



FELRA and UFCW Pension Fund

Master Consulting Services Report

**Period Ended
September 30, 2022**

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Market Discussion

3Q | 2022

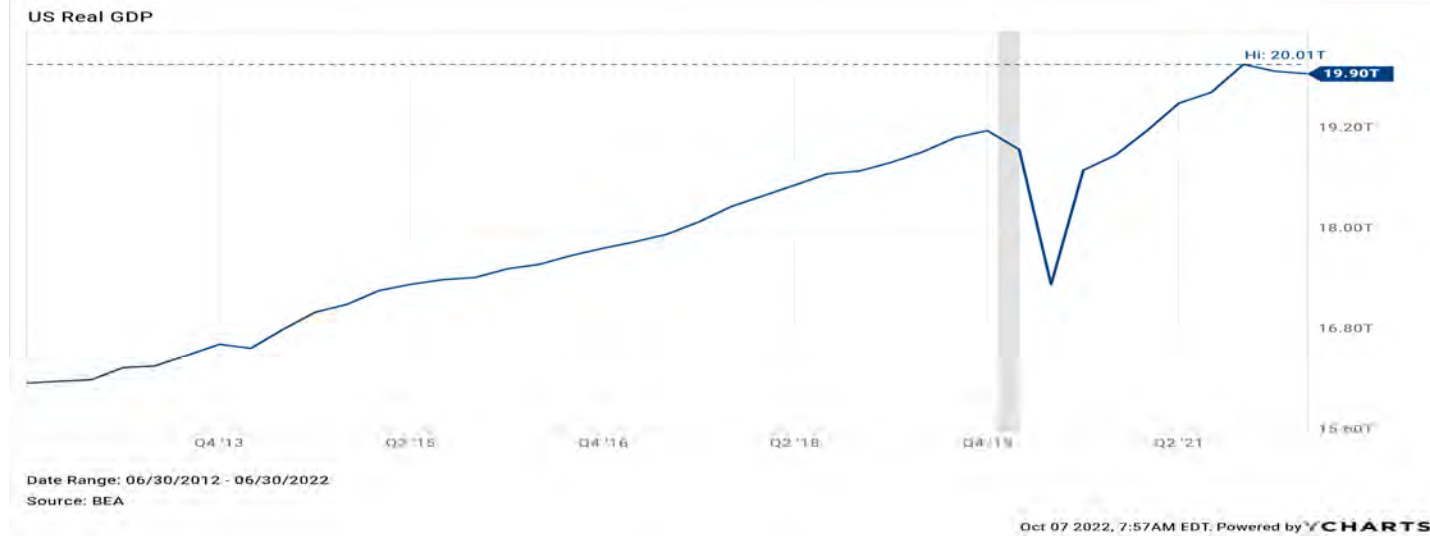


Financial Market Performance

Periods Ending September 30, 2022

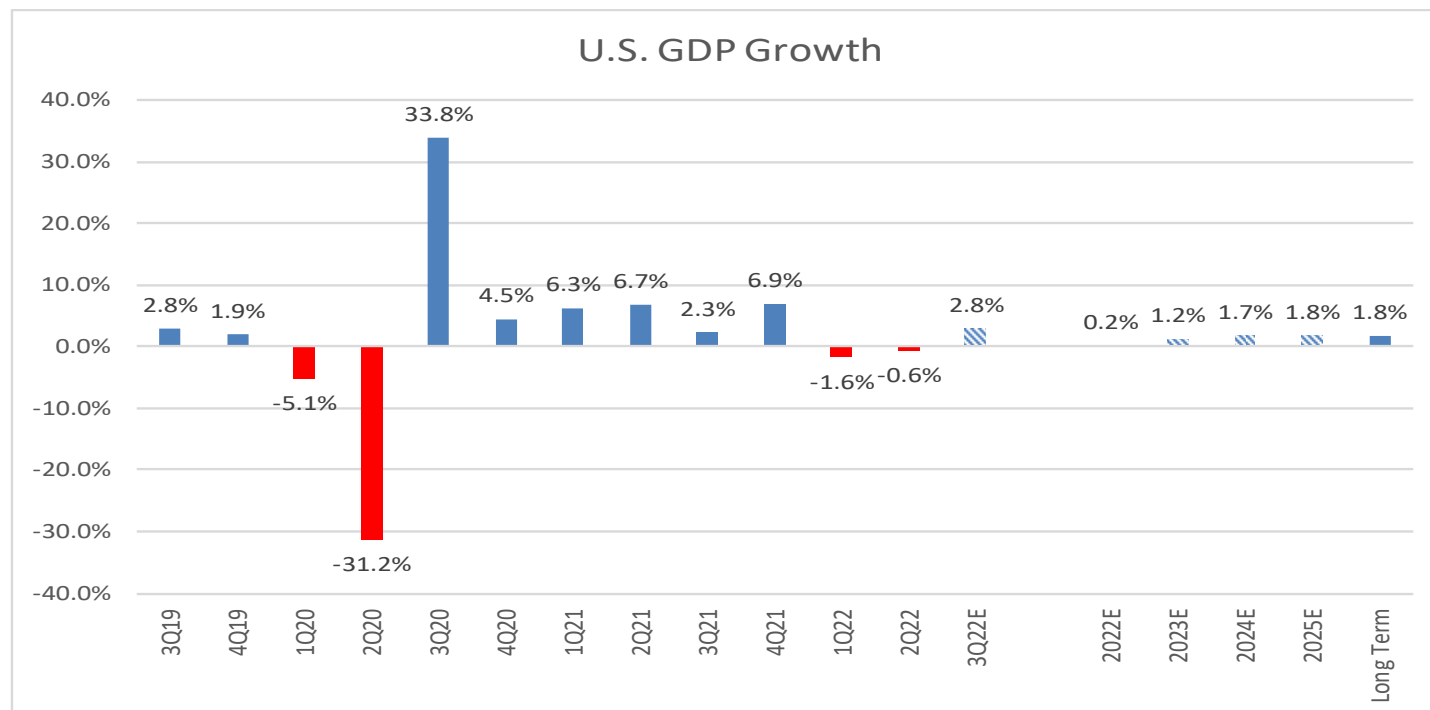
Strategy	Sector	Index	QTR	YTD	2021	2020	2019	2018	2017	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
Stocks	US Large Cap	S&P 500	-4.9%	-23.9%	28.7%	18.4%	31.5%	-4.4%	21.8%	-15.5%	8.2%	9.2%	11.7%	9.2%
	US Small Cap	Russell 2000	-2.2%	-25.1%	14.8%	20.0%	25.5%	-11.0%	14.6%	-23.5%	4.3%	3.6%	8.6%	8.9%
	All Country	MSCI All Country World (net)	-6.8%	-25.6%	18.5%	16.3%	26.6%	-9.4%	24.0%	-20.7%	3.7%	4.4%	7.3%	7.3%
	Non-US Developed	MSCI EAFE (net)	-9.4%	-27.1%	11.3%	7.8%	22.0%	-13.8%	25.0%	-25.1%	-1.8%	-0.8%	3.7%	5.3%
	Emerging Markets	MSCI EM (net)	-11.6%	-27.2%	-2.5%	18.3%	18.4%	-14.6%	37.3%	-28.1%	-2.1%	-1.8%	1.0%	8.1%
	Int'l Small Cap	MSCI EAFE Small Cap (net)	-9.8%	-32.1%	10.1%	12.3%	25.0%	-17.9%	33.0%	-32.1%	-2.2%	-1.8%	5.3%	7.7%
Bonds	Treasury	Bloomberg US Govt	-4.3%	-12.9%	-2.3%	7.9%	6.8%	0.9%	2.3%	-12.8%	-3.1%	-0.2%	0.5%	2.6%
	Broad Market	Bloomberg Aggregate	-4.8%	-14.6%	-1.5%	7.5%	8.7%	0.0%	3.5%	-14.6%	-3.3%	-0.3%	0.9%	3.1%
	Intermediate	Bloomberg Gov/Credit Int.	-3.1%	-9.6%	-1.4%	6.4%	6.8%	0.9%	2.1%	-10.1%	-1.6%	0.4%	1.0%	2.9%
	High Yield	Bloomberg HY BaB 2% IC	-0.7%	-14.5%	4.7%	7.7%	15.2%	-1.9%	6.9%	-13.8%	-0.4%	1.8%	3.9%	6.8%
	Short Duration HY	ICE BofA 1-3 Yrs BB US Cash Pay HY	0.7%	-5.6%	3.2%	5.4%	8.7%	1.4%	3.6%	-5.1%	1.4%	2.5%	3.5%	6.2%
	Global Bonds	FTSE WGBI	-7.6%	-21.3%	-7.0%	10.1%	5.9%	-0.8%	7.5%	-22.1%	-7.0%	-3.1%	-1.8%	2.4%
GTAA	Unconstrained	65% MSCI World /35% FTSE WGBI	-6.6%	-23.9%	11.0%	14.6%	19.9%	-5.8%	17.0%	-20.3%	0.7%	2.6%	4.8%	6.3%
Real Estate	Core	NCREIF ODCE Equal Weighted (net)	0.8%	13.4%	21.9%	0.8%	5.2%	7.3%	6.9%	21.7%	12.1%	9.9%	10.3%	7.8%
Hedge Fund of Funds	Diversified FOFs	HFRI FOF Composite	-0.7%	-7.2%	6.2%	10.9%	8.4%	-4.0%	7.8%	-6.8%	4.0%	3.0%	3.4%	3.6%
	Equity Long-Short	HFRI Equity Hedge	-2.7%	-14.1%	11.7%	17.9%	13.7%	-7.1%	13.3%	-13.6%	3.1%	4.3%	5.3%	5.5%
Commodities	Commodities	Goldman Sachs Commodity	-10.3%	21.8%	40.4%	-23.7%	17.6%	-13.8%	5.8%	23.6%	12.2%	7.8%	-3.9%	-0.1%

U.S. Economy



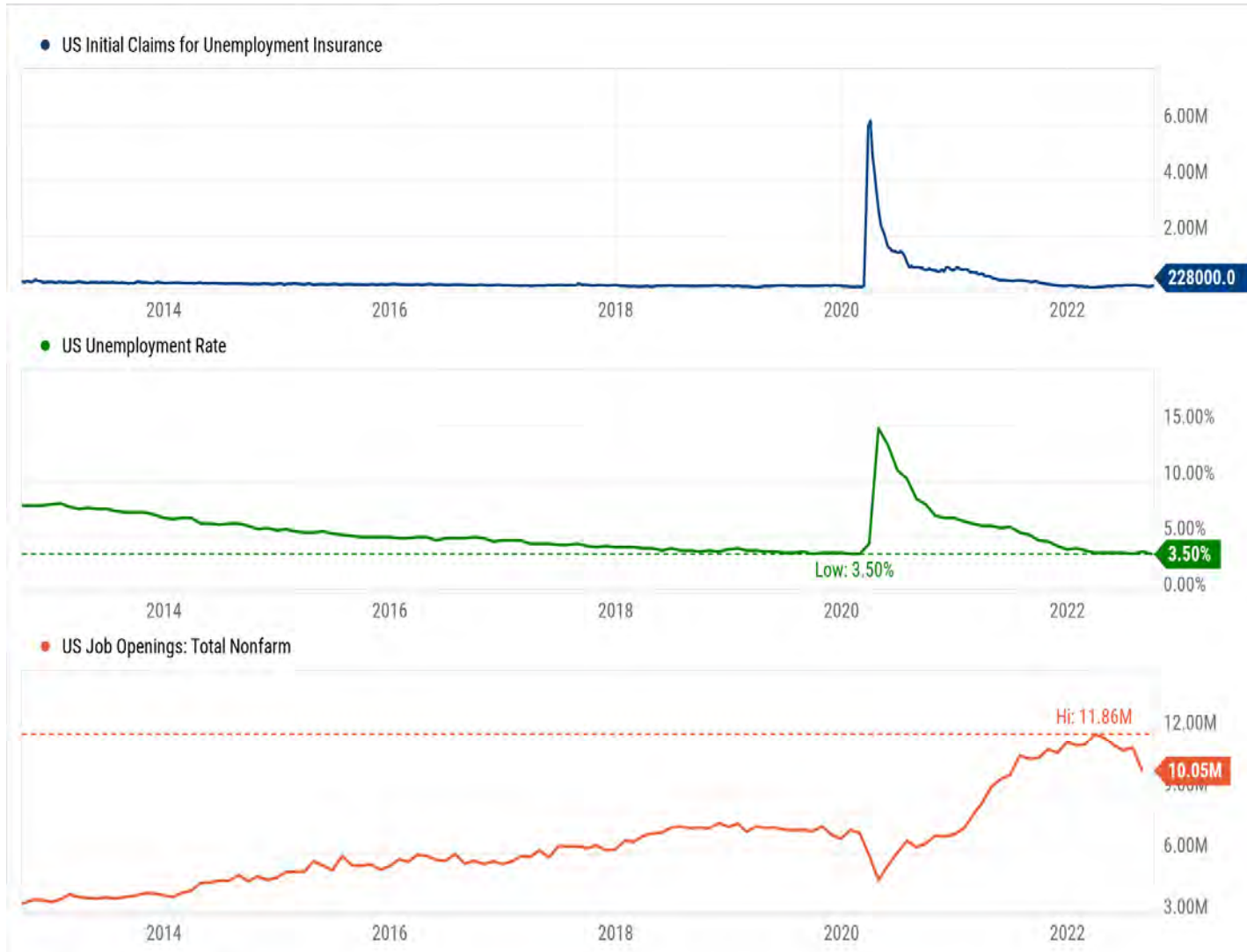
U.S. Economic Growth Forecast Downgraded

- U.S. economic growth contracted for the second consecutive quarter in Q2 2022, as a sharp slowdown in inventory accumulation offset strong consumer spending.
- While two consecutive quarters of negative GDP growth is often considered a recession, an official determination is made by a committee within the National Bureau of Economic Research, which evaluates several factors beyond changes in GDP.
- Economic growth is projected to have turned positive in Q3 2022, as the Atlanta Fed GDPNow model is forecasting growth of 2.8% as of October 14th.
- In the most recent projections, the Federal Reserve lowered U.S. economic growth forecasts through 2024 and now foresees GDP growth of 0.2% in 2022, 1.2% in 2023, 1.7% in 2024, and 1.8% over the long-term.



Sources: U.S. Bureau of Economic Analysis, Federal Reserve, Atlanta Federal Reserve

U.S. Economy



Date Range: 09/29/2012 - 10/08/2022

Sources: DoL, BLS

Oct 14 2022, 4:19PM EDT. Powered by **YCHARTS**

Higher Interest Rates Have Not Derailed Employment

- To date, the Federal Reserve's efforts to reduce inflation by raising interest rates have not meaningfully impacted employment.
- Employers added 263,000 jobs in September, slightly below estimates of 275,000 and the lowest monthly increase since April 2021.
- The unemployment rate declined to 3.5%, matching the lowest level in over 50 years. The drop was driven by declines in the labor force participation rate and the overall size of the labor force.
- Job openings in the U.S. fell by 10% in August, the biggest one month decline since April 2020. Despite the decline, there remain approximately 1.7 job openings for every available worker.

U.S. Economy



Inflation Remains Persistent

- Year-over-year CPI was 8.2% in September and has now exceeded 5% for 16 consecutive months. On a month-over-month basis, CPI was up 0.4% after rising only 0.1% in August.
- Higher food prices offset declines in energy prices. Excluding food and energy, core inflation increased by 0.6% for the month and 6.6% vs. a year ago, the highest level since 1982.
- Personal Consumption Expenditures ("PCE"), the Fed's preferred measure, increased by 4.9% over the last year through August, down from the peak year-over-year growth of 5.3% in February, but up from July's increase of 4.7%.
- Despite persistently high inflation numbers, future inflation expectations, as measured by the 5- and 10-year breakeven inflation rate, are well off recent highs.



