

## First Quarter 2020 Performance Report

Adams County Retirement Plan May 5, 2020

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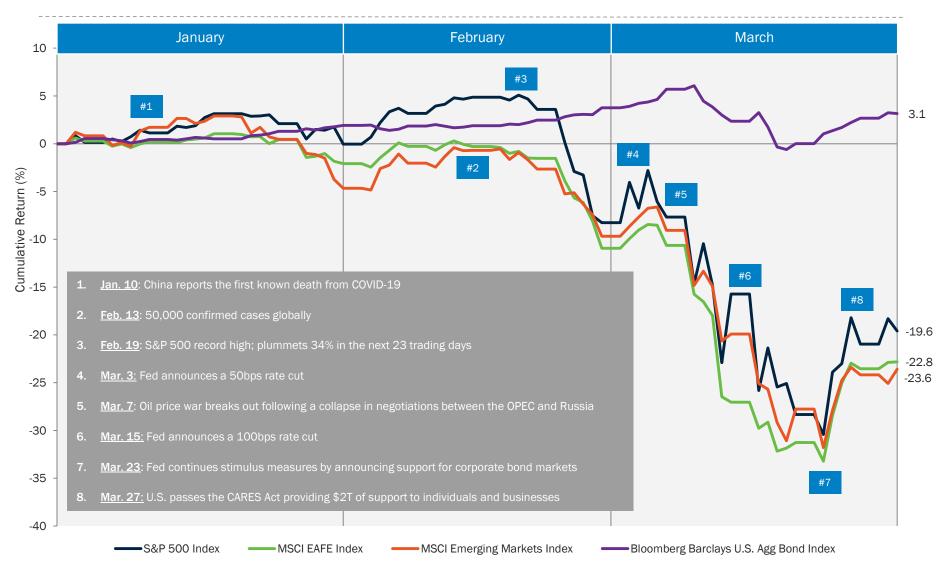
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# First Quarter 2020 Capital Markets Exhibits



## Stocks Tumble on COVID-19 Fears

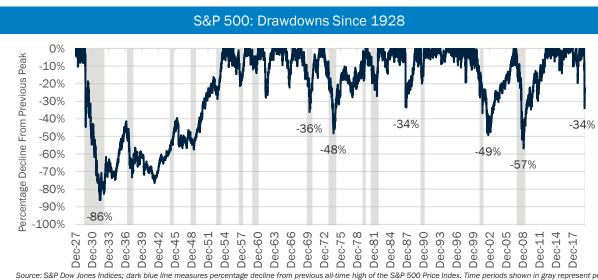


Source: Morningstar Direct, S&P Dow Jones Indices, MSCI, Bloomberg Finance, LP, Our World in Data, Federal Reserve, Library of Congress.



## Equity Market Drawdown and Volatility

Fastest Decline and Highest Volatility Since the Great Depression

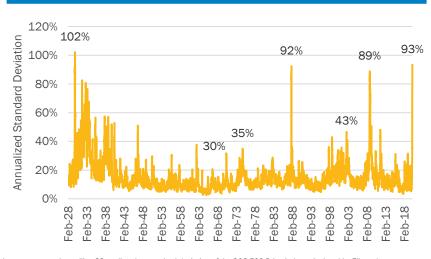


- The S&P 500 fell 34% between February 20 and March 23 - a span of 23 trading days. This was the largest decline in the S&P 500 over a 23-day period since 1929.
- This marked the seventh time since 1928 that the S&P 500 fell more than 30% from its previous peak. The average recovery time in the previous six occurrences has been 6.7 years. The average recovery time excluding the Great Depression has been 3.6 years.
- March 2020 was the most volatile month in the market since the Great Depression.

#### S&P 500 Drawdowns Greater Than 30% Since 1928

Drawdown Period	Drawdown	Drawdown Duration (Years)	Recovery Date	Recovery Time (Years)
Sep 1929 to Jun 1932	-86%	2.73	Sep 1954	22.32
Nov 1968 to May 1970	-36%	1.49	Mar 1972	1.78
Jan 1973 to Oct 1974	-48%	1.73	Jul 1980	5.79
Aug 1987 to Dec 1987	-34%	0.28	Jul 1989	1.64
Mar 2000 to Oct 2002	-49%	2.55	May 2007	5.64
Oct 2007 to Mar 2009	-57%	1.42	Mar 2013	4.05
Feb 2020 to Mar 2020	-34%	0.06		

#### S&P 500: One-Month Annualized Volatility



Source: S&P Dow Jones Indices; drawdown, drawdown duration, and recovery time all calculated by Ellwood. Orange line on the chart represents the trailing 22-trading day standard deviation of the S&P 500 Price Index calculated by Ellwood.



## Volatile Quarter for Corporate Bonds

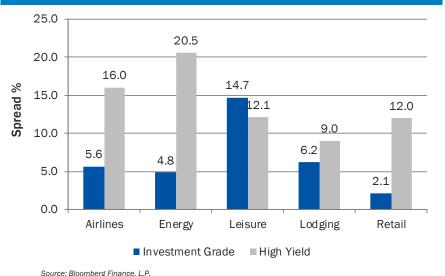




#### Comments

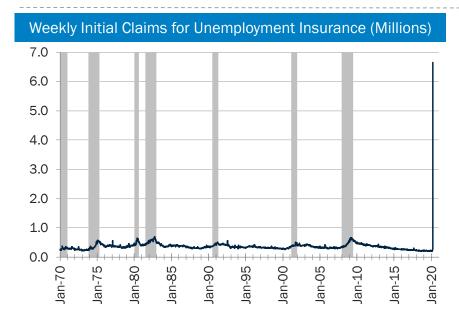
- · Credit spreads rose across the corporate bond universe during the first quarter 2020, topping out before the announcement of the Federal Reserve's primary and secondary corporate credit facilities.
- The Bloomberg Barclays Corporate Bond Index reached a spread relative to U.S. Treasuries of 3.7% on March 23 before settling at 2.7% at the end of the first quarter. Within investment grade corporates, BBB rated securities saw the largest degree of spread widening.
- Below investment grade securities bore the brunt of the dislocation in the credit markets with spreads widening by 5.4 percentage points and reaching the highest levels since 2009. Within high yield, energy securities, which represent 10% of the Bloomberg Barclays High Yield Index, saw spreads exceed 20%, an increase of approximately 14% for the quarter. Spreads were elevated in other high yield sectors such as airlines, leisure and retail.

#### Dislocated Sector Spreads: March 31, 2020





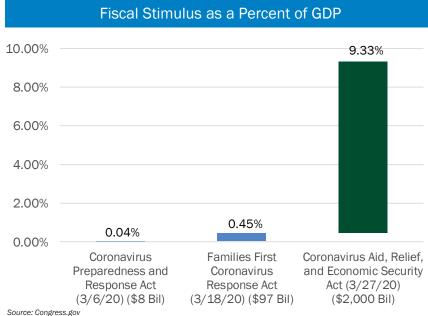
## Stemming the Tide of Job Losses



Source: US Department of Labor, National Bureau of Economic Research

Employment Statistics							
Civilian Labor Force (Jan 2020)	164.6 million						
Total Employed	158.7 million						
Total Unemployed	5.9 million						
Unemployment Rate	3.6%						
Initial Unemployment Claims:							
Week Ending March 21	3.3 million						
Week Ending March 28	6.6 million						
Direct At-Risk Industries	32.5 million						

Source: US Department of Labor, U.S. Bureau Of Labor Statistics

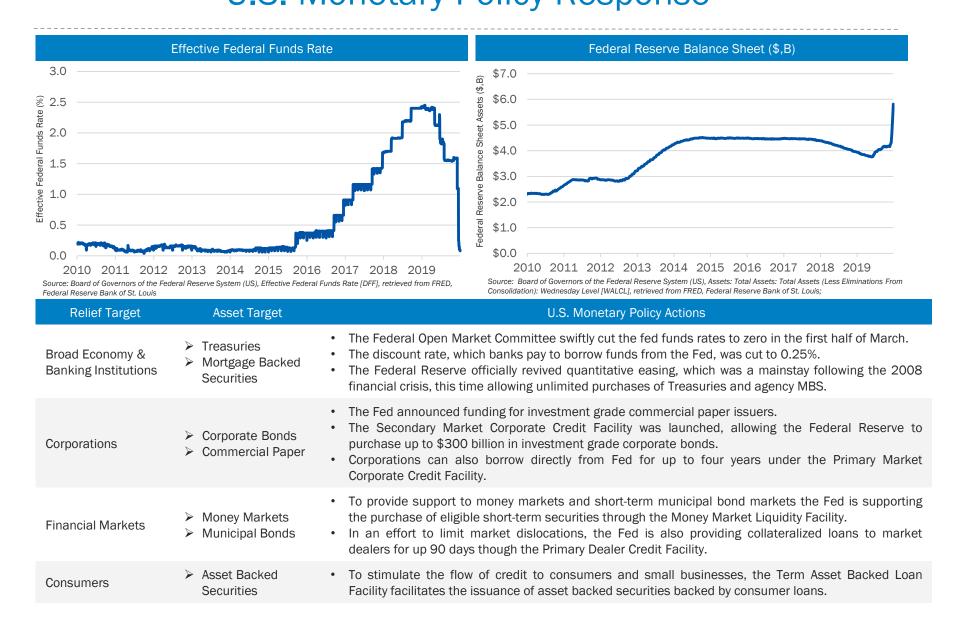


#### Comments

- Over the two weeks ending March 28, nearly ten million Americans filed initial claims for unemployment insurance – levels that are unprecedented relative to history.
- An estimate of workers in direct at-risk industries, including the retail and leisure industries, totaled 32.5 million.
- In March, the U.S. passed three economic assistance programs with estimated outlays totaling \$2.1 trillion, or nearly 10% of GDP.

