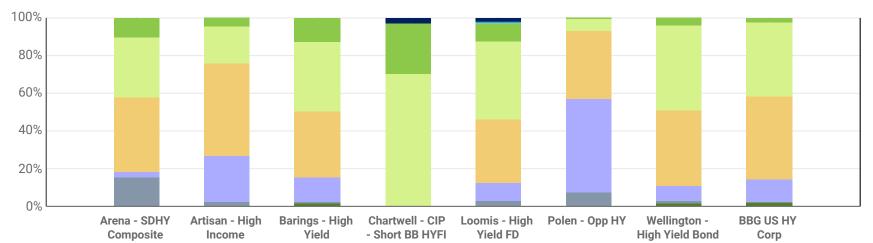
### CHARACTERISTICS



Fund	Duration Emphasis	Convexity	Yield to Worst	Duration (Years)	Average Quality	Minimum Quality	# of Issues	Use of Derivatives
Arena - SDHY Composite	Short	-	10.95%	1.60	BB	CCC	157	Yes
Artisan - High Income	Intermediate	-	10.14%	3.07	В	Distressed Debt	215	Yes
Barings - High Yield	Intermediate	0.01%	8.72%	3.70	В	CCC	287	Yes
Chartwell - Short BB HYFI	Short	(0.08%)	6.68%	1.77	BB	BB	57	No
LoomSayles - High Yield FD	Intermediate	0.08%	8.43%	3.70	BB	С	532	Yes
Polen - US Opportunistic HY	Intermediate	0.16%	11.29%	1.48	В	CCC	50	No
Wellington - High Yield Bond	Intermediate	(0.01%)	7.49%	3.70	NA	NA	170	Yes
Bloomberg Barclays US High Yield - Corporate	NA	0.24%	8.65%	3.76	B+	D	1,981	NA



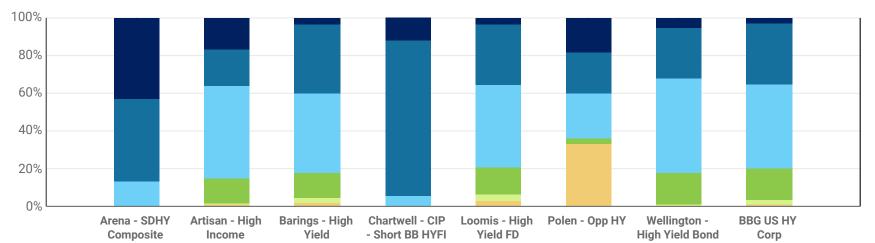
### ALLOCATIONS BY CREDIT QUALITY



Credit Quality	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
AAA/Aaa	0.00%	0.00%	0.00%	2.71%	2.02%	0.00%	0.00%	0.00%
AA/Aa	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
A	0.00%	0.00%	0.00%	0.00%	0.92%	0.00%	0.00%	0.00%
BBB/Baa	10.56%	4.40%	12.54%	26.80%	9.74%	0.43%	4.00%	2.63%
BB/Ba	31.80%	19.80%	37.36%	70.49%	40.96%	6.76%	45.00%	39.19%
В	39.16%	48.90%	34.90%	0.00%	33.66%	35.60%	40.00%	44.08%
CCC/Caa and Below	2.91%	24.60%	13.03%	0.00%	9.52%	49.51%	8.00%	12.02%
Not Rated	15.57%	2.30%	0.41%	0.00%	3.16%	7.70%	1.00%	0.00%
Other	0.00%	0.00%	1.76%	0.00%	0.00%	0.00%	2.00%	2.08%



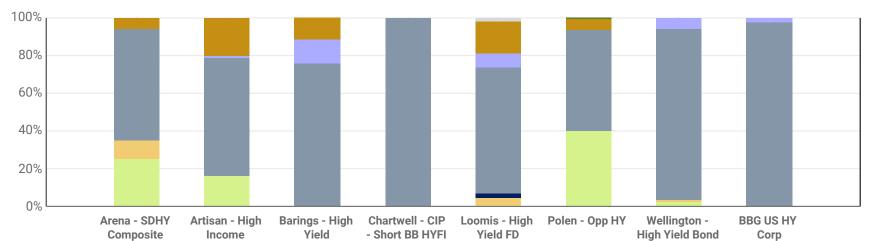
### ALLOCATIONS BY DURATION



Duration	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
Duration <1 Yr	42.68%	16.63%	3.29%	12.08%	3.59%	18.25%	5.00%	3.19%
Duration 1-3 Yrs	44.21%	19.39%	36.53%	82.26%	31.84%	21.73%	27.00%	32.29%
Duration 3-5 Yrs	13.11%	49.07%	42.37%	5.66%	43.82%	24.02%	50.00%	44.47%
Duration 5-7 Yrs	0.00%	12.91%	13.24%	0.00%	14.21%	2.62%	17.00%	16.74%
Duration 7-10 Yrs	0.00%	0.82%	2.85%	0.00%	3.80%	0.00%	1.00%	2.09%
Duration 10-20 Yrs	0.00%	1.18%	1.72%	0.00%	2.74%	33.38%	0.00%	1.22%
Duration >20 Yrs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



### ALLOCATIONS BY SECTOR



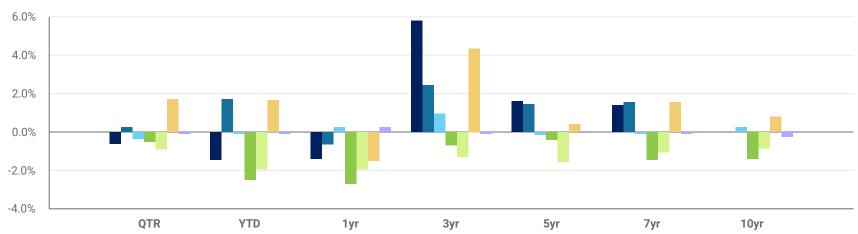
Sector	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
Government	0.00%	0.00%	0.00%	0.00%	2.02%	0.00%	0.00%	0.00%
Government-Related	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Municipal / Tax-Exempt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Municipals Taxable	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank Loan / Leveraged	25.00%	16.31%	0.00%	0.00%	0.38%	40.24%	2.00%	0.00%
Convertibles	10.00%	0.00%	0.00%	0.00%	4.44%	0.00%	1.00%	0.00%
Investment Grade	0.00%	1.38%	12.59%	0.00%	7.24%	0.00%	5.00%	2.63%
High Yield Corporate	59.00%	62.41%	76.43%	100.00%	66.69%	53.18%	92.00%	97.37%
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	0.00%
Securitized	0.00%	0.00%	0.00%	0.00%	1.79%	0.00%	0.00%	0.00%
Other *	6.00%	19.90%	11.47%	0.00%	17.37%	6.50%	0.00%	0.00%

\* May include Non-US Dev. Markets and Emerging Markets



### **PERFORMANCE** TRAILING PERIOD PERFORMANCE - NET OF FEES

**Excess Returns** 



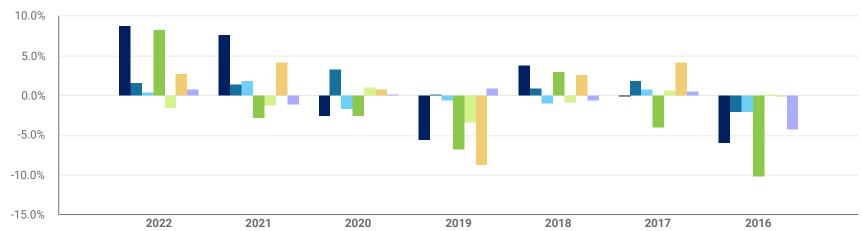
Ab	solute Returns	Benchmark	Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
	Arena - SDHY Composite	1	1.17%	3.93%	7.68%	8.94%	4.97%	5.93%	-
	Artisan - High Income	1	2.00%	7.11%	8.45%	5.59%	4.83%	6.08%	-
	Barings - High Yield	1	1.42%	5.31%	9.36%	4.08%	3.21%	4.45%	4.71%
	Chartwell - Short BB HYFI	1	1.26%	2.90%	6.41%	2.48%	2.99%	3.12%	3.05%
	LoomSayles - High Yield FD	1	0.86%	3.45%	7.13%	1.84%	1.84%	3.50%	3.60%
	Polen - US Opportunistic HY	1	3.48%	7.05%	7.61%	7.53%	3.78%	6.13%	5.26%
	Wellington - High Yield Bond	1	1.72%	5.37%	9.31%	3.12%	3.44%	4.45%	4.19%
1	Bloomberg Barclays US High Yield - Corporate		1.75%	5.38%	9.06%	3.14%	3.36%	4.53%	4.43%



Performance as of June 30, 2023 Past performance is no guarantee of future results.

### **PERFORMANCE** CALENDAR YEAR PERFORMANCE - NET OF FEES

**Excess Returns** 



A	bsolute Returns	Benchmark	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
	Arena - SDHY Composite	1	(2.46%)	12.93%	4.63%	8.78%	1.67%	7.49%	11.26%	1.25%	-	-
	Artisan - High Income	1	(9.62%)	6.62%	10.43%	14.50%	(1.23%)	9.34%	15.15%	1.50%	-	-
	Barings - High Yield	1	(10.84%)	7.09%	5.41%	13.72%	(3.08%)	8.26%	15.08%	(0.18%)	1.85%	11.23%
	Chartwell - Short BB HYFI	1	(2.99%)	2.46%	4.61%	7.60%	0.78%	3.55%	7.05%	(0.60%)	1.21%	5.34%
	LoomSayles - High Yield FD	1	(12.69%)	4.11%	8.12%	10.98%	(2.97%)	8.18%	17.20%	(7.22%)	4.37%	8.76%
	Polen - US Opportunistic HY	1	(8.46%)	9.41%	7.84%	5.68%	0.41%	11.61%	17.01%	(4.26%)	3.18%	9.65%
	Wellington - High Yield Bond	1	(10.39%)	4.15%	7.27%	15.18%	(2.73%)	7.98%	12.94%	(3.54%)	2.98%	6.30%
	Bloomberg Barclays US High Yield - Corporate		(11.19%)	5.28%	7.11%	14.32%	(2.08%)	7.50%	17.13%	(4.47%)	2.45%	7.44%



Performance as of June 30, 2023 Past performance is no guarantee of future results.

### PERFORMANCE

### EXCESS RETURNS ANALYSIS - NET OF FEES



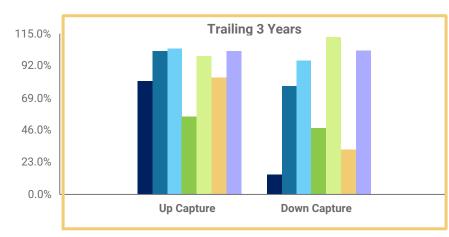
		Excess Return (%)				Tracking	Error (%)		Information Ratio				Beta vs.
	3 Yrs	5 Yrs	7 Yrs	10 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Index
Arena - SDHY Composite	5.80	1.61	1.40	-	5.72	5.09	4.43	4.23	1.01	0.32	0.32	-	0.50
Artisan - High Income	2.45	1.48	1.55	-	2.48	2.31	2.02	2.04	0.99	0.64	0.77	-	0.89
Barings - High Yield	0.95	(0.15)	(0.08)	0.28	1.13	1.46	1.31	1.48	0.84	(0.10)	(0.06)	0.19	1.01
Chartwell - Short BB HYFI	(0.66)	(0.37)	(1.42)	(1.38)	4.19	4.69	4.11	4.01	(0.16)	(0.08)	(0.35)	(0.34)	0.52
LoomSayles - High Yield FD	(1.29)	(1.52)	(1.03)	(0.83)	1.14	1.12	1.07	1.35	(1.13)	(1.35)	(0.96)	(0.61)	1.06
Polen - US Opportunistic HY	4.39	0.43	1.59	0.83	4.77	4.91	4.31	3.93	0.92	0.09	0.37	0.21	0.61
Wellington - High Yield Bond	(0.02)	0.09	(0.08)	(0.24)	0.81	0.80	0.78	1.00	(0.02)	0.11	(0.11)	(0.24)	1.04

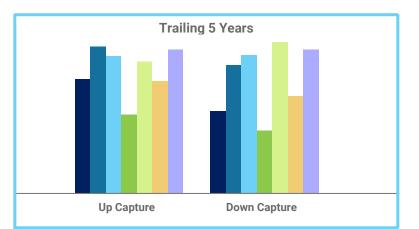


Performance as of June 30, 2023 Past performance is no guarantee of future results.

### PERFORMANCE

### UP CAPTURE / DOWN CAPTURE - NET OF FEES





	Trailing	J 3 Years	Trailing 5 Years				
	Up Capture	Down Capture	Up Capture	Down Capture			
Arena - SDHY Composite	81.12%	14.03%	81.86%	59.14%			
Artisan - High Income	102.59%	77.50%	105.24%	91.85%			
Barings - High Yield	104.43%	95.76%	98.36%	99.32%			
Chartwell - Short BB HYFI	55.49%	47.81%	55.93%	44.64%			
LoomSayles - High Yield FD	99.00%	112.53%	94.65%	108.64%			
Polen - US Opportunistic HY	83.80%	32.21%	80.54%	69.57%			
Wellington - High Yield Bond	102.21%	103.08%	102.88%	102.95%			





# APPENDIX





# HIGH YIELD MANAGER SEARCH

MEMORIAL HEALTHCARE SYSTEM (SOUTH BROWARD HOSPITAL DISTRICT)

**SEPTEMBER 2023** 

Gary Wyniemko Partner



# **TABLE OF CONTENTS**

- Introduction
- Firm & Product Summary
- Portfolio Positioning
- Performance
- Profiles





# INTRODUCTION



## **INTRODUCTION TO ASSET CLASS**

### **HIGH YIELD**

High Yield bond managers invest in below investment grade debt instruments issued by domestic corporations. Because of the perceived greater risk of default, these bonds pay a higher yield than investment grade corporate debt. In an issuer's capital structure high yield debt is senior to equity and hybrid securities, but subordinate to bank loans. In order to add alpha or reduce volatility some managers may invest a small piece of the portfolio in bank loans, which are floating rate securities that typically carry a below investment grade rating. Other non-benchmark sectors may include convertible bonds, preferred equity, and investment grade corporates.