U.S. Equity Market

Sector	Index	3Q22	YTD	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
Large Cap	S&P 500	-4.9%	-23.9%	28.7%	18.4%	31.5%	-4.4%	21.8%	-15.5%	8.2%	9.2%	11.7%
	Russell 1000	-4.6%	-24.6%	26.5%	21.0%	31.4%	-4.8%	21.7%	-17.2%	7.9%	9.0%	11.6%
	Russell 1000 Value	-5.6%	-17.8%	25.2%	2.8%	26.5%	-8.3%	13.7%	-11.4%	4.4%	5.3%	9.2%
	Russell 1000 Growth	-3.6%	-30.7%	27.6%	38.5%	36.4%	-1.5%	30.2%	-22.6%	10.7%	12.2%	13.7%
Mid Cap	Russell Mid-Cap	-3.4%	-24.3%	22.6%	17.1%	30.5%	-9.1%	18.5%	-19.4%	5.2%	6.5%	10.3%
	Russell Mid-Cap Value	-4.9%	-20.4%	28.3%	5.0%	27.1%	-12.3%	13.3%	-13.6%	4.5%	4.8%	9.4%
	Russell Mid-Cap Growth	-0.7%	-31.5%	12.7%	35.6%	35.5%	-4.8%	25.3%	-29.5%	4.3%	7.6%	10.9%
Small Cap	Russell 2000	-2.2%	-25.1%	14.8%	20.0%	25.5%	-11.0%	14.6%	-23.5%	4.3%	3.6%	8.6%
	Russell 2000 Value	-4.6%	-21.1%	28.3%	4.6%	22.4%	-12.9%	7.8%	-17.7%	4.7%	2.9%	7.9%
	Russell 2000 Growth	0.2%	-29.3%	2.8%	34.6%	28.5%	-9.3%	22.2%	-29.3%	2.9%	3.6%	8.8%
Total Market	Wilshire 5000	-4.4%	-24.4%	26.7%	20.8%	31.0%	-5.3%	21.0%	-17.2%	8.1%	8.8%	11.5%
	Russell 3000	-4.5%	-24.6%	25.7%	20.9%	31.0%	-5.2%	21.1%	-17.6%	7.7%	8.6%	11.4%

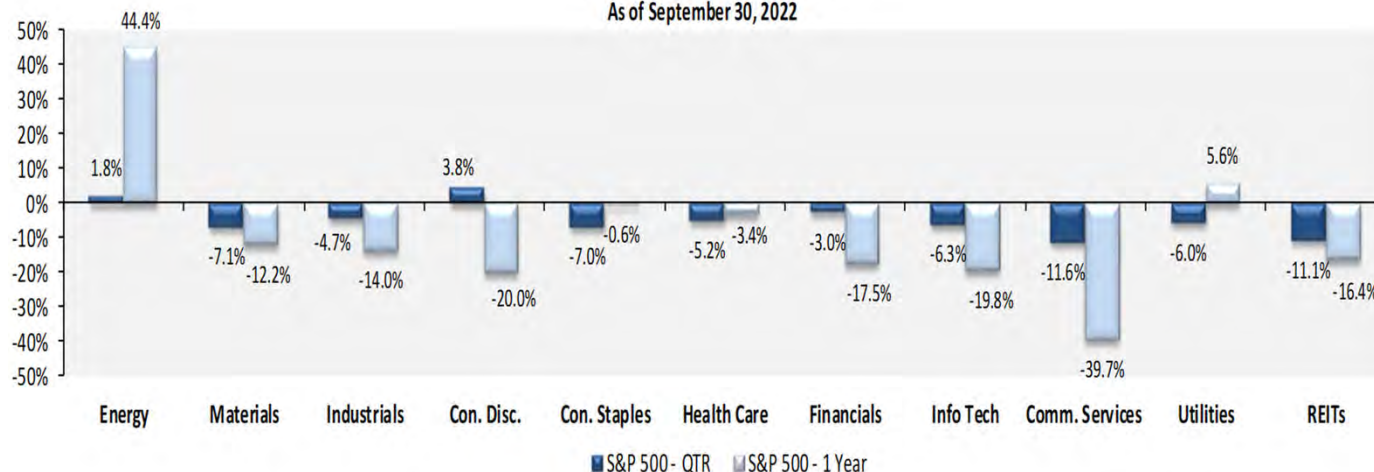


- The S&P 500 (U.S. large cap equities) has now declined for three consecutive quarters, the longest stretch of negative returns since the prolonged bear market that accompanied the global financial crisis (2008/09).
- After U.S. equity prices moved downward through the first six months of 2022, the third quarter saw an ultimately short-lived rally that ran through July and into mid-August.
- In July, equity investors started to focus on the possibility of interest rate cuts from the U.S. Federal Reserve ("Fed") in 2023, given concerns about slowing growth. However, such hopes were dashed at August's Jackson Hole summit of central bankers, where the Fed reaffirmed its commitment to fighting inflation. This sent stocks lower in the second half of the quarter.

U.S. Equity Market

S&P 500 Sector Performance

As of September 30, 2022



U.S. Equity Valuations Have Become More Compelling... If Forward Earnings Are Valid

- The forward P/E of the S&P 500 declined from 21.2x at the start of 2022 to 15.2x at the end of Q3.
- As stock prices declined without sell-side analysts meaningfully lowering full-year guidance, the forward P/E of the S&P 500 is now well below its 25-year average.

S&P 500 Index: Forward P/E ratio



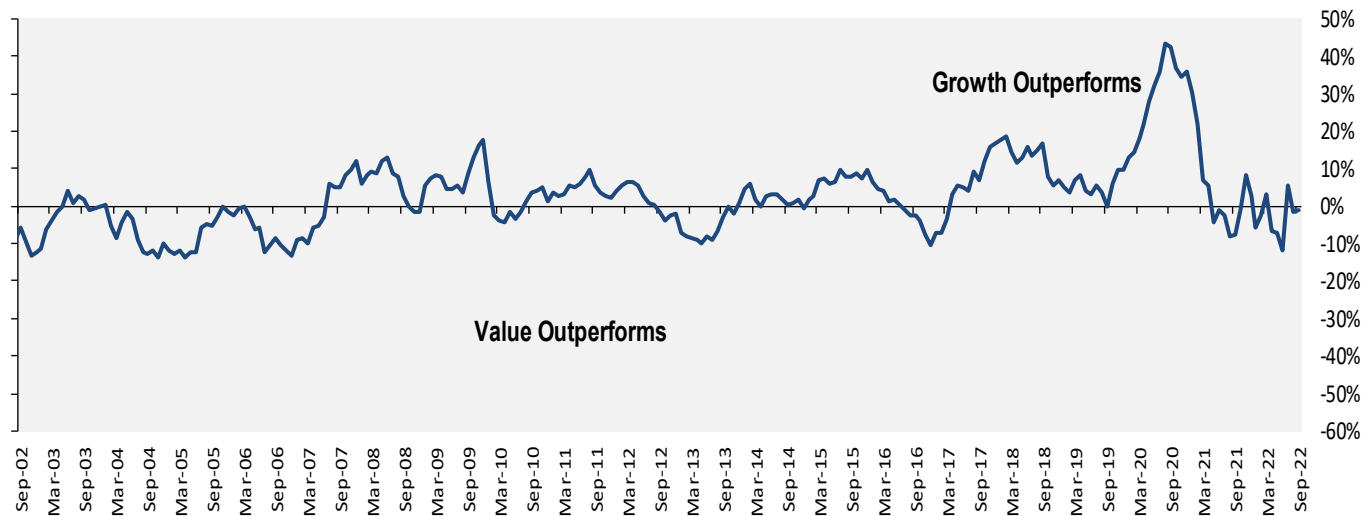
Source: J.P. Morgan Asset Management

Investor & Main Street Confidence At Odds With Wall Street

- The communication services sector, including both telecoms and media stocks, was among the weakest sectors over the quarter, along with real estate. The consumer discretionary and energy sectors were the most resilient. Nine of 11 sectors were lower in the quarter, while energy remains the only sector positive YTD.
- Even though higher-yielding defensive groups are outperforming on a YTD basis, September was this year's worst-performing month for both utilities (-11.7%) and staples (-8%), due in part to rising rates, which now offer a more competitive yield over any time since the GFC.
- Collectively, sell-side analysts remain confident that U.S. profitability will continue to be resilient despite inflationary pressures on margins, as well as a potential economic slowdown. Looking ahead, analysts expect earnings growth of 4.0% for Q4 2022, and 7.4% for CY 2022. For CY 2023, analysts are projecting earnings growth of 7.9% and revenue growth of 4.4%.

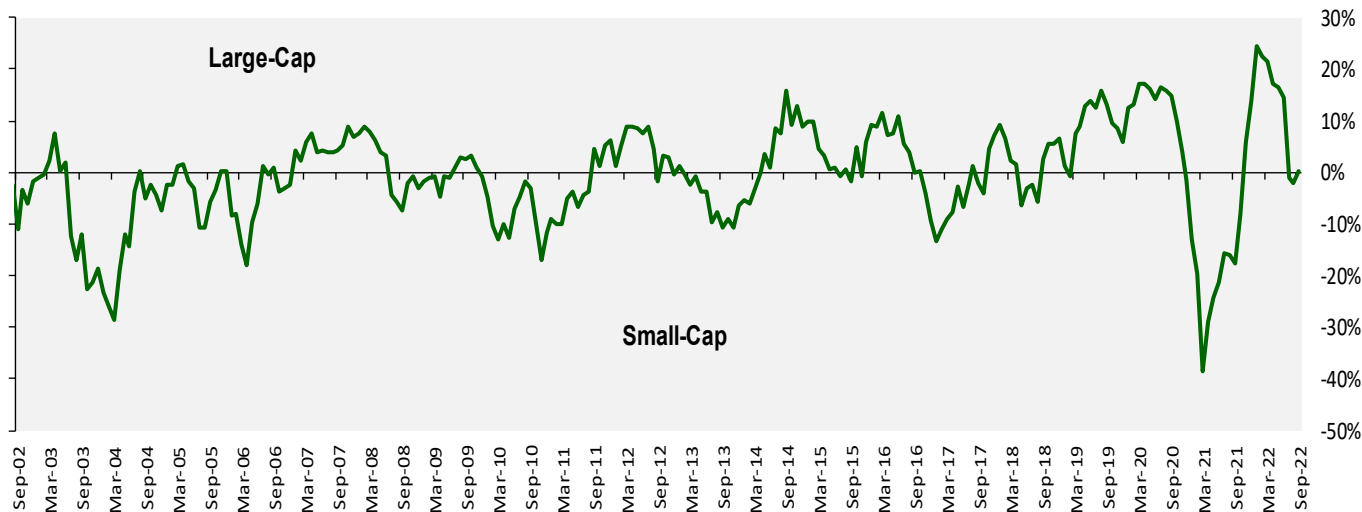
U.S. Equity Market

Russell 1000 Growth vs. Russell 1000 Value
Rolling One-Year Returns



- Both large and small cap growth stocks outperformed value stocks in Q3 2022; however, on a YTD basis, value has outperformed by the widest margin since the early 2000s. The sharp rise in interest rates has a greater negative impact on longer-duration growth stocks whose earnings power is further in the future.

S&P 500 vs. Russell 2000
Rolling One-Year Returns

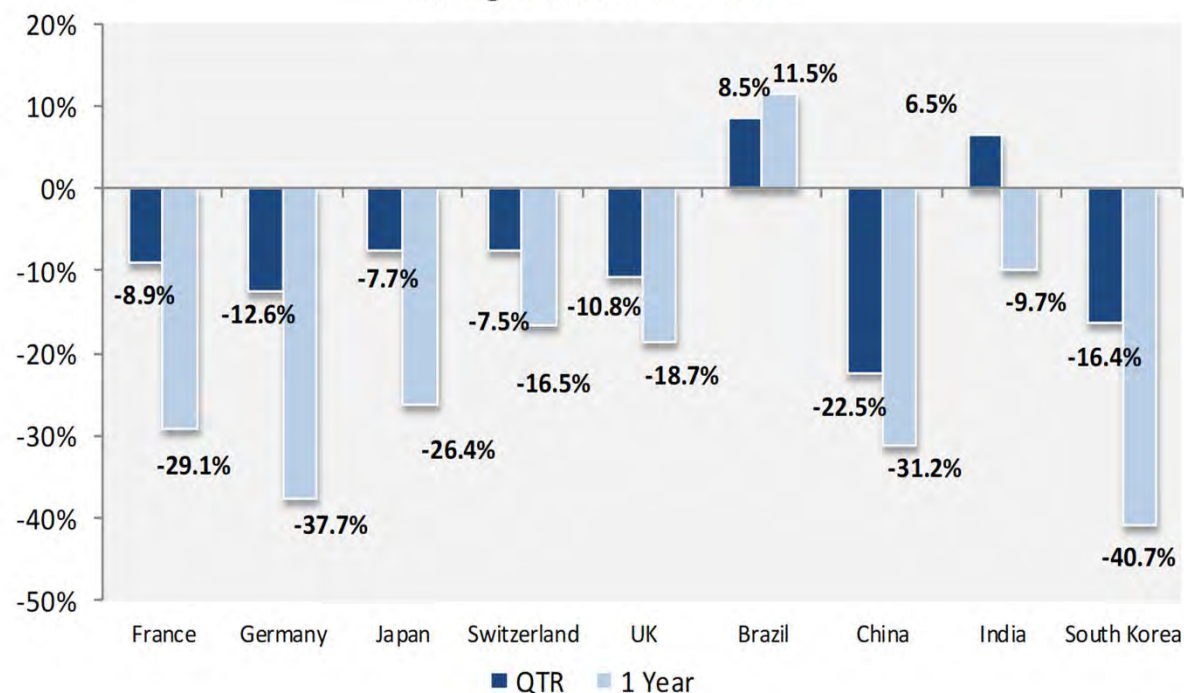


- Negative Q3 2022 performance contributed to near-record losses for the small and large cap indexes for the first nine months of a calendar year, as the Russell 2000 was down 25.1% and the S&P 500 fell 23.9%.
- The Russell 2000 Value Index (-4.6%) underperformed the Russell 2000 Growth Index (0.2%) in Q3 2022, reversing a trend where the small cap value had beaten small cap growth for seven consecutive quarters.

International Equity Market

Sector	Index	3Q22	YTD	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
Global	MSCI AC World Index (net)	-6.8%	-25.6%	18.5%	16.3%	26.6%	-9.4%	24.0%	-20.7%	3.7%	4.4%	7.3%
	MSCI World Small Cap (net)	-5.3%	-26.6%	15.8%	16.0%	26.2%	-13.9%	22.7%	-25.0%	2.6%	2.4%	7.5%
	MSCI World ex US (net)	-9.2%	-26.2%	12.6%	7.6%	22.5%	-14.1%	24.2%	-23.9%	-1.2%	-0.4%	3.6%
Developed ex US	MSCI World ex US Small Cap (net)	-9.5%	-31.1%	11.1%	12.8%	25.4%	-18.1%	31.0%	-30.8%	-1.3%	-1.2%	4.8%
	MSCI EAFE (net)	-9.4%	-27.1%	11.3%	7.8%	22.0%	-13.8%	25.0%	-25.1%	-1.8%	-0.8%	3.7%
	MSCI EAFE Value (net)	-10.2%	-21.1%	10.9%	-2.6%	16.1%	-14.8%	21.4%	-20.2%	-2.8%	-2.7%	2.4%
	MSCI EAFE Growth (net)	-8.5%	-33.0%	11.3%	18.3%	27.9%	-12.8%	28.9%	-30.3%	-1.5%	0.7%	4.7%
Emerging Markets	MSCI EAFE Small Cap (net)	-9.8%	-32.1%	10.1%	12.3%	25.0%	-17.9%	33.0%	-32.1%	-2.2%	-1.8%	5.3%
	MSCI Emerging Markets (net)	-11.6%	-27.2%	-2.5%	18.3%	18.4%	-14.6%	37.3%	-28.1%	-2.1%	-1.8%	1.0%

Foreign Markets Returns



- European stocks experienced further sharp declines in Q3 2022 amid the ongoing energy crisis, rising inflation, and consequent fears about the outlook for economic growth.
- Within the UK, a key event in the quarter was the election of Liz Truss as the fleeting Conservative Party leader and prime minister. The new government announced a fiscal package in September, which was poorly received by markets and sent the British pound to an all-time low versus the U.S. dollar. Consequently, policymakers in Britain were forced to implement new purchases of longer-duration UK bonds, whose recent price declines were negatively impacting local pension funds.
- China also underperformed by a significant margin. Not only has a slump in the property market weighed on investor sentiment, but the burden of Covid-related lockdowns in various major cities has also harmed domestic demand.

International Equity Market

ICE US Dollar Index Level



Date Range: 09/28/2012 - 09/30/2022

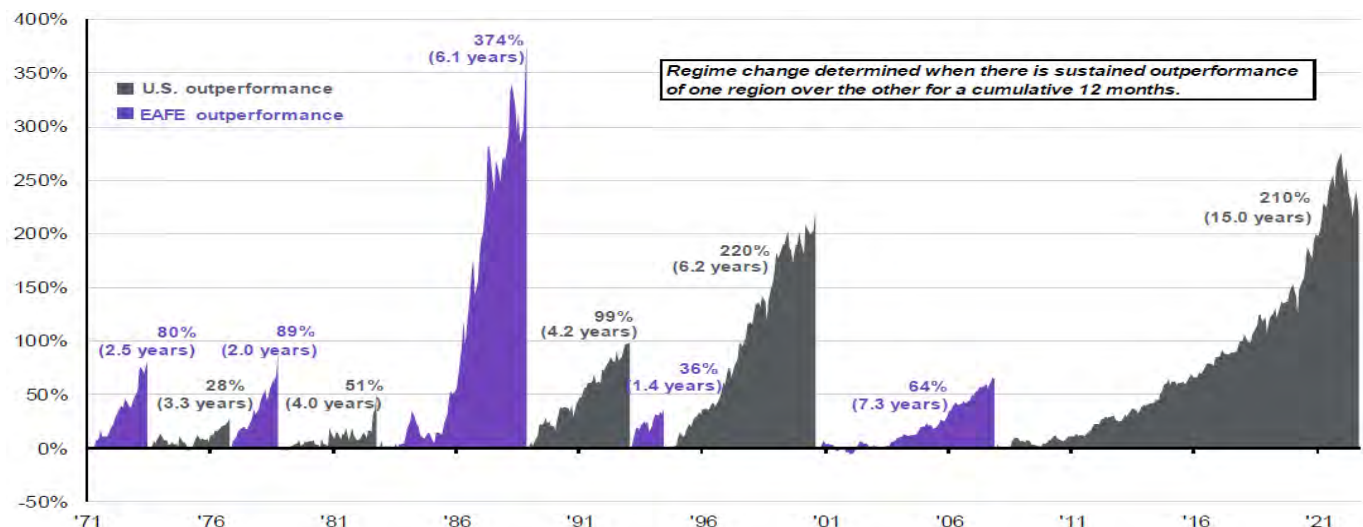
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King Dollar Reins Supreme

- The U.S. Dollar Index (DXY) has gained 17.2% YTD, marking its best annual gain on record (1967). Accordingly, the Japanese Yen has declined a record 25.8%, while the Euro and British pound have declined 13.4% and 17.5%, respectively. The sharp rise in the global reserve currency increases debt-servicing costs and trade for foreigners and is a significant headwind for global economic activity.
- In September, the Japanese Ministry of Finance directly intervened in currency markets. This was the first such direct intervention in support of the Japanese Yen since 1998.