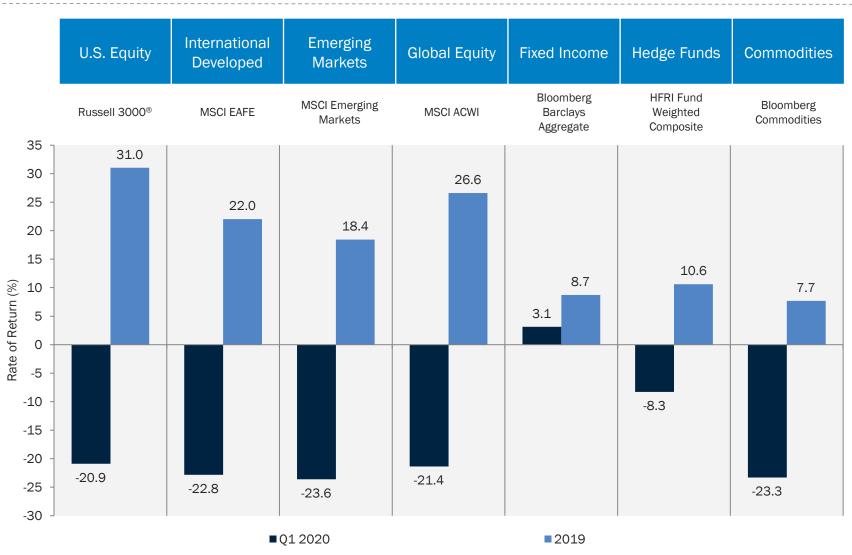


## U.S. Monetary Policy Response





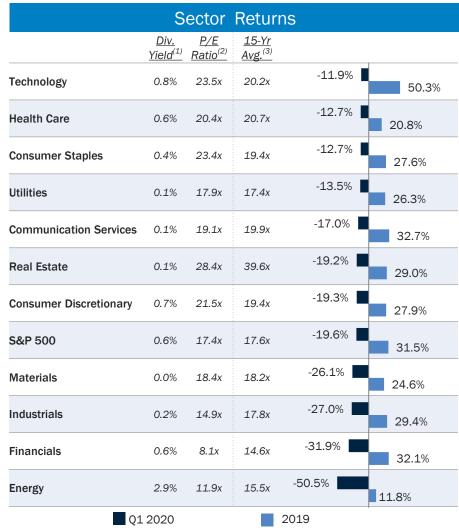
## **Market Overview**



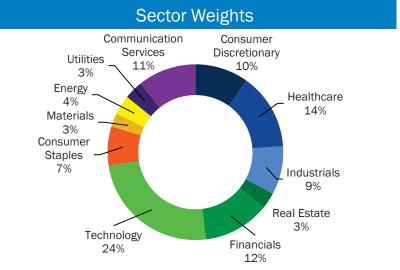
Source: Morningstar Direct, S&P Dow Jones Indices, Russell, MSCI, Hedge Fund Research, Inc., Bloomberg Finance, L.P.



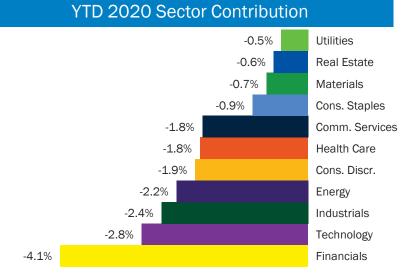
### S&P 500 Scorecard



Source: Morningstar Direct, S&P Dow Jones Indices (1)Trailing 12 month Dividend Yield as of 3/31/2020. (2)Trailing 12 month P/E as of 3/31/2020.



Source: Morningstar Direct, S&P Dow Jones Indices

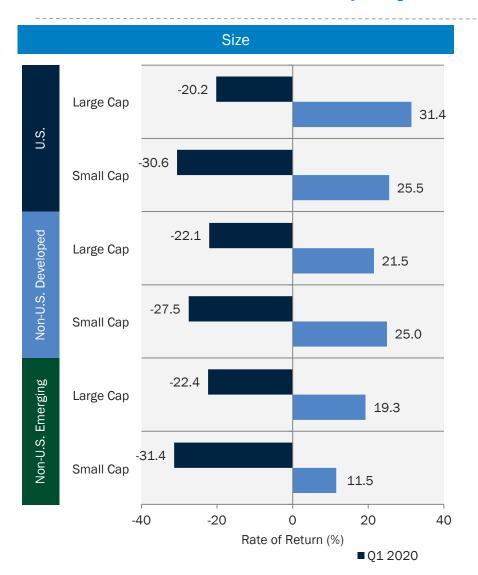


Source: Morningstar Direct, S&P Dow Jones Indices, GICS



<sup>(3)15-</sup>year average trailing 12 month P/E as of 3/31/2020.

## **Global Equity Factor Performance**

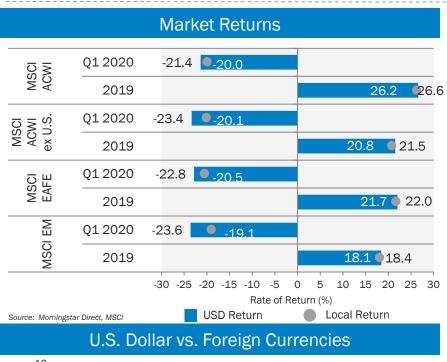


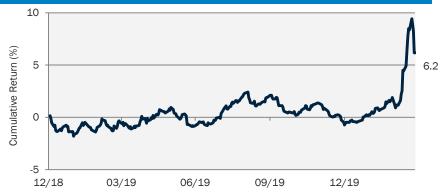


Note: Indices above are the respective size and style sub-indices of Russell and MSCI. Source: Morningstar Direct, Russell, and MSCI.



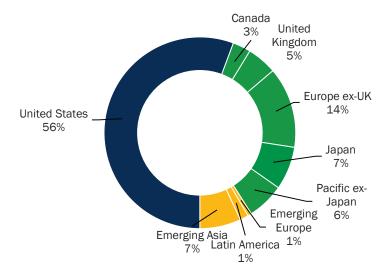
# Non-U.S. / Global Equity Markets





Trade Weighted U.S. Dollar Index: Broad Source: Board of Governors of the Federal Reserve System (US), Trade Weighted U.S. Broad Dollar Index - Goods & Services from FRED, Federal Reserve Bank of St. Louis. As of 3/31/2020.

### MSCI ACWI Equity Weights



Source: MSCI

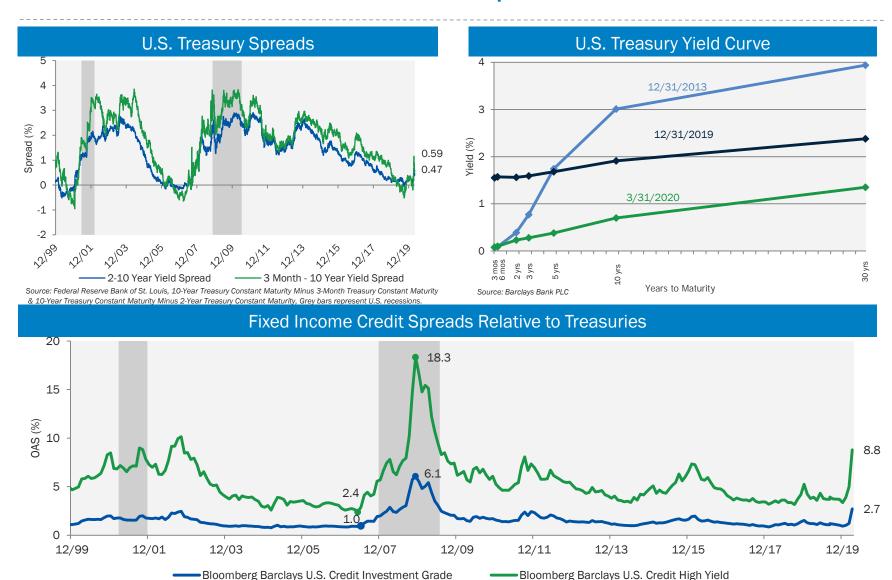
### YTD 2020 Regional Market Returns (USD)



Source: Morningstar Direct, MSCI.



## Rates and Spreads



Source: Bloomberg Finance, L.P. Grey bars represent U.S. recessions; As of 3/31/2020

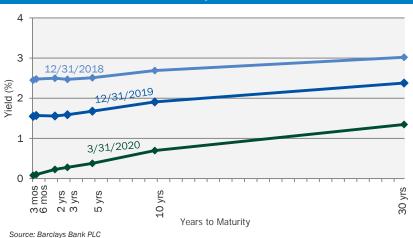


## **Fixed Income Markets**

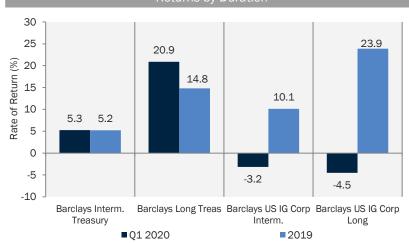


Source: Morningstar Direct, Bloomberg Finance, L.P.

### U.S. Treasury Yield Curve

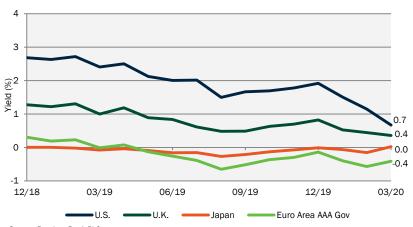


#### Returns by Duration



Source: Morningstar Direct, Bloomberg Finance, L.P.

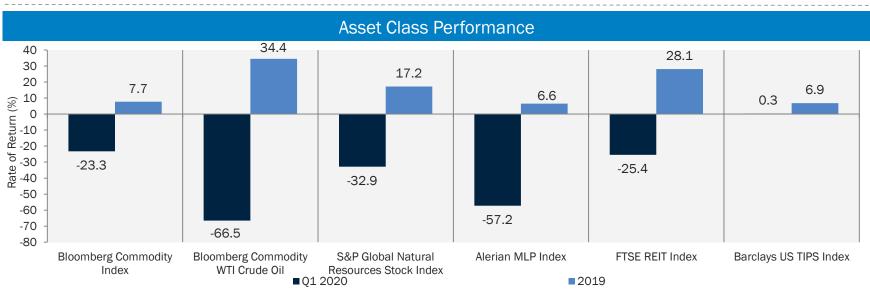
### Global Ten Year Government Spot Yields



Source: Barclavs Bank PLC



### **Real Assets**



Source: Morningstar Direct, Bloomberg Finance, L.P, Barclays, S&P Dow Jones Indices, Alerian, FTSE

## WTI Crude Oil Prices 120 100 80 20 12/12 12/13 12/14 12/15 12/16 12/17 12/18 12/19

Source: U.S. Energy Information Administration, Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma, retrieved from FRED, Federal Reserve Bank of St. Louis; As of 3/31/2020.

#### **United States Breakeven Inflation**



Source: Federal Reserve Bank of St. Louis, 5-Year & 10-Year Breakeven Inflation Rate; As of 3/31/2020.