Manager performance is run against the Bloomberg Barclays US Corporate High Yield Index ("Index"). The Index covers the universe of US dollar-denominated, fixed rate, non-investment grade debt. Alpha in the space is dependent on manager approach – i.e. high quality focus (BB/B-rated only), full rating spectrum, illiquid opportunities – but expect strategies to outperform the Index by approximately 0-3% on a net basis. Those products that have a high quality tilt aim to capture most of the market return in up-markets, but protect principal substantially during challenging credit environments.



### **RESEARCH PROCESS**

NEPC's investment manager research process identifies a Focused Placement List of strategies that we expect will provide superior investment performance over time. Our four step process used for identifying our Focused Placement List includes:

#### 1. UNIVERSE SCREENING

The construction of the Focused Placement List begins with initial universe screening to identify candidates that meet acceptable criteria for further analysis.

#### 2. QUANTITATIVE SCORING

Strategies are scored using our proprietary Performance Analytics Statistical Software (PASS) on metrics that we believe identify investment processes expected to consistently outperform the benchmark over the long term.

#### 3. QUALITATIVE SCORING

Our research efforts are focused on developing a deep understanding of each strategy's people, philosophy, & process, synthesizing those aspects into our interpretation of each strategy's investment thesis – the identification of a particular set of market inefficiencies and the conviction in a portfolio management team's ability to exploit those inefficiencies over the long-term.

#### 4. PEER REVIEW

The research process culminates in exhaustive peer review. NEPC Research coverage provides feedback and insight to the research team prior to vetting strategies in front of senior research and consulting professionals on NEPC's Marketable Investment Committee (MIC).

We believe that this exhaustive process leads to identification of strategies with a reasonable probability of delivering consistent, high quality investment results. From time to time, we may include products specifically requested by clients.



## **NEPC RESEARCH RATING DEFINITIONS**

NEPC Rating	Definition
1	NEPC Research views these strategies as best ideas. Strategy has a clearly articulated investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis. Strategies rated 1 have been vetted through NEPC's comprehensive due diligence process and approved by either the Private Investment Committee (PIC) or Marketable Investment Committee (MIC). Strategies rated 1 are monitored regularly and reviewed at least annually.
2	NEPC has a positive view of the strategy. Strategy has a clearly articulated investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strategies rated 2 have been vetted through NEPC's due diligence process and approved by either the PIC or MIC. Strategies rated 2 are monitored regularly and reviewed at least annually.
3	NEPC has a constructive view of the strategy and believes the strategy can play an appropriate role in certain clients portfolios. NEPC monitors the team and strategy and believes the manager is sufficiently resourced and incented to execute on their investment approach. Through initial and/or ongoing research of a strategy, NEPC has not identified unreasonable risks from an organizational, process, operational or investment perspective. Strategies rated 3 have been reviewed and rated by an NEPC investment professional. Strategies rated 3 are monitored on an ongoing basis. 3 rated strategies are not profiled for clients in new searches though a client may request inclusion of a 3 rated strategy for comparison.
4	NEPC has conducted a reasonable level of due diligence on the strategy and has a relatively unfavorable view of the strategy. Through the due diligence process, NEPC has uncovered issues, weaknesses or risks that we believe challenge the manager's ability to execute on a stated investment thesis.
5	NEPC has conducted a reasonable level of due diligence on the strategy and has significant concerns about the effectiveness or viability of the strategy. Through the due diligence process, NEPC has uncovered issues, weaknesses or risks that we believe challenge the manager's ability to execute on a stated investment thesis. These risks include all those highlighted above that could potentially lead to a 4 rating. Any one or several of these risks together could be meaningful enough to cause us to have serious doubts about the strategy leading to a 5 rating.



## **SEARCH CANDIDATES**

The following is a list of managers under consideration for this search. The table below summarizes the products proposed for each manager.

Firm	Strategy	Comments
Arena Capital Advisors LLC	Arena Short Duration High Yield	Composite Track Record Shown
Artisan Partners Limited Partnership	Artisan High Income	Composite Track Record Shown
Barings LLC	Barings U.S. High Yield Bonds	Composite Track Record Shown
Chartwell Investment Partners, LLC	Chartwell Short BB High Yield Fixed Income	Incumbent Shown in Red Composite Track Record Shown
Loomis, Sayles & Company, L.P.	Loomis High Yield Full Discretion	Composite Track Record Shown
Polen Capital Management, LLC	DDJ U.S. Opportunistic High Yield	Composite Track Record Shown
Wellington Management Company LLP	Wellington Core High Yield Bond	Composite Track Record Shown



## **NEPC INVESTMENT THESIS**

Firm/Product	NEPC Investment Thesis
High Yield	
Arena - SDHY Composite	We expect Arena Capital's Short Duration High Yield strategy to outperform the broader short duration credit market through credit selection and industry rotation. The ability to invest in floating rate leveraged loans is a value-add in this space that we feel can combat rising interest rates and protect capital with higher recoveries, while enjoying senior security in the capital structure. Arena Capital has taken what senior personnel had built at Post Advisory, and constructed a more nuanced process, philosophy, and approach to the short duration high yield investing that we believe will lead to future success of the strategy.
Artisan - High Income	Artisan's High Income strategy invests in issuers, primarily within the non-investment grade universe, with high-quality business models that have compelling risk-adjusted return characteristics. The value-add in this strategy is that lead portfolio manager Bryan Krug is unconstrained in the way he can invest in senior floating rate bank loans when the risk-return characteristics of a company's loan is more attractive than their high yield debt issue. Investors can expect to be invested primarily in high yield bonds, and have opportunistic exposure to loans in some environments. The team believes that market inefficiencies exist at different points along the credit cycle, therefore, allocating a portion of the portfolio away from high yield in favor of loans can be beneficial in some market environments throughout the credit cycle.
Barings - High Yield	The Barings US High Yield strategy draws upon the firm's well resourced investment platform to construct portfolios focusing on domestic U.S. high yield markets. The portfolio is expected to take positions in U.S. high yield bonds. The team's experience in high yield investing is a key value add, and their time-tested process of successfully targeting high current income, capturing capital appreciation in below investment grade bonds, and the ability to avoid defaults. The Barings Global Fixed Income and Multi-Asset team is well resourced and incorporates a process that spans across the research platform in a way that researches companies and issues in a way that all identifiable aspects of risk are measured and monitored.
Chartwell - Short BB HYFI	NA



## **NEPC INVESTMENT THESIS**

Firm/Product	NEPC Investment Thesis
High Yield	
LoomSayles - High Yield FD	Loomis adds value to client portfolios through their large proprietary credit research and their ability to predict credit upgrades and downgrades before the ratings agencies react. Analysts at Loomis are able to specialize on small portions of credit sectors and industries, becoming firm-wide experts in their areas of coverage. Loomis has built an organizational culture around credit markets and credit research, and has integrated this philosophy into all of their investment products. Their expected alpha lies with their skill in credit research and non-benchmark allocations such as investment grade credit, emerging markets debt, non-dollar debt, and convertible securities.
Polen - US Opportunistic HY	Polen adds value to client portfolios through credit selection and tactical positions in the capital structure of issuers. Value in a credit is identified through Polen's bottom-up research. A large part of their advantage comes from the types of credits and the size of issuers that they follow. The strategy focuses on small to mid-cap issuers, with many in the lower quality portion of the universe, where many names are overlooked due to liquidity constraints and lack of information. By developing relationships and meeting with companies, competitors, suppliers and other related businesses, Polen is able to gain an informational advantage, allowing them to develop an investment thesis on a credit that differs from the market, and that recognizes a security's potential value. In-house legal analysis of bond covenants, along with expertise in stressed and distressed credits also helps in the investment process and in the creation of value for clients.
Wellington - High Yield Bond	Wellington believes that bottom-up fundamental research is the key to adding value across business cycles. The strategy will invest in US high yield bonds and bank debt. The strategy will also dynamically adjust risk exposures over time to take advantage of spread widening and tightening during global economic cycles. Top down themes will play a role in overall sector allocations.



## **PRODUCT SUMMARY**

# (1/2)

Firm/Product	Investment Style/Strategy	Performance Expectations	Portfolio Positioning	
High Yield				
Arena - SDHY Composite	Arena strives to construct diversified portfolios of short duration high yield fixed income instruments focusing on downside protection and lower volatility while still exposed to the full high yield credit spectrum.	Strategy seeks to generate attractive risk- adjusted returns through bottom-up fundamental and technical analysis as well as active management.	Portfolio positioning is expected to be diversified across corporate bonds and leveraged loans with maturities of less than 5 years and credit quality below BBB	
Artisan - High Income	Artisan's High Income strategy invests in issuers, primarily within the non-investment grade universe with high-quality business models that have compelling risk-adjusted return characteristics.	Expect good performance in most environments. Downside protection should be expected through the use of senior secured floating rate bank loans when appropriate.	The portfolio will consist of high conviction best ideas across primarily high yield bonds and senior floating rate bank loans.	
Barings - High Yield	This high yield strategy will avoid emerging markets and focus on developed markets issuers via a traditional credit underwriting approach.	Expect solid upside capture with a low downside capture compared to the broad global high yield benchmark over a market cycle, while targeting 150bps of excess return.	This strategy invests in US below investment grade credit, primarily high yield corporate bonds, with minimal bank loan exposure. The portfolio is well diversified.	
Chartwell - Short BB HYFI	NA	NA	NA	



## **PRODUCT SUMMARY**

## (2/2)

Firm/Product	Investment Style/Strategy	Performance Expectations	Portfolio Positioning
High Yield			
LoomSayles - High Yield FD	Strategy is defined by out-of-benchmark investing, tactical positions, and bottom-up security selection. Loomis will buy yield where they can find it, when it is attractively valued. Manager is aggressive in both credit quality and individual security positioning.	Higher beta manager. Expect strategy to lag during credit bear markets.	This strategy has the ability to invest in out of benchmark securities such as convertibles, investment grade debt, non- dollar, bank loans, preferred/equity, and others.
Polen - US Opportunistic HY	Polen's research process heavily emphasizes contact between the investment team and company management. One differentiating strength is their ability to work with stressed/distressed credits. Should bankruptcies occur, Polen is very experienced in the restructuring process.	Strategy is aggressive with heavier allocations to B/CCCs. Should do well during strong credit markets.	Below investment grade credit manager investing in bonds and loans. Expect lower liquidity than other strategies. Portfolio may be concentrated.
Wellington - High Yield Bond	Strategy will invest in US and European high yield, along with emerging markets debt (both sovereign and corporate).	Strategy should do well in most market conditions but is likely to lag during periods of rapid spread tightening due to a higher quality bias.	US High Yield and Bank Loans. The portfolio will be broadly diversified across high yield issuers.





# FIRM & PRODUCT SUMMARY



### FIRM COMPARISON SUMMARY

Firm Name	Location	Year Firm Founded	Total Assets Under Mgmt (\$MM)	% Employee Owned	% Parent Owned	Parent Company Name	% Publicly Held	% Other Ownership
High Yield								
Arena Capital Advisors LLC	Los Angeles, California	2013	3,446	100	0	NA	0	0
Artisan Partners Limited Partnership	Milwaukee, Wisconsin	1994	142,989	10	0	NA	79	11
Barings LLC	Charlotte, North Carolina	1940	351,999	0	100	Massachus etts Mutual Life Insurance Company	0	0
Chartwell Investment Partners, LLC	Berwyn, Pennsylvania	1997	11,081	0	100	Raymond James Investment Manageme nt	0	0
Loomis, Sayles & Company, L.P.	Boston, Massachusetts	1926	310,304	0	100	Natixis Investment Managers, L.P.	0	0
Polen Capital Management, LLC	Boca Raton, Florida	1979	65,185	72	0	NA	0	28
Wellington Management Company LLP	Boston, Massachusetts	1928	1,200,572	100	0	NA	0	0



## FIRM COMPARISON SUMMARY

Firm Name	Registered Investment Advisor	GIPS Compliant	Past or Pending Litigation
High Yield			
Arena Capital Advisors LLC	Yes	Yes	No
Artisan Partners Limited Partnership	Yes	Yes	Yes
Barings LLC	Yes	Yes	Yes
Chartwell Investment Partners, LLC	Yes	Yes	No
Loomis, Sayles & Company, L.P.	Yes	Yes	Yes
Polen Capital Management, LLC	Yes	Yes	No
Wellington Management Company LLP	Yes	Yes	Yes



## **PRODUCT COMPARISON**

Firm/Product	Inception Date	AUM (\$MM)	# of Portfolio Managers	# of Research Analysts	# of Traders
High Yield					
Arena - SDHY Composite	2014	2,265	4	3	1
Artisan - High Income	2014	7,971	1	7	1
Barings - High Yield	2000	4,894	10	22	4
Chartwell - Short BB HYFI	2006	3,057	2	4	2
LoomSayles - High Yield FD	1989	3,150	4	100	50
Polen - US Opportunistic HY	1997	4,608	3	13	2
Wellington - High Yield Bond	1997	2,757	6	61	43



### **FEE COMPARISON**

Mandate size: \$880,000,000 eVestment Universe: US High Yield Fixed Income

Firm/Product	Vehicle Proposed	Liquidity In	Liquidity Out	Standard Reported Fee (bps)	NEPC Negotiated Fee (bps)	Search Specific Proposed Fee (bps)	Universe Median Fee (bps)
High Yield							
Arena - SDHY Composite	Commingled Fund	Monthly	Monthly	55	55	55	45
Artisan - High Income	Separate Account Commingled Fund	Daily Monthly	Daily Monthly	51 68	NA NA	51 68	37 45
Barings - High Yield	Separate Account Commingled Fund	Daily Daily	Daily Daily	39 41	NA NA	40 23	37 45
Chartwell - Short BB HYFI	Separate Account	Daily	Daily	31	NA	31	37
LoomSayles - High Yield FD	Commingled Fund	Daily	Daily	47	NA	29	45
Polen - US Opportunistic HY	Separate Account	Daily	Daily	47	NA	47	37
Wellington - High Yield Bond	Commingled Fund	Daily	Daily	40	NA	30	45