Unprecedented Period of U.S. Equity Market Outperformance Continues

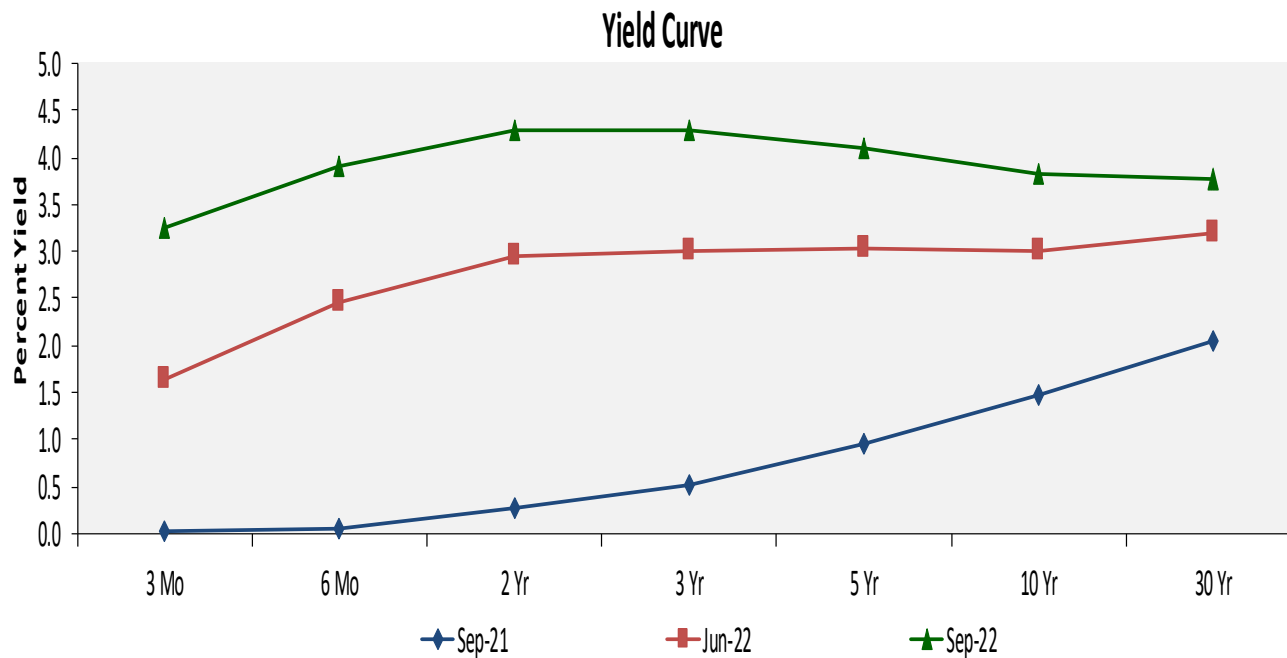
- U.S. equity markets outperformed developed non-U.S. markets by 210% cumulatively over the last 15 years.
- Notably, the current cycle represents the longest period of outperformance, as well as the greatest degree of U.S. outperformance, over the last 50 years. However, the magnitude is less than the period of non-U.S. outperformance in the late 1980s.



Source: J.P. Morgan Asset Management

Bond Market

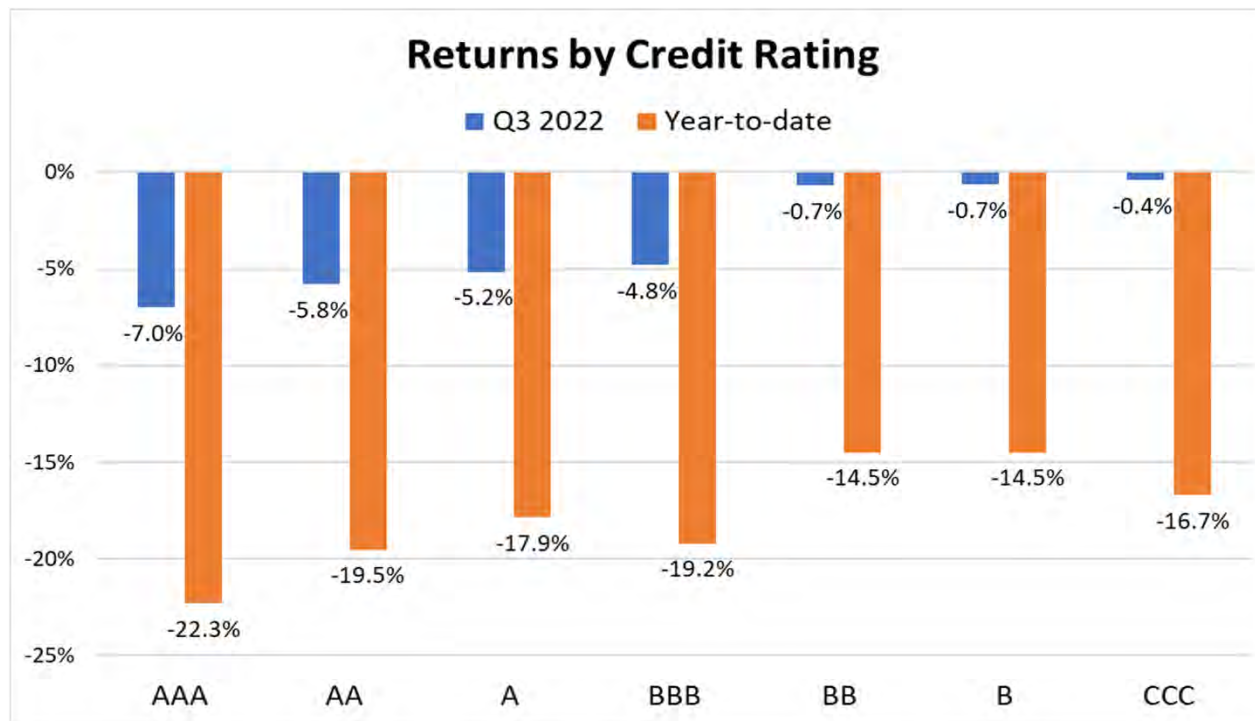
Index	Duration (years)	Yield	3Q22	YTD	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
Bloomberg Aggregate	6.4	4.75%	-4.8%	-14.6%	-1.5%	7.5%	8.7%	0.0%	3.5%	-14.6%	-3.3%	-0.3%	0.9%
Bloomberg Govt/Credit	6.5	4.71%	-4.6%	-15.1%	-1.7%	8.9%	9.7%	-0.4%	4.0%	-14.9%	-3.1%	-0.1%	1.0%
Bloomberg Int Agg	4.8	4.69%	-3.8%	-11.0%	-1.3%	5.6%	6.7%	0.9%	2.3%	-11.5%	-2.3%	-0.0%	0.8%
Bloomberg Int Govt/Credit	4.0	4.61%	-3.1%	-9.6%	-1.4%	6.4%	6.8%	0.9%	2.1%	-10.1%	-1.6%	0.4%	1.0%
Bloomberg U.S. Corporate	7.4	5.69%	-5.1%	-18.7%	-1.0%	9.9%	14.5%	-2.5%	6.4%	-18.5%	-3.7%	-0.0%	1.7%
Bloomberg HY Ba/B 2% IC	4.7	8.81%	-0.7%	-14.5%	4.7%	7.7%	15.2%	-1.9%	6.9%	-13.8%	-0.4%	1.8%	3.9%
ICE BofA 1-3 Yrs BB US Cash Pay HY	2.0	8.33%	0.7%	-5.6%	3.2%	5.4%	8.7%	1.4%	3.6%	-5.1%	1.4%	2.5%	3.5%
Bloomberg Mortgage	6.3	4.83%	-5.3%	-13.7%	-1.0%	3.9%	6.4%	1.0%	2.5%	-14.0%	-3.7%	-0.9%	0.5%
Bloomberg Treasury	6.2	4.13%	-4.3%	-13.1%	-2.3%	8.0%	6.9%	0.9%	2.3%	-12.9%	-3.1%	-0.2%	0.5%
Bloomberg US TIPS	6.9	4.30%	-5.1%	-13.6%	6.0%	11.0%	8.4%	-1.3%	3.0%	-11.6%	0.8%	2.0%	1.0%
BofA ML 91 day T-Bills	0.2	3.27%	0.5%	0.6%	0.0%	0.7%	2.3%	1.9%	0.9%	0.6%	0.6%	1.1%	0.7%



- The treasury curve continued to flatten in Q3 2022 as the short end pushed higher as the Federal Reserve continued to raise short-term rates faster than previously anticipated.
- Most of the curve remains flat at ~4% with some inversion beyond the 3-year. This reflects some level of uncertainty of how high the Federal Reserve can and will raise rates and often implies an increased probability of a recession in upcoming years.
- U.S. Bond markets experienced losses again in Q3 2022. Longer duration sectors underperformed due to the sharp rise in interest rates. Despite a risk-off sentiment in equity markets, lower quality credit outperformed due to shorter duration.

Bond Market

Returns by Credit Rating



Nowhere to Hide In Corporate Bonds

- High yield bonds (BB & lower) outperformed investment grade bonds (BBB & Higher) in Q3 2022, a reversal of what was experienced in Q2.
- The underperformance of investment grade bonds relative to high yield was largely driven by the sharp move higher in interest rates, causing longer duration bonds to underperform shorter duration bonds.
- Investment grade bonds have a longer duration because investors are willing to lend to higher quality companies for longer periods of time. Many companies have taken advantage of this by locking in historically low interest rates by issuing bonds with long maturities. These long maturity bonds are more sensitive to interest rate changes.
- Despite the risk-off environment across all asset classes in 2022, high yield bonds are outperforming investment grade bonds through the first three quarters of the year, led by BB and B rated credit.

Bond Ratings

	Standard & Poor's	Moody's
Investment Grade	AAA	Aaa
	AA	Aa
	A	A
	BBB	Baa
High Quality High Yield	BB	Ba
	B	B
Low Quality High Yield	CCC	Caa
	CC	Ca
	C	C

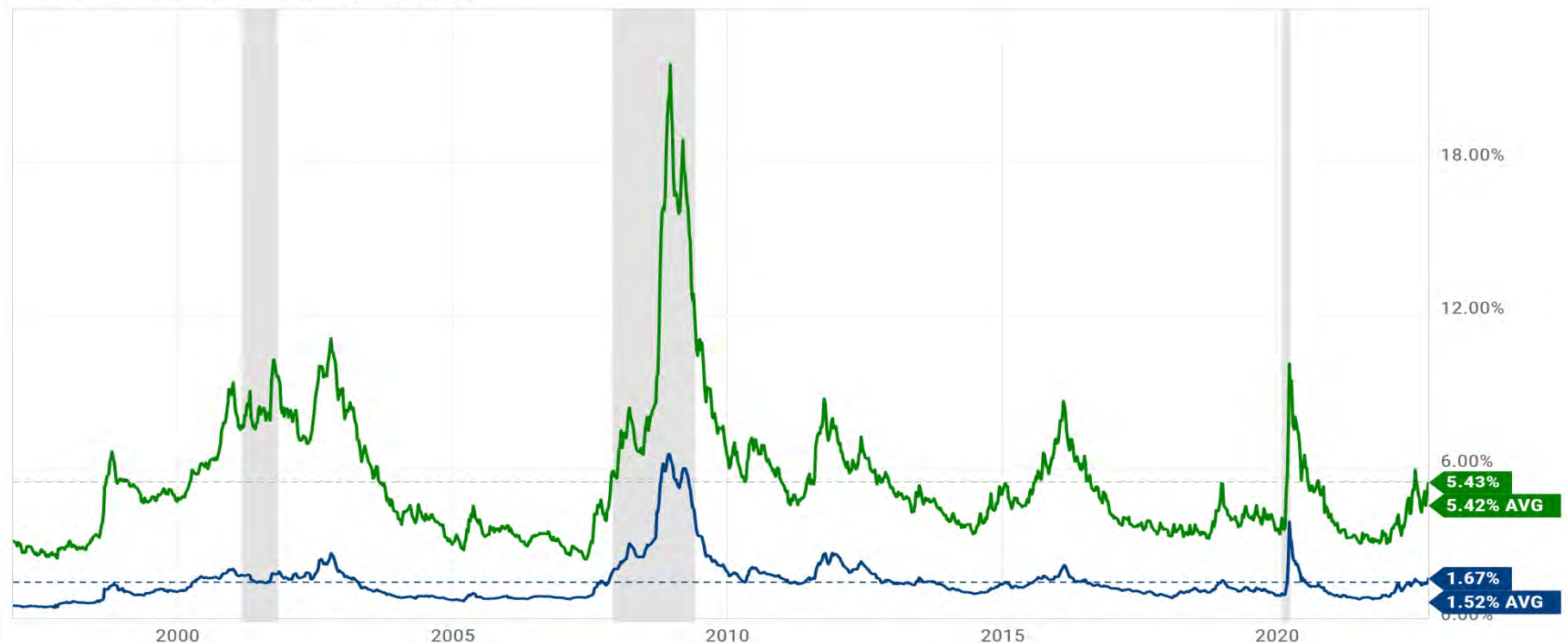
Bond Market

Credit Spreads Little Changed for the Quarter

- Credit spreads were mostly flat in Q3, with both investment grade (IG) and high yield (HY) spreads sitting slightly above their long-term averages.
- Dispersion in bond market performance was largely driven by differences in duration.

Corporate Credit Spreads

- US Corporate Master Option-Adjusted Spread
- US High Yield Master II Option-Adjusted Spread



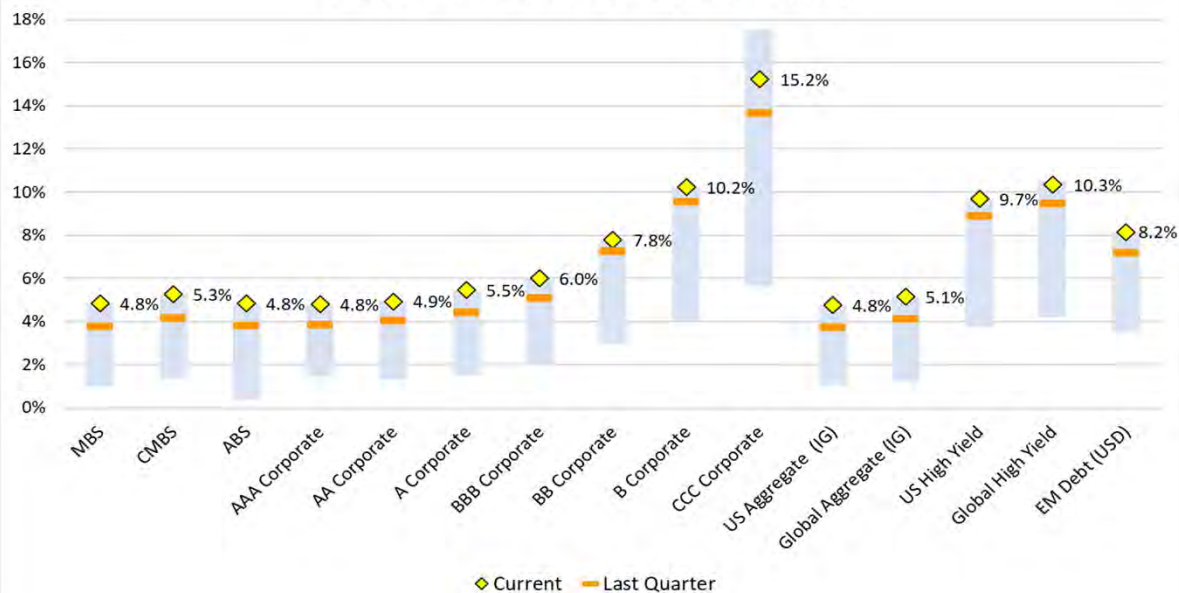
Date Range: 12/31/1996 - 09/30/2022

Source: Bank of America Merrill Lynch

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Bond Market

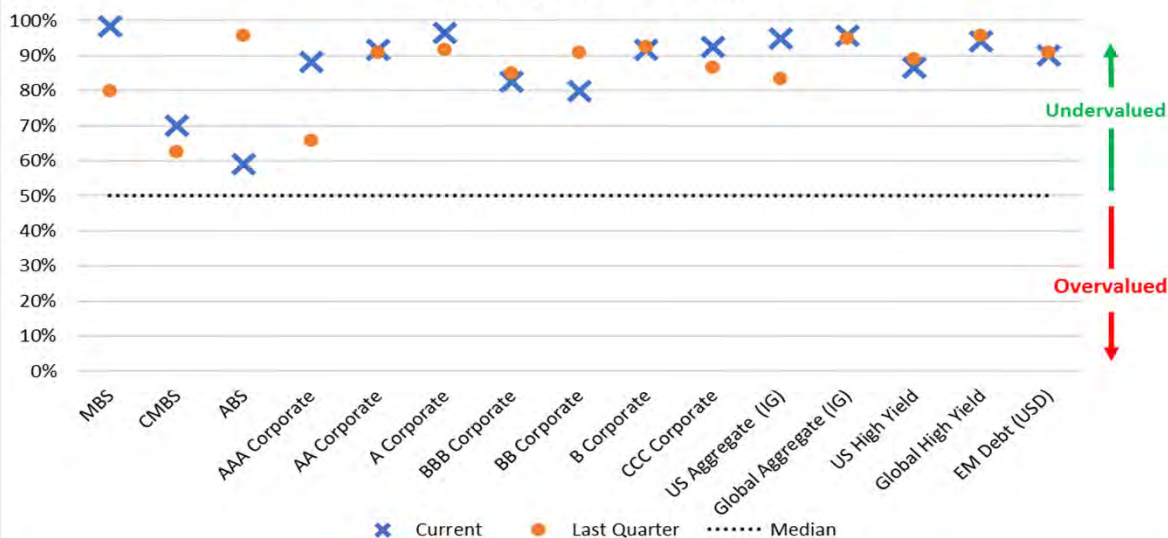
Yields Relative to 10-Year Historic Range



Yields

- Yields increased across bond sectors as interest rates moved higher in 3Q 2022.
- Yields are at their highest levels in 10 years across most sectors.
- Investment grade bonds are now yielding ~5% with BBB corporates yielding 6%.
- BB corporates (HY) are yielding 7.8% while the broad U.S. high yield market is yielding 9.7% due to B & CCC corporates yielding more.