# World Markets Heat Map

Calendar Year Returns										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
U.S. Equity										
S&P 100 Index	3.2%	16.1%	30.4%	12.7%	2.6%	11.4%	22.0%	-3.9%	32.2%	-17.29
S&P 500 Index	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	-19.69
Russell 1000 Value Index	0.4%	17.5%	32.5%	13.5%	-3.8%	17.3%	13.7%	-8.3%	26.5%	-26.79
Russell 1000 Growth Index	2.6%	15.3%	33.5%	13.0%	5.7%	7.1%	30.2%	-1.5%	36.4%	-14.19
Russell 2000 Index	-4.2%	16.4%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	-30.69
Russell 2000 Value Index	-5.5%	18.1%	34.5%	4.2%	-7.5%	31.7%	7.8%	-12.9%	22.4%	-35.79
Russell 2000 Growth Index	-2.9%	14.6%	43.3%	5.6%	-1.4%	11.3%	22.2%	-9.3%	28.5%	-25.89
Russell Micro Cap Index	-9.3%	19.7%	45.6%	3.6%	-5.2%	20.4%	13.2%	-13.1%	22.4%	-32.09
Non U.S. Equity										
MSCI ACWI ex U.S. Index	-13.7%	16.8%	15.3%	-3.9%	-5.7%	4.5%	27.2%	-14.2%	21.5%	-23.49
MSCI EAFE Index	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	-22.89
MSCI EAFE Small Cap Index	-15.9%	20.0%	29.3%	-4.9%	9.6%	2.2%	33.0%	-17.9%	25.0%	-27.59
MSCI Emerging Markets Index	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	-23.69
MSCI Emerging Mkts. Small Cap Index	-27.2%	22.2%	1.0%	1.0%	-6.8%	2.3%	33.8%	-18.6%	11.5%	-31.49
MSCI Frontier Markets Index	-18.7%	8.9%	25.9%	6.8%	-14.5%	2.7%	31.9%	-16.4%	18.0%	-26.69
Global										
MSCI ACWI Index	-7.4%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	-21.49
Fixed Income										
Barclays US Aggregate Index	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	3.1%
Barclays US Inv. Grade. Corp. Index	8.1%	9.8%	-1.5%	7.4%	-0.7%	6.1%	6.4%	-2.5%	14.5%	-3.6%
Barclays High Yield Index	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	-12.79
Barclays US Corp Long AA+ Index	19.1%	9.9%	-7.8%	18.7%	-1.1%	6.9%	10.8%	-3.4%	18.2%	2.1%
Barclays US Treasury Long Index	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	20.99
Barclays U.S. Municipal Bond Index	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	-0.6%
Barclays Global Agg. ex. U.S. Index	4.4%	4.1%	-3.1%	-3.1%	-6.0%	1.5%	10.5%	-2.1%	5.1%	-2.7%
Barclays EM Debt (Local) Gov't Index	0.3%	13.9%	-4.3%	-1.9%	-10.4%	5.9%	14.3%	-3.4%	9.5%	-7.6%
Alternatives										
Bloomberg Commodity Index	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-23.39
Bloomberg Commodity – Gold	9.6%	6.1%	-28.7%	-1.7%	-10.9%	7.7%	12.8%	-2.8%	18.0%	4.5%
Bloomberg Commodity – WTI Crude Oil	-3.6%	-11.8%	6.8%	-41.7%	-44.3%	7.1%	5.1%	-20.5%	34.4%	-66.59
Bloomberg Commodity – Agriculture	-14.4%	4.0%	-14.3%	-9.2%	-15.6%	2.1%	-11.0%	-10.8%	1.7%	-9.9%
FTSE REIT Index	7.3%	20.1%	3.2%	27.1%	2.3%	9.3%	9.3%	-4.1%	28.1%	-25.49

Source: Morningstar Direct, Bloomberg Finance, L.P., Russell, S&P Do	ow Jones Indices, MSCI, FTSE; As of 3/31/2020
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Annualized Returns										
	YTD	1-Yr	3-Yr	5-Yr	10-Yr	TTM P/E	Div. Yield			
U.S. Equity										
S&P 100 Index	-17.2%	-3.1%	6.5%	8.0%	10.8%	18.3x	2.5%			
S&P 500 Index	-19.6%	-7.0%	5.1%	6.7%	10.5%	17.9x	2.5%			
Russell 1000 Value Index	-26.7%	-17.2%	-2.2%	1.9%	7.7%	13.2x	3.7%			
Russell 1000 Growth Index	-14.1%	0.9%	11.3%	10.4%	13.0%	23.7x	1.5%			
Russell 2000 Index	-30.6%	-24.0%	-4.6%	-0.2%	6.9%	13.0x	2.2%			
Russell 2000 Value Index	-35.7%	-29.6%	-9.5%	-2.4%	4.8%	10.1x	3.5%			
Russell 2000 Growth Index	-25.8%	-18.6%	0.1%	1.7%	8.9%	18.5x	1.1%			
Russell Micro Cap Index	-32.0%	-26.4%	-6.6%	-1.9%	6.0%	10.1x	1.9%			
Non U.S. Equity										
MSCI ACWI ex U.S. Index	-23.4%	-15.6%	-2.0%	-0.6%	2.0%	13.0x	4.2%			
MSCI EAFE Index	-22.8%	-14.4%	-1.8%	-0.6%	2.7%	13.9x	4.3%			
MSCI EAFE Small Cap Index	-27.5%	-18.1%	-2.9%	1.0%	4.8%	12.3x	3.8%			
MSCI Emerging Markets Index	-23.6%	-17.7%	-1.6%	-0.4%	0.7%	11.8x	3.9%			
MSCI Emerging Mkts. Small Cap Index	-31.4%	-29.0%	-9.6%	-5.2%	-1.3%	11.1x	4.3%			
MSCI Frontier Markets Index	-26.6%	-19.0%	-4.3%	-2.9%	1.0%	10.3x	5.5%			
Global										
MSCI ACWI Index	-21.4%	-11.3%	1.5%	2.8%	5.9%	15.4x	3.2%			
Fixed Income						Duration	YTW			
Barclays US Aggregate Index	3.1%	8.9%	4.8%	3.4%	3.9%	5.7	1.6%			
Barclays US Inv. Grade. Corp. Index	-3.6%	5.0%	4.2%	3.4%	4.9%	8.0	3.4%			
Barclays High Yield Index	-12.7%	-6.9%	0.8%	2.8%	5.6%	4.1	9.4%			
Barclays US Corp Long AA+ Index	2.1%	13.5%	8.4%	5.8%	7.8%	16.4	2.9%			
Barclays US Treasury Long Index	20.9%	32.6%	13.4%	7.3%	9.0%	19.2	1.3%			
Barclays U.S. Municipal Bond Index	-0.6%	3.8%	4.0%	3.2%	4.1%	5.4	2.0%			
Barclays Global Agg. ex. U.S. Index	-2.7%	0.7%	2.6%	2.0%	1.4%	8.1	0.8%			
Barclays EM Debt (Local) Gov't Index	-7.6%	-1.1%	1.5%	1.7%	2.0%	6.9	3.4%			
Alternatives										
Bloomberg Commodity Index	-23.3%	-22.3%	-8.6%	-7.8%	-6.7%					
Bloomberg Commodity - Gold	4.5%	22.2%	7.7%	5.4%	3.0%	-				
Bloomberg Commodity - WTI Crude Oil	-66.5%	-65.4%	-25.5%	-23.4%	-19.2%					
Bloomberg Commodity - Agriculture	-9.9%	-5.3%	-9.1%	-7.2%	-3.5%	-				
FTSE REIT Index	-25.4%	-18.2%	-0.9%	1.5%	8.2%	-				

Source: Morningstar Direct, Bloomberg Finance, L.P., Russell, S&P Dow Jones Indices, MSCI, FTSE; As of 3/31/2020



### Total Fund

		Asset Allocat	tion vs. Target				
	Policy Range	Policy	%	Current	%	Difference*	%
Public Equity	35.0% - 45.0%	\$111,465,603	45.0%	\$100,931,897	40.7%	-\$10,533,705	-4.3%
Vanguard Institutional Index		\$49,540,268	20.0%	\$47,734,011	19.3%	-\$1,806,257	-0.7%
Vanguard Total International Stock Index		\$24,770,134	10.0%	\$18,372,704	7.4%	-\$6,397,430	-2.6%
American New Perspective Fd R6		\$12,385,067	5.0%	\$13,530,151	5.5%	\$1,145,084	0.5%
Dodge & Cox Global Equity Fd		\$12,385,067	5.0%	\$9,885,639	4.0%	-\$2,499,428	-1.0%
FIAM SMID Cap Core		\$12,385,067	5.0%	\$11,409,393	4.6%	-\$975,674	-0.4%
Private Equity	0.0% - 10.0%	\$12,385,067	5.0%	\$15,029,916	6.1%	\$2,644,849	1.1%
Adams Street 2012 Global Fund				\$3,812,598	1.5%		
Greenspring Global Partners IX-B				\$2,100,044	0.8%		
Mesirow Private Equity III				\$572,091	0.2%		
Mesirow Private Equity IV				\$1,688,400	0.7%		
NGP Natural Resources XI				\$1,722,918	0.7%		
RCP Fund XI				\$3,202,169	1.3%		
Strategic Value Special Situations III				\$1,931,696	0.8%		
Fixed Rate Debt	5.0% - 15.0%	\$37,155,201	15.0%	\$42,041,899	17.0%	\$4,886,699	2.0%
Segall Bryant & Hamill		\$18,577,600	7.5%	\$20,865,128	8.4%	\$2,287,528	0.9%
Metropolitan West Total Return		\$18,577,600	7.5%	\$21,176,771	8.5%	\$2,599,171	1.0%
Floating Rate Debt	10.0% - 20.0%	\$24,770,134	10.0%	\$14,523,103	5.9%	-\$10,247,031	-4.1%
Golub Capital Partners 11				\$7,000,000	2.8%		
Principal Real Estate Debt Fund				\$314,056	0.1%		
Principal Real Estate Debt Fund II				\$7,209,048	2.9%		
Low Volatility	5.0% - 15.0%	\$24,770,134	10.0%	\$24,407,004	9.9%	-\$363,130	-0.1%
Grosvenor Institutional Partners		\$12,385,067	5.0%	\$12,332,295	5.0%	-\$52,772	0.0%
Parametric Defensive Equity Fund		\$12,385,067	5.0%	\$12,074,709	4.9%	-\$310,358	-0.1%
Liquid Real Assets	0.0% - 10.0%	\$0	0.0%			\$0	0.0%
Real Estate	10.0% - 20.0%	\$37,155,201	15.0%	\$46,061,415	18.6%	\$8,906,214	3.6%
Principal US Property Account		\$24,770,134	10.0%	\$26,754,743	10.8%	\$1,984,609	0.8%
Harbert US Real Estate Fund V				\$3,487,632	1.4%		
Harbert US Real Estate Fund VI				\$10,842,837	4.4%		
Harbert US Real Estate Fund VII				\$4,976,203	2.0%		
Cash	-		-	\$4,706,105	1.9%	\$4,706,105	1.9%
Operating Account				\$3,600,154	1.5%		
Mill Levy Operating Account				\$1,105,951	0.4%		
Total		\$247,701,340	100.0%	\$247,701,340	100.0%		