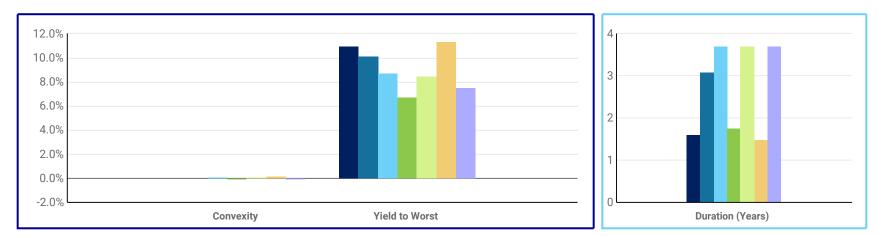






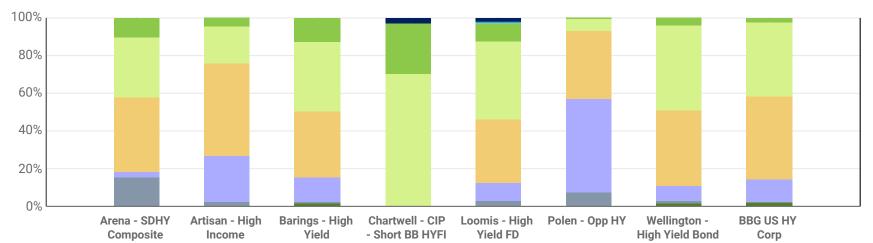
# **FUND COMPOSITION**

### CHARACTERISTICS



Fund	Duration Emphasis	Convexity	Yield to Worst	Duration (Years)	Average Quality	Minimum Quality	# of Issues	Use of Derivatives
Arena - SDHY Composite	Short	-	10.95%	1.60	BB	CCC	157	Yes
Artisan - High Income	Intermediate	-	10.14%	3.07	В	Distressed Debt	215	Yes
Barings - High Yield	Intermediate	0.01%	8.72%	3.70	В	CCC	287	Yes
Chartwell - Short BB HYFI	Short	(0.08%)	6.68%	1.77	BB	BB	57	No
LoomSayles - High Yield FD	Intermediate	0.08%	8.43%	3.70	BB	С	532	Yes
Polen - US Opportunistic HY	Intermediate	0.16%	11.29%	1.48	В	CCC	50	No
Wellington - High Yield Bond	Intermediate	(0.01%)	7.49%	3.70	NA	NA	170	Yes
Bloomberg Barclays US High Yield - Corporate	NA	0.24%	8.65%	3.76	B+	D	1,981	NA

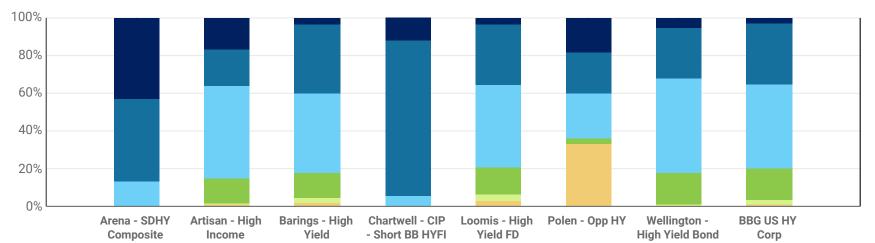
### ALLOCATIONS BY CREDIT QUALITY



Credit Quality	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
AAA/Aaa	0.00%	0.00%	0.00%	2.71%	2.02%	0.00%	0.00%	0.00%
AA/Aa	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
A	0.00%	0.00%	0.00%	0.00%	0.92%	0.00%	0.00%	0.00%
BBB/Baa	10.56%	4.40%	12.54%	26.80%	9.74%	0.43%	4.00%	2.63%
BB/Ba	31.80%	19.80%	37.36%	70.49%	40.96%	6.76%	45.00%	39.19%
В	39.16%	48.90%	34.90%	0.00%	33.66%	35.60%	40.00%	44.08%
CCC/Caa and Below	2.91%	24.60%	13.03%	0.00%	9.52%	49.51%	8.00%	12.02%
Not Rated	15.57%	2.30%	0.41%	0.00%	3.16%	7.70%	1.00%	0.00%
Other	0.00%	0.00%	1.76%	0.00%	0.00%	0.00%	2.00%	2.08%



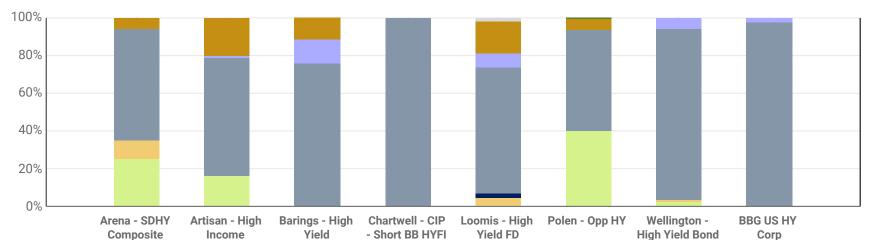
### ALLOCATIONS BY DURATION



Duration	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
Duration <1 Yr	42.68%	16.63%	3.29%	12.08%	3.59%	18.25%	5.00%	3.19%
Duration 1-3 Yrs	44.21%	19.39%	36.53%	82.26%	31.84%	21.73%	27.00%	32.29%
Duration 3-5 Yrs	13.11%	49.07%	42.37%	5.66%	43.82%	24.02%	50.00%	44.47%
Duration 5-7 Yrs	0.00%	12.91%	13.24%	0.00%	14.21%	2.62%	17.00%	16.74%
Duration 7-10 Yrs	0.00%	0.82%	2.85%	0.00%	3.80%	0.00%	1.00%	2.09%
Duration 10-20 Yrs	0.00%	1.18%	1.72%	0.00%	2.74%	33.38%	0.00%	1.22%
Duration >20 Yrs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



### ALLOCATIONS BY SECTOR



Sector	Arena - SDHY Composite	Artisan - High Income	Barings - High Yield	Chartwell - CIP - Short BB HYFI	Loomis - High Yield FD	Polen - Opp HY	Wellington - High Yield Bond	BBG US HY Corp
Government	0.00%	0.00%	0.00%	0.00%	2.02%	0.00%	0.00%	0.00%
Government-Related	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Municipal / Tax-Exempt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Municipals Taxable	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank Loan / Leveraged	25.00%	16.31%	0.00%	0.00%	0.38%	40.24%	2.00%	0.00%
Convertibles	10.00%	0.00%	0.00%	0.00%	4.44%	0.00%	1.00%	0.00%
Investment Grade	0.00%	1.38%	12.59%	0.00%	7.24%	0.00%	5.00%	2.63%
High Yield Corporate	59.00%	62.41%	76.43%	100.00%	66.69%	53.18%	92.00%	97.37%
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	0.00%
Securitized	0.00%	0.00%	0.00%	0.00%	1.79%	0.00%	0.00%	0.00%
Other *	6.00%	19.90%	11.47%	0.00%	17.37%	6.50%	0.00%	0.00%

\* May include Non-US Dev. Markets and Emerging Markets



# 

# PERFORMANCE



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# **PERFORMANCE DEFINITIONS**

The following performance charts show the historical record for the strategies under consideration. To manage client portfolios, each manager has a range of offerings (separate accounts, commingled funds or mutual funds) that allow all types of clients access to the strategy at reasonable prices.

**Trailing Period Returns and Calendar Year Returns:** 

These pages highlight a manager's performance for quarter, year to date, 1, 3, 5, 7 & 10 year periods as well as calendar year returns.

**Performance Summary:** 

These pages highlight a manager's excess performance over various periods. All managers are also shown from the inception of the shortest record referred to as LCD or Least Common Denominator.

**Return Histogram:** 

These charts display the frequency of a manager's monthly excess performance data.

**Rolling One Year and Three Year Excess Returns:** 

These charts demonstrate the manager's demonstrated relative performance versus the benchmark over time. Using each manager's one year return and subtracting the one year benchmark return shows how each manager has performed relative to the relevant benchmark. The same method is used for the three year charts.

**Rolling One Year and Three Year Excess Return Versus Benchmark:** 

These charts demonstrate the manager's demonstrated relative performance behavior over up and down equity markets. The charts are displayed in order of benchmark performance along the X-Axis rather than chronological order. By looking at the Y-Coordinate you can determine whether or not the manager added or detracted value versus the benchmark over that one year period. Each dot represents the one year excess return versus the relevant benchmark. The same method is used for the three year charts.

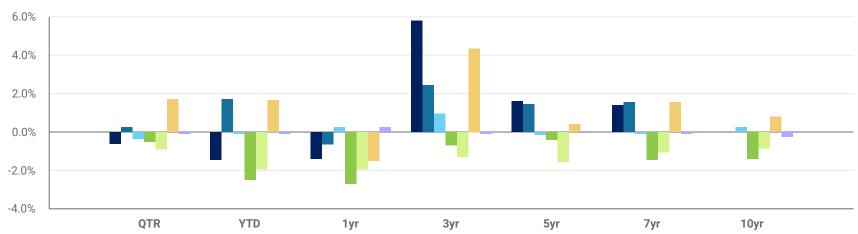
**Risk/Return Performance Charts:** 

These charts show the risk and return of the candidates and indicies for 3, 5, 7 & 10 year periods.



# **PERFORMANCE** TRAILING PERIOD PERFORMANCE - NET OF FEES

**Excess Returns** 

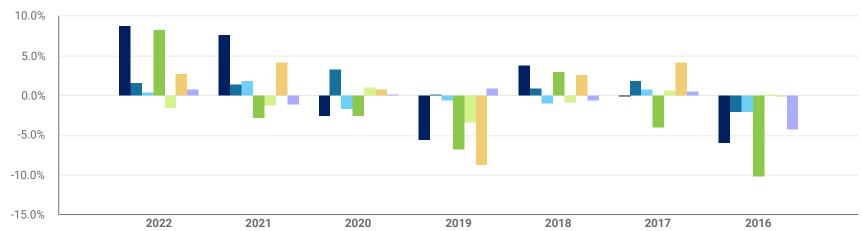


Ab	solute Returns	Benchmark	Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
	Arena - SDHY Composite	1	1.17%	3.93%	7.68%	8.94%	4.97%	5.93%	-
	Artisan - High Income	1	2.00%	7.11%	8.45%	5.59%	4.83%	6.08%	-
	Barings - High Yield	1	1.42%	5.31%	9.36%	4.08%	3.21%	4.45%	4.71%
	Chartwell - Short BB HYFI	1	1.26%	2.90%	6.41%	2.48%	2.99%	3.12%	3.05%
	LoomSayles - High Yield FD	1	0.86%	3.45%	7.13%	1.84%	1.84%	3.50%	3.60%
	Polen - US Opportunistic HY	1	3.48%	7.05%	7.61%	7.53%	3.78%	6.13%	5.26%
	Wellington - High Yield Bond	1	1.72%	5.37%	9.31%	3.12%	3.44%	4.45%	4.19%
1	Bloomberg Barclays US High Yield - Corporate		1.75%	5.38%	9.06%	3.14%	3.36%	4.53%	4.43%



# **PERFORMANCE** CALENDAR YEAR PERFORMANCE - NET OF FEES

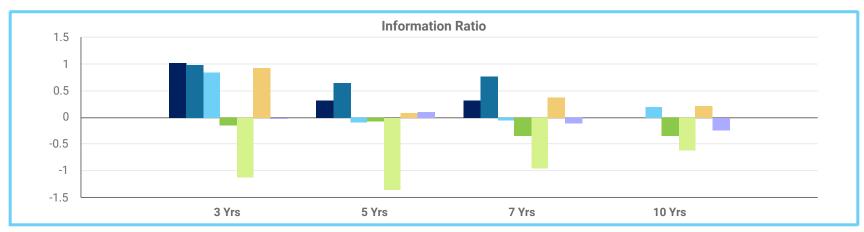
**Excess Returns** 



A	osolute Returns	Benchmark	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
	Arena - SDHY Composite	1	(2.46%)	12.93%	4.63%	8.78%	1.67%	7.49%	11.26%	1.25%	-	-
	Artisan - High Income	1	(9.62%)	6.62%	10.43%	14.50%	(1.23%)	9.34%	15.15%	1.50%	-	-
	Barings - High Yield	1	(10.84%)	7.09%	5.41%	13.72%	(3.08%)	8.26%	15.08%	(0.18%)	1.85%	11.23%
	Chartwell - Short BB HYFI	1	(2.99%)	2.46%	4.61%	7.60%	0.78%	3.55%	7.05%	(0.60%)	1.21%	5.34%
	LoomSayles - High Yield FD	1	(12.69%)	4.11%	8.12%	10.98%	(2.97%)	8.18%	17.20%	(7.22%)	4.37%	8.76%
	Polen - US Opportunistic HY	1	(8.46%)	9.41%	7.84%	5.68%	0.41%	11.61%	17.01%	(4.26%)	3.18%	9.65%
	Wellington - High Yield Bond	1	(10.39%)	4.15%	7.27%	15.18%	(2.73%)	7.98%	12.94%	(3.54%)	2.98%	6.30%
1	Bloomberg Barclays US High Yield - Corporate		(11.19%)	5.28%	7.11%	14.32%	(2.08%)	7.50%	17.13%	(4.47%)	2.45%	7.44%