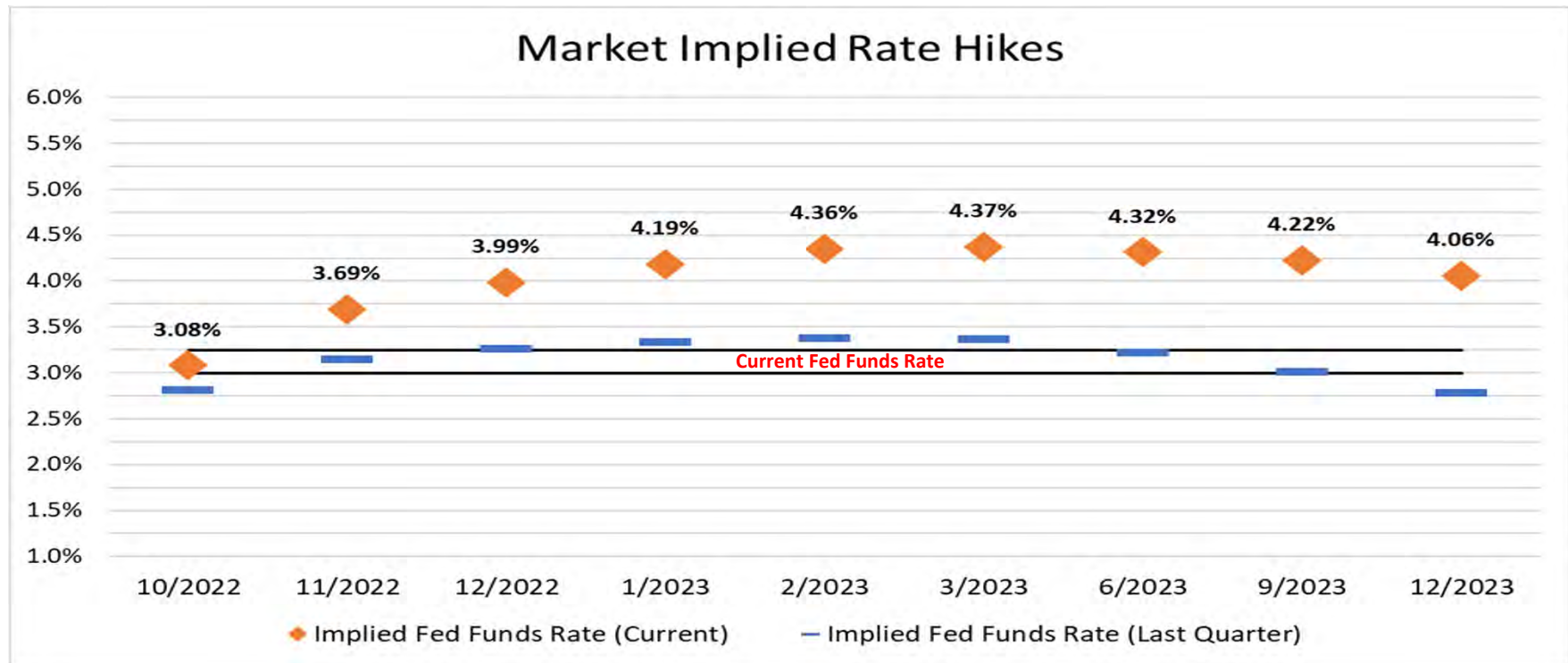
Credit Spread Percentile



Credit Spreads/Valuations

- While credit spreads for indexes were mostly flat in Q3, there was some dispersion among underlying sectors.
- BB-rated credit spreads moved tighter in Q3 while CCC-rated credit moved wider. This indicates a shift toward higher quality positioning.
- AAA-rated credit saw a sharp move wider in Q3, potentially indicating that the highest quality businesses may not be as resilient to inflation as previously perceived.
- MBS spreads are now at the 98th percentile of observations seen over the last decade.

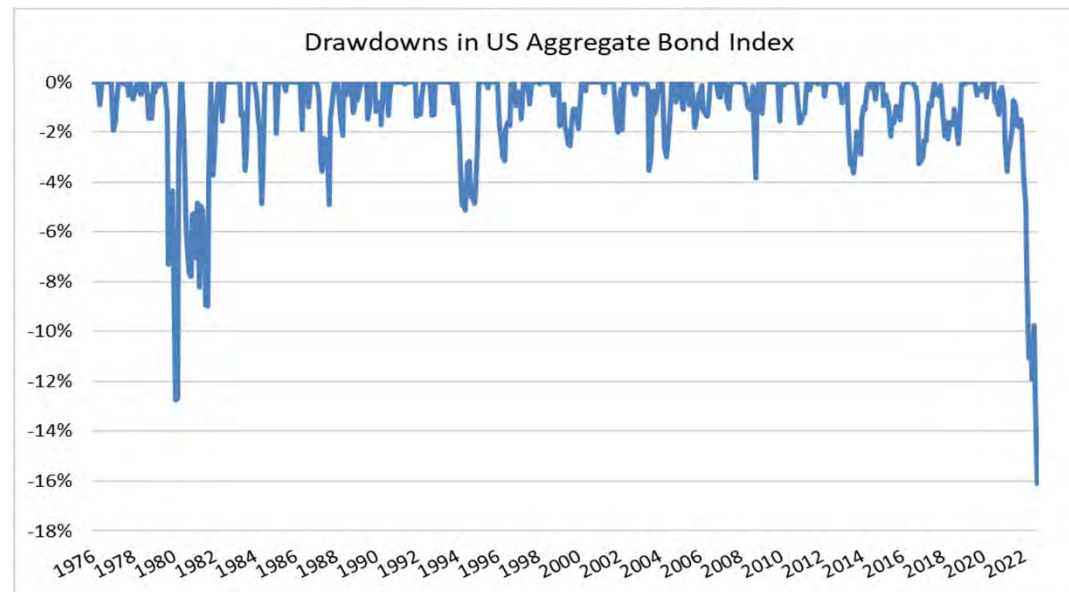
Bond Market



As of 10/03/22

- The FOMC raised interest rates by 75 bps in late July and raised rates again by 75 bps in September. The current target federal funds rate is now 3.00-3.25%, up from 1.50-1.75% in Q2.
- Market expectations for interest rate hikes by the FOMC continued to rise in Q3 2022 following two separate 75 bps rate hikes. As of October 3rd, the market is now expecting the FOMC to hike rates by 50 bps in November with the potential for another 25-50 bps hike in December.
- The market was previously expecting the Fed to stop raising rates by the end of 2022. Following the two 75 bps hikes in Q3, the market is now expecting additional rate hikes in Q1 2023.
- Market Implied Fed Funds Rate for Year-End 2022 = 3.75-4.25%
- The market continues to anticipate a reduction in the trajectory of future rate hikes in 2023 with the potential for a rate cut or pause by year-end 2023. The longer-term futures contracts (September & December 2023) are less active and thus less predictive of market expectations.

Bond Market

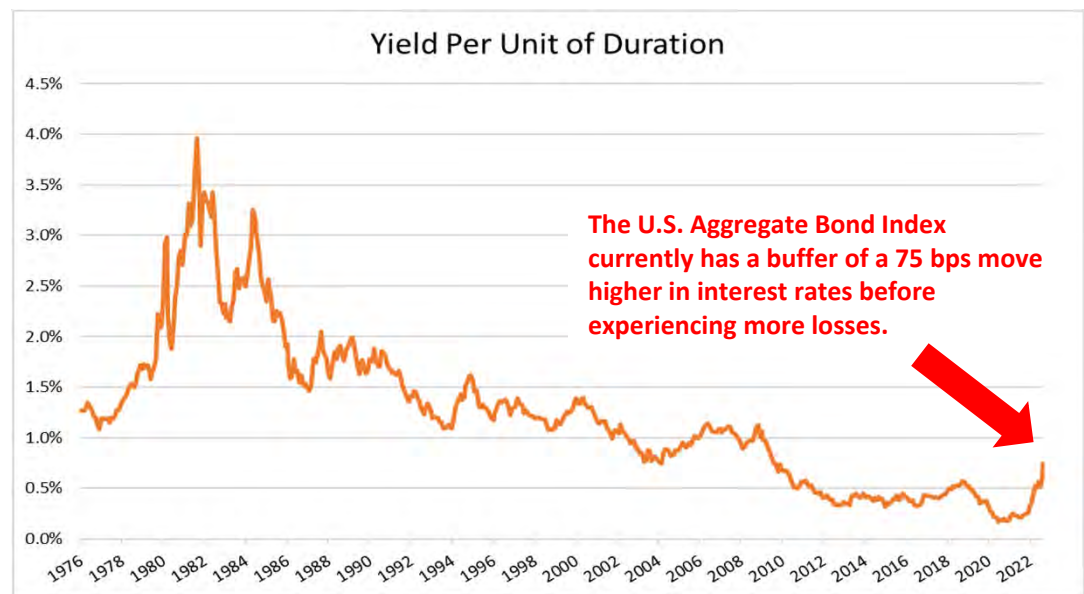


Worst Drawdown in US Aggregate Index History

- The U.S. Aggregate Bond Index is the bellwether bond index for U.S. Investment Grade Bonds.
- The index is down 16% from its all-time high in 2020, the largest drawdown in the index's 46-year history.
- While the current drawdown dwarfs any drawdown experienced over the last 25 years, the index experienced a 12.7% drawdown in 1980 in an environment that closely resembles today's macro environment.
- The 1980 drawdown coincided with the Federal Reserve raising interest rates to combat runaway inflation.
- The index rebounded to new highs in 1980, 1981, and 1982.

A Duration Driven Sell-Off

- Most of the underperformance in investment grade bonds is being driven by duration.
- With record low interest rates, yields on investment grade bonds provided investors with little cushion against a rise in interest rates.
- For most of the past decade, a 50-bps increase in interest rates would have wiped out an entire year's worth of interest payments. This number was as low as 20-bps in 2021.
- This has resulted in major losses for investment grade bonds as the Federal Reserve has raised the Fed Funds rate by 3% in 2022. A similar event occurred in 1980 when the Federal Reserve raised rates from 15% to 20%.



Bond Market

Interest Rate Sensitivity

12 Month Holding Period - Annualized Returns as of 9/30/2022

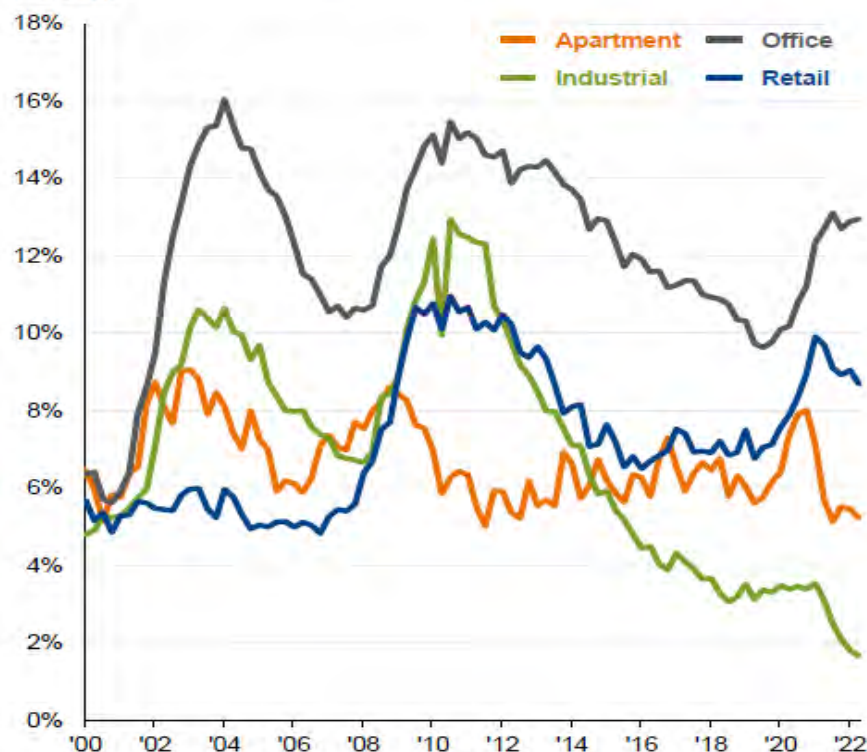
Yield Change	10 Year Treasury	Bloomberg Aggregate	Bloomberg Int Govt/Credit	ICE BofA Gov/Corp Master	ICE BofA 1-3 yr Gov/Corp	Defensive ICE BofA US HY BB/B ND	Short Duration ICE BofA US HY BB/B 1-3 yr
(bps)							
-300	29.15	23.98	16.55	24.08	10.13	22.06	14.30
-250	24.93	20.78	14.56	20.85	9.20	19.79	13.31
-200	20.70	17.57	12.57	17.62	8.27	17.51	12.31
-150	16.48	14.37	10.58	14.39	7.34	15.24	11.32
-100	12.25	11.16	8.59	11.16	6.41	12.96	10.32
-75	10.14	9.56	7.60	9.55	5.95	11.82	9.82
-50	8.03	7.96	6.60	7.93	5.48	10.69	9.33
-25	5.91	6.35	5.61	6.32	5.02	9.55	8.83
0	3.80	4.75	4.61	4.70	4.55	8.41	8.33
25	1.69	3.15	3.62	3.09	4.09	7.27	7.83
50	-0.43	1.55	2.62	1.47	3.62	6.14	7.34
75	-2.54	-0.06	1.63	-0.15	3.16	5.00	6.84
100	-4.65	-1.66	0.63	-1.76	2.69	3.86	6.34
150	-8.88	-4.87	-1.36	-4.99	1.76	1.59	5.35
200	-13.10	-8.07	-3.35	-8.22	0.83	-0.69	4.35
250	-17.33	-11.28	-5.34	-11.45	-0.10	-2.97	3.36
300	-21.55	-14.48	-7.33	-14.68	-1.03	-5.24	2.36
Duration	8.45	6.41	3.98	6.46	1.86	4.55	1.99

FOR ILLUSTRATIVE PURPOSES ONLY: For each index the current yield to worst as of 9/30/2022 was used as the base case annualized return. The annualized return sensitivity to a uniform increase or decrease in the yield curve was calculated by taking the index's Option-Adjusted Duration as of 9/30/2022 multiplied by the percentage point change in the yield curve (basis point change divided by 100) and then appropriately adding or subtracting this implied percentage change in the value of the index (due to the shift in the yield curve) to the base case annualized return. This is a rough approximation of the annual return sensitivity to parallel shifts in the yield curve.

Real Estate Market

Sector	Index	3Q22	YTD	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
US Private	NCREIF ODCE Equal Weighted (net)	0.8%	13.3%	21.9%	0.8%	5.2%	7.3%	6.9%	21.7%	12.1%	9.9%	10.3%
	NCREIF ODCE EW Income Index	0.8%	2.7%	4.1%	3.6%	3.5%	3.5%	3.6%	3.7%	3.8%	3.7%	3.8%
	NCREIF ODCE EW Appreciation Index	0.1%	11.1%	18.3%	-2.4%	1.7%	3.7%	3.2%	18.6%	8.8%	6.4%	6.4%

U.S. vacancy rates by property type
Percent

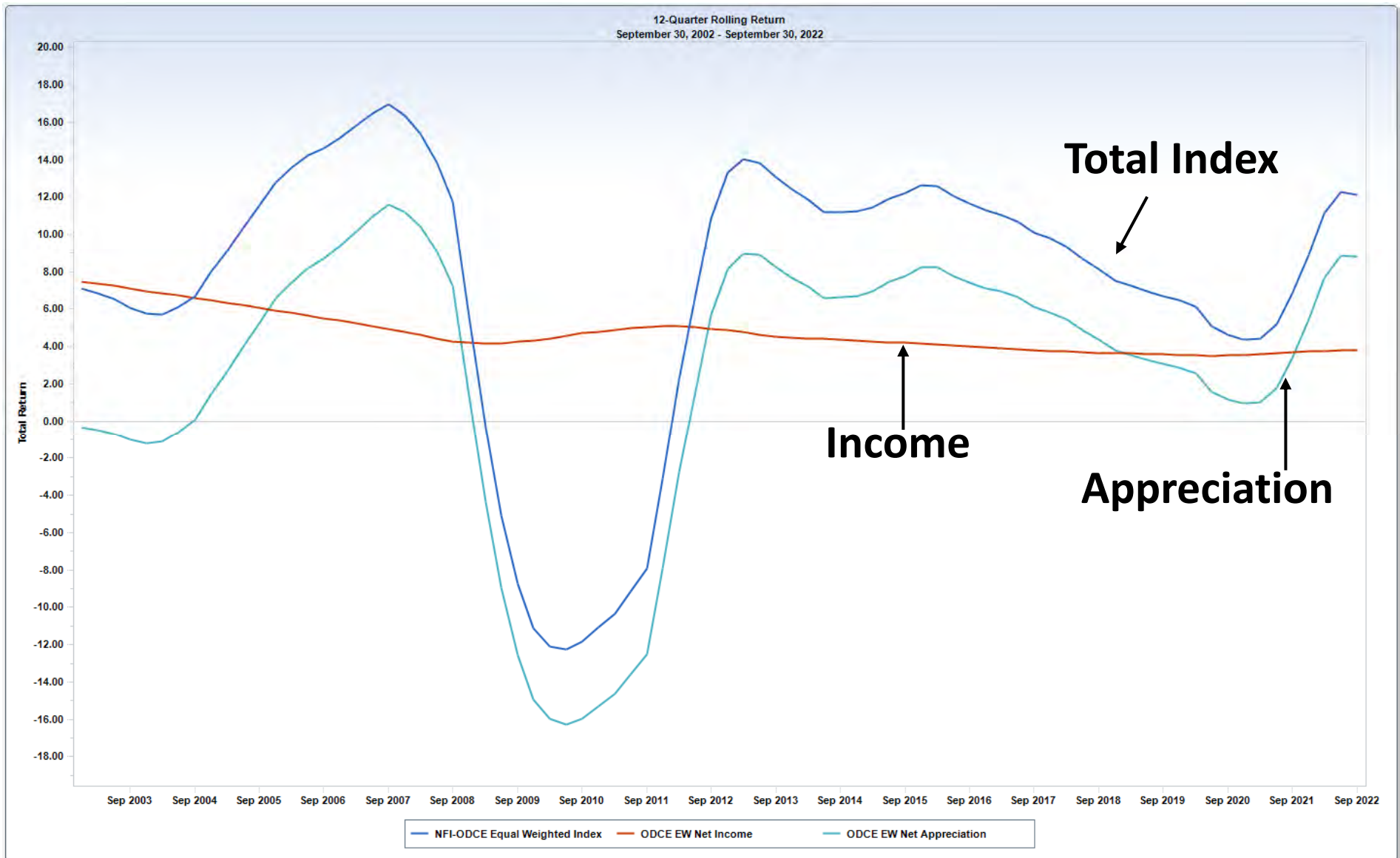


Source: J.P. Morgan Asset Management, Q3 2022.