<sup>\*</sup>Difference between Policy and Current Allocation



### Total Fund

	Cash Flow Summary							
	Quarter Ending March 31, 2020							
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value				
Vanguard Institutional Index	\$59,368,502	\$0	-\$11,634,491	\$47,734,011				
Vanguard Total International Stock Index	\$24,269,361	\$0	-\$5,896,657	\$18,372,704				
American New Perspective Fd R6	\$16,540,741	\$0	-\$3,010,590	\$13,530,151				
Dodge & Cox Global Equity Fd	\$14,326,849	\$0	-\$4,441,210	\$9,885,639				
FIAM SMID Cap Core	\$16,396,372	\$22,888	-\$5,009,867	\$11,409,393				
Adams Street 2012 Global Fund	\$3,812,598	\$0	\$0	\$3,812,598				
Greenspring Global Partners IX-B	\$2,100,044	\$0	\$0	\$2,100,044				
Mesirow Private Equity III	\$572,091	\$0	\$0	\$572,091				
Mesirow Private Equity IV	\$1,733,400	-\$45,000	\$0	\$1,688,400				
NGP Natural Resources XI	\$1,647,428	\$75,490	\$0	\$1,722,918				
RCP Fund XI	\$2,902,169	\$300,000	\$0	\$3,202,169				
Strategic Value Special Situations III	\$1,931,696	\$0	\$0	\$1,931,696				
Segall Bryant & Hamill	\$20,630,113	\$0	\$235,015	\$20,865,128				
Metropolitan West Total Return	\$20,709,449	\$0	\$467,322	\$21,176,771				
Golub Capital Partners 11	\$7,159,955	-\$159,955	\$0	\$7,000,000				
Principal Real Estate Debt Fund	\$322,425	-\$7,912	-\$457	\$314,056				
Principal Real Estate Debt Fund II	\$7,714,806	-\$490,056	-\$15,703	\$7,209,048				
Grosvenor Institutional Partners	\$13,091,531	\$0	-\$759,236	\$12,332,295				
Parametric Defensive Equity Fund	\$14,390,257	\$0	-\$2,315,548	\$12,074,709				
Principal US Property Account	\$26,653,779	\$0	\$100,963	\$26,754,743				
Harbert US Real Estate Fund V	\$4,474,598	-\$986,966	\$0	\$3,487,632				
Harbert US Real Estate Fund VI	\$11,089,309	-\$246,472	\$0	\$10,842,837				
Harbert US Real Estate Fund VII	\$4,069,610	\$906,593	\$0	\$4,976,203				
Operating Account	\$6,491,961	-\$2,902,836	\$11,029	\$3,600,154				
Mill Levy Operating Account	\$285,046	\$819,674	\$1,231	\$1,105,951				
Total	\$282,684,090	-\$2,714,552	-\$32,268,199	\$247,701,340				

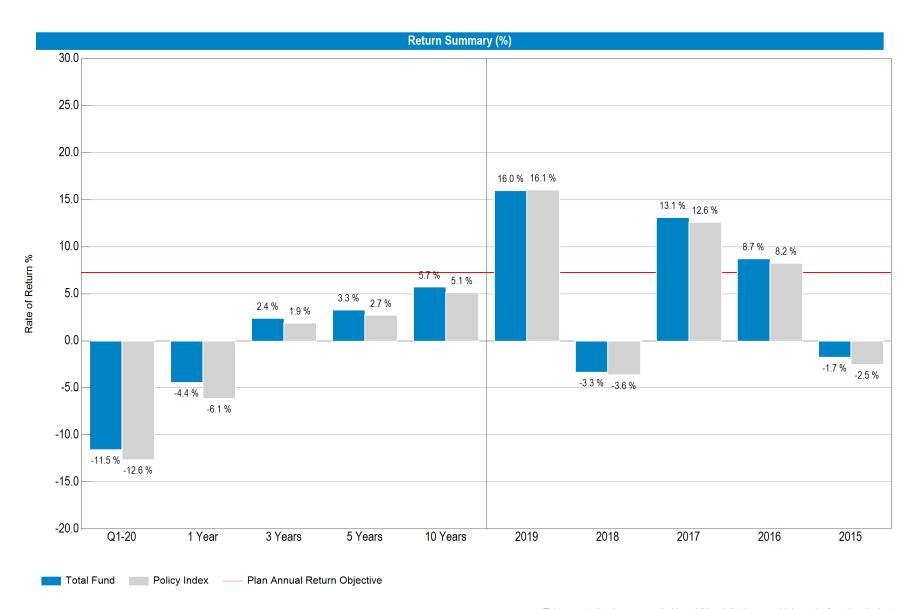


### Total Fund

	Cash Flow Summary							
	YTD Ending March 31, 2020							
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value				
Vanguard Institutional Index	\$59,368,502	\$0	-\$11,634,491	\$47,734,011				
Vanguard Total International Stock Index	\$24,269,361	\$0	-\$5,896,657	\$18,372,704				
American New Perspective Fd R6	\$16,540,741	\$0	-\$3,010,590	\$13,530,151				
Dodge & Cox Global Equity Fd	\$14,326,849	\$0	-\$4,441,210	\$9,885,639				
FIAM SMID Cap Core	\$16,396,372	\$22,888	-\$5,009,867	\$11,409,393				
Adams Street 2012 Global Fund	\$3,812,598	\$0	\$0	\$3,812,598				
Greenspring Global Partners IX-B	\$2,100,044	\$0	\$0	\$2,100,044				
Mesirow Private Equity III	\$572,091	\$0	\$0	\$572,091				
Mesirow Private Equity IV	\$1,733,400	-\$45,000	\$0	\$1,688,400				
NGP Natural Resources XI	\$1,647,428	\$75,490	\$0	\$1,722,918				
RCP Fund XI	\$2,902,169	\$300,000	\$0	\$3,202,169				
Strategic Value Special Situations III	\$1,931,696	\$0	\$0	\$1,931,696				
Segall Bryant & Hamill	\$20,630,113	\$0	\$235,015	\$20,865,128				
Metropolitan West Total Return	\$20,709,449	\$0	\$467,322	\$21,176,771				
Golub Capital Partners 11	\$7,159,955	-\$159,955	\$0	\$7,000,000				
Principal Real Estate Debt Fund	\$322,425	-\$7,912	-\$457	\$314,056				
Principal Real Estate Debt Fund II	\$7,714,806	-\$490,056	-\$15,703	\$7,209,048				
Grosvenor Institutional Partners	\$13,091,531	\$0	-\$759,236	\$12,332,295				
Parametric Defensive Equity Fund	\$14,390,257	\$0	-\$2,315,548	\$12,074,709				
Principal US Property Account	\$26,653,779	\$0	\$100,963	\$26,754,743				
Harbert US Real Estate Fund V	\$4,474,598	-\$986,966	\$0	\$3,487,632				
Harbert US Real Estate Fund VI	\$11,089,309	-\$246,472	\$0	\$10,842,837				
Harbert US Real Estate Fund VII	\$4,069,610	\$906,593	\$0	\$4,976,203				
Operating Account	\$6,491,961	-\$2,902,836	\$11,029	\$3,600,154				
Mill Levy Operating Account	\$285,046	\$819,674	\$1,231	\$1,105,951				
Total	\$282,684,090	-\$2,714,552	-\$32,268,199	\$247,701,340				



### **Total Fund**

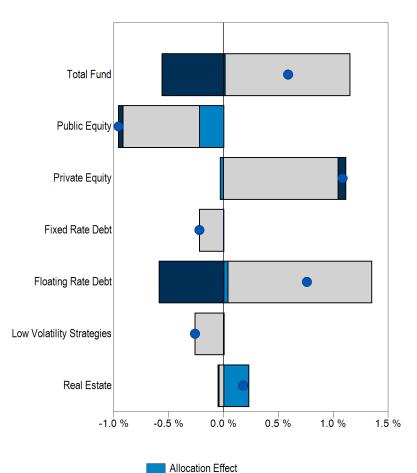




### **Total Fund**

As of March 31, 2020

#### **Attribution Effects** 3 Months Ending March 31, 2020

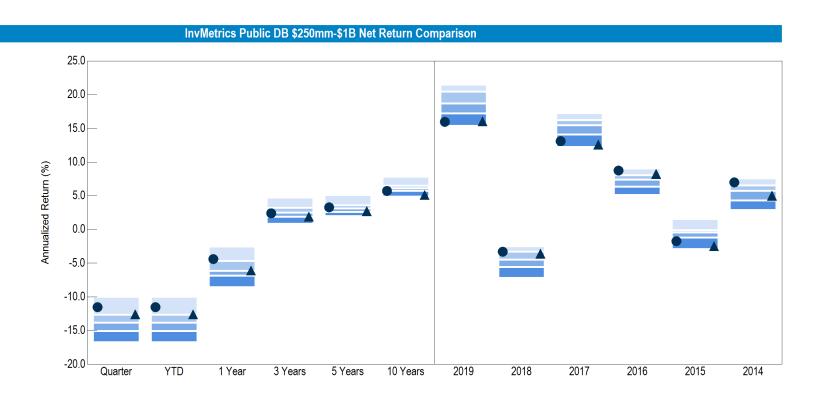


Selection Effect Interaction Effects Total Effect

Attribution Summary 3 Months Ending March 31, 2020													
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects						
Public Equity	-22.9%	-21.4%	-1.5%	-0.7%	-0.1%	0.0%	-0.8%						
Private Equity	0.0%	-20.9%	20.9%	1.0%	0.0%	0.1%	1.1%						
Fixed Rate Debt	1.7%	3.1%	-1.4%	-0.2%	0.1%	0.0%	-0.1%						
Floating Rate Debt	-0.1%	-13.2%	13.1%	1.2%	0.0%	-0.6%	0.7%						
Low Volatility Strategies	-11.2%	-8.6%	-2.6%	-0.3%	0.0%	0.0%	-0.3%						
Real Estate	0.2%	0.5%	-0.3%	0.0%	0.3%	0.0%	0.2%						
Total	-11.7%	-12.6%	0.9%	1.1%	0.3%	-0.5%	0.9%						