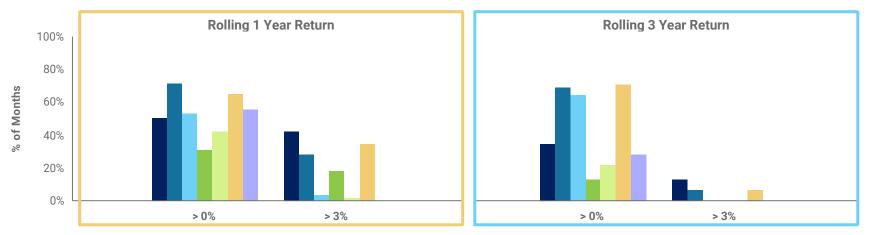
# EXCESS RETURNS ANALYSIS - NET OF FEES



	Excess Return (%)				Tracking Error (%)				Information Ratio				Beta vs.
	3 Yrs	5 Yrs	7 Yrs	10 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Index
Arena - SDHY Composite	5.80	1.61	1.40	-	5.72	5.09	4.43	4.23	1.01	0.32	0.32	-	0.50
Artisan - High Income	2.45	1.48	1.55	-	2.48	2.31	2.02	2.04	0.99	0.64	0.77	-	0.89
Barings - High Yield	0.95	(0.15)	(0.08)	0.28	1.13	1.46	1.31	1.48	0.84	(0.10)	(0.06)	0.19	1.01
Chartwell - Short BB HYFI	(0.66)	(0.37)	(1.42)	(1.38)	4.19	4.69	4.11	4.01	(0.16)	(0.08)	(0.35)	(0.34)	0.52
LoomSayles - High Yield FD	(1.29)	(1.52)	(1.03)	(0.83)	1.14	1.12	1.07	1.35	(1.13)	(1.35)	(0.96)	(0.61)	1.06
Polen - US Opportunistic HY	4.39	0.43	1.59	0.83	4.77	4.91	4.31	3.93	0.92	0.09	0.37	0.21	0.61
Wellington - High Yield Bond	(0.02)	0.09	(0.08)	(0.24)	0.81	0.80	0.78	1.00	(0.02)	0.11	(0.11)	(0.24)	1.04



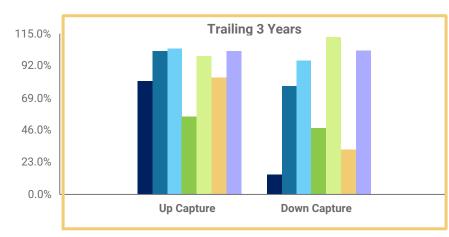
# EXCESS RETURNS ANALYSIS - NET OF FEES

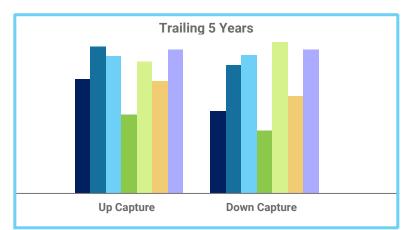


	# of Months	% Positive	High	Low	Average	% >	Rolling 1 Yr. Rtr.		Rolling 3 Yr. Rtr.	
	(Track Record)	(Mo.)	(Mo.)	(Mo.)	(Mo.)	0.50%	>0%	>3%	>0%	>3%
Arena - SDHY Composite	109	51.38%	3.89%	(3.77%)	0.13%	33.03%	50.46%	42.20%	34.86%	12.84%
Artisan - High Income	109	66.97%	1.75%	(1.84%)	0.16%	28.44%	71.56%	28.44%	68.81%	6.42%
Barings - High Yield	109	57.80%	0.98%	(2.39%)	0.01%	5.50%	53.21%	3.67%	64.22%	0.00%
Chartwell - Short BB HYFI	109	40.37%	5.72%	(2.80%)	(0.11%)	25.69%	31.19%	18.35%	12.84%	0.00%
LoomSayles - High Yield FD	109	41.28%	0.87%	(1.29%)	(0.08%)	3.67%	42.20%	1.83%	22.02%	0.00%
Polen - US Opportunistic HY	109	61.47%	2.88%	(4.00%)	0.08%	34.86%	65.14%	34.86%	70.64%	6.42%
Wellington - High Yield Bond	109	48.62%	0.86%	(1.56%)	(0.02%)	2.75%	55.96%	0.00%	28.44%	0.00%



# UP CAPTURE / DOWN CAPTURE - NET OF FEES

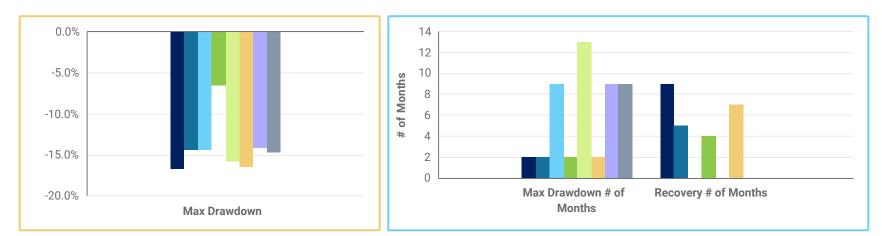




	Trailing	3 Years	Trailing	5 Years
	Up Capture	Down Capture	Up Capture	Down Capture
Arena - SDHY Composite	81.12%	14.03%	81.86%	59.14%
Artisan - High Income	102.59%	77.50%	105.24%	91.85%
Barings - High Yield	104.43%	95.76%	98.36%	99.32%
Chartwell - Short BB HYFI	55.49%	47.81%	55.93%	44.64%
LoomSayles - High Yield FD	99.00%	112.53%	94.65%	108.64%
Polen - US Opportunistic HY	83.80%	32.21%	80.54%	69.57%
Wellington - High Yield Bond	102.21%	103.08%	102.88%	102.95%



# DRAWDOWN ANALYSIS - NET OF FEES



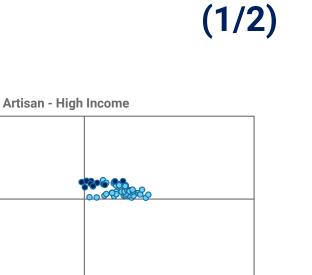
	# of Months (Track Record)	Max Drawdown	Max Drawdown # of Months	Recovery # of Months	Max Drawdown Peak Date	Max Drawdown Valley Date
Arena - SDHY Composite	109	(16.67%)	2	9	2/1/2020	3/31/2020
Artisan - High Income	109	(14.34%)	2	5	2/1/2020	3/31/2020
Barings - High Yield	109	(14.31%)	9	0	1/1/2022	9/30/2022
Chartwell - Short BB HYFI	109	(6.53%)	2	4	2/1/2020	3/31/2020
LoomSayles - High Yield FD	109	(15.79%)	13	0	9/1/2021	9/30/2022
Polen - US Opportunistic HY	109	(16.49%)	2	7	2/1/2020	3/31/2020
Wellington - High Yield Bond	109	(14.12%)	9	0	1/1/2022	9/30/2022
Bloomberg Barclays US High Yield - Corporate	109	(14.74%)	9	0	1/1/2022	9/30/2022



# ROLLING 3 YEAR EXCESS RETURNS NET OF FEES

Arena - SDHY Composite

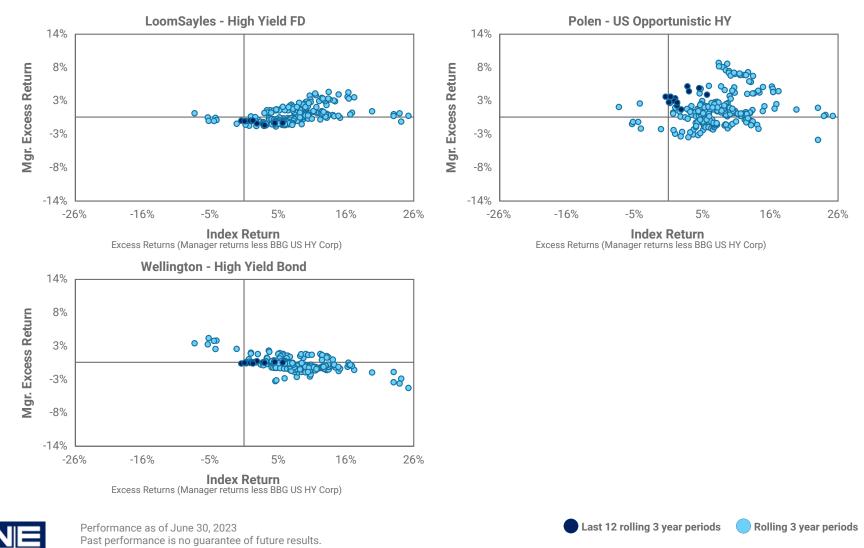
14%





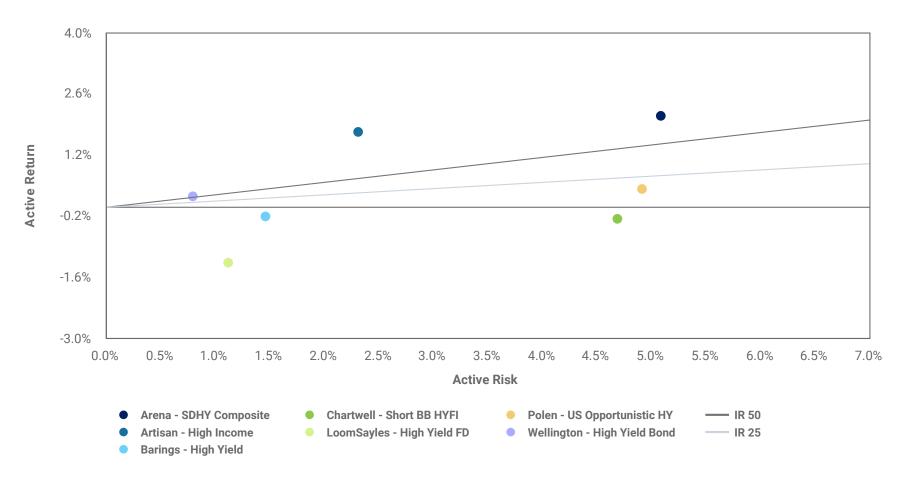
14%

# ROLLING 3 YEAR EXCESS RETURNS NET OF FEES

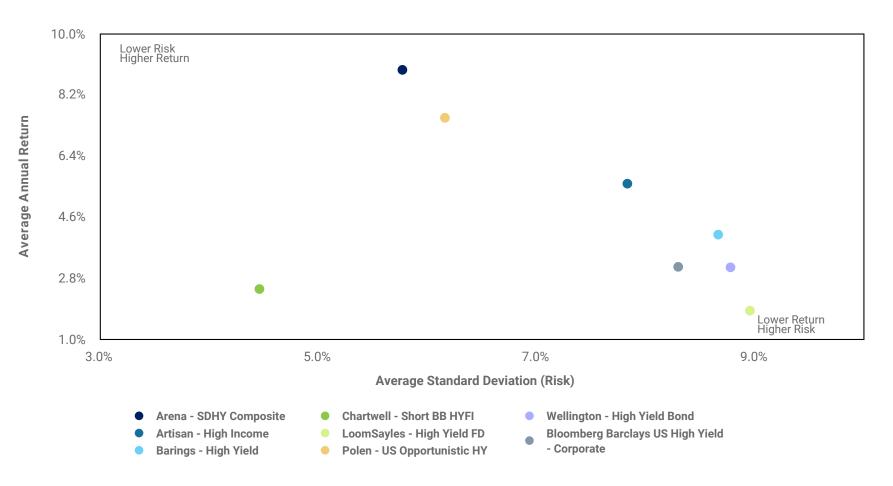


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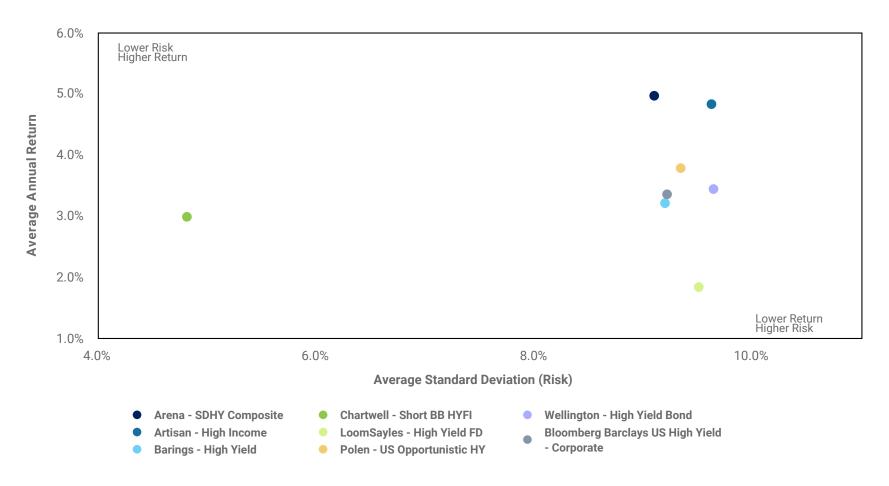
# 5 YEAR ACTIVE RISK/ACTIVE RETURN - NET OF FEES