- Private real estate again acted as a ballast in client portfolios in Q3 2022, providing positive returns while global equity and fixed income markets broadly declined. However, the outsized returns of the past several quarters abated in Q3, as the NCREIF ODCE Equal Weighted Index (net) was up just 0.79% in the quarter.
- A confluence of factors helped slow the rate of appreciation in real estate assets, including rising interest rates, inflation and a murky economic outlook, all of which have caused a substantial slowdown in transaction volumes. According to real estate data provider Realfin, the number of deals involving an institutional or private fund investor declined nearly 53% year-over-year in Q3 2022.
- High degrees of uncertainty still surround the office sector; varying lease terms and expirations mean the market still has not realized the full effects of post-pandemic occupancy and remote work.

Real Estate Market

- Unlike the previous two quarters in which appreciation was the primary driver of real estate returns, the ODCE return in Q3 primarily consisted of the income component. Appreciation was slightly positive (+14 bps) for the equal-weighted version of the ODCE, while coming in negative during the quarter for the cap-weighted ODCE index (-29 bps).



Hedge Fund Market

Strategy	Index	3Q22	YTD	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
Fund of Funds	HFRI FOF Composite	-0.7%	-7.2%	6.2%	10.9%	8.4%	-4.0%	7.8%	-6.8%	4.0%	3.0%	3.4%
Equity Long-Short	HFRI Equity Hedge	-2.7%	-14.1%	11.7%	17.9%	13.7%	-7.1%	13.3%	-13.6%	6.1%	4.3%	5.3%
Event Driven	HFRI Event Driven	-0.7%	-8.0%	12.4%	9.3%	7.5%	-2.1%	7.6%	-7.0%	5.1%	3.9%	4.8%
Global Macro	HFRI Macro Index	1.7%	10.3%	7.7%	5.4%	6.5%	-4.1%	2.2%	10.0%	7.7%	5.6%	3.1%
Relative Value	HFRI Relative Value	-0.2%	-2.3%	7.6%	3.4%	7.4%	-0.4%	5.1%	-2.1%	3.4%	3.3%	4.1%
Credit	HFRI Credit Index	-0.6%	-4.0%	7.9%	6.3%	6.5%	-0.0%	6.0%	-4.1%	3.8%	3.5%	4.4%

Hedge Fund Strategy Performance



- As in Q2 2022, hedge funds were again mostly negative in Q3 2022 as global equity and fixed income markets continued their declines. Global macro strategies were again the sole bright spot amidst the negative returns. After generating positive returns in July and August 2022, the HFRI Fund of Funds Composite declined -2.0% in September to close the quarter in negative territory, down -0.7%.
- Macro strategies continued to generate positive returns, up 1.7% during Q3 and 10.4% YTD. The sub-strategy rose as the U.S. Dollar extended its record gains, and managers continue to actively trade around moves in currencies, interest rates and commodities.
- The HFRI Equity Hedge was the largest detractor, down -2.7% during Q3, adding to its YTD loss of -14.1%. As in prior quarters, growth-oriented and long-biased managers led the declines.
- According to HFRI, performance dispersion among hedge fund managers continues to widen. The top decile of HFRI constituents is up 38% on average YTD through September, while managers in the bottom decile of performance have seen YTD declines of more than -35% on average. This represents top decile / bottom decile dispersion of 73%, underscoring the importance of manager selection.



FELRA and UFCW Pension Fund

Master Consulting Services Report

Period Ended

September 30, 2022

Total Fund Growth of Assets - Combined

	Third Quarter	Fiscal Year-To-Date	One Year	Three Years	Five Years	Seven Years	Ten Years
Beginning Market Value	\$1,285,758,678	\$91,926,567	\$110,999,030	\$131,109,693	\$314,796,838	\$459,407,643	\$610,155,182
Net Cash Flow	-\$22,812,333	\$1,173,667,307	\$1,149,317,737	\$1,111,339,432	\$906,304,952	\$693,416,534	\$416,530,085
Net Investment Change	-\$4,520,095	-\$7,167,624	-\$1,890,517	\$15,977,125	\$37,324,460	\$105,602,073	\$231,740,983
Ending Market Value	\$1,258,426,250	\$1,258,426,250	\$1,258,426,250	\$1,258,426,250	\$1,258,426,250	\$1,258,426,250	\$1,258,426,250

- The Fund's fiscal year end is December 31st.
- The merger of the Mid-Atlantic UFCW and Participating Employers Pension Fund into FELRA and UFCW Pension Fund was effective January 1, 2021. A total of \$149,140,492 transferred into the Fund.
- On May 31, 2022, \$1,242,121,642 of SFA assets transferred into the Fund. On September 23, 2022, \$1,180,432,879 of SFA assets transferred to the SFA manager (Loomis, Sayles & Company).

Total Fund Growth of Assets - SFA Manager

	Inception 9/30/22
Beginning Market Value	\$0
Net Cash Flow	\$1,180,432,879
Net Investment Change	-\$10,257,842
Ending Market Value	\$1,170,175,037

Total Fund Growth of Assets - Legacy Portfolio

	Third Quarter	Fiscal Year-To- Date	One Year	Three Years	Five Years	Seven Years	Ten Years
Beginning Market Value	\$1,285,758,678	\$91,926,567	\$110,999,030	\$131,109,693	\$314,796,838	\$459,407,643	\$610,155,182
Net Cash Flow	-\$1,203,245,212	-\$6,765,572	-\$31,115,143	-\$69,093,447	-\$274,127,928	-\$487,016,345	-\$763,902,794
Net Investment Change	\$5,737,747	\$3,090,217	\$8,367,325	\$26,234,967	\$47,582,302	\$115,859,914	\$241,998,825
Ending Market Value	\$88,251,212	\$88,251,212	\$88,251,212	\$88,251,212	\$88,251,212	\$88,251,212	\$88,251,212

- The Legacy Portfolio market value from May 31, 2022 to September 23, 2022 includes SFA assets.

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2022						
			2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund - Combined	\$1,258,426,250	100.0%	0.0%	-2.9%	1.9%	5.5%	5.3%	6.6%	6.9%
Total Opportunistic Strategies	\$1,740,328	0.1%							
Total Private Equity	\$7,250,541	0.6%							
Total Cash Equivalents	\$77,420,782	6.2%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%
Total Other	\$1,839,562	0.1%							
Total SFA Manager	\$1,170,175,037	93.0%	--	--	--	--	--	--	--

Note: The present assumed actuarial rate effective January 1, 2016 as determined by the plan actuary is 7.0%.

Note: Time-weighted returns are not shown for asset classes for which internal rate of return (IRR) is a more appropriate performance measurement. IRRs can be found on the Commitment and Funding of Alternative Investments chart.

Fiscal Year Ending December 31st (Gross of Fees)												
	Fiscal YTD	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Fund - Combined	-2.9%	15.8%	3.1%	10.2%	-1.6%	12.0%	8.1%	3.0%	6.0%	14.9%	12.5%	0.6%

Fiscal Year Ending December 31st (Net of Fees)												
	Fiscal YTD	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Fund - Combined	-3.0%	15.4%	3.0%	9.9%	-2.1%	11.2%	7.3%	2.3%	5.3%	14.2%	11.7%	0.0%

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2022						
			2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund - Legacy Portfolio	\$88,251,212	100.0%	0.5%	-2.4%	2.4%	5.7%	5.4%	6.7%	7.0%
Total Opportunistic Strategies	\$1,740,328	2.0%							
Total Private Equity	\$7,250,541	8.2%							
Total Cash Equivalents	\$77,420,782	87.7%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%
Total Other	\$1,839,562	2.1%							

Note: Time-weighted returns are not shown for asset classes for which internal rate of return (IRR) is a more appropriate performance measurement. IRRs can be found on the Commitment and Funding of Alternative Investments chart.

	Fiscal YTD	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Fund - Legacy Portfolio	-2.4%	15.8%	3.1%	10.2%	-1.6%	12.0%	8.1%	3.0%	6.0%	14.9%	12.5%	0.6%

	Fiscal Year Ending December 31st (Net of Fees)											
	Fiscal YTD	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Fund - Legacy Portfolio	-2.5%	15.4%	3.0%	9.9%	-2.1%	11.2%	7.3%	2.3%	5.3%	14.2%	11.7%	0.0%

Current vs. Policy - Legacy Portfolio

	Current	Current	Policy	Policy Range	Difference	Difference
Domestic Large Cap Equity	\$0	0.0%	12.5%	0.0% - 50.0%	-12.5%	-\$11,031,402
Domestic Small / Mid Cap Equity	\$0	0.0%	2.5%	0.0% - 20.0%	-2.5%	-\$2,206,280
Investment Grade Fixed Income	\$0	0.0%	55.0%	0.0% - 100.0%	-55.0%	-\$48,538,167
High Yield Fixed Income	\$0	0.0%	7.5%	0.0% - 25.0%	-7.5%	-\$6,618,841
Short Duration High Yield Fixed Income	\$0	0.0%	15.0%	0.0% - 30.0%	-15.0%	-\$13,237,682
Real Estate - Value Add	\$0	0.0%	7.5%	0.0% - 20.0%	-7.5%	-\$6,618,841
Opportunistic Strategies	\$1,740,328	2.0%	0.0%	0.0% - 0.0%	2.0%	\$1,740,328
Private Equity	\$7,250,541	8.2%	0.0%	0.0% - 0.0%	8.2%	\$7,250,541
Cash Equivalents / Other	\$79,260,343	89.8%	0.0%	0.0% - 0.0%	89.8%	\$79,260,343
Total	\$88,251,212	100.0%	100.0%			

- The Policy was adopted November 2022 and is effective TBD (pending funding of managers).
- Cash Equivalents / Other includes PNC STIF (FELRA) and EnTrust Capital Diversified Fund - Class X.
- The above market value does not include the SFA Manager (Loomis, Sayles & Company - \$1,170,175,037).

FELRA and UFCW Pension Fund - Asset Allocation

- Asset allocation and glide path reviews were presented and discussed with the Board of Trustees at the following meetings: January 26, 2017, March 5, 2017, May 31, 2017, July 13, 2017, January 10, 2018, March 3, 2018, June 4, 2018, July 18, 2019, March 11, 2021, June 22, 2021, September 27, 2021, December 15, 2021, March 11, 2022, June 10, 2022, August 29, 2022, September 6, 2022, and November 2, 2022.
- In a July 2021 memo, to raise cash for cash needs IPS recommended submitting a partial redemption of \$8.0M to global tactical asset allocation (First Eagle) and a \$1.0M redemption from domestic large cap equity (Vanguard U.S. Stock Market Index). Decision: Approved. Status: In July 2021, domestic large cap equity (Vanguard U.S. Stock Market Index) transferred \$1.0M to cash. In August 2021, global tactical asset allocation (First Eagle) transferred \$8.0M to cash.
- In a August 2021 memo, to raise \$7.5M for cash needs IPS recommended submitting a partial redemption of \$7.5M to global tactical asset allocation (First Eagle). Decision: Approved. Status: In September 2021, global tactical asset allocation (First Eagle) transferred \$7.5M to cash.
- In a September 2021 memo, to raise \$7.5M for cash needs IPS recommended submitting a full redemption to international equity (Hardman Johnston International Group Trust) and have the remainder redeemed from domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In October 2021, international equity (Hardman Johnston International Group Trust) was terminated and transferred \$5.5M to cash and domestic large cap equity (Vanguard U.S. Stock Market Index Fund) transferred \$2.0M to cash.
- In a October 2021 memo, to raise \$2.0M for cash needs IPS recommended submitting a \$2.0M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In October 2021, \$2.0M was transferred to cash.
- In a November 2021 memo, to raise \$6.0M for cash needs IPS recommended submitting a \$6.0M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In November 2021, \$6.0M was transferred to cash.
- In a December 2021 memo, to raise \$7.5M for cash needs IPS recommended submitting a \$7.5M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In December 2021, \$7.5M was transferred to cash.
- In a January 2022 memo, to raise \$7.5M for cash needs IPS recommended submitting a \$7.5M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In January 2022, \$7.5M was transferred to cash.
- In a February 2022 memo, to raise \$7.5M for cash needs IPS recommended submitting a \$7.5M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In February 2022, \$7.5M was transferred to cash.
- In a March 2022 memo, to raise \$7.0M for cash needs IPS recommended submitting a \$7.0M redemption to domestic large cap equity (Vanguard U.S. Stock Market Index Fund). Decision: Approved. Status: In March 2022, \$7.0M was transferred to cash.

FELRA and UFCW Pension Fund - Asset Allocation

- In a March 16, 2022 memo, in order to increase the probability of the Pension Fund's ability to meet benefit payments through October 2022, IPS recommended the Trustees approve the full liquidation of domestic large cap equity (Vanguard U.S. Stock Market Index Fund), global tactical asset allocation (First Eagle), investment grade fixed income (Segall Bryant & Hamill), and short duration high yield fixed income (Chartwell). Decision: Approved. Status: In March 2022, domestic large cap equity (Vanguard U.S. Stock Market Index Fund), investment grade fixed income (Segall Bryant & Hamill), and short duration high yield fixed income (Chartwell) were terminated and proceeds (\$46.2M) transferred to cash. In April 2022, global tactical asset allocation (First Eagle) was terminated and proceeds (\$14.7M) transferred to cash.
- In a May 13, 2022 memo, IPS recommended that the Trustees select the following investment managers for finalist interviews for the SFA mandate: Columbia Threadneedle, Loomis, Sayles & Company, and Wellington. Decision: Approved.
- At the May 24, 2022 meeting, the trustees heard presentations from Columbia Threadneedle, Loomis, Sayles & Company, and Wellington. After discussion, the Trustees elected to hire Loomis, Sayles & Company for the SFA mandate. Status: In process. Additionally, the Trustees elected to hire Ryan ALM to provide a custom liability benchmark for the Fund.
- At the June 10, 2022 meeting, an asset allocation review was presented to determine how to invest the legacy assets now that the SFA proceeds have been received. After discussion, the Trustees elected to adopt an asset allocation Policy of 20.0% domestic large cap equity, 7.5% domestic small / mid cap equity, 10.0% international equity, 10.0% high yield fixed income, 10.0% global tactical asset allocation, 20.0% real estate - value add, 10.0% opportunistic strategies, and 12.5% private equity. Additionally, within the domestic large cap equity allocation the Trustees elected to target a mix of 60.0% value and 40.0% growth.
- At the August 29, 2022 meeting, an update on the final SFA rule and an asset allocation analysis was presented. The Trustees requested that Loomis provide an analysis showing how many months of benefit payments the SFA assets would cover using a full cash flow match approach. Additionally, the Trustees requested that IPS present additional analysis regarding the Legacy portfolio.
- At the September 6, 2022 meeting, a memo summarizing Loomis' analysis of a full cash flow match investment strategy was presented. The Trustees approved a full cash flow match investment strategy for the SFA portfolio. Additionally, IPS presented an asset allocation analysis for the legacy portfolio.
- At the September 15, 2022 meeting, IPS recommended using a short term gov/credit strategy for the Legacy assets until a final decision was made regarding the investment strategy for the legacy portfolio. Decision: Approved. Additionally, IPS recommended that Segall Bryant & Hamill be hired to manage the short term gov/credit strategy. Decision: Approved. Status: Funding in process.
- At the November 2, 2022 meeting, an analysis of considerations for the Legacy portfolio was presented. After discussion, the Trustees elected to adopt Policy of 12.5% domestic large cap equity, 2.5% domestic small / mid cap equity, 55.0% investment grade fixed income, 15.0% short duration high yield fixed income, 7.5% high yield fixed income, and 7.5% real estate – value add.

FELRA and UFCW Pension Fund - Asset Allocation

Recommendation: None. Allocations are expected to rebalance closer to Policy and within Policy Ranges as managers are funded.

Commitment and Funding of Opportunistic Strategies Investments (In Millions) as of September 30, 2022											
Investments		Commitments			Contributions & Distributions		Valuations		Performance		
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI	IRR
¹ EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	2018	\$2.0	\$0.1	1.0	\$2.0	\$0.1	\$1.7	\$1.8	0.0	0.9	-2.8%
Total		\$2.0	\$0.1	1.0	\$2.0	\$0.1	\$1.7	\$1.8	0.0	0.9	-2.8%

¹Unfunded commitment includes recallable distributions of \$75K.

Commitment and Funding of Private Equity Investments (In Millions) as of September 30, 2022											
Investments		Commitments			Contributions & Distributions		Valuations		Performance		
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI	IRR
¹ GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	2017	\$9.1	\$2.8	0.7	\$6.4	\$2.0	\$7.3	\$9.2	0.3	1.4	19.3%
Total		\$9.1	\$2.8	0.7	\$6.4	\$2.0	\$7.3	\$9.2	0.3	1.4	19.3%

¹Unfunded commitment includes recallable distributions of \$115K; Commitment amount includes \$1.1M unfunded commitment adjustment.

- Distribution to Paid-In (DPI) – The DPI is the value of all distributions to limited partners divided by the amount limited partners have contributed to the fund. A DPI of 1 indicates the investor has received capital back equal to what they invested while a DPI over 1 indicates an investor has received more capital back than they invested. DPI is most relevant for closed-end fund structures such as private equity.
- Total Value to Paid in Multiple (TVPI) – The TVPI is a measure of return that expresses how much a fund has made relative to how much was contributed. It is calculated by dividing the sum of the amount of capital distributed to investors and the amount of remaining value by the amount of invested capital. A TVPI below 1 indicates the current value of the investment plus the capital returned to the investor is less than the investor contributed. A TVPI greater than 1 indicates the current value of the investment plus the capital returned to the investor is more than the investor contributed. For closed-end funds such as private equity, DPI and TVPI will be the same at the end of the fund's life.
- Internal Rate of Return (IRR) – The discount rate at which the net present value of an investment's cash flows is equal to zero. IRR is commonly used to gauge fund performance.
- Performance data included in the table above may differ from performance data provided by the investment manager due to the availability and timing of data used in the calculations.