### **Total Fund**



		Return (Ran	k)										
!	th Percentile	-10.0	-10.0	-2.56	4.69	5.07	7.77	21.46	-2.53	17.25	9.04	1.53	7.56
	5th Percentile	-12.6	-12.6	-4.65	3.26	3.62	6.51	20.48	-3.27	16.23	8.10	-0.09	6.57
	<b>Median</b>	-13.8	-13.8	-6.10	2.52	3.13	6.15	18.72	-4.44	15.48	7.41	-0.44	5.78
-	5th Percentile	-15.0	-15.0	-6.83	1.92	2.63	5.74	17.24	-5.53	14.11	6.38	-1.20	4.33
9	5th Percentile	-16.7	-16.7	-8.55	0.86	1.99	4.91	15.40	-7.15	12.25	5.15	-2.90	2.89
i	of Portfolios	34	34	34	33	31	23	77	73	59	57	49	31
	Total Fund	-11.5 (14)	-11.5 (14)	-4.39 (24)	2.40 (52)	3.28 (40)	5.72 (78)	15.97 (92)	-3.30 (26)	13.11 (90)	8.74 (10)	-1.73 (84)	6.98 (13)
	Policy Index	-12.5 (25)	-12.5 (25)	-6.09 (49)	1.89 (76)	2.72 (70)	5.12 (93)	16.06 (91)	-3.59 (30)	12.60 (92)	8.24 (22)	-2.48 (91)	5.01 (60)

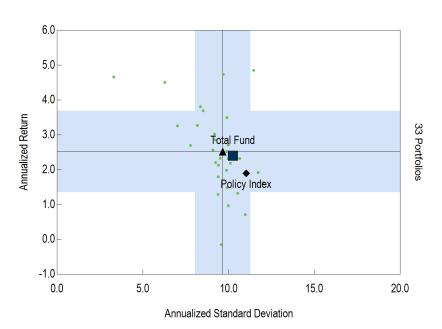


### **Total Fund**

As of March 31, 2020

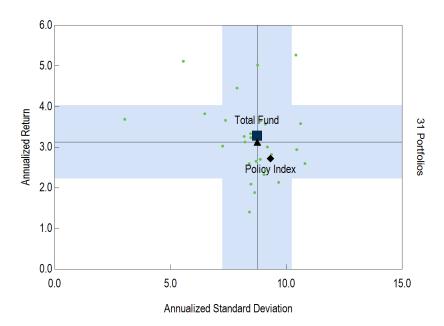
#### Quarterly Risk/Return Charts

#### Annualized Return vs. Annualized Standard Deviation 3 Years Ending March 31, 2020



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB \$250mm-\$1B Net

#### Annualized Return vs. Annualized Standard Deviation 5 Years Ending March 31, 2020



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB \$250mm-\$1B Net



### **Total Fund**

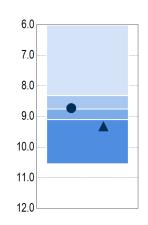
As of March 31, 2020

#### 5 Year Risk Statistics vs IF Public DB \$250mm-\$1B Net

### Return 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0

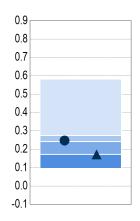
● Total Fund Value Rank ▲ Policy Index Value Rank	3.3 40 2.7 70
Universe 5th %tile 25th %tile Median 75th %tile 95th %tile	5.1 3.6 3.1 2.6 2.0

#### Standard Deviation



Total Fund	
Value	8.7
Rank	49
▲ Policy Index	
Value	9.3
Rank	83
TOTAL	00
Universe	
5th %tile	6.0
25th %tile	8.3
Median	8.7
75th %tile	9.1
95th %tile	10.5

#### Sharpe Ratio



● Total Fund Value Rank ▲ Policy Index Value Rank	0.2 44 0.2 77
Universe 5th %tile 25th %tile Median 75th %tile 95th %tile	0.6 0.3 0.2 0.2 0.1



### Total Fund

		Perform	ance Su	mmary									
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Total Fund	247,701,340	100.0	-11.5	-11.5	-4.4	2.4	3.3	5.7	16.0	-3.3	13.1	8.7	-1.7
Policy Index			-12.6	-12.6	-6.1	1.9	2.7	5.1	16.1	-3.6	12.6	8.2	-2.5
InvMetrics Public DB \$250mm-\$1B Net Median			-13.8	-13.8	-6.1	2.5	3.1	6.2	18.7	-4.4	15.5	7.4	-0.4
Equity													
Public Equity	100,931,897	40.7	-22.9	-22.9	-12.2	0.4	2.1		28.5	-11.2	23.7	8.1	-3.2
MSCI ACWI			-21.4	-21.4	-11.3	1.5	2.8	5.9	26.6	-9.4	24.0	7.9	-2.4
InvMetrics Public DB Total Eq Net Median			-22.4	-22.4	-12.3	1.5	3.3	6.6	26.9	-8.4	22.6	9.2	-1.4
Private Equity	15,029,916	6.1	0.0	0.0	4.7	8.6	8.7	11.8	6.6	8.4	15.5	10.7	4.6
Russell 3000 Less Current Qtr			-20.9	-20.9	-9.1	4.0	5.8	10.1	31.0	-5.2	21.1	12.7	0.5
Russell 3000			-20.9	-20.9	-9.1	4.0	5.8	10.1	31.0	-5.2	21.1	12.7	0.5
Debt													
Fixed Rate Debt	42,041,899	17.0	1.7	1.7	7.7	4.7	3.3		9.5	-0.1	4.3	3.3	0.1
BBgBarc US Aggregate TR			3.1	3.1	8.9	4.8	3.4	3.9	8.7	0.0	3.5	2.6	0.6
Intermediate Core Bond MStar MF Median			1.9	1.9	7.2	4.1	3.0	3.8	8.5	-0.3	3.9	3.2	0.2
Floating Rate Debt	14,523,103	5.9	-0.1	-0.1	6.3	6.1	5.9		9.9	3.9	6.3	8.5	3.3
Credit Suisse Leveraged Loans			-13.2	-13.2	-9.5	-0.7	1.2	3.3	8.2	1.1	4.2	9.9	-0.4
Alternatives													
Low Volatility Strategies	24,407,004	9.9	-11.2	-11.2	-5.9	0.4	1.2	2.6	11.1	-2.2	6.5	5.2	0.3
Low Volatility Custom Index			-8.6	-8.6	-3.0	2.1	1.3	2.4	12.2	-2.5	8.8	0.5	-0.3
Real Estate	46,061,415	18.6	0.2	0.2	6.1	8.4	9.5		7.2	9.3	10.6	9.7	13.1
Real Estate Custom Index			0.5	0.5	4.1	6.0	7.5		5.1	7.1	6.8	7.8	13.7



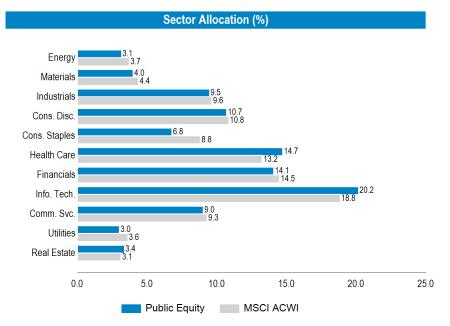
### Public Equity

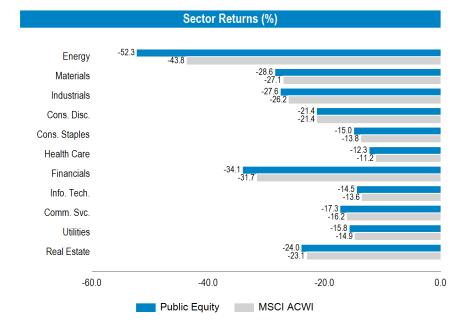
	Perform	nance Sumr	mary							
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Public Equity	100,931,897	100.0	-22.9	-22.9	-12.2	0.4	2.1		2.4	Jul-14
MSCI ACWI			-21.4	-21.4	-11.3	1.5	2.8	5.9	2.5	Jul-14
InvMetrics Public DB Total Eq Net Rank			68	68	50	80	83		72	Jul-14
InvMetrics Public DB Total Eq Net Median			-22.4	-22.4	-12.3	1.5	3.3	6.6	3.4	Jul-14
Vanguard Institutional Index	47,734,011	47.3	-19.6	-19.6	-7.0				3.7	Jul-17
S&P 500			-19.6	-19.6	-7.0	5.1	6.7	10.5	3.8	Jul-17
Large Blend MStar MF Rank			31	31	29				16	Jul-17
Large Blend MStar MF Median			-20.2	-20.2	-8.8	3.9	5.4	9.6	1.5	Jul-17
Vanguard Total International Stock Index	18,372,704	18.2	-24.3	-24.3	-16.5				-6.1	Jul-17
FTSE Global All Cap ex US			-24.0	-24.0	-15.7	-2.0	-0.2	2.6	-5.5	Jul-17
Foreign Large Blend MStar MF Rank			58	58	63				22	Jul-17
Foreign Large Blend MStar MF Median			-23.7	-23.7	-15.8	-2.5	-0.9	2.5	-7.5	Jul-17
American New Perspective Fd R6	13,530,151	13.4	-18.2	-18.2	-6.4				2.8	Jul-17
MSCI ACWI			-21.4	-21.4	-11.3	1.5	2.8	5.9	-0.9	Jul-17
MSCI ACWI Growth NR USD			-15.7	-15.7	-2.3	7.0	6.1	8.2	4.5	Jul-17
World Large Stock Mstar MF Rank			35	35	29				21	Jul-17
World Large Stock Mstar MF Median			-20.6	-20.6	-11.4	1.1	2.7	6.4	-2.0	Jul-17
Dodge & Cox Global Equity Fd	9,885,639	9.8	-31.0	-31.0	-22.1				-8.4	Jul-17
MSCI ACWI			-21.4	-21.4	-11.3	1.5	2.8	5.9	-0.9	Jul-17
MSCI ACWI Value NR USD			-27.1	-27.1	-20.0	-4.0	-0.5	3.5	-6.4	Jul-17
World Large Stock Mstar MF Rank			98	98	96				93	Jul-17
World Large Stock Mstar MF Median			-20.6	-20.6	-11.4	1.1	2.7	6.4	-2.0	Jul-17
FIAM SMID Cap Core	11,409,393	11.3	-30.6	-30.6	-21.7	-4.4	-0.2		5.5	Apr-13
Russell 2500			-29.7	-29.7	-22.5	-3.1	0.5	7.7	4.9	Apr-13
SMID Blend MStar MF Rank			42	42	26	35	39		11	Apr-13
SMID Blend MStar MF Median			-30.9	-30.9	-24.4	-5.4	-1.0	6.4	3.7	Apr-13