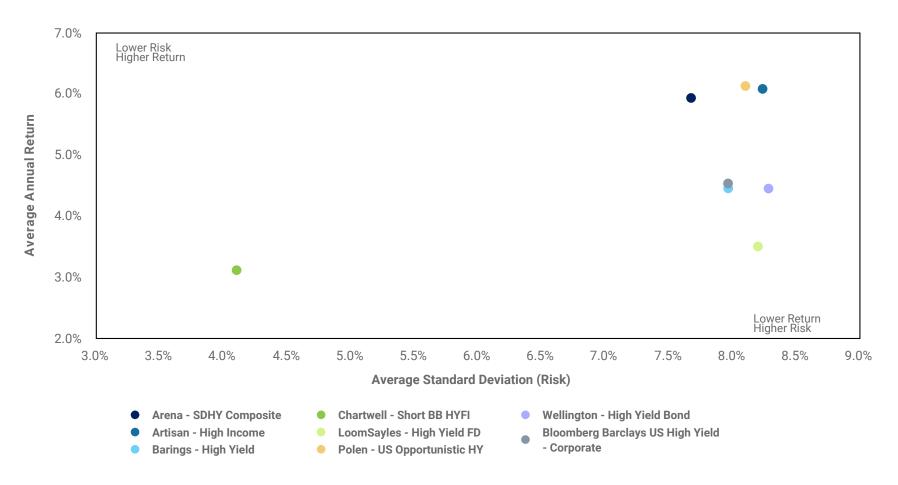




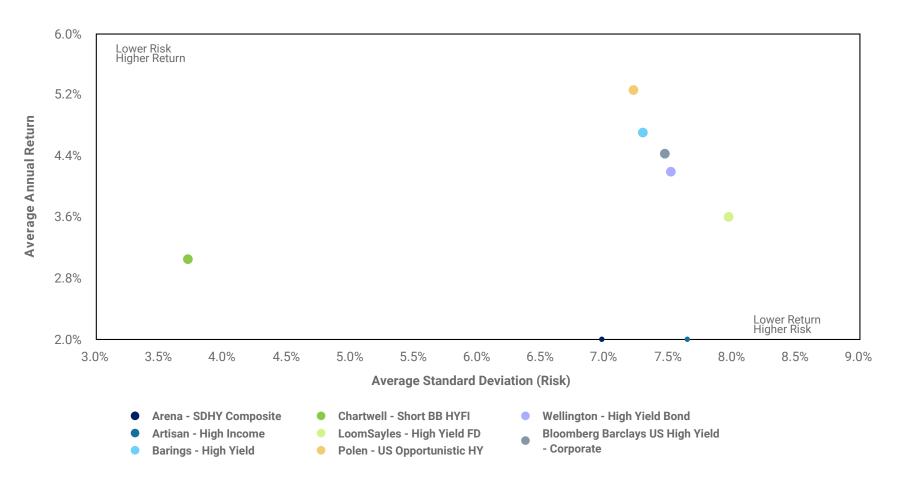
















# PROFILES



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# DESCRIPTION

The following pages contain profile descriptions regarding each Manager Firm and Investment Product including:

- Firm Description
- NEPC Investment Thesis
- People
- Philosophy
- Investment Strategy
- Portfolio Structure
- Performance Expectations
- Biographies



# Arena Capital Advisors LLC Arena Short Duration High Yield

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

(1/2)

### **Firm Description**

Arena Capital Advisors, LLC is an independent investment management firm specializing in fixed income, focusing primarily on the corporate bond and leveraged loan markets. Arena specializes in short duration high yield securities. Arena was founded in 2014 in Los Angeles, CA by Jeremy Sagi (former CIO of Post Advisory Group), Daniel Elperin (former Director of Trading for Silver Rock Financial), & Sanije Perrett (former COO and member of the Board of Directors at Post Advisory Group). Arena is joined by Larry Post (Founder of Post Advisory Group), who has over forty-eight years of industry experience and pioneered the short duration high yield space.

### **NEPC Investment Thesis**

We expect Arena Capital's Short Duration High Yield strategy to outperform the broader short duration credit market through credit selection and industry rotation. The ability to invest in floating rate leveraged loans is a value-add in this space that we feel can combat rising interest rates and protect capital with higher recoveries, while enjoying senior security in the capital structure. Arena Capital has taken what senior personnel had built at Post Advisory, and constructed a more nuanced process, philosophy, and approach to the short duration high yield investing that we believe will lead to future success of the strategy.

### People

Jeremy Sagi is CIO and lead portfolio manager. Jamie Farnham is a portfolio manager and head of credit research. Jacob Rothman is also listed as a portfolio manager with a distressed debt focus. Daniel Elperin is head trader. There are three senior credit analysts (Lorcan Kilmartin, Nikolas Fodor and James Waldeck) and a trader/desk analyst (Gary Warner) supporting the investment effort. Anthony Pelle is an investment associate on the team and primarily covers SPAC research. Analysts cover approximately 25-30 issuers each in the portfolio.

### Philosophy

Arena believes during market environments where traditional debt and equity markets seem fully valued or too volatile, short duration high yield can be a relatively lower risk alternative. Arena believes credit quality is easier to predict over shorter time frames and that ratings in this space do not adjust accurately to account for maturity. Arena strives to construct diversified portfolios with attractive risk/reward profiles, utilizing intensive research to minimize downside risk.



# Arena Capital Advisors LLC Arena Short Duration High Yield

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

(2/2)

### **Investment Strategy**

Portfolio construction starts with a screen of the short duration universe for securities rated below BBB- with maturites of less that 5 years. Idea generation is developed through proprietary analytics aimed at identifying attractive relative return opportunities in the short duration space. Potential investments are evaluated through Arena's proprietary tool, the Arena Rate Card ("ARC"). The ARC model takes into account a number of factors, including ratings, company balance sheet metrics, liquidity and interest rate sensitivity and exposure. The ARC model is used as part of Arena's risk assessment. The model assigns an internal credit score on a specific security rather than relying solely on credit agencies' ratings, which are capital structure based, that Arena believes often lag true market value. This screening process incorporates both quantitative and qualitative fundamental evaluation of potential investments by the team. Fundamental credit analysis begins with building company specific financial models, conducting various scenario analyses to evaluate the relative attractiveness of an investment as well as analyzing the possible impact of future events on an investment. The team reviews legal, environmental and other quantitative and qualitative credit factors that may affect the overall credit quality of an investment. Analysts typically follow about 25-35 portfolio companies, in addition to tracking Arena's "wish list" securities. Consensus opinion is used by the investment team for purchasing, risk assessment, and the sizing of positions in the portfolio. Arena's investment philosophy is to construct diversified portfolios with attractive risk/reward profiles, utilizing intensive research to minimize downside risk. Capital preservation and default avoidance is key to the success of this strategy.

### **Portfolio Structure**

Portfolios are constructed in a way that diversifies across corporate bonds and leveraged loans with average maturities of less than 5 years and credit qualities of below BBB-. The maturity profile is expected to be between 3-5 years, however, due to the floating rate component of this strategy, the average duration is expected to fall between 1-3 years. Arena targets a geographic exposure of 80%-90% in North American and 20% Non-US. Industry limits are typically below 15%, and issuer concentration limits are set at under 5%. This portfolio has the discretion to opportunistically invest up to 40% in leveraged loans depending upon market conditions and relative value opportunities. This is an active strategy, and not a "buy-and-hold" approach similar to other players in the space. Portfolios are expected to be diversified, yet expressive of high conviction ideas of the investment team. Total issues in the portfolio are expected to be between 100 and 150.

### **Performance Expectations**

Strategy seeks to generate attractive risk-adjusted returns through bottom-up fundamental and technical analysis as well as active management.



# **BIOGRAPHIES OF KEY PROFESSIONALS**

# Arena Capital Advisors LLC Arena Short Duration High Yield

### Jeremy Sagi, Chief Investment Officer

Jeremy Sagi is a Founding Partner and Chief Investment Officer of Arena Capital Advisors. Jeremy has over 18 years of industry experience and was most recently at Post Advisory Group where he was the Chief Investment Officer and Lead Portfolio Manager for the Limited Term and Intermediate Term products. He joined Post in 2002 when assets under management were approximately \$1.5 billion and helped grow the firm to approximately \$13 billion in assets under management. During his tenure at Post he built a solid short duration platform, growing assets under management to over \$4 billion in under five years. He is a CFA charterholder and is an inactive CPA. Jeremy received a Bachelor's degree in Business and Economics and a Minor in Accounting from the University of California, Los Angeles, where he graduated Magna Cum Laude with honors.

### Larry Post, Partner

Larry Post is a Partner in Arena Capital Advisors. Larry has over 49 years of industry experience. He founded Post Advisory Group, a High Yield money management firm in 1992 and grew it to \$13 billion in assets. Prior to Post Advisory Group, he was the Co-Director of Research and a High Yield Bond Trader with Drexel Burnham Lambert. Larry was the head of High Yield Research at Salomon Brothers, head of the High Yield Bond Department at Smith Barney, Co-Head of the Public Bond Department at Massachusetts Mutual Life Insurance Co. and a Senior Analyst at Value Line Investment Co. In the High Yield area, he co-authored the first brokerage house research report on the field, developed the first performance index, developed the first statistical screening tool to monitor credit quality and wrote the first High Yield Newsletter. He is a graduate of the Wharton School MBA and Lehigh University. Larry serves on several boards and devotes a large part of his time to philanthropic pursuits.



# **BIOGRAPHIES OF KEY PROFESSIONALS**

# Arena Capital Advisors LLC Arena Short Duration High Yield

### Sanije Perrett, President

Sanije Perrett is a Founding Partner and President of Arena Capital Advisors. She has 24 years of industry experience. Most recently she was with Post Advisory Group as the Chief Operating Officer and member of the Board of Directors. Prior to Post, she was the Chief Legal and Compliance Officer at Relational Investors, where she had responsibility for all legal, compliance and regulatory affairs at the firm. Before Relational, she worked in London as Senior Counsel for Nomura International where she was responsible for corporate, regulatory and litigation matters. Prior to Nomura, she was a regulator for the State of Arizona, Securities Division where she was part of the Enforcement, Trading & Markets and Investment Management Divisions. Sanije earned her law degree from the University of Wales, UK, where she graduated with Honors.

# **Daniel Elperin, Managing Director of Trading**

Daniel Elperin is a Founding Partner and the Managing Director of Trading at Arena Capital Advisors. He has 19 years of industry experience and manages all trading and market relationships for the firm. He was most recently at Silver Rock Financial where he was Director of Trading and responsible for trading, risk and the overall profitability of the trading business. Prior to Silver Rock, he was Director of Trading at Post Advisory Group where he was responsible for all trading positions, risk and profitability of the firm's trading business. Before Post, he was Director of Trading at Financial Management Advisory where he managed all trading on behalf of the firm. Daniel attended the University of Arizona.



# (1/2)

# Artisan Partners Limited Partnership Artisan High Income

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment July 2023

### **Firm Description**

Artisan Partners Limited Partnership ("Artisan Partners") is a publicly traded multi-boutique investment firm (NYSE: APAM) headquartered in Milwaukee, Wisconsin. The firm was founded in 1994 and has offices in Atlanta, Boston, Chicago, Denver, Dublin, Hong Kong, London, Milwaukee, New York, San Francisco, Singapore, Sydney, and Wilmington. There are currently ten autonomous investment teams (Growth Team, Global Equity Team, U.S. Value Team, International Value Team, Global Value Team, Sustainable Emerging Markets Team, Credit Team, Developing World Team, Antero Peak Group, and EMSights Capital Group) at the firm. Artisan Partners business model maximizes the time investment teams spend on investment-related decisions.

### **NEPC Investment Thesis**

Artisan's High Income strategy invests in issuers, primarily within the non-investment grade universe, with high-quality business models that have compelling risk-adjusted return characteristics. The value-add in this strategy is that lead portfolio manager Bryan Krug is unconstrained in the way he can invest in senior floating rate bank loans when the risk-return characteristics of a company's loan is more attractive than their high yield debt issue. Investors can expect to be invested primarily in high yield bonds, and have opportunistic exposure to loans in some environments. The team believes that market inefficiencies exist at different points along the credit cycle, therefore, allocating a portion of the portfolio away from high yield in favor of loans can be beneficial in some market environments throughout the credit cycle.

### People

Artisan's Credit Team manages the High Income strategy and is headed by Bryan Krug. Artisan holds a strong belief in team autonomy. Artisan allows each investment team to have its own unique investment process and maintain its own research capabilities, believing this to be best practice that ultimately leads each group to run successful strategies. The fixed income team, headed by portfolio manager Bryan Krug, is supported by analysts and a trader dedicated solely to one investment philosophy and process.

### Philosophy

The Credit Team's investment philosophy is based on the belief that the non-investment grade credit market has cyclical industry and company dislocations that can be exploited. The team believes that these investment opportunities can be identified through fundamental bottom-up credit research and value identification across the capital structure. Furthermore, the team believes that attractive risk-adjusted returns can consistently be achieved over a full credit cycle through the implementation of a repeatable, high conviction investment process.



# Artisan Partners Limited Partnership Artisan High Income

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment July 2023

### **Investment Strategy**

While the process is a collaborative effort that allows the team to leverage internal resources and expertise, final decision-making ability lies with Bryan Krug. Together with Bryan, the analysts, as members of the research team, perform bottom-up credit analysis with generalist responsibilities. The Credit Team believes that the having a broader perspective under the generalist model, as posed to sector specific research coverage, helps eliminate missed opportunities. The Credit Team has a daily markets meeting, a daily investment meeting, and adheres to a guarterly re-underwriting of names. The investment process starts through idea generation/sourcing through the use of quantitative screens and non-quantitative sources. Quantitative screens are used to evaluate yield, relative value by sector, and bond and loan outperformers/underperformers. Non-Quantitative sources that are evaluated include credit trends, industry analysis, and security specific characteristics. Business evaluation is done through fundamental credit research. This bottom-up fundamental research process is done to assess business quality, financial strength, a downside analysis, and a target valuation for the credit. The result of this process is a portfolio consisting of 20%-60% Core credits, 10-50% Spread Tightening credits, and 10%-30% Opportunistic credit. Core investments are positions the team views as having stable to improving credit profiles and lower loan to value ratios. Core investments represent the portfolio's stable foundation of income. Spread investments are those where the team has an out-of-consensus view about a company's credit improvement potential. They believe these investments have significant upside potential which the broader market is mispricing. The team looks for scenarios where the potential for financial deleveraging can result in improved credit fundamentals, leading to spread tightening. These investments have unique, idiosyncratic risk profiles. Opportunistic investments are driven by market dislocations that have created a unique investment opportunity in the team's view. These selective opportunities can be driven by technicals in the loan and bond markets, where a short-term tactical scenario creates pricing dislocations. This category can also be a home for catalyst-driven ideas. If the team is comfortable with an underlying credit and think a meaningful catalyst is on the horizon, they may establish an opportunistic position.