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Detail (Net of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2022							Inception	Inception Date
			2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs		
Total Fund - Combined	\$1,258,426,250	100.0%	0.0%	-3.0%	1.7%	5.3%	5.0%	6.2%	6.4%	--	Jan-97
Total Opportunistic Strategies	\$1,740,328	0.1%									
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	0.1%									
Total Private Equity	\$7,250,541	0.6%									
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	0.6%									
Total Cash Equivalents	\$77,420,782	6.2%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%	--	Jul-06
PNC STIF (FELRA)	\$77,420,782	6.2%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.5%	1.4%	Jul-06
Total Other	\$1,839,562	0.1%									
EnTrust Capital Diversified Fund - Class X	\$1,839,562	0.1%									
Total SFA Manager	\$1,170,175,037	93.0%	--	--	--	--	--	--	--	--	Sep-22
Loomis, Sayles & Company	\$1,170,175,037	93.0%	--	--	--	--	--	--	--	--	Sep-22

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Detail (Net of Fees) - Annualized

				Ending September 30, 2022
	Market Value	% of Portfolio	Inception	Inception Date
Total Fund - SFA Manager	\$1,170,175,037	100.0%	--	Sep-22
Loomis, Sayles & Company	\$1,170,175,037	100.0%	--	Sep-22

			Ending September 30, 2022								
	Market Value	% of Portfolio	2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Legacy Portfolio	\$88,251,212	100.0%	0.5%	-2.5%	2.3%	5.5%	5.1%	6.3%	6.4%	5.9%	Jan-97
Total Opportunistic Strategies	\$1,740,328	2.0%									
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	2.0%									
Total Private Equity	\$7,250,541	8.2%									
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	8.2%									
Total Cash Equivalents	\$77,420,782	87.7%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%	--	Jul-06
PNC STIF (FELRA)	\$77,420,782	87.7%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.5%	1.4%	Jul-06
Total Other	\$1,839,562	2.1%									
EnTrust Capital Diversified Fund - Class X	\$1,839,562	2.1%									

Account Information		EnTrustPermal Special Opportunities Fund IV, Ltd - Class A		
Account Name	EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	Ending September 30, 2022		
Account Structure	Commingled Fund	Third Quarter		Inception
Investment Style	Active			1/1/21
Inception Date	1/01/21	Beginning Market Value	\$1,991,048	\$0
Account Type	Opportunistic Strategies	Net Cash Flow	-\$75,507	\$1,830,022
Benchmark		Net Investment Change	-\$175,213	-\$89,694
Universe		Ending Market Value	\$1,740,328	\$1,740,328

FELRA & UFCW Pension Fund - EnTrustPermal Special Opportunities Fund IV, Ltd - Class A

Manager Summary

- IPS conducted due diligence meetings with EnTrust on May 18, 2020, November 20, 2020, March 2, 2021 (annual meeting participation), September 8, 2021 and March 29, 2022.
- In March 2019, EnTrustPermal rebranded the firm as EnTrust Global.
- On February 18, 2020, Legg Mason (which owns 65% of EnTrust Global) announced they would be acquired by Franklin Templeton. EnTrust subsequently announced that they will be reacquiring Legg Mason's interest in EnTrust, effective upon the consummation of the Franklin Templeton/Legg Mason combination, to once again become an independent, privately-owned firm. The transaction closed on July 31, 2020.

The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager verified the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, the manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Ownership Changes -The manager stated at the end of September 2022, a sovereign wealth fund (SWF) purchased a minority stake (less than 10%) of EnTrust Global. The SWF's investment is generally passive; Gregg S. Hymowitz and entities affiliated with him own over 90% of EnTrust Global, and day to day management of EnTrust Global remains with Mr. Hymowitz and the various committees of EnTrust Global senior executives.

Account Information		GCM Grosvenor Secondary Opportunities Feeder Fund II, LP		
Account Name	GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	Ending September 30, 2022		
Account Structure	Commingled Fund	Third Quarter		Inception
Investment Style	Active			1/1/21
Inception Date	1/01/21	Beginning Market Value	\$6,931,534	\$0
Account Type	Private Equity	Net Cash Flow	\$319,007	\$5,259,391
Benchmark		Net Investment Change	\$0	\$1,991,150
Universe		Ending Market Value	\$7,250,541	\$7,250,541

Note: Investment is valued as of June 30, 2022, plus or minus flows.

FELRA & UFCW Pension Fund - GCM Grosvenor Secondary Opportunities Feeder Fund II, LP

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on March 24, 2020, November 18, 2020, March 17, 2021 and December 3, 2021.
- On August 3, 2020, Grosvenor announced their intention to become a publicly-traded company through a merger with CF Finance Acquisition Corp., a special purpose acquisition company (SPAC) sponsored by Cantor Fitzgerald, a global financial services firm. The combined company will operate as GCM Grosvenor Inc. and will be listed on the NASDAQ stock exchange. Upon completion of the transaction, Grosvenor management will own more than 70% of the firm's equity. Existing shareholder Hellman & Friedman, a private equity firm that has been a passive minority shareholder in Grosvenor since 2007, will sell their equity interest. No personnel changes are expected as a result and no client action is required. Grosvenor announced the completion of the transaction on November 17, 2020.

The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and /or offering document guidelines.

Items of Interest: Communication – The manager states they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to GCM Grosvenor Secondary Opportunities Fund II, L.P. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement. **Form ADV** – The manager stated that GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Please see the firm's most recent Form ADV Part 2A in the full Compliance Report. The following section of the Form ADV Part 2A brochure received material updates: **Item 8** – Disclosure relating to Risks and Other Special Considerations.

Account Information		Loomis, Sayles & Company		
Account Name	Loomis, Sayles & Company	Ending September 30, 2022		
Account Structure	Separate Account	Third Quarter		Inception
Investment Style	Active			9/30/22
Inception Date	9/30/22	Beginning Market Value	--	\$0
Account Type	Investment Grade Fixed Income	Net Cash Flow	\$1,180,432,879	\$1,180,432,879
Benchmark		Net Investment Change	-\$10,257,842	-\$10,257,842
Universe		Ending Market Value	\$1,170,175,037	\$1,170,175,037

FELRA & UFCW Pension Fund - Loomis, Sayles & Company

Manager Summary

- IPS conducted due diligence meetings with Loomis Sayles on September 28, 2021, May 12, 2022 and July 12, 2022.

Recommendation: None.

Compliance Summary

Compliance monitoring will begin when the manager has received the Investment Policy Statement and signed the Manager Addendum.

Investment Policy Statement

- Investment policy statement was adopted in August 2014.

Custody Bank

- The current custodian is PNC Bank.
- Separate account market values and flows are derived from the custodial statement.

Proxy Voting Provider

- Effective April 17, 2020, Segal Marco Advisors proxy voting services were terminated.

Commingled Funds

- Commingled Fund: Due to the commingled fund structure, IPS does not monitor the holdings within the commingled fund for compliance with the client's investment policy statement. The commingled fund is governed by its own investment policy.
- Commingled fund market values and flows are derived from the manager's statement.



FELRA and UFCW Pension Fund

Appendix

FELRA and UFCW Pension Fund - Cash Flow Analysis

Quarter Ending	Beginning Market Value	Net Contributions /		Ending Market Value
		Withdrawals	Appreciation / Depreciation	
Jun-08	\$927,883,998	(\$22,279,057)	\$3,761,688	\$909,366,629
Sep-08	\$909,366,629	(\$20,509,818)	(\$80,014,998)	\$808,841,813
Dec-08	\$808,841,813	(\$20,711,188)	(\$113,094,795)	\$675,035,830
Mar-09	\$675,035,830	(\$20,585,950)	(\$39,228,598)	\$615,221,281
Jun-09	\$615,221,281	(\$20,646,824)	\$46,554,642	\$641,129,099
Sep-09	\$641,129,099	(\$15,477,240)	\$51,866,729	\$677,518,587
Dec-09	\$677,518,587	(\$20,301,671)	\$16,291,888	\$673,508,804
Mar-10	\$673,508,804	(\$23,964,727)	\$24,806,670	\$674,350,747
Jun-10	\$674,350,747	(\$14,607,147)	(\$28,805,278)	\$630,938,322
Sep-10	\$630,938,322	(\$18,531,935)	\$48,030,080	\$660,436,468
Dec-10	\$660,436,468	(\$19,020,364)	\$39,663,596	\$681,079,700
Mar-11	\$681,079,700	(\$19,226,978)	\$23,472,595	\$685,325,318
Jun-11	\$685,325,317	(\$19,226,221)	\$7,939,126	\$674,038,223
Sep-11	\$674,038,223	(\$17,543,142)	(\$54,950,333)	\$601,544,748
Dec-11	\$601,544,748	(\$17,996,347)	\$26,652,623	\$610,201,024
Mar-12	\$610,201,024	(\$18,424,045)	\$41,651,407	\$633,428,386
Jun-12	\$633,428,386	(\$19,565,191)	(\$12,196,300)	\$601,666,895
Sep-12	\$601,666,895	(\$19,502,528)	\$27,990,815	\$610,155,182
Dec-12	\$610,155,182	(\$19,736,735)	\$13,322,360	\$603,740,808
Mar-13	\$603,740,808	(\$21,331,110)	\$25,836,469	\$608,246,166
Jun-13	\$608,246,166	(\$22,971,241)	(\$3,558,977)	\$581,715,949
Sep-13	\$581,715,949	(\$22,792,009)	\$29,121,566	\$588,045,505
Dec-13	\$588,045,505	(\$23,020,041)	\$29,768,336	\$594,793,801
Mar-14	\$594,793,801	(\$22,948,172)	\$11,617,817	\$583,463,445
Jun-14	\$583,463,445	(\$23,781,419)	\$20,935,774	\$580,617,800
Sep-14	\$580,617,800	(\$23,973,486)	(\$7,324,690)	\$549,319,624
Dec-14	\$549,319,624	(\$24,616,981)	\$6,603,834	\$531,306,478
Mar-15	\$531,306,478	(\$23,458,617)	\$17,197,180	\$525,045,041
Jun-15	\$525,045,041	(\$24,143,915)	\$5,472,944	\$506,374,069
Sep-15	\$506,374,069	(\$24,112,722)	(\$22,853,704)	\$459,407,643
Dec-15	\$459,407,643	(\$27,542,185)	\$12,993,637	\$444,859,095
Mar-16	\$444,859,095	(\$26,773,145)	\$1,631,135	\$419,717,085
Jun-16	\$419,717,085	(\$26,381,540)	\$6,603,058	\$399,938,603
Sep-16	\$399,938,603	(\$36,893,297)	\$12,191,625	\$375,236,931
Dec-16	\$375,236,931	(\$16,095,723)	\$8,021,326	\$367,162,534
Mar-17	\$367,162,534	(\$26,515,622)	\$12,883,529	\$353,530,441
Jun-17	\$353,530,441	(\$26,489,842)	\$5,533,760	\$332,574,360
Sep-17	\$332,574,360	(\$26,197,063)	\$8,419,541	\$314,796,838
Dec-17	\$314,796,838	(\$25,843,977)	\$9,214,416	\$298,167,277
Mar-18	\$298,167,277	(\$25,673,057)	(\$709,162)	\$271,785,057
Jun-18	\$271,785,057	(\$23,495,940)	\$2,668,486	\$250,957,604
Sep-18	\$250,957,604	(\$27,227,771)	\$7,572,457	\$231,312,290
Dec-18	\$231,312,290	(\$24,743,983)	(\$13,372,282)	\$193,196,024
Mar-19	\$193,196,024	(\$33,290,012)	\$11,059,732	\$170,826,184
Jun-19	\$170,826,184	(\$18,391,427)	\$3,651,995	\$156,086,751
Sep-19	\$156,086,751	(\$25,879,043)	\$901,985	\$131,109,693
Dec-19	\$131,109,693	(\$26,962,901)	\$1,520,339	\$105,667,131
Mar-20	\$105,667,131	(\$24,855,060)	(\$999,229)	\$79,812,842
Jun-20	\$79,812,842	(\$25,451,087)	\$2,213,062	\$56,574,816
Sep-20	\$56,574,816	(\$25,496,118)	\$223,731	\$31,302,540
Dec-20	\$31,302,540	(\$25,877,125)	\$298,053	\$5,726,908
Mar-21	\$5,726,908	\$135,266,912	\$5,362,546	\$148,853,764
Jun-21	\$148,853,764	(\$23,524,636)	\$7,359,490	\$133,418,817
Sep-21	\$133,418,817	(\$22,836,907)	(\$1,810)	\$110,999,030
Dec-21	\$110,999,030	(\$24,349,571)	\$5,306,812	\$91,926,567
Mar-22	\$91,926,567	(\$22,598,143)	(\$3,339,478)	\$65,988,945
Jun-22	\$65,988,945	\$1,219,077,784	\$691,949	\$1,285,758,678
Sep-22	\$1,285,758,678	(\$22,812,333)	(\$4,520,095)	\$1,258,426,250
		\$67,140,366	\$259,911,073	

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Detail (Gross of Fees) - Annualized

			Ending September 30, 2022									
	Market Value	% of Portfolio	2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date	
Total Fund - Combined	\$1,258,426,250	100.0%	0.0%	-2.9%	1.9%	5.5%	5.3%	6.6%	6.9%	--	Jan-97	
Total Opportunistic Strategies	\$1,740,328	0.1%										
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	0.1%										
Total Private Equity	\$7,250,541	0.6%										
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	0.6%										
Total Cash Equivalents	\$77,420,782	6.2%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%	--	Jul-06	
PNC STIF (FELRA)	\$77,420,782	6.2%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.5%	1.4%	Jul-06	
Total Other	\$1,839,562	0.1%										
EnTrust Capital Diversified Fund - Class X	\$1,839,562	0.1%										
Total SFA Manager	\$1,170,175,037	93.0%	--	--	--	--	--	--	--	--	Sep-22	
Loomis, Sayles & Company	\$1,170,175,037	93.0%	--	--	--	--	--	--	--	--	Sep-22	

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Performance Detail (Gross of Fees) - Annualized

				Ending September 30, 2022	
	Market Value	% of Portfolio	Inception	Inception Date	
Total Fund - SFA Manager	\$1,170,175,037	100.0%	--	Sep-22	
Loomis, Sayles & Company	\$1,170,175,037	100.0%	--	Sep-22	

			Ending September 30, 2022									
	Market Value	% of Portfolio	2022 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date	
Total Fund - Legacy Portfolio	\$88,251,212	100.0%	0.5%	-2.4%	2.4%	5.7%	5.4%	6.7%	7.0%	6.3%	Jan-97	
Total Opportunistic Strategies	\$1,740,328	2.0%										
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	2.0%										
Total Private Equity	\$7,250,541	8.2%										
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	8.2%										
Total Cash Equivalents	\$77,420,782	87.7%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.6%	--	Jul-06	
PNC STIF (FELRA)	\$77,420,782	87.7%	0.5%	0.6%	0.7%	0.6%	0.9%	0.7%	0.5%	1.4%	Jul-06	
Total Other	\$1,839,562	2.1%										
EnTrust Capital Diversified Fund - Class X	\$1,839,562	2.1%										

FELRA and UFCW Pension Fund

Master Consulting Services Report as of September 30, 2022

Account	Fee Schedule	Market Value As of 9/30/2022	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Opportunistic Strategies	-	\$1,740,328	0.1%	--	--
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	1.25% of Assets	\$1,740,328	0.1%	\$21,754	1.25%
Total Private Equity	-	\$7,250,541	0.6%	--	--
*GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	19,319 Quarterly	\$7,250,541	0.6%	\$77,276	1.07%
Total Cash Equivalents	-	\$77,420,782	6.2%	--	--
PNC STIF (FELRA)	-	\$77,420,782	6.2%	--	--
Total Other	-	\$1,839,562	0.1%	--	--
EnTrust Capital Diversified Fund - Class X	0.50% of Assets	\$1,839,562	0.1%	\$9,198	0.50%
Total SFA Manager	-	\$1,170,175,037	93.0%	--	--
Loomis, Sayles & Company	0.10% of Assets	\$1,170,175,037	93.0%	\$1,170,175	0.10%
Investment Management Fee		\$1,258,426,250	100.0%	\$1,278,403	0.10%

* The estimated annual fee (%) shown in the above table is calculated based on the investment market value. For investments in which the fee is based on committed capital, the estimated annual fee (%) shown may not be representative of the actual annual fee (%).

- The above fees do not include incentive fees.

Footnotes

- Montag & Caldwell was terminated on August 1, 2006 and funds were transferred to Capital Management Associates.
- Fountain was terminated and assets moved to Lazard High Yield on July 2, 2007.
- Ark was terminated and assets moved to Westwood on August 1, 2007.
- The net of fees returns in this report are estimated. Fees do not include: the investment consulting fee paid to IPS, custodian fees, or other administrative costs.
- The net of fees calculations began 3Q 2004 and cannot be calculated for prior time periods.
- Gottex Fund Management Holdings Ltd. values, flows, and returns are provided by Gottex and cannot be independently verified.
- Segall Bryant & Hamill hired with initial funding from Logan Circle Partners on November 14, 2008 in the amount of \$39,669,926.
- On December 16, 2016 Tremont Recovery amount of \$215,947 was transferred to the cash account. The Tremont Recovery payment is reflected as a gain in the Hedge Fund of Funds group.
- The following composite returns prior to 1Q 2010 do not include cash in the calculation of returns.
 - Total Fund Domestic Equity
 - Total Fund International Equity
 - Total Domestic Fixed Investment Grade
 - Total Fixed High Yield
 - Total Fund Real Estate
 - Total Fund Hedge Fund of Fund
 - Total Fund GTAA/Risk Parity
- Separately managed account returns are calculated by IPS using custodian data.
- Values, flows, and returns for all commingled funds, mutual funds, partnerships, and all other alternative assets are provided by the firm managing the assets and cannot be independently verified by IPS.
- Total asset class inception returns may not be available if the performance history begins prior to December 2007.



FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update

Period Ended

October 31, 2022

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Total Fund Growth of Assets - Combined

	Last Month	Fiscal Year-To-Date
Beginning Market Value	\$1,258,426,250	\$91,926,567
Net Cash Flow	-\$6,481,435	\$1,167,185,872
Net Investment Change	-\$3,176,084	-\$10,343,708
Ending Market Value	\$1,248,768,730	\$1,248,768,730

- The Fund's fiscal year end is December 31st.
- The merger of the Mid-Atlantic UFCW and Participating Employers Pension Fund into FELRA and UFCW Pension Fund was effective January 1, 2021. A total of \$149,140,492 transferred into the Fund.
- On May 31, 2022, \$1,242,121,642 of SFA assets transferred into the Fund. On September 23, 2022, \$1,180,432,879 of SFA assets transferred to the SFA manager (Loomis, Sayles & Company).