### **Public Equity**

	Public Equity Performance Attribution vs.	MSCI ACWI					
		Attribution Effects					
	Total	Selection	Allocation				
	Effects	Effect	Effect				
Energy	-0.26%	-0.39%	0.13%				
Materials	0.12%	-0.04%	0.16%				
Industrials	-0.12%	-0.15%	0.02%				
Consumer Discretionary	0.02%	0.00%	0.02%				
Consumer Staples	0.18%	-0.04%	0.22%				
Health Care	-0.31%	-0.16%	-0.15%				
Financials	-0.22%	-0.38%	0.16%				
Information Technology	-0.26%	-0.16%	-0.10%				
Communication Services	-0.09%	-0.10%	0.01%				
Utilities	0.07%	-0.01%	0.08%				
Real Estate	-0.10%	-0.03%	-0.06%				
Cash	0.01%	0.00%	0.01%				
Portfolio	-0.97% =	-1.45% +	0.48%				







### Public Equity

	Country Allocation				
Versus MSCI ACWI - Quarter Ending March 31, 2020					
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)			
Totals					
Developed	92.3%	88.1%			
Emerging*	6.2%	11.9%			
Frontier**	0.0%	0.0%			
Other	0.1%				
Cash	1.5%				

Country	y Allocation		
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)	
Europe			
Austria	0.0%	0.0%	
Belgium	0.2%	0.2%	
Croatia**	0.0%	0.0%	
Czech Republic*	0.0%	0.0%	
Denmark	0.6%	0.6%	
Estonia**	0.0%	0.0%	
Finland	0.1%	0.3%	
France	2.5%	3.1%	Ar
Germany	1.3%	2.4%	Ar
Greece*	0.0%	0.0%	Br
Hungary*	0.0%	0.0%	Ca
Ireland	0.3%	0.2%	Ch
Italy	0.5%	0.6%	Co
Lithuania**	0.0%	0.0%	Me
Luxembourg	0.1%	0.0%	Pe
Netherlands	1.2%	1.2%	Ur
Norway	0.1%	0.2%	To
Poland*	0.0%	0.1%	
Portugal	0.0%	0.1%	
Romania**	0.0%	0.0%	
Russia*	0.2%	0.4%	
Serbia**	0.0%	0.0%	
Slovenia**	0.0%	0.0%	
Spain	0.6%	0.7%	
Sweden	0.5%	0.8%	
Switzerland	2.4%	3.1%	
United Kingdom	3.1%	4.3%	
Total-Europe	13.9%	18.3%	

00011								
	Country Allocation			Country Allocation		Co	ountry Allocation	
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)		Manager Ending Allocation (USD)	Index Ending Allocation (USD)		Manager Ending Allocation (USD)	Index Ending Allocation (USD)
Americas			AsiaPacific			Other		
Argentina*	0.0%	0.0%	Australia	0.7%	1.7%	Bahrain**	0.0%	0.0%
Brazil*	0.5%	0.6%	Bangladesh**	0.0%	0.0%	Egypt*	0.0%	0.0%
Canada	1.6%	2.7%	China*	1.5%	4.8%	Israel	0.1%	0.2%
Chile*	0.0%	0.1%	Hong Kong	1.4%	1.1%	Jordan**	0.0%	0.0%
Colombia*	0.0%	0.0%	India*	0.7%	0.9%	Kazakhstan**	0.0%	0.0%
Mexico*	0.3%	0.2%	Indonesia*	0.1%	0.2%	Kenya**	0.0%	0.0%
Peru*	0.0%	0.0%	Japan	4.3%	7.5%	Kuwait**	0.0%	0.0%
United States	70.4%	56.7%	Korea*	0.8%	1.4%	Lebanon**	0.0%	0.0%
Total-Americas	72.8%	60.4%	Malaysia*	0.1%	0.2%	Mauritius**	0.0%	0.0%
			New Zealand	0.1%	0.1%	Morocco**	0.0%	0.0%
			Pakistan*	0.0%	0.0%	Nigeria**	0.0%	0.0%
			Philippines*	0.0%	0.1%	Oman**	0.0%	0.0%
			Singapore	0.2%	0.3%	Other Countries	0.1%	0.0%
			Sri Lanka**	0.0%	0.0%	Qatar*	0.0%	0.1%
			Taiwan*	1.0%	1.5%	Saudi Arabia*	0.1%	0.3%
			Thailand*	0.1%	0.3%	South Africa*	0.4%	0.4%
			Vietnam**	0.0%	0.0%	Tunisia**	0.0%	0.0%
			Total-AsiaPacit	ific 11.1%	20.1%	Turkey*	0.0%	0.1%
						United Arab Emirate	es* 0.0%	0.1%
						Total-Other	0.8%	1.2%



### Private Equity

				No	n-Marketabl	e Securities	Overview						
Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	DPI (dist / takedowns)	RVPI (RV / takedowns)	TVPI (TV / takedown)	Takedown (takedowns / commit)	IRR
Private Equity	Adams Street 2012 Global Fund	2012	\$4,000,000	\$3,427,600	\$1,492,358	\$3,812,598	\$5,304,956	\$572,400	43.54%	111.23%	154.77%	85.69%	11.29
	Greenspring Global Partners IX-B	2019	\$5,750,000	\$2,070,000	\$0	\$2,100,044	\$2,100,044	\$3,680,000	0.00%	101.45%	101.45%	36.00%	1.96
	Mesirow Private Equity	2005	\$4,000,000	\$3,840,000	\$5,821,787	\$572,091	\$6,393,878	\$160,000	151.61%	14.90%	166.51%	96.00%	8.04
	Mesirow Private Equity IV	2006	\$4,500,000	\$4,275,000	\$5,761,975	\$1,688,400	\$7,450,375	\$225,000	134.78%	39.49%	174.28%	95.00%	9.96
	NGP Natural Resources	2014	\$2,000,000	\$1,806,695	\$405,869	\$1,722,918	\$2,128,787	\$193,305	22.46%	95.36%	117.83%	90.33%	6.37
	RCP Fund XI	2016	\$6,000,000	\$3,240,000	\$0	\$3,202,169	\$3,202,169	\$2,760,000	0.00%	98.83%	98.83%	54.00%	-0.91
	Strategic Value Special Situations III	2013	\$2,000,000	\$1,820,000	\$1,004,582	\$1,931,696	\$2,936,278	\$180,000	55.20%	106.14%	161.33%	91.00%	12.01
	Total Account		\$28,250,000	\$20,479,295	\$14,486,571	\$15,029,916	\$29,516,487	\$7,770,705	70.74%	73.39%	144.13%	72.49%	9.02

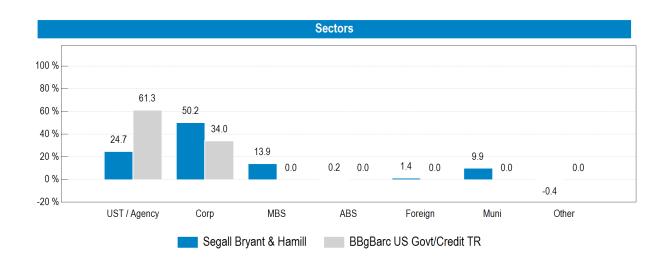


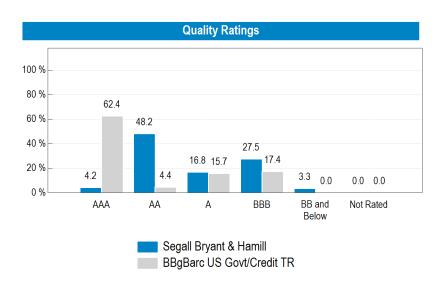
### Fixed Rate Debt

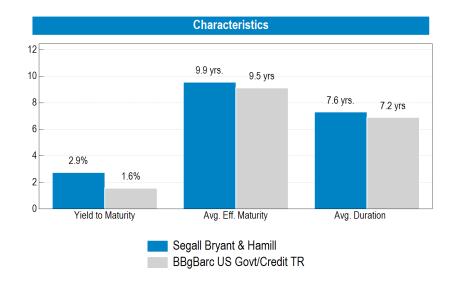
	Perform	nance Sum	mary							
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fixed Rate Debt	42,041,899	100.0	1.7	1.7	7.7	4.7	3.3		3.4	Jul-14
BBgBarc US Aggregate TR			3.1	3.1	8.9	4.8	3.4	3.9	3.5	Jul-14
Intermediate Core Bond MStar MF Rank			54	54	32	20	23		27	Jul-14
Intermediate Core Bond MStar MF Median			1.9	1.9	7.2	4.1	3.0	3.8	3.2	Jul-14
Segall Bryant & Hamill	20,865,128	49.6	1.1	1.1	7.2	4.7	3.4	4.3	6.1	Dec-89
BBgBarc US Govt/Credit TR			3.4	3.4	9.8	5.2	3.5	4.1	6.0	Dec-89
Intermediate Core Bond MStar MF Rank			65	65	48	17	11	13	3	Dec-89
Intermediate Core Bond MStar MF Median			1.9	1.9	7.2	4.1	3.0	3.8	5.8	Dec-89
Metropolitan West Total Return	21,176,771	50.4	2.3	2.3	8.3	4.7			3.5	Sep-16
BBgBarc US Aggregate TR			3.1	3.1	8.9	4.8	3.4	3.9	3.5	Sep-16
Intermediate Core Bond MStar MF Rank			38	38	26	21			14	Sep-16
Intermediate Core Bond MStar MF Median			1.9	1.9	7.2	4.1	3.0	3.8	3.0	Sep-16



### Segall Bryant & Hamill





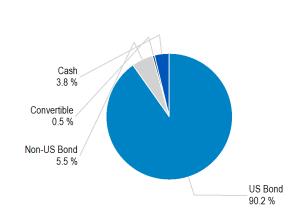




### Metropolitan West Total Return

As of March 31, 2020

#### Mutual Fund Allocation as of March 31, 2020



Fund Information as	of March 31, 2020
Fund Name	METROPOLITAN WEST TOTAL RETURN BD PLAN
Ticker	MWTSX
Morningstar Category	Intermediate Core-Plus Bond
Benchmark	BBgBarc US Aggregate TR
Expense Ratio	0.37%
Fund Assets (\$mm)	23,795.10
Share Class Inception Date	7/29/2011
Manager Tenure	23

Top Holdings as of March 31, 2020	
FEDERAL NATIONAL MORTGAGE ASSOCIATION 2.5%	9.90%
FEDERAL NATIONAL MORTGAGE ASSOCIATION 3%	6.32%
UNITED STATES TREASURY NOTES 0.5%	4.19%
FEDERAL NATIONAL MORTGAGE ASSOCIATION 2.5%	2.93%
UNITED STATES TREASURY BONDS 2%	2.88%
UNITED STATES TREASURY BONDS 0.25%	1.45%
FEDERAL NATIONAL MORTGAGE ASSOCIATION 3.5%	1.44%
UNITED STATES TREASURY NOTES 1.75%	1.26%
UNITED STATES TREASURY NOTES 0.25%	1.23%
FEDERAL NATIONAL MORTGAGE ASSOCIATION 3%	1.01%