### **Portfolio Structure**

The team is not geographically constrained, but their expertise and experience that the team has built over the years has led them to focus primarily on US-based issuers. Occasionally there are attractive investments outside of the US, most commonly in Europe.

### **Performance Expectations**

Expect good performance in most environments. Downside protection should be expected through the use of senior secured floating rate bank loans when appropriate.



# **BIOGRAPHIES OF KEY PROFESSIONALS**

# Artisan Partners Limited Partnership Artisan High Income

### Bryan Krug, Managing Director and Portfolio Manager

Bryan C. Krug, is a managing director of Artisan Partners and a portfolio manager on the Credit team. In this role, he is the portfolio manager for the Artisan High Income Strategy. Prior to joining Artisan Partners in December 2013, Mr. Krug was the portfolio manager of Ivy High Income Fund at Waddell & Reed from February 2006 through November 2013. Mr. Krug joined Waddell & Reed in 2001 as a high yield investment analyst and was later promoted to portfolio manager. Earlier in his career, he was affiliated with Pacholder Associates as the primary analyst for a distressed portfolio. Mr. Krug holds a bachelor's degree in finance from Miami University, Richard T. Farmer School of Business.



# Barings LLC Barings U.S. High Yield Bonds

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

(1/3)

### **Firm Description**

Barings LLC formerly Cornerstone was founded in 1994 to serve as the investment manager for the MassMutual real estate equity portfolio and with the intent to grow an investment management business for other institutional investors over time. Barings LLC formerly Cornerstone registered with the SEC as an Investment Adviser on April 1, 1996, and Barings formerly Cornerstone has not merged with or acquired another investment manager since its founding. In 2004, the company changed from a C-corp (Inc.) format to a Limited Liability Company (LLC). No other name, ownership or company format changes are contemplated at this time. This change had no impact on company operations and no other name, ownership or company format changes are contemplated at this time. Barings formerly Cornerstone began managing assets for seven tax-exempt institutions in 1997, concurrent with their investment in the Cornerstone Suburban Office L.P., a closed-end, commingled real estate fund formed by Cornerstone that invested in geographically diverse, suburban office properties.

### **NEPC Investment Thesis**

The Barings US High Yield strategy draws upon the firm's well resourced investment platform to construct portfolios focusing on domestic U.S. high yield markets. The portfolio is expected to take positions in U.S. high yield bonds. The team's experience in high yield investing is a key value add, and their time-tested process of successfully targeting high current income, capturing capital appreciation in below investment grade bonds, and the ability to avoid defaults. The Barings Global Fixed Income and Multi-Asset team is well resourced and incorporates a process that spans across the research platform in a way that researches companies and issues in a way that all identifiable aspects of risk are measured and monitored.

### People

Martin Horne, London, is head of Global Public Fixed Income and Chairman of the Global High Yield Allocation Committee. Mike Freno relinquished his position when he moved to takeover from Tom Finke as Chairman. David Mihalick, previously the head of US High Yield, became the Head of Private Assets. Following David's promotion, Adrienne Butler and Scott Roth were promoted to Co-Heads of US High Yield. Both Ms. Butler and Mr. Roth joined Barings in 2002, and have three decades of industry experience each. Mr. Roth also assumed Mr. Mihalick's roles as voting member of the Global High Yield Allocation Committee and Chair of the U.S. High Yield Investment Committee. Chris Sawyer is the Head of European High Yield.



# Barings LLC Barings U.S. High Yield Bonds

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

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# Philosophy

Barings believes that attractive long-term, risk-adjusted returns can best be achieved through: 1) Strong fundamental credit underwriting with the primary focus on principal preservation, and 2) Active portfolio management aiming to capture the best relative value and identify opportunities for capital appreciation.

# **Investment Strategy**

The Global High Yield Investments Group's investment style is fundamental bottom-up analysis with a long-term focus in mind. The key to credit selection is assessing based on the expected long-term success of a company, its ability to service its capital structure, and any mispricing perceived by the market on its securities. Portfolio construction is a three step process. 1) Fundamental Bottom-Up Research and Investment Committee - Internal fundamental bottom-up credit analysis focusing on company financials, management team, industry outlook and company performance. The Investment Committee takes a team-based approach to credit decision making, believing this is the key to unlocking value in the high yield space. 2) Portfolio Construction and Relative Value Decisions - Individual portfolio managers use discretion to construct a portfolio of assets from the buy-list that match the portfolio's investment guidelines and risk / return objective. Analysts make credit recommendations based on a 12-month outlook (i.e. improving credit, stable credit, or declining credit). Security weighting is based upon relative value decisions. Typically hold 0.5% to 1.0% for normal positions and 1.5% to 2.5% for positions with strong conviction. 3) Active Portfolio Monitoring / Sell Discipline - Research analysts monitor credit performance daily and provide updates as events occur. Portfolio managers review performance and market strategy through: daily investment committee meetings, weekly Portfolio Management meetings, and other internal ad-hoc meetings. Decision to sell is based on a research analyst and portfolio manager's current risk assessment, and is weighed against current market prices, as well as client objectives and constraints. The Investment Committee can vote for a mandatory sale in certain situations. Portfolios will be constructed with issues that bear high conviction and the capability of performing in both up and down market environments. The primary universe of the strategy is the Bank of America Merrill Lynch Non-Financial Developed Markets High Yield Constrained Index, but will invest in out of benchmark securities if bottom-up research points to the potential of these securities to add value to the portfolio. The Strategy is benchmark aware, and not benchmark driven, if an investment opportunity does not exemplify the right attributes, then it will not be purchased even though it might be large constituent in the benchmark.

# **Portfolio Structure**

Typically the portfolio will have 125 – 175 issuers in the portfolio over a cycle. At all times, at least 80% of the portfolio will be invested in below



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# Barings LLC Barings U.S. High Yield Bonds

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

investment grade securities. Sector weightings and positions in single names are to be interpreted as the result of bottom-up fundamental research and conviction level.

# **Performance Expectations**

Expect solid upside capture with a low downside capture compared to the broad global high yield benchmark over a market cycle, while targeting 150bps of excess return.



# **BIOGRAPHIES OF KEY PROFESSIONALS**

# Barings LLC Barings U.S. High Yield Bonds

# Michael Freno, Managing Director, Head of U.S. High Yield

Michael Freno is a member of the firm's High Yield Investments Group and is a research analyst in the U.S. Bank Loan Portfolio Management and Research team. He has 10 years of industry experience. Prior to joining Babson Capital in 2005, Michael was a research analyst for Mangan & McColl Partners, LLC, where he focused on equity and credit analysis for special situation and distressed investments for the firm. Prior to that, Michael was a Manager at PricewaterhouseCoopers. He holds a B.A. from Furman University, an M.B.A. from The Wake Forest Babcock School of Business.

### Sean Feeley, CFA, CPA, Managing Director, Portfolio Manager

Sean Feeley is Head of High Yield Research and a member of the High Yield Bond and Loan Investment Committees. His team is responsible for the analysis of high yield bonds and loans for various fixed income strategies. He is also a portfolio manager and a team leader for the energy and power sectors. Sean has over 21 years of industry experience. Prior to joining the firm in 2003, he worked at Cigna Investment Management in project finance and at Credit Suisse, where he worked in the leveraged finance group. He holds a B.S. in accounting from Canisius College (Magna Cum Laude) and an M.B.A. from Cornell University. Sean is a Certified Public Account (inactive) and a member of the CFA Institute.

### Scott Roth, CFA, Managing Director, Portfolio Manager

Scott Roth is a member of the firms High Yield Investments Group. He is a portfolio manager and a member of the High Yield Bond Investment Committee. In addition, he is a team leader for the automotive, homebuilding/building materials, aerospace/defense and paper/packaging sectors. Scott has over 17 years of industry experience. Prior to joining Babson Capital in 2002, Scott worked at Webster Bank and was a high yield analyst at Times Square Capital Management. In addition, he spent time as an underwriter at Chubb Insurance Company. He holds a B.B.A. from Western Michigan University and an M.B.A. from the University of Michigan. Scott is a member of the CFA Institute.



# Chartwell Investment Partners, LLC Chartwell Short BB High Yield Fixed Income

NA Source: NEPC and eVestment NA

### **Firm Description**

Chartwell Investment Partners (Chartwell) was founded in 1997 by nine investment professionals who worked together previously at Delaware Investment Advisers. In 2014, the firm was acquired by TriState Capital Holdings through a cash deal that bought 100% of the firm, including 35% held by retired partners plus 25% held by Maverick Partners, a limited partnership comprised of three passive investors. Under the new ownership structure, compensation is tied to TriState stock.



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# Loomis, Sayles & Company, L.P. Loomis High Yield Full Discretion

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

### **Firm Description**

Loomis, Sayles & Company was founded as an investment management company in 1926. Throughout its history, the firm has grown to become a primarily institutional investment manager with specialized products in domestic/international fixed income, equities and alternatives. Currently, the firm is a wholly owned subsidiary of NATIXIS Global Asset Management. Loomis has built a strong organizational culture around proprietary research and fundamental analysis, and has applied this approach to investing across all of its products. The firm manages strategies across multiple asset classes, with a majority in domestic and international fixed income.

### **NEPC Investment Thesis**

Loomis adds value to client portfolios through their large proprietary credit research and their ability to predict credit upgrades and downgrades before the ratings agencies react. Analysts at Loomis are able to specialize on small portions of credit sectors and industries, becoming firmwide experts in their areas of coverage. Loomis has built an organizational culture around credit markets and credit research, and has integrated this philosophy into all of their investment products. Their expected alpha lies with their skill in credit research and non-benchmark allocations such as investment grade credit, emerging markets debt, non-dollar debt, and convertible securities.

### People

The Full Discretion team includes Matt Eagan, Elaine Stokes, Matt Kennedy and Todd Vandam, all of whom have been with Loomis over 20 years. From the analyst standpoint, credit research has been the hallmark of Loomis Sayles Boston office and it continues to grow and show investment, including developing globally.

While still taking advantage of the vast centralized research resources, the Full Discretion team did add a dedicated group of three analysts that will be able to spend more time focusing on deeper credit dives for the FD team specifically. Nicole Ranzinger, Zachary South and Ryan Yackel make up this new unit and are labelled as "customized". All three came from the centralized research group at Loomis.

Dan Fuss, Vice Chairman has stepped back from day to day portfolio management responsibilities and is now a 'Senior Advisor'. Loomis did a good job in creating an environment where Dan Fuss continued to be recognized for his leadership and achievements, while also putting a structure and team around him ameliorate the key person issue.



# Loomis, Sayles & Company, L.P. Loomis High Yield Full Discretion

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

### Philosophy

The High Yield Full Discretion strategy seeks to exploit the insights identified by the Loomis Sayles Fixed Income credit research organization. Portfolio guidelines are broad, offering the team significant investment flexibility. Portfolio managers collaborate with a full team of in-house credit analysts to identify attractive total rate of return investment opportunities in the global corporate fixed income sector. Security selection is the primary driver of performance.

### Investment Strategy

The bottom-up investment evaluation process drives the portfolio investments and resulting sector allocations. This process results in allocations to non-benchmark yield sectors including busted convertible debt, preferred equity, emerging markets, investment grade corporate debt and non-US dollar issues on an opportunistic basis. The product team and portfolio managers then establish strategy and construct client portfolios consistent with these ideas, the benchmark characteristics, and the guideline limits associated with the product. The resulting portfolios are well-diversified and expected to generate superior long-term investment performance when compared to the major high yield indices.

The approach used by Loomis Sayles is total return oriented and focused on discounted, below investment grade corporate bonds. They practice what they describe as "fundamental bond picking," whereby each security selected is ranked based on total return criteria. Their portfolios are biased towards issues that have stable and improving credit prospects and favorable call protection. They do not attempt to forecast interest rates, although they do seek to take advantage of cyclical and secular trends in interest rates. Duration adjustments are gradual and are moderated by their bias towards intermediate to long-term securities.

The fixed income investment process employed by Loomis seeks to uncover mispriced bonds, which have the potential to be upgraded. When examining a security, they evaluate its yield advantage, call protection, upgrade potential, cyclicality and other issue specific features such as sinking funds and special covenants. Credit specific analysis will examine such factors as cash flow projections, market position, management strength, industry developments and trends, political climate and economic forecasts. Sector and spread analysis is carried out to identify relative value across bond markets. The credit research department establishes credit rating and credit trends for over 1,300 issues as part of their bottom-up fundamental research.

To monitor the broad macroeconomic factors affecting the fixed income markets, Loomis maintains a Fixed Income Policy Committee, which assesses the outlook for interest rates and the associated opportunities and risks of holding long and short term securities. They also examine



# Loomis, Sayles & Company, L.P. Loomis High Yield Full Discretion

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

economic and political developments which are likely to impact the bond markets. The Committee meets once a month, and all decisions and conclusions made by the Committee are disseminated throughout the firm and are offered as guidance in the construction of the portfolios.

Trading is an important part of Loomis' portfolio management efforts, and an important element in the investment process. The firm reinforces this strength by committing considerable resources to traders and trading systems. The firm employs sector-based trading on a central fixed income trading desk. The trading desk is staffed with experienced investment professionals who specialize in all fixed income sectors. Sector specialization allows for in-depth focus on relative value analysis, market technicals, trends, and money flows. Each morning portfolio managers, traders, and research analysts meet on a formal basis to discuss the current fixed income markets and strategy. And throughout the day, research analysts, portfolio managers, and traders are in constant communication.

### **Portfolio Structure**

According to Loomis, approximately 50% of their value-added in high yield fixed income management comes from security selection, with 30% coming from sector/industry diversification decisions, and an additional 20% coming from changing of average maturity and duration. Loomis does not employ any yield curve strategies in their high yield fixed income portfolio management. Sector/industry diversification is a residual of the security selection process. Average maturity/duration decisions are a residual of the security selection process. Generally investment in a single issuer is limited to 2% of the portfolio. Loomis has no stated limited on the current ratings assigned to the securities they buy. Emerging market debt can be up to 50% of the portfolio. The portfolio typically holds around 200 securities.