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Total Fund Growth of Assets - SFA Manager

	Last Month	Inception 9/30/22
Beginning Market Value	\$1,170,175,037	\$0
Net Cash Flow	-\$13,050,000	\$1,167,382,879
Net Investment Change	-\$3,366,151	-\$13,623,992
Ending Market Value	\$1,153,758,887	\$1,153,758,887

Total Fund Growth of Assets - Legacy Portfolio

	Last Month	Fiscal Year-To-Date
Beginning Market Value	\$88,251,212	\$91,926,567
Net Cash Flow	\$6,568,565	-\$197,007
Net Investment Change	\$190,067	\$3,280,284
Ending Market Value	\$95,009,844	\$95,009,844

- The Legacy Portfolio market value from May 31, 2022 to September 23, 2022 includes SFA assets.

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Current vs. Policy - Legacy Portfolio

	Current	Current	Policy	Policy Range	Difference	Difference
Domestic Large Cap Equity	\$0	0.0%	12.5%	0.0% - 50.0%	-12.5%	-\$11,876,230
Domestic Small / Mid Cap Equity	\$0	0.0%	2.5%	0.0% - 20.0%	-2.5%	-\$2,375,246
Investment Grade Fixed Income	\$0	0.0%	55.0%	0.0% - 100.0%	-55.0%	-\$52,255,414
High Yield Fixed Income	\$0	0.0%	7.5%	0.0% - 25.0%	-7.5%	-\$7,125,738
Short Duration High Yield Fixed Income	\$0	0.0%	15.0%	0.0% - 30.0%	-15.0%	-\$14,251,477
Real Estate - Value Add	\$0	0.0%	7.5%	0.0% - 20.0%	-7.5%	-\$7,125,738
Opportunistic Strategies	\$1,740,328	1.8%	0.0%	0.0% - 0.0%	1.8%	\$1,740,328
Private Equity	\$7,250,541	7.6%	0.0%	0.0% - 0.0%	7.6%	\$7,250,541
Cash Equivalents / Other	\$86,018,974	90.5%	0.0%	0.0% - 0.0%	90.5%	\$86,018,974
Total	\$95,009,844	100.0%	100.0%			

- The Policy was adopted November 2022 and is effective TBD (pending funding of managers).
- Cash Equivalents / Other includes PNC STIF (FELRA) and EnTrust Capital Diversified Fund - Class X.
- The above market value does not include the SFA manager (Loomis, Sayles & Company - \$1,153,758,887).

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Performance Detail (Gross of Fees)

	Market Value	% of Portfolio	Ending October 31, 2022	
			1 Mo	Fiscal YTD
Total Fund - Combined	\$1,248,768,730	100.0%	-0.2%	-3.2%
Total Opportunistic Strategies	\$1,740,328	0.1%		
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	0.1%		
Total Private Equity	\$7,250,541	0.6%		
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	0.6%		
Total Cash Equivalents	\$84,181,683	6.7%	0.2%	0.8%
PNC STIF (FELRA)	\$84,181,683	6.7%	0.2%	0.8%
Total Other	\$1,837,291	0.1%		
EnTrust Capital Diversified Fund - Class X	\$1,837,291	0.1%		
Total SFA Manager	\$1,153,758,887	92.4%	-0.3%	--
Loomis, Sayles & Company	\$1,153,758,887	92.4%	-0.3%	--

	Market Value	% of Portfolio	Ending October 31, 2022
			1 Mo
Total Fund - SFA Manager	\$1,153,758,887	100.0%	-0.3%
Loomis, Sayles & Company	\$1,153,758,887	100.0%	-0.3%

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Performance Detail (Gross of Fees)

	Market Value	% of Portfolio	Ending October 31, 2022	
			1 Mo	Fiscal YTD
Total Fund - Legacy Portfolio	\$95,009,844	100.0%	0.2%	-2.2%
Total Opportunistic Strategies	\$1,740,328	1.8%		
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	1.8%		
Total Private Equity	\$7,250,541	7.6%		
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	7.6%		
Total Cash Equivalents	\$84,181,683	88.6%	0.2%	0.8%
PNC STIF (FELRA)	\$84,181,683	88.6%	0.2%	0.8%
Total Other	\$1,837,291	1.9%		
EnTrust Capital Diversified Fund - Class X	\$1,837,291	1.9%		

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Performance Detail (Net of Fees)

	Market Value	% of Portfolio	Ending October 31, 2022	
			1 Mo	Fiscal YTD
Total Fund - Combined	\$1,248,768,730	100.0%	-0.3%	-3.3%
Total Opportunistic Strategies	\$1,740,328	0.1%		
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	0.1%		
Total Private Equity	\$7,250,541	0.6%		
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	0.6%		
Total Cash Equivalents	\$84,181,683	6.7%	0.2%	0.8%
PNC STIF (FELRA)	\$84,181,683	6.7%	0.2%	0.8%
Total Other	\$1,837,291	0.1%		
EnTrust Capital Diversified Fund - Class X	\$1,837,291	0.1%		
Total SFA Manager	\$1,153,758,887	92.4%	-0.3%	--
Loomis, Sayles & Company	\$1,153,758,887	92.4%	-0.3%	--

	Market Value	% of Portfolio	Ending October 31, 2022	
			1 Mo	
Total Fund - SFA Manager	\$1,153,758,887	100.0%	-0.3%	
Loomis, Sayles & Company	\$1,153,758,887	100.0%	-0.3%	

FELRA and UFCW Pension Fund

Preliminary Monthly Performance Update as of October 31, 2022

Performance Detail (Net of Fees)

	Market Value	% of Portfolio	Ending October 31, 2022	
			1 Mo	Fiscal YTD
Total Fund - Legacy Portfolio	\$95,009,844	100.0%	0.2%	-2.3%
Total Opportunistic Strategies	\$1,740,328	1.8%		
EnTrustPermal Special Opportunities Fund IV, Ltd - Class A	\$1,740,328	1.8%		
Total Private Equity	\$7,250,541	7.6%		
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,250,541	7.6%		
Total Cash Equivalents	\$84,181,683	88.6%	0.2%	0.8%
PNC STIF (FELRA)	\$84,181,683	88.6%	0.2%	0.8%
Total Other	\$1,837,291	1.9%		
EnTrust Capital Diversified Fund - Class X	\$1,837,291	1.9%		

Footnotes

- The information contained in this report is proprietary and confidential information. You are hereby notified that any dissemination, distribution, or copying of this document is strictly prohibited.
- Values, flows, and returns for all commingled funds, mutual funds, partnerships, and all other alternative assets are provided by the firm managing the assets and cannot be independently verified by IPS.
- Separately managed account returns are calculated by IPS using custodian data.
- The net of fees returns in this report are estimated. Fees do not include: the investment consulting fee paid to IPS, custodian fees, or other administrative costs.
- The following managers are valued as of June 30, 2022, plus or minus flows:
 - GCM Grosvenor Secondary Opportunities Feeder Fund II, LP
- The following manager is valued as of September 30, 2022, plus or minus flows:
 - EnTrustPermal Special Opportunities Fund IV, Ltd. - Class A
- In October 2022, \$6.97M was contributed to cash equivalents (PNC STIF) from outside cash.
- In October 2022, \$11.68M was distributed from cash equivalents (PNC STIF) for benefit payments.
- In October 2022, \$13.05M was transferred from the SFA manager (Loomis, Sayles & Company) to cash equivalents (PNC STIF).



FELRA and UFCW Pension Fund
Investment Manager Review
High Yield Fixed Income - Short Duration

As of 9/2022

Benchmark: U.S. High Yield Cash Pay 1-3 Yr BB Index

Universe: eVestment US High Yield Fixed Income - Short Duration

Executive Summary

Manager Search Process

- Assist the Trustees in specifying the characteristics of the investment manager that will satisfy the needs of the Fund. This is accomplished within the scope of the Fund's investment policy statement.
- IPS develops a list of qualified candidates for each asset class and investment style. Investment manager candidates are thoroughly researched from various sources, including the eVestment database, Wilshire Compass database, Morningstar mutual fund database, and industry/public information. The purpose of the due diligence discipline is to reduce the immense list of potential candidates to a manageable group of firms with an impartial eye on meeting all selection criteria. That list is further examined to determine an approved list of "best in class" managers.
- Consistency of performance is a key component of the manager search process. IPS is mindful of the mathematics of an investment loss, which requires the achievement of higher rates of positive performance to recover from a loss. Investment managers that outperform or capture a significant amount of market upside when markets are positive, while protecting capital when markets decline, are preferred. IPS believes that managers who can provide this asymmetric return profile of performance and risk will rank well when longer time periods are considered.
- For every investment manager search, as part of the IPS due diligence process, IPS sends a Request for Information (RFI) to each potential candidate, regarding the product characteristics, performance, personnel, investment process and other relevant criteria. A copy of the RFI for each manager may be provided to the Fund's Administrator and additional copies can be provided to the Trustees upon request.
- It is important to note that no fees are paid to IPS by any investment manager to be included in a search or database. The only requirement placed upon the manager is their willingness to submit and maintain data concerning their firm, its investment products, and performance results.
- IPS does not sell products or services to investment managers. However, investment managers may pay IPS to attend and to help defray the cost of IPS' annual conference, EPIC. EPIC is an educational conference addressing various issues related to employee benefit plans. IPS does not give preferential treatment to investment managers or any other provider that pays to attend and help defray the costs of EPIC.
- If the Trustees so desire, the next step can be a presentation of background information regarding the firms meeting the selection criteria. IPS will assist in the review of these candidates to help the Board of Trustees choose the best candidates to make personal interviews and presentations by their principals and/or managers who will be responsible for managing the fund's assets.

-
- The last meeting, held at the Trustees' discretion, is the personal presentation of the final group of candidates who appear to best meet the needs of the Trustees and their objectives. The manager presentation is a very important step in the Trustee's process of evaluating and comparing the candidates.
 - The conclusion of the search process is the selection of the firm(s) by the Trustees to manage the assets.
 - Importantly, as part of our ongoing performance evaluation reports, we will review the manager transfer as it occurs, and ensure the accurate accounting of the changes made.

Perspective on Performance and Risk Data

The manager search materials include historical performance results. It is important to remember that past performance is not to be construed as a guarantee of future performance. The key to using historical performance data is to develop an expectation of returns during various market environments and to determine which type of return (and thus which type of manager) best suits the client's needs. We use historical data to "look behind" the managers' numbers for consistency of returns and to inspect how they preserve capital over full market cycles and in declining markets.

Included within the manager search materials are the following: firm's history, fund styles, fees, volatility, relative performance, and risk measures. This information is critical when comparing the candidates among each other. The material is presented in a consistent fashion to ensure there is a level playing field.

EPIC

April 27 - 29, 2022

The following investment managers and providers included in this search attended and helped to defray the cost of IPS' annual conference EPIC. EPIC is an educational conference addressing various issues related to employee benefit plans. IPS does not give preferential treatment to investment managers or any other provider that pays to attend EPIC.

Chartwell Investment Partners
Post Advisory Group



Firm and Strategy Summary

Periods Ending 9/2022

Investment Manager	Founded	City	State	Ownership	E&O Coverage (Millions)	Total AUM (Millions)	Taft-Hartley AUM (Millions)	Taft-Hartley Accounts	Primary Investment Approach	Strategy Inception Date	Strategy AUM (Millions)
Chartwell Investment Partners	1997	Berwyn	Pennsylvania	Public Limited Liability Company	\$10	\$10,047	\$4,058	232	Fundamental	01/01/2006	\$2,868
Post Advisory Group LLC	1992	Los Angeles	California	Private Limited Liability Company	\$60	\$15,638	\$1,812	36	Fundamental	02/01/2012	\$5,534

The Taft-Hartley client figure above for Post Advisory only includes data for separately managed accounts. Post commingled funds have approximately 30 additional Taft-Hartley clients.



Strategy and Investment Terms

Separate Account
Periods Ending 9/2022

Investment Manager	Minimum Investment	Liquidity Terms	Management Fee	408(b)(2) Provided	Accepts H&W Assets
Chartwell Investment Partners	\$5,000,000	Daily	50 Bps First \$20MM (1), 40 Bps Next \$30MM, \$30 Bps Thereafter	Yes	Yes
Post Advisory Group LLC	\$50,000,000	Daily / 3 Days	50 Bps Accounts <\$10MM, 48 Bps Accounts \$10-25MM, 45 Bps Accounts >\$25MM	Yes	Yes

(1) For initial investments greater than \$15 million, Chartwell has lowered the first fee tier from 50 Bps to 45 Bps.



Strategy and Investment Terms

Commingled Fund

Periods Ending 9/2022

Investment Manager	Minimum Investment	Liquidity Terms	Management Fee	408(b)(2) Provided	Accepts H&W Assets
Chartwell Investment Partners	Mutual Fund - \$1,000	Daily (1)	49 Bps (2)	Yes	Yes
Post Advisory Group LLC	Limited Partnership - \$3,000,000 (3)	Monthly / 30 Days (4)	50 Bps<\$10MM, 48 Bps Accounts \$10-25MM, 45 Bps Accounts>25MM (5)	Yes	Yes

Commingled funds have proprietary investment policies that govern their investment activities. Those policies may differ from those of their separately managed clients.

(1) Redemptions made within 30 days of purchase are subject to a 1.00% redemption fee.

(2) Represents the net expense ratio for the Chartwell Short Duration High Yield mutual fund (ticker: CWFIX).

(3) The subscription documents state a minimum initial investment of \$3 million, but the manager is willing to accept \$500,000 based on their relationship with IPS.

(4) After a six-month lock-up period from the initial investment.

(5) Discounted fee schedule for IPS clients



Strategy Fundamental Characteristics

Periods Ending 9/2022

Investment Manager	Strategy	Effective Duration (Yrs)	Yield to Worst	Average Quality Issue	Current # of Bond Issues
Chartwell Investment Partners	Short BB High Yield Fixed Income	2.0	7.2%	BB	57
Post Advisory Group LLC	Post Intermediate Term High Yield Strategy	2.6	8.0%	BB	139

Duration – A measure of the sensitivity of a bond’s price to changes in interest rates. Duration is cited in years. When interest rates increase, positive duration implies the bond’s price will decrease. When interest rates decrease, positive duration implies the bond’s price will increase.

Yield to Worst – The lowest potential yield that can be received on a bond without the issuer actually defaulting. This would include the issuer utilizing their call option to retire the bonds early.



Annualized Returns Periods Ending 9/2022

Investment Manager	Strategy	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Chartwell Investment Partners	Short BB High Yield Fixed Income	0.87	-5.23	-4.89	1.10	2.22	3.06	3.05
Post Advisory Group LLC	Post Intermediate Term High Yield Strategy	0.32	-7.25	-6.69	0.62	2.13	3.10	3.76
BofA Merrill Lynch	U.S. High Yield Cash Pay 1-3 Yr BB Index	0.67	-5.62	-5.14	1.40	2.51	3.51	3.50



Calendar Year Returns

Investment Manager	Strategy	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Chartwell Investment Partners	Short BB High Yield Fixed Income	2.77	4.93	7.93	1.09	3.87	7.37	-0.30	1.52	5.66	9.69
Post Advisory Group LLC	Post Intermediate Term High Yield Strategy	3.83	4.29	9.79	0.78	4.10	6.62	2.52	3.08	8.25	---
BofA Merrill Lynch	U.S. High Yield Cash Pay 1-3 Yr BB Index	3.24	5.44	8.69	1.35	3.62	8.46	1.20	1.92	5.58	10.22



5 Year Risk Statistics Periods Ending 9/2022

Investment Manager	Strategy	Beta Ratio	Sharpe Ratio	Tracking Error	Information Ratio	Consistency	Standard Deviation	Upside Market Capture	Downside Market Capture
Chartwell Investment Partners	Short BB High Yield Fixed Income	0.93	0.23	0.79	-0.37	41.67%	4.67	92.17	95.22
Post Advisory Group LLC	Post Intermediate Term High Yield Strategy	1.00	0.19	1.23	-0.31	50.00%	5.15	97.75	105.05
BofA Merrill Lynch	U.S. High Yield Cash Pay 1-3 Yr BB Index	1.00	0.28	0.00	---	0.00%	4.99	100.00	100.00

Beta Ratio – A measure of an investment’s volatility relative to a market benchmark. The beta of the market is 1.0. A beta above 1.0 indicates higher volatility than the benchmark; a beta below 1.0 indicates less volatility than the benchmark. For example, a portfolio with a beta value of 1.25 in an up market is expected to perform 25% better than the benchmark; a portfolio with a beta of .80 in an up market is expected to perform 20% worse than the benchmark; and a portfolio with a beta of 1.0 is expected to perform in line with the benchmark.

Sharpe Ratio - A measure of return in excess of the risk-free rate (U.S. Treasury Bills) per unit of volatility. The ratio is calculated by subtracting the risk-free rate from the rate of return for a portfolio and dividing the result by the portfolio’s standard deviation. The greater a portfolio’s ratio, the better its risk-adjusted performance.

Tracking Error - A measure of how closely a portfolio’s return follows its benchmark, tracking error is measured by the standard deviation of the difference between the portfolio and index returns. The higher the tracking error, the higher the variability of the portfolio returns around the benchmark. Tracking error is often used as a measurement of consistency of returns against a benchmark over time.

Information Ratio – A measure of a portfolio’s excess returns above (below) a benchmark to the volatility of those excess returns. Information is calculated by subtracting the return of a portfolio by the return of the benchmark and then dividing that by the tracking error of those returns. A positive information ratio implies a manager is rewarded for their active decisions around their benchmark.

Consistency - Defined as the percentage of months the manager outperformed the index (also referred to as “batting average”).

Standard Deviation - A statistical measure of the dispersion of a set of data from its mean, depicting how widely returns varied over a certain period of time. Standard deviation is the most commonly cited measure of the volatility or “risk” in investment returns. An investment manager with a standard deviation in excess of the index historically had volatility greater than the index.