Fund Characteristics as of March 31, 202	0
Sharpe Ratio (3 Year)	1.06
Average Duration	5.32
Average Coupon	3.14%
Average Effective Maturity	7.47
R-Squared (3 Year)	0.96
Alpha (3 Year)	0.05%
Beta (3 Year)	0.93

Fixed Income Sectors as of March 31, 2020								
GOVERNMENT	13.38%							
MUNICIPAL	1.17%							
CORPORATE	25.68%							
SECURITIZED	55.99%							
CASH & EQUIVALENTS	1.73%							
DERIVATIVE	2.05%							

Maturities as of March 31, 2020		Credit Quality as of March 31, 2020	
1 to 3 Years	4.90%	AAA	62.52%
3 to 5 Years	7.10%	AA	2.94%
5 to 7 Years	7.15%	Α	9.04%
7 to 10 Years	7.52%	BBB	19.35%
10 to 15 Years	4.41%	BB	2.60%
15 to 20 Years	15.31%	В	0.84%
20 to 30 Years	36.76%	Below B	2.71%
Greater than 30 Years	15.01%	Not Rated	0.00%



### Floating Rate Debt

Performance Summary											
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Floating Rate Debt	14,523,103	100.0	-0.1	-0.1	6.3	6.1	5.9		5.5	Jul-14	
Credit Suisse Leveraged Loans			-13.2	-13.2	-9.5	-0.7	1.2	3.3	1.3	Jul-14	
Golub Capital Partners 11	7,000,000	48.2	0.0	0.0	6.5				9.0	Jul-17	
Principal Real Estate Debt Fund	314,056	2.2	-0.1	-0.1	5.4	7.3	7.7		8.1	May-14	
Principal Real Estate Debt Fund II	7,209,048	49.6	-0.2	-0.2	6.7				9.7	Aug-17	



### Floating Rate Debt

	Non-Marketable Securities Overview												
Account Type	Account	Vintage Year	Commitment		Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	DPI (dist / takedowns)	RVPI (RV / takedowns)	TVPI (TV / takedown)	Takedown (takedowns / commit)	IRR
Other	Golub Capital Partners 11	2017	\$8,000,000	\$6,600,000	\$449,926	\$7,000,000	\$7,449,926	\$1,400,000	6.82%	106.06%	112.88%	82.50%	8.65
	Principal Real Estate Debt Fund	2014	\$10,500,000	\$8,090,646	\$9,782,422	\$314,056	\$10,096,478	\$2,409,354	120.91%	3.88%	124.79%	77.05%	8.47
	Principal Real Estate Debt Fund II	2017	\$12,000,000	\$10,767,288	\$4,592,577	\$7,209,048	\$11,801,625	\$1,232,712	42.65%	66.95%	109.61%	89.73%	8.23
	Total Account		\$30,500,000	\$25,457,934	\$14,824,925	\$14,523,103	\$29,348,028	\$5,042,066	58.23%	57.05%	115.28%	83.47%	8.45



### Low Volatility Strategies

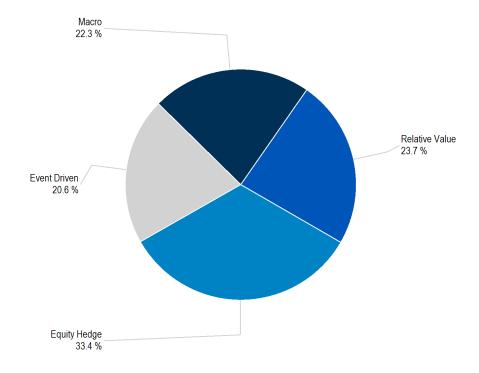
Performance Summary											
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Low Volatility Strategies	24,407,004	100.0	-11.2	-11.2	-5.9	0.4	1.2	2.6	3.1	Sep-04	
Low Volatility Custom Index			-8.6	-8.6	-3.0	2.1	1.3	2.4	2.9	Sep-04	
Grosvenor Institutional Partners	12,332,295	50.5	-5.8	-5.8	-2.8	0.8	0.9	3.2	3.5	Sep-04	
HFRI Fund of Funds Composite Index			-7.3	-7.3	-3.9	0.5	0.3	1.9	2.6	Sep-04	
InvMetrics Public DB Hedge Funds Net Rank			56	56	42	49	43	64	32	Sep-04	
InvMetrics Public DB Hedge Funds Net Median			-5.4	-5.4	-3.0	0.8	0.6	3.9	3.3	Sep-04	
Parametric Defensive Equity Fund	12,074,709	49.5	-16.1	-16.1	-8.8	-			-0.6	Aug-17	
50% S&P500/50%T-Bills			-9.9	-9.9	-2.2	3.7	4.1		3.2	Aug-17	



### **Grosvenor Institutional Partners**

As of March 31, 2020

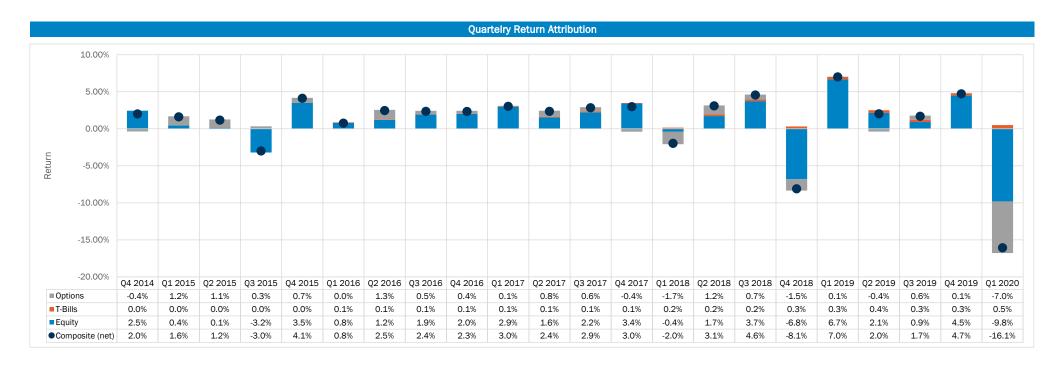
#### Hedge Fund Allocation: Strategies As of March 31, 2020



Total Hedge Fund Strategy Allocation									
As of March 31, 2020									
Strategy	Market Value	Percent							
Equity Hedge	\$4,122,686.22	33.43%							
Event Driven	\$2,540,452.77	20.60%							
Macro	\$2,751,335.01	22.31%							
Relative Value	\$2,917,821.00	23.66%							
TOTALS	\$12,332,295.00	100.00%							



### Parametric Defensive Equity Fund





### Real Estate

	Performance Summary											
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date		
Real Estate	46,061,415	100.0	0.2	0.2	6.1	8.4	9.5		10.2	Jul-14		
Real Estate Custom Index			0.5	0.5	4.1	6.0	7.5		8.2	Jul-14		
Principal US Property Account	26,754,743	58.1	0.4	0.4	4.7	6.9	8.4	11.4	7.1	Sep-04		
NCREIF-ODCE Net			0.8	0.8	3.9	5.9	7.5	10.4	7.0	Sep-04		
Harbert US Real Estate Fund V	3,487,632	7.6	0.0	0.0	7.2	9.2	11.0		12.7	Jul-14		
NCREIF Property Index			0.0	0.0	4.5	6.2	7.5	10.1	8.2	Jul-14		
Harbert US Real Estate Fund VI	10,842,837	23.5	0.0	0.0	11.7	13.1			8.3	Apr-16		
NCREIF Property Index			0.0	0.0	4.5	6.2	7.5	10.1	6.4	Apr-16		
Harbert US Real Estate Fund VII	4,976,203	10.8	0.0	0.0					-9.1	Oct-19		
NCREIF Property Index			0.0	0.0	4.5	6.2	7.5	10.1	1.6	Oct-19		



### Real Estate

	Non-Marketable Securities Overview												
Account Type	Account	Vintage Year	Commitment		Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	DPI (dist / takedowns)	RVPI (RV / takedowns)	TVPI (TV / takedown)	Takedown (takedowns / commit)	IRR
	Harbert US Real Estate Fund V		\$11,300,000	\$9,159,759	\$10,423,763	\$3,487,632	\$13,911,395	\$2,140,241	113.80%	38.08%	151.88%	81.06%	12.79
	Harbert US Real Estate Fund VI		\$10,000,000	\$9,027,146	\$1,497,689	\$10,842,837	\$12,340,525	\$972,854	16.59%	120.11%	136.70%	90.27%	11.75
	Harbert US Real Estate Fund VII	2019	\$11,600,000	\$5,124,156	\$0	\$4,976,203	\$4,976,203	\$6,475,844	0.00%	97.11%	97.11%	44.17%	-5.11
	Total Account		\$32,900,000	\$23,311,062	\$11,921,451	\$19,306,672	\$31,228,123	\$9,588,938	51.14%	82.82%	133.96%	70.85%	11.99



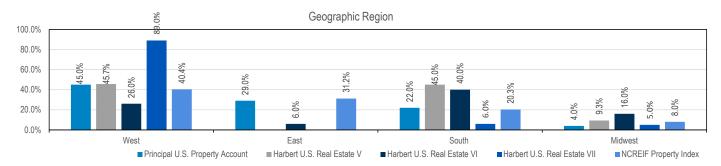
### Private Equity Real Estate

As of March 31, 2020

#### Private Equity Real Estate Portfolio Characteristics As of March 31, 2020

	Principal U.S. Property Account	*Harbert U.S. Real Estate Fund V, LP	*Harbert U.S. Real Estate Fund VI, LP	*Harbert U.S. Real Estate Fund VII, LP
Gross Asset Value	\$10.36 Billion	N/A	N/A	N/A
Net Asset Value	\$8.08 Billion	\$203.91 Million	\$504.37 Million	\$82.57 Million
Leverage Ratio	19.8%	64.0%	62.0%	16.0%
Number of Investments	133	12	29	3
Number of Markets	41	6	10	3
Portfolio Occupancy	96.4%	77.0%	85.0%	77.0%