# **Performance Expectations**

Higher beta manager. Expect strategy to lag during credit bear markets.



# **BIOGRAPHIES OF KEY PROFESSIONALS**

# Loomis, Sayles & Company, L.P. Loomis High Yield Full Discretion

### Matthew Eagan, CFA, Fixed Income Portfolio Manager

Mr. Eagan started his investment career in 1990 and joined Loomis Sayles in 1997. During his tenure, he has also served as part of the medium grade fixed income team and as a fixed income Research Analyst, and is currently a key member of the Full Discretion team. Prior to Loomis Sayles, he worked for Liberty Mutual Insurance Company as a Senior Fixed Income Analyst and for BancBoston Financial Company as a Senior Credit Analyst. Previously, Mr. Eagan had served as a Fixed Income Analyst at Loomis Sayles as well as at Liberty Mutual Insurance Company. He earned a BA from Northeastern University and an MBA from Boston University.

### **Daniel Fuss, Vice Chairman**

Mr. Fuss started his investment career in 1958 and joined Loomis Sayles in 1976. He serves as the Vice Chairman of Loomis Sayles' Board of Directors. Mr. Fuss co-manages a variety of mutual funds, including the flagship Bond, Strategic Income, Institutional High Income and Investment Grade Bond Funds. He is past president of the Boston Security Analysts Society, and a former Morningstar "Fixed Income Manager of the Year. In 2000, he was named to the Fixed Income Analysts Society's Hall of Fame in recognition of his contributions and lifetime achievements in the advancement of the analysis of fixed income securities and portfolios. Prior to joining Loomis Sayles, he was Vice President, Investment Counsel at The Boston Company, and held positions with Endowment Management, and Continental Illinois Bank, Illinois Mid-Continental Insurance Company. He was also an investment analyst with First Wisconsin Trust Company and began his career at Wauwatosa Bank. He earned both a BA (1955) and MBA (1965) from Marquette University. He served in the US Navy from 1955 to 1958 and held the rank of Lieutenant.

### Elaine Stokes, Fixed Income Portfolio Manager

Ms. Stokes started her investment career in 1987 and joined Loomis Sayles in 1988. She co-manages the Loomis Sayles Multi-Sector Bond Discipline and the Loomis Sales High Income Opportunities Fund, and manages institutional portfolios. Her experience is in high yield and domestic/emerging markets. Previously, she served as both a Senior High Yield Trader and High Yield Portfolio Specialist for the firm. She earned a BS from St. Michael's College.



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# Polen Capital Management, LLC DDJ U.S. Opportunistic High Yield

Alec Rapaport, Principal, Sr. Investment Director Source: NEPC and eVestment August 2023

### **Firm Description**

Polen Capital Management (Polen) was founded in 1979 by David Polen. The firm initially operated as a financial adviser to high net worth individuals and families. Polen switched business strategies and began managing equity investment assets in 1989. The firm's equity had been solely held by the founder until 2007, when Mr. Polen distributed 12% of his ownership to five other employees in the form of gifts. In 2012, after Mr. Polen's passing, the firm worked with his estate to recapitalize the firm. The deal was completed at the end of 2012 – financed through a combination of personal checks and the firm's cash flows -- and rendered six active employees with a 51% equity stake. At the end of 2015, the Polen estate granted 9% of their equity to the firm and sold 20% to iM Square, reducing their overall ownership to 20%. The equity grant increased firm ownership to 60% and equity participation to 16 active employees. Europe-based investment management firm iM Square is a passive, non-voting shareholder in the firm.

### **NEPC Investment Thesis**

Polen adds value to client portfolios through credit selection and tactical positions in the capital structure of issuers. Value in a credit is identified through Polen's bottom-up research. A large part of their advantage comes from the types of credits and the size of issuers that they follow. The strategy focuses on small to mid-cap issuers, with many in the lower quality portion of the universe, where many names are overlooked due to liquidity constraints and lack of information. By developing relationships and meeting with companies, competitors, suppliers and other related businesses, Polen is able to gain an informational advantage, allowing them to develop an investment thesis on a credit that differs from the market, and that recognizes a security's potential value. In-house legal analysis of bond covenants, along with expertise in stressed and distressed credits also helps in the investment process and in the creation of value for clients.

### People

Dave Breazzano is the head of the high yield team at Polen. He has been leading the group since DDJ's inception in 1996. Around him is a slightly younger generation. John Sherman (18 years industry/18 years Polen) and Ben Santonelli (17 years industry/15 years Polen) are co-PMs with Mr. Breazzano on the Opportunistic High Yield strategy and Roman Rjanikov (19 years industry/15 years Polen) is co-PM with Dave on Upper Tier High Yield and Director of Research. In addition to the portfolio managers, on the Investment Review Committee is the Assoc. General Counsel, Elizabeth Duggan. Jason Rizzo is the head trader.



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# Polen Capital Management, LLC DDJ U.S. Opportunistic High Yield

Alec Rapaport, Principal, Sr. Investment Director Source: NEPC and eVestment August 2023

# Philosophy

The Polen high yield investment philosophy has been in place since the product's inception and is based upon the belief that the lower-rated segments of the high yield market (B and below) are the most inefficient areas of the market and provide investment opportunities for security selection. Polen believes that the typical institutional mandate overlooks the lower-quality segment, and that high yield benchmark construction is also geared toward BB and B rated securities. Furthermore, the strategy seeks to focus on small to mid-cap issuers where Polen has found better access to management teams, and therefore better access to information. The goal of the strategy is to identify mispriced securities in the CCC rated and below high yield market through bottom-up credit research. Although the strategy expects to earn most excess returns from the lower-quality segment of the portfolio, the strategy is also diversified across BB and B rated securities. The universe of securities may also include stressed and distressed securities where Polen will take an activist position.

### **Investment Strategy**

Polen's investment universe contains approximately 1,500 issues in the broad domestic (US and Canada) high yield fixed income market as well as certain private investments with high yield characteristics. Screens such as yield, duration, leverage multiples and market cap are applied to the universe to identify issuers suitable for further research. Polen typically avoids high yield securities issued by companies domiciled in other countries (including emerging markets and developed markets), as it believes that such countries generally do not have sufficiently developed and effective insolvency laws.

Credit research begins with evaluating a target company's financial position, with a particular focus on free cash flow generation capability, liquidity position over the coming years, intrinsic business valuation and asset coverage. Utilizing the financial assessment of the target company's business, Polen will consider the current yield, yield-to-maturity and yield-to-worst for each class of the subject company's debt securities. The analysis takes into account Polen's risk assessment of each class, based on the liquidity and valuation analyses described above, as well as an evaluation of the anticipated treatment of each class of liabilities in the event of adverse circumstances. Polen's analysts use a variety of sources to arrive at investment recommendations, including without limitation: financial statements, company and industry contacts, industry competitors, industry consultants and trade literature. Analysts are required to go into the field and contact not only the target company, but also its competitors, customers, suppliers and other third parties that may be familiar with the company or industry. Macroeconomic research is also utilized in projecting a target company's future performance, particularly for those businesses which exhibit a high degree of economic cyclicality. Analysts will then typically focus on the 20-30 opportunities in each sector that merit further consideration, and rank the possible investment opportunities within their respective industries based on the anticipated return-versus-risk



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# Polen Capital Management, LLC DDJ U.S. Opportunistic High Yield

Alec Rapaport, Principal, Sr. Investment Director Source: NEPC and eVestment August 2023

incurred. These relative value rankings are then discussed informally throughout the week with the Co-Portfolio Managers and more formally at weekly investment triage meetings involving Polen's entire investment team.

Because a portion of the portfolio may have low liquidity, Polen manages liquidity risk in several ways. Liquidity risk is an important factor in Polen's relative value analysis, with decreased liquidity lowering the relative value of an investment. In addition, to offset liquidity risk, the High Yield Strategy will typically own less than 10% of an issue. Polen also believes that experienced traders and diversification among trading partners are keys to managing liquidity risk. Polen works with over 30 brokers, with the objective of no single broker exceeding 10% of Polen's trading volume of high yield securities.

### **Portfolio Structure**

Portfolio construction takes into account the yield and characteristics of each name, with the intent of taking larger weightings in fewer names that offer the best risk/reward. Position sizes average 1.5-2.5%, with 5% the maximum, resulting in around 60-80 issuers at any given time. Sizes of positions are governed by relative value analysis and availability as well as applicable client guidelines. Generally, the strategy targets issues with maturities ranging from 3-10 years. Industry weights are not a primary concern in portfolio construction but are monitored to maintain compliance with client guidelines as well as to promote general diversification objectives. The portfolio will invest in bank loans, senior debt, subordinated debt and convertible securities.

### **Performance Expectations**

Strategy is aggressive with heavier allocations to B/CCCs. Should do well during strong credit markets.



### **BIOGRAPHIES OF KEY PROFESSIONALS**

#### Polen Capital Management, LLC DDJ U.S. Opportunistic High Yield

#### David Breazzano, CIO, President

Mr. Breazzano is a co-founder of DDJ and has over 27 years of experience in high yield, distressed, and special situation investing. Prior to forming DDJ, from 1990 to 1996, he was a vice president and portfolio manager in the High Income Group at Fidelity Investments, where he had investment management responsibility for over \$4 billion in high yield and distressed assets. Specifically, he was a portfolio manager of the Fidelity Capital & Income Fund, which was one of the largest high yield funds in existence at that time. In addition, Mr. Breazzano co-managed the distressed investing operation at Fidelity. Prior to joining Fidelity in 1990, Mr. Breazzano was a vice president and portfolio manager at T. Rowe Price Associates. Before joining T. Rowe Price in 1985, he was a high yield analyst and vice president at First Investors Asset Management, which had over \$1 billion in high yield assets under management. Mr. Breazzano began his professional career at New York Life as an investment analyst. He currently serves on the boards of directors of Avado Brands, Inc., Bush Industries, Inc., and Key Energy Services, Inc. Mr. Breazzano is co-author of the chapter entitled "Trading in the Distressed Market" in Investing in Bankruptcies and Turnarounds. Mr. Breazzano received his MBA from the Johnson School at Cornell University where he currently sits on the advisory board, and graduated cum laude with a BA from Union College, where he currently sits on the board of trustees.

#### Benjamin Santonelli, Portfolio Manager

Mr. Santonelli joined DDJ in 2004 and has more than 15 years of experience in sourcing, analyzing, and managing investments across a variety of industries. Mr. Santonelli serves as co-portfolio manager of DDJ's U.S. Opportunistic High Yield strategy, portfolio manager of DDJ's Total Return Credit strategy, and assistant portfolio manager of DDJ's Bank Loan strategy. He is also a member of the Investment Review Committee. Mr. Santonelli serves as a member of the board of directors of a portfolio company. Mr. Santonelli received his BA from Amherst College.

#### John Sherman, Portfolio Manager

Mr. Sherman joined DDJ in 2007 and has more than 15 years of corporate finance and investment experience. Mr. Sherman serves as coportfolio manager of DDJ's U.S. Opportunistic High Yield strategy, portfolio manager of DDJ's Bank Loan strategy, and assistant portfolio manager of DDJ's Total Return Credit strategy. He is also a member of the Investment Review Committee. Mr. Sherman serves as a member of the board of directors of a portfolio company.



# **INVESTMENT FIRM/PRODUCT PROFILE**

#### Wellington Management Company LLP Wellington Core High Yield Bond

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

#### **Firm Description**

Wellington Management Company was founded in 1928 by Walter Morgan when he established the first balanced mutual fund in the US. In 1967 the firm merged with Thorndike, Doran, Paine & Lewis, an independent investment counseling firm. In 1979, 29 original partners bought back the firm, which then switched to a partnership structure. In 1996 the firm was restructured as a limited liability partnership. Wellington is a full service investment manager focused on institutional clients. The firm's organizational culture is built around research and fosters creativity and independent thinking at all levels of the firm from analysts to portfolio managers. Wellington remains an independent private partnership owned entirely by its active partners.

#### **NEPC Investment Thesis**

Wellington believes that bottom-up fundamental research is the key to adding value across business cycles. The strategy will invest in US high yield bonds and bank debt. The strategy will also dynamically adjust risk exposures over time to take advantage of spread widening and tightening during global economic cycles. Top down themes will play a role in overall sector allocations.

#### People

Michael Barry and Konstantin Leidman are co-heads of high yield at Wellington. Chris Jones, Partner and Fixed Income Portfolio Manager, led the High Yield effort at Wellington for a number of years. He announced in September 2022 that he would be retiring at the end of June 2023. Mr. Jones remains engaged in the investment process, however, as of January 2023, Mr. Barry and Mr. Leidman officially took over final decision-making responsibilities for the Core US High Yield and Global High Yield strategies respectively. Mr. Barry and Mr. Leidman do act as backups for one another on their respective strategies. Overall, the transition to Mr. Barry and Mr. Leidman as co-heads appears to be going smoothly so far.

Michael Hong is PM for the higher quality, BB/B high yield effort. David Marshak and Jeff Heuer focus on bank loans. Sam Steere is the team's investment director (CPM, business management). There is a team of 17 dedicated credit analysts, covering two sectors each and collaborating with the IG credit analysts and the global industry analysts. There were two new analysts, Peter Yu and Kenta Shimojo, added to the team since our last meeting.



### **INVESTMENT FIRM/PRODUCT PROFILE**

#### Wellington Management Company LLP Wellington Core High Yield Bond

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

#### Philosophy

Wellington believes that bottom-up fundamental research is the key to adding value across business cycles. The strategy will invest in US high yield bonds and bank debt. The strategy will also dynamically adjust risk exposures over time to take advantage of spread widening and tightening during global economic cycles. Top down themes will play a role in overall sector allocations.