\*Information as of 12/31/2019



### Benchmark History

As of March 31, 2020

	Benchmark History										
Total Fund											
12/1/2019	Present	MSCI ACWI 45% / Russell 3000 Less Current Qtr 5% / BBgBarc US Aggregate TR 15% / Credit Suisse Leveraged Loans 10% / 50% S&P500/50%T-Bills 5% / HFRI Fund of Funds Composite Index 5% / NCREIF-ODCE Net 10% / NCREIF Property Index 5%									
9/1/2019	11/30/2019	MSCI ACWI 40% / Russell 3000 Less Current Qtr 5% / BBgBarc US Aggregate TR 15% / Credit Suisse Leveraged Loans 10% / Alerian MLP TR USD 5% / 50% S&P500/50%T-Bills 5% / HFRI Fund of Funds Composite Index 5% / NCREIF-ODCE Net 10% / NCREIF Property Index 5%									
8/1/2017	8/31/2019	MSCI ACWI 40% / Russell 3000 Less Current Qtr 5% / BBgBarc US Aggregate TR 10% / Credit Suisse Leveraged Loans 15% / Alerian MLP TR USD 5% / 50% S&P500/50%T-Bills 5% / HFRI Fund of Funds Composite Index 5% / NCREIF-ODCE Net 10% / NCREIF Property Index 5%									
10/1/2014	7/31/2017	MSCI ACWI 40% / Russell 3000 5% / BBgBarc US Aggregate TR 10% / Credit Suisse Leveraged Loans 10% / Alerian MLP TR USD 10% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10% / NCREIF Property Index 5%									
7/1/2014	9/30/2014	MSCI ACWI 40% / Russell 3000 5% / BBgBarc US Aggregate TR 15% / Credit Suisse Leveraged Loans 10% / Alerian MLP TR USD 5% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10% / NCREIF Property Index 5%									
10/1/2013	6/30/2014	MSCI ACWI 40% / Russell 3000 5% / BBgBarc US Aggregate TR 25% / Credit Suisse Leveraged Loans 5% / Alerian MLP TR USD 5% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10%									
1/1/2012	9/30/2013	MSCI ACWI 40% / Russell 3000 5% / BBgBarc US Aggregate TR 25% / Alerian MLP TR USD 5% / HFRI Fund of Funds Composite Index 15% / NCREIF-ODCE Net 10%									
10/1/2010	12/31/2011	MSCI ACWI 45% / Russell 3000 5% / BBgBarc US Aggregate TR 25% / HFRI Fund of Funds Composite Index 15% / NCREIF-ODCE Net 10%									
9/1/2009	9/30/2010	MSCI ACWI 55% / Russell 3000 5% / BBgBarc US Aggregate TR 20% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10%									
7/1/2007	8/31/2009	Russell 3000 40% / MSCI ACWI ex USA 20% / BBgBarc US Aggregate TR 20% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10%									
7/1/2005	6/30/2007	Russell 3000 45% / MSCI EAFE 15% / BBgBarc US Aggregate TR 20% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10%									
10/1/2004	6/30/2005	S&P 500 38% / Russell 2000 12% / MSCI EAFE 10% / BBgBarc US Aggregate TR 10% / BBgBarc US Govt/Credit TR 10% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 10%									
1/1/2004	9/30/2004	S&P 500 38% / Russell 2000 12% / MSCI EAFE 10% / BBgBarc US Aggregate TR 20% / BBgBarc US Govt/Credit TR 20%									
7/1/2001	12/31/2003	S&P 500 40% / Russell 2000 Growth 10% / MSCI EAFE 10% / BBgBarc US Aggregate TR 20% / BBgBarc US Govt/Credit TR 20%									
4/1/2000	6/30/2001	S&P 500 40% / Russell 2000 Growth 10% / MSCI EAFE 10% / BBgBarc US Govt/Credit Int TR 30% / BBgBarc US Govt/Credit TR 10%									
1/1/1998	3/31/2000	S&P 500 40% / Russell 2000 10% / MSCI EAFE 10% / BBgBarc US Govt/Credit Int TR 30% / BBgBarc US Govt/Credit TR 10%									
1/1/1995	12/31/1997	S&P 500 35% / MSCI EAFE 10% / BBgBarc US Govt/Credit Int TR 41% / BBgBarc US Govt/Credit TR 14%									
1/1/1992	12/31/1994	S&P 500 40% / BBgBarc US Govt/Credit Int TR 45% / BBgBarc US Govt/Credit TR 15%									
1/1/1990	12/31/1991	S&P 500 40% / BBgBarc US Govt/Credit Int TR 60%									

Low Volatility Strategies		
9/1/2017	Present	HFRI Fund of Funds Composite Index 50% / 50% S&P500/50%T-Bills 50%
9/1/2004	8/31/2017	HERI Fund of Funds Composite Index 100%

Real Estate

7/1/2014 NCREIF-ODCE Net 67% / NCREIF Property Index 33% Present



### Manager Roster

		Manager Roster				
	Account Type	Benchmark	Universe	Market Value	Allocation	Inception
Adams Street 2012 Global Fund	Private Equity			\$3,812,598	1.5%	2/1/2012
American New Perspective Fd R6	Public Equity	MSCI ACWI	World Large Stock Mstar MF	\$13,530,151	5.5%	7/31/2017
Dodge & Cox Global Equity Fd	Public Equity	MSCI ACWI	World Large Stock Mstar MF	\$9,885,639	4.0%	7/31/2017
FIAM SMID Cap Core	Public Equity	Russell 2500	SMID Blend MStar MF	\$11,409,393	4.6%	4/1/2013
Golub Capital Partners 11	Floating Rate Debt			\$7,000,000	2.8%	7/1/2017
Greenspring Global Partners IX-B	Private Equity			\$2,100,044	0.8%	2/1/2019
Grosvenor Institutional Partners	Low Volatility	HFRI Fund of Funds Composite Index	InvMetrics Public DB Hedge Funds Net	\$12,332,295	5.0%	9/1/2004
Harbert US Real Estate Fund V	Real Estate	NCREIF Property Index		\$3,487,632	1.4%	7/1/2014
Harbert US Real Estate Fund VI	Real Estate	NCREIF Property Index		\$10,842,837	4.4%	4/1/2016
Harbert US Real Estate Fund VII	Real Estate	NCREIF Property Index		\$4,976,203	2.0%	10/1/2019
Mesirow Private Equity III	Private Equity			\$572,091	0.2%	9/1/2005
Mesirow Private Equity IV	Private Equity			\$1,688,400	0.7%	3/1/2007
Metropolitan West Total Return	Fixed Rate Debt	BBgBarc US Aggregate TR	Intermediate Core Bond MStar MF	\$21,176,771	8.5%	9/30/2016
Mill Levy Operating Account	Cash			\$1,105,951	0.4%	2/28/2018
NGP Natural Resources XI	Private Equity			\$1,722,918	0.7%	11/1/2014
Operating Account	Cash			\$3,600,154	1.5%	10/1/1998
Parametric Defensive Equity Fund	Low Volatility	50% S&P500/50%T-Bills		\$12,074,709	4.9%	8/31/2017
Principal Real Estate Debt Fund	Floating Rate Debt			\$314,056	0.1%	5/1/2014
Principal Real Estate Debt Fund II	Floating Rate Debt			\$7,209,048	2.9%	8/1/2017
Principal US Property Account	Real Estate	NCREIF-ODCE Net		\$26,754,743	10.8%	9/1/2004
RCP Fund XI	Private Equity			\$3,202,169	1.3%	12/1/2016
Segall Bryant & Hamill	Fixed Rate Debt	BBgBarc US Govt/Credit TR	Intermediate Core Bond MStar MF	\$20,865,128	8.4%	12/31/1989
Strategic Value Special Situations III	Private Equity			\$1,931,696	0.8%	10/1/2014
Vanguard Institutional Index	Public Equity	S&P 500	Large Blend MStar MF	\$47,734,011	19.3%	7/31/2017
Vanguard Total International Stock Index	Public Equity	FTSE Global All Cap ex US	Foreign Large Blend MStar MF	\$18,372,704	7.4%	7/31/2017
Total		Policy Index	InvMetrics Public DB \$250mm-\$1B Net	\$247,701,340	100.0%	1/1/1990



### Fee Schedule

Fee Schedule					
Account	Fee Schedule	Market Value As of 3/31/2020	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Vanguard Institutional Index	0.04% of Assets	\$47,734,011	19.3%	\$19,094	0.04%
Vanguard Total International Stock Index	0.09% of Assets	\$18,372,704	7.4%	\$16,535	0.09%
American New Perspective Fd R6	0.45% of Assets	\$13,530,151	5.5%	\$60,886	0.45%
Dodge & Cox Global Equity Fd	0.63% of Assets	\$9,885,639	4.0%	\$62,280	0.63%
FIAM SMID Cap Core	0.65% of Assets	\$11,409,393	4.6%	\$74,161	0.65%
Adams Street 2012 Global Fund	1.00% of Assets	\$3,812,598	1.5%	\$38,126	1.00%
Greenspring Global Partners IX-B	14,375 Quarterly	\$2,100,044	0.8%	\$57,500	2.74%
Mesirow Private Equity III	1.00% of Assets	\$572,091	0.2%	\$5,721	1.00%
Mesirow Private Equity IV	1.00% of Assets	\$1,688,400	0.7%	\$16,884	1.00%
NGP Natural Resources XI	7,500 Quarterly	\$1,722,918	0.7%	\$30,000	1.74%
RCP Fund XI	15,000 Quarterly	\$3,202,169	1.3%	\$60,000	1.87%
Strategic Value Special Situations III	8,750 Quarterly	\$1,931,696	0.8%	\$35,000	1.81%
Segall Bryant & Hamill	0.30% of First 25.0 Mil, 0.25% Thereafter	\$20,865,128	8.4%	\$62,595	0.30%
Metropolitan West Total Return	0.44% of Assets	\$21,176,771	8.5%	\$93,178	0.44%
Golub Capital Partners 11	1.00% of Assets	\$7,000,000	2.8%	\$70,000	1.00%
Principal Real Estate Debt Fund	0.65% of Assets	\$314,056	0.1%	\$2,041	0.65%
Principal Real Estate Debt Fund II	0.85% of Assets	\$7,209,048	2.9%	\$61,277	0.85%
Grosvenor Institutional Partners	1.25% of First 25.0 Mil, 1.00% of Next 25.0 Mil	\$12,332,295	5.0%	\$154,154	1.25%
Parametric Defensive Equity Fund	0.35% of Assets	\$12,074,709	4.9%	\$42,261	0.35%
Principal US Property Account	1.00% of Assets	\$26,754,743	10.8%	\$267,547	1.00%
Harbert US Real Estate Fund V	1.50% of Assets	\$3,487,632	1.4%	\$52,314	1.50%
Harbert US Real Estate Fund VI	31,250 Quarterly	\$10,842,837	4.4%	\$125,000	1.15%
Harbert US Real Estate Fund VII	39,150 Quarterly	\$4,976,203	2.0%	\$156,600	3.15%
Operating Account	0.18% of Assets	\$3,600,154	1.5%	\$6,480	0.18%
Mill Levy Operating Account	0.18% of Assets	\$1,105,951	0.4%	\$1,991	0.18%
Investment Management Fee		\$247,701,340	100.0%	\$1,571,626	0.63%



### **Endnotes**

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