#### **Investment Strategy**

High Yield emphasizes three areas to add value: broad macroeconomic strategy, credit research and analysis, and portfolio construction and risk controls. To synthesize macro strategies, the High Yield and Bank Loan portfolio managers and a cross-functional team of members from other areas of the firm meet quarterly to systematically assess the environment for high yield bonds. The team is designed to be small enough to facilitate decision making, yet broad enough to have competing points of view and active discussion. The team considers macro and micro factors that are expected to have an impact on the high yield bond market and how these factors might translate into appropriate investment strategy. The objective is to decide on industry weights, quality weights and beta positioning.

Research analysis is the most important step in the process. One analyst is assigned primary research coverage and responsibility for a credit opinion for each corporate bond issuer. Analysts are responsible for maintaining detailed financial models that include a projection of each issuer's future financial performance, including prospective debt servicing capabilities and capital structure composition. They also contact the senior management of each issuer discussing financial developments and industry trends.

High Yield analysts are responsible for assigning an Investment Rating (Strong Buy, Buy, Source of Funds, Sell) to express sector relative return expectations within a 12-month investment horizon. Similarly, analysts are responsible for assigning a Credit Risk Rating (on a numerical scale of 1-5) to express sector relative credit risk for names under their coverage.

#### **Portfolio Structure**

The portfolio will be broadly diversified across high yield issuers. The portfolio targets about 125 issues. Individual position weights are conviction-weighted, ranging from 0.5-3.5%. Oftentimes, larger positions will have several different research channels of support (high yield analyst, equity analysts, commodities, etc) with independently derived theses.



### **INVESTMENT FIRM/PRODUCT PROFILE**

#### Wellington Management Company LLP Wellington Core High Yield Bond

Conor Fitzell, Sr. Investment Analyst Source: NEPC and eVestment August 2023

#### **Performance Expectations**

Strategy should do well in most market conditions but is likely to lag during periods of rapid spread tightening due to a higher quality bias.



### FIRM COMPARISON – ESG INTEGRATION

Firm	Is the firm a PRI Signatory?			Do you have a firm- wide policy on ESG/Responsible Investment?
High Yield				
Arena Capital Advisors LLC	In Progress	Yes at the product level	Yes	Yes
Artisan Partners Limited Partnership	Yes	Yes, at the product level	Yes	Yes
Barings LLC	Yes	Yes, at both the firm and product level	Yes	Yes
Chartwell Investment Partners, LLC	Yes	No	Yes	Yes
Loomis, Sayles & Company, L.P.	Yes	Yes at the product level	Yes	Yes
Polen Capital Management, LLC	Yes	Yes, at the product level	Yes	Yes
Wellington Management Company LLP	Yes	Yes at the firm level	Yes	Yes



### **STRATEGY COMPARISON – ESG INTEGRATION**

Firm/Product	monitoring or is it mechanisms for the i		Do formalized investment processes integrate ESG factors into security selection for this strategy?	Is external quantitative or qualitative data used in portfolio construction processes?	
High Yield					
Arena - SDHY Composite	Dedicated group with support from investment teams	Yes	Yes	Both	
Artisan - High Income	Investment Teams	Yes	Yes	Both	
Barings - High Yield	Investment Teams	Yes	Yes	Both	
Chartwell - Short BB HYFI	Dedicated group with support from investment teams	No Yes		Neither	
LoomSayles - High Yield FD	Investment Teams	No	Yes	Both	
Polen - US Opportunistic HY	Investment Teams	Yes	Yes	Both	
Wellington - High Yield Bond	Dedicated group with support from investment teams	Yes	Yes	Both	



# **TOTAL FIRM ASSETS**

Firm	YTD		2022		2021		2020	
	\$ММ	# of accounts						
High Yield								
Arena Capital Advisors LLC	3,446	28	3,073	27	3,428	29	2,701	22
Artisan Partners Limited Partnership	142,989	257	127,892	259	174,754	268	157,776	258
Barings LLC	351,999	3,795	347,282	2,862	391,487	2,607	345,163	2,130
Chartwell Investment Partners, LLC	11,081	364	10,473	373	11,844	373	10,263	368
Loomis, Sayles & Company, L.P.	310,304	2,298	282,060	2,311	363,027	2,263	347,752	2,204
Polen Capital Management, LLC	65,185	3,937	54,833	4,290	82,790	5,160	59,271	3,655
Wellington Management Company LLP	1,200,572	2,698	1,149,360	2,647	1,425,481	2,556	1,291,419	2,383



# **TOTAL PRODUCT ASSETS**

	YTD		2022		2021		2020		
Firm/Product	\$ММ	# of accounts	\$ММ	# of accounts	\$ММ	# of accounts	\$ММ	# of accounts	
High Yield	High Yield								
Arena - SDHY Composite	2,265	10	1,846	9	1,623	9	1,404	9	
Artisan - High Income	7,971	6	6,957	8	8,017	7	6,241	4	
Barings - High Yield	4,894	62	4,584	62	5,189	55	5,767	57	
Chartwell - Short BB HYFI	3,057	122	2,950	124	3,108	123	2,631	120	
LoomSayles - High Yield FD	3,150	49	3,379	54	5,489	73	5,938	83	
Polen - US Opportunistic HY	4,608	23	4,387	22	5,466	21	5,522	22	
Wellington - High Yield Bond	2,757	12	2,755	12	3,420	12	2,823	11	



# **PRODUCT ASSETS BY VEHICLE TYPE**

Firm/Product	Separate Account		Commingled Fund		Inst. Mutual Fund	Retail Mutual Fund		
riini/rioduct	\$MM	# of accounts	\$MM	# of accounts	\$MM	\$MM		
High Yield								
Arena - SDHY Composite	714.3	б	1,550.9	4	0	0		
Artisan - High Income	971	4	278	1	6,474	248		
Barings - High Yield	4,764	38	0	0	122	8		
Chartwell - Short BB HYFI	2,824	121	0	0	232	0		
LoomSayles - High Yield FD	2,120	21	665	25	0	366		
Polen - US Opportunistic HY	4,062	20	255	1	291	0		
Wellington - High Yield Bond	2,366	8	392	4	0	0		



# **ACCOUNT MINIMUMS AND FEE SCHEDULES**

Firm/Product	Separate Account Min. (\$MM)	Commingled Fund Min. (\$MM)	Mutual Fund Min. (\$MM)	Separate Account Fee Schedule	Commingled Fund Fee Schedule	Mutual Fund Ticker and Fee
High Yield						
Arena - SDHY Composite	-	2	-	NA	All Assets at 0.55%	NA
Artisan - High Income	100	0	0	First \$250 million - 0.55% Balance - 0.50%	All Assets at 0.68%	APDFX - 0.83%
Barings - High Yield	100	1	0	First \$100 million - 0.47% Next \$150 million - 0.42% Balance - 0.38%	First \$10 million - 0.60% Next \$40 million - 0.50% Balance - 0.40%	BXHIX - 0.75%
Chartwell - Short BB HYFI	5	1	1	First \$20 million - 0.50% Next \$30 million - 0.40% Balance - 0.30%	All Assets at 0.49%	CWFIX - 0.50%
LoomSayles - High Yield FD	50	5	3	All Assets at 0.47%	All Assets at 0.47%	LSHIX - 0.68%
Polen - US Opportunistic HY	50	5	5	First \$100 million - 0.55% Next \$100 million - 0.50% Next \$1000 million - 0.45%	All Assets at 0.60%	DDJIX - 0.79%
Wellington - High Yield Bond	100	1	-	All Assets at 0.50%	All Assets at 0.40%	NA



# LITIGATION

Firm	Managers explanation of Prior or Pending Litigation				
Arena Capital Advisors LLC	There is no prior or pending litigation.				
Artisan Partners Limited Partnership	Artisan Partners does not publicly comment on legal proceedings or litigation. Information regarding Artisan Partners' required regulatory disclosures can be found under Item 11 - Disclosure Information of Artisan Partners' Form ADV Part 1.				
Barings LLC	There is no pending or threatened litigation relating to any Barings entity or employee of any such entity related to investment management which Barings believes could be deemed material by a reasonable investor. A summary of investment-related litigation matters is available upon request.				
Chartwell Investment Partners, LLC	There is no prior or pending litigation.				



# LITIGATION

Firm	Managers explanation of Prior or Pending Litigation
Loomis, Sayles & Company, L.P.	In July 2011, the Loomis Sayles Credit Alpha Fund (the "Fund") was named as a defendant along with all former shareholders of the Tribune Corporation (the "Company") that received cash in exchange for shares of the Company in a public-to-private leveraged buyout in 2007 (the "LBO"). The Fund received \$1,190,000 for the shares it owned at the time of the LBO. Within one year of the LBO, the company filed for Chapter 11 bankruptcy. Pre-bankruptcy bondholders and unsecured creditors seek to recover all amounts paid to the shareholder defendants ("Defendants") in connection with the LBO, with pre-bankruptcy interest, alleging that the LBO constituted a fraudulent conveyance by the Company. The entirety of this litigation has been consolidated in federal district court in New York. A settlement offer, which would have involved Defendants agreeing to repay 57.2% of the proceeds received, was rejected on the advice of counsel as premature, at the high end of the range of reasonableness, and not in the best interests of the Fund. In May 2014, Ropes & Gray, on behalf of shareholder defendants (including Loomis) filed a Global Motion to Dismiss in the federal district court. In March 2016, the United States Court of Appeals for the Second Circuit upheld the federal district court dismissed the plaintiffs' claim of constructive fraudulent conveyance. The plaintiffs appealed this decision to the Supreme Court of the United States, which declined to hear the case. In January 2017, the federal district court dismissed the plaintiffs' second claim, for intentional fraudulent conveyance issue in a case from another circuit, which led to remand of the Second Circuit decision is subject to appeal. In February 2018 the U.S. Supreme Court issued a decision on the constructive fraudulent conveyance issue in a case from another circuit, which led to remand of the Second Circuit decision in the Tribune case. In June 2018, the federal district court judge required all parties in the various litigations that are part of Tribune to cons
Polen Capital Management, LLC	There is no prior or pending litigation.
Wellington Management Company LLP	From time to time, Wellington Management is involved in litigation that arises in the ordinary course of its business, none of which is material with respect to the firm's investment management business or its clients.



# **CONTACT INFORMATION**

Manager	Location	U.S. Client Contact	Phone	Email
High Yield				
Arena Capital Advisors LLC	Los Angeles, California	Brian Houle	(310) 806-6731	bhoule@arenaca.com
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Barings LLC	Charlotte, North Carolina	Nick Loglisci	(704) 805-7670	nick.loglisci@barings.com
Chartwell Investment Partners, LLC	Berwyn, Pennsylvania	Eric Lareau	(617) 733-2323	lareau@chartwellip.com
Loomis, Sayles & Company, L.P.	Boston, Massachusetts	Flaubert Tarek	(617) 346-9819	ftarek@loomissayles.com
Polen Capital Management, LLC	Boca Raton, Florida	Bill Porter	(781) 283-8537	bporter@ddjcap.com
Wellington Management Company LLP	Boston, Massachusetts	Bridget Olsen	(617) 263-4478	BAOlsen@wellington.com



### DISCLOSURE

#### DATA DISCLOSURE

Investment management fees can have a significant effect on total returns. The results profiled herein reflect the deduction of management fees and other expenses, except where specifically noted.

#### FOOTNOTES FIRM OWNERSHIP

Artisan Partners Limited Partnership - Artisan Investment Corporation: 4%, Initial Investors: 6%, Former Employee Partners: 1%
 Polen Capital Management, LLC - 21 active employees participate in the firm's long-term incentive plan linking compensation to company performance.

#### **FEES/EXPENSES**

**Artisan Partners Limited Partnership -** Fees for management of a separate account are negotiable for clients with assets under the firm's management of approximately \$500 million or more.

**Barings U.S. High Yield Bonds -** For a separate account, terms related to notification and cash flows will be agreed upon in the investment management agreement through the onboarding process.

**Polen Capital Management, LLC -** Polen is currently offering a 10% discount on the first \$100mm invested in the NEPC CIT share class resulting in an annual 'all-in' total expense ratio of 0.50%.



### **GLOSSARY OF TERMS**

**Beta:** A measure of volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. Beta can be thought of as the tendency of a security's returns to respond to swings in the market. A beta of 1 indicates that the security's price will move with the market.

**Convexity:** A measure of the non-linear relationship of bond prices to changes in interest rates. It is the second derivative of duration.

**Correlation:** A statistical measure of how two securities move in relation to each other. Correlation is computed into a correlation coefficient which ranges between -1 to +1. A perfect positive correlations (+1) implies that as one security moves either up or down, the other security will move in the same direction. Alternatively, a perfect negative correlation (-1) means that if one security moves in either direction, the security that is perfectly negatively correlated will move by an equal amount in the opposite direction.

**Excess Return:** The performance return above/below that of the strategy's preferred benchmark for the stated period.

**Information Ratio:** A measure of portfolio management's performance against risk and return relative to a benchmark or alternative measure.

- IR 25: Graphically represents an information ratio of 0.25 in an active risk/active return chart.
- **IR 50:** Graphically represents an information ratio of 0.50 in an active risk/active return chart.

**Kurtosis:** A statistical measure used to describe the distribution of observed data around the mean. Kurtosis describes trends in charts. A high kurtosis portrays a chart with fat tails and a low, even distribution, whereas a low kurtosis portrays a chart with skinny tails and a distribution concentrated toward the mean.



### **GLOSSARY OF TERMS**

Max Drawdown: The maximum observed loss from a peak to a trough of a portfolio, before a new peak is achieved.

**Skewness:** A statistical term used to describe a situation's asymmetry in relation to a normal distribution. A positive skew describes a distribution favoring the right tail, whereas a negative skew describes a distribution favoring the left tail.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. Tracking errors are reported as a "standard deviation percentage" difference. It represents the difference between the return of a fund and that of the benchmark the fund was trying to copy.

**Yield to Worst:** The weighted average yield to maturity if the lowest quoted yield repayment took place on all the bonds in the portfolio.



# **INFORMATION DISCLAIMER**

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