Capture Ratios - A measure an investment manager’s performance relative to their benchmark in a rising (“up market capture”) or falling (“down market capture”) environment. Up and down market capture ratios indicate the percentage of the “market’s” performance captured by an investment manager. For example, a manager with a downside capture of 80% generated a return that was less negative than the market (i.e., S&P -1.0% vs. manager -0.8%); a manager with a downside capture of 120% generated a return that was more negative than the market (i.e., S&P -1.0% vs. manager -1.2%); and a manager with a downside capture of -100% generated a positive return in a negative market environment (i.e. S&P -1.0% vs. manager +1.0%).



10 Year Risk Statistics Periods Ending 9/2022

Investment Manager	Strategy	Beta Ratio	Sharpe Ratio	Tracking Error	Information Ratio	Consistency	Standard Deviation	Upside Market Capture	Downside Market Capture
Chartwell Investment Partners	Short BB High Yield Fixed Income	0.94	0.66	0.74	-0.60	45.00%	3.66	92.81	100.13
Post Advisory Group LLC	Post Intermediate Term High Yield Strategy	0.98	0.79	1.11	0.23	59.17%	3.93	103.50	98.70
BofA Merrill Lynch	U.S. High Yield Cash Pay 1-3 Yr BB Index	1.00	0.74	0.00	---	0.00%	3.84	100.00	100.00

Beta Ratio – A measure of an investment’s volatility relative to a market benchmark. The beta of the market is 1.0. A beta above 1.0 indicates higher volatility than the benchmark; a beta below 1.0 indicates less volatility than the benchmark. For example, a portfolio with a beta value of 1.25 in an up market is expected to perform 25% better than the benchmark; a portfolio with a beta of .80 in an up market is expected to perform 20% worse than the benchmark; and a portfolio with a beta of 1.0 is expected to perform in line with the benchmark.

Sharpe Ratio - A measure of return in excess of the risk-free rate (U.S. Treasury Bills) per unit of volatility. The ratio is calculated by subtracting the risk-free rate from the rate of return for a portfolio and dividing the result by the portfolio’s standard deviation. The greater a portfolio’s ratio, the better its risk-adjusted performance.

Tracking Error - A measure of how closely a portfolio’s return follows its benchmark, tracking error is measured by the standard deviation of the difference between the portfolio and index returns. The higher the tracking error, the higher the variability of the portfolio returns around the benchmark. Tracking error is often used as a measurement of consistency of returns against a benchmark over time.

Information Ratio – A measure of a portfolio’s excess returns above (below) a benchmark to the volatility of those excess returns. Information is calculated by subtracting the return of a portfolio by the return of the benchmark and then dividing that by the tracking error of those returns. A positive information ratio implies a manager is rewarded for their active decisions around their benchmark.

Consistency - Defined as the percentage of months the manager outperformed the index (also referred to as “batting average”).

Standard Deviation - A statistical measure of the dispersion of a set of data from its mean, depicting how widely returns varied over a certain period of time. Standard deviation is the most commonly cited measure of the volatility or “risk” in investment returns. An investment manager with a standard deviation in excess of the index historically had volatility greater than the index.

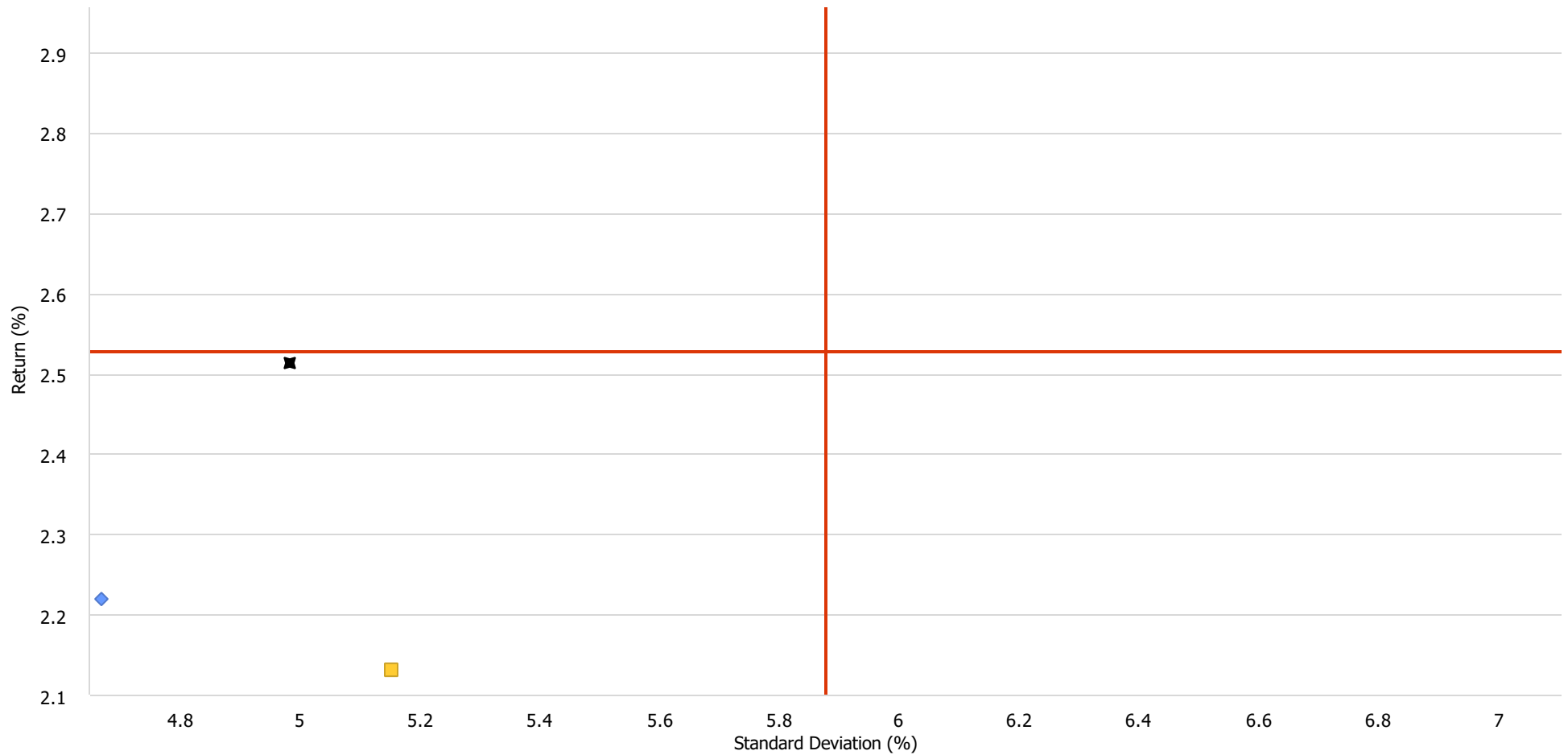
Capture Ratios - A measure an investment manager’s performance relative to their benchmark in a rising (“up market capture”) or falling (“down market capture”) environment. Up and down market capture ratios indicate the percentage of the “market’s” performance captured by an investment manager. For example, a manager with a downside capture of 80% generated a return that was less negative than the market (i.e., S&P -1.0% vs. manager -0.8%); a manager with a downside capture of 120% generated a return that was more negative than the market (i.e., S&P -1.0% vs. manager -1.2%); and a manager with a downside capture of -100% generated a positive return in a negative market environment (i.e. S&P -1.0% vs. manager +1.0%).



Risk vs. Return

Annualized Five Year Returns

Periods Ending 9/2022



◆ Chartwell Investment Partners: Short BB High Yield Fixed Income

■ Post Advisory Group LLC: Post Intermediate Term High Yield Strategy

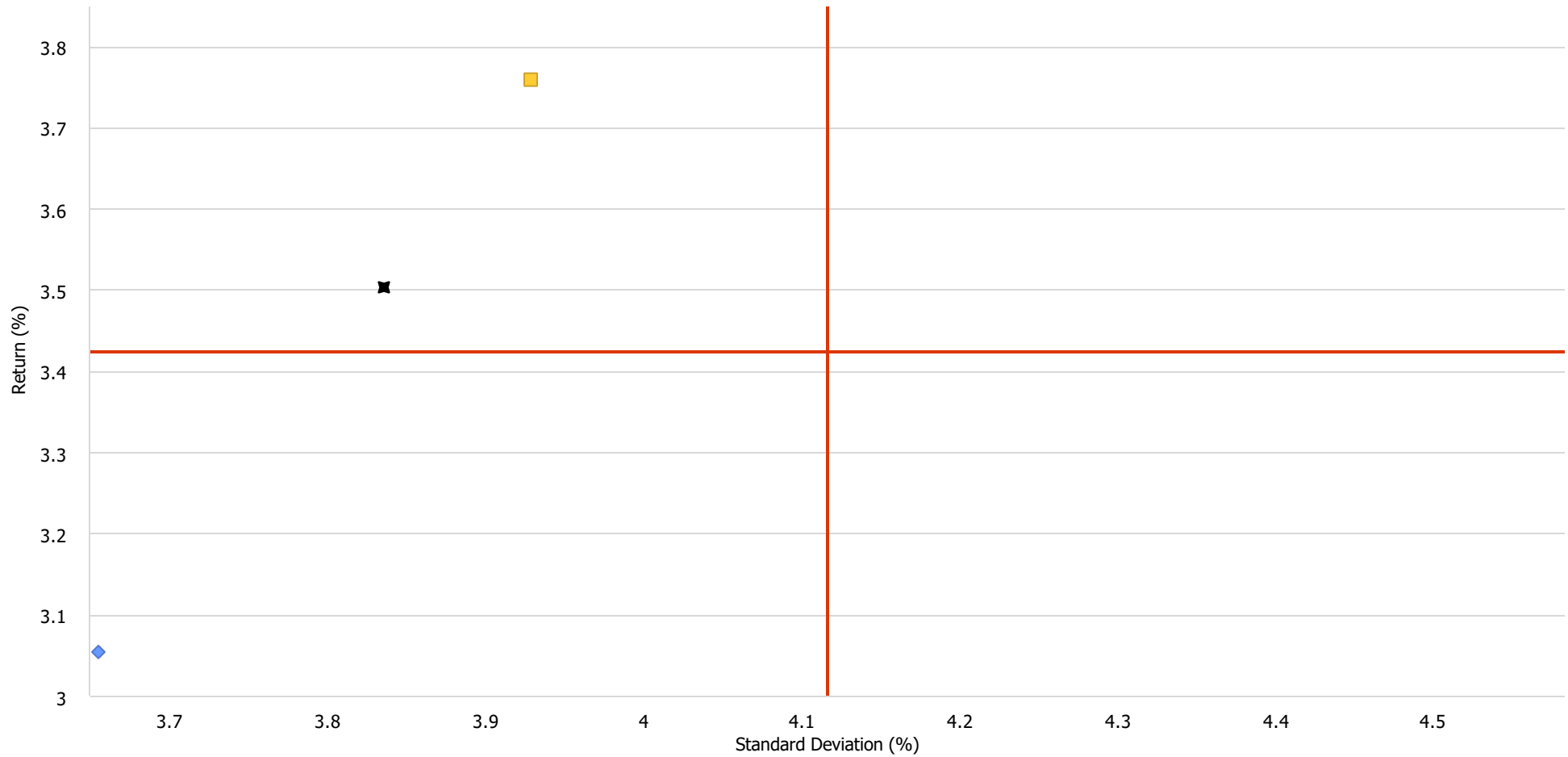
✱ BofA Merrill Lynch: U.S. High Yield Cash Pay 1-3 Yr BB Index

+ US High Yield Fixed Income - Short Duration

Universe: eVestment US High Yield Fixed Income - Short Duration



Risk vs. Return Annualized Ten Year returns Periods Ending 9/2022



◆ Chartwell Investment Partners: Short BB High Yield Fixed Income

■ Post Advisory Group LLC: Post Intermediate Term High Yield Strategy

✱ BofA Merrill Lynch: U.S. High Yield Cash Pay 1-3 Yr BB Index

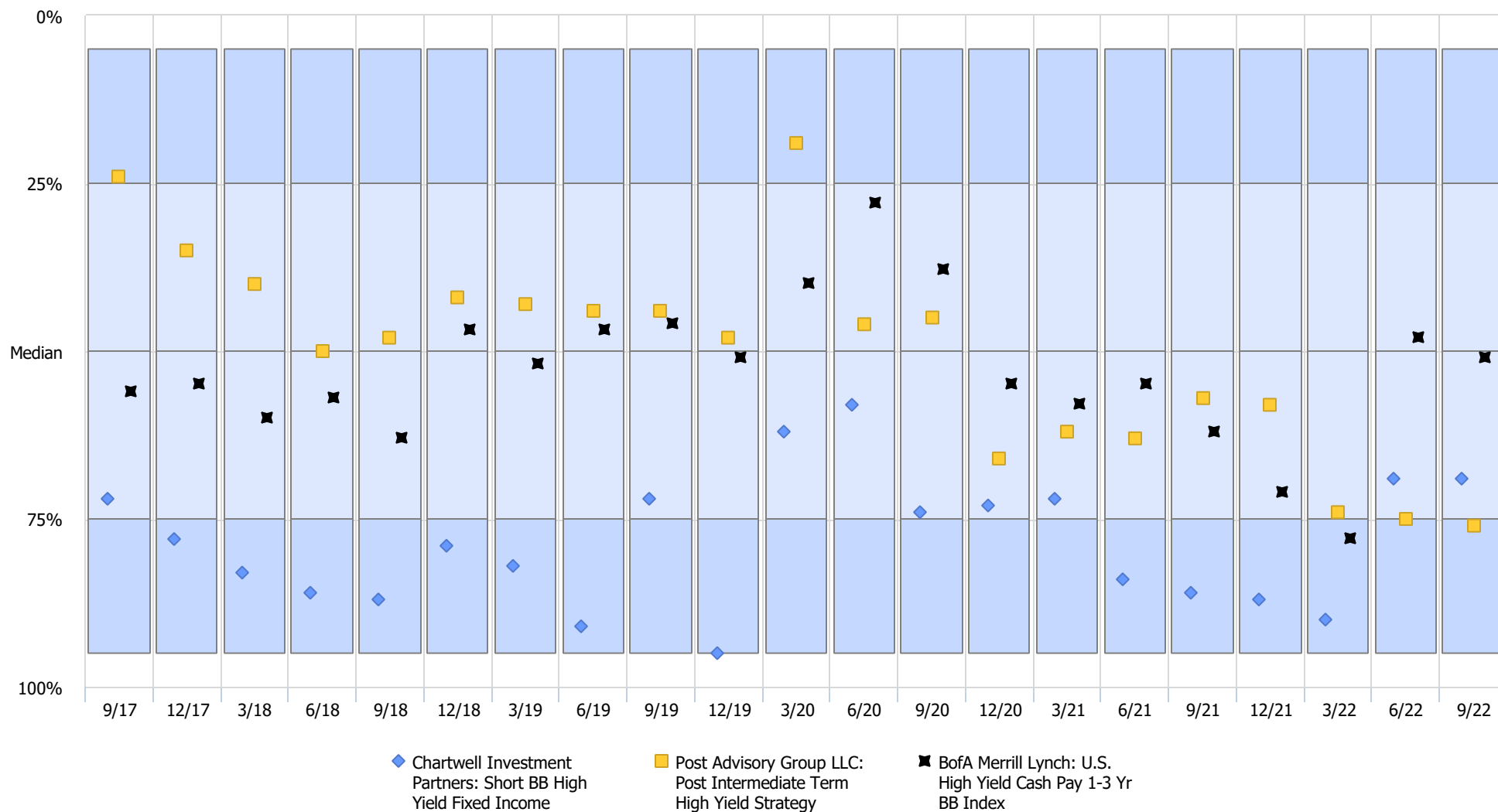
+ US High Yield Fixed Income - Short Duration

Universe: eVestment US High Yield Fixed Income - Short Duration



5 Year Rolling Returns with 1 Quarter Rollback - Universe Rankings

Periods Ending 9/2022

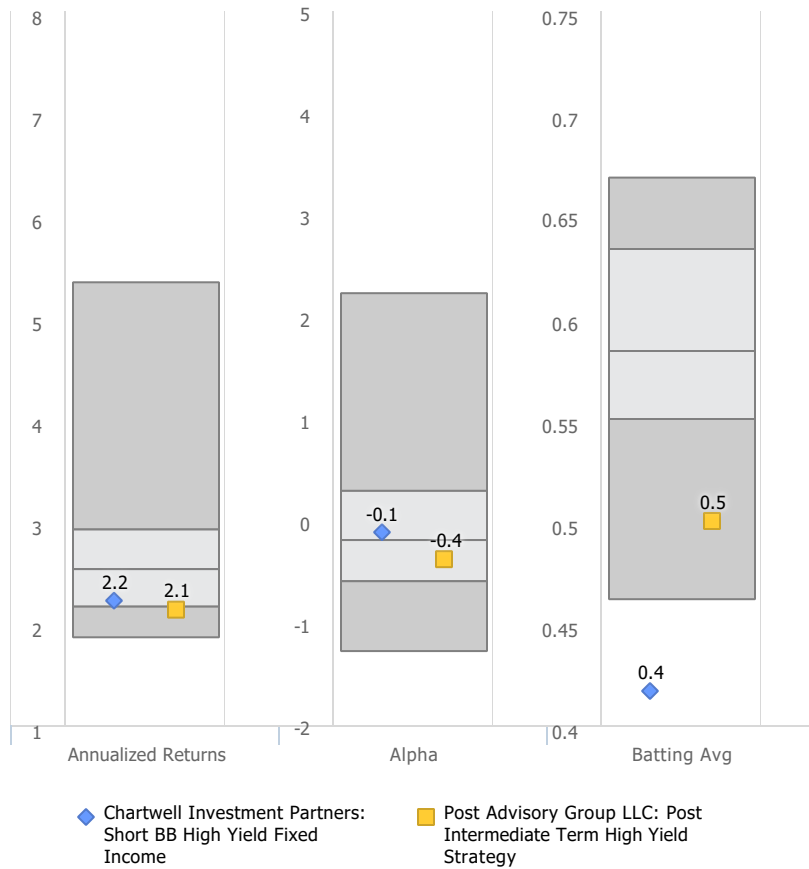


Universe: eVestment US High Yield Fixed Income - Short Duration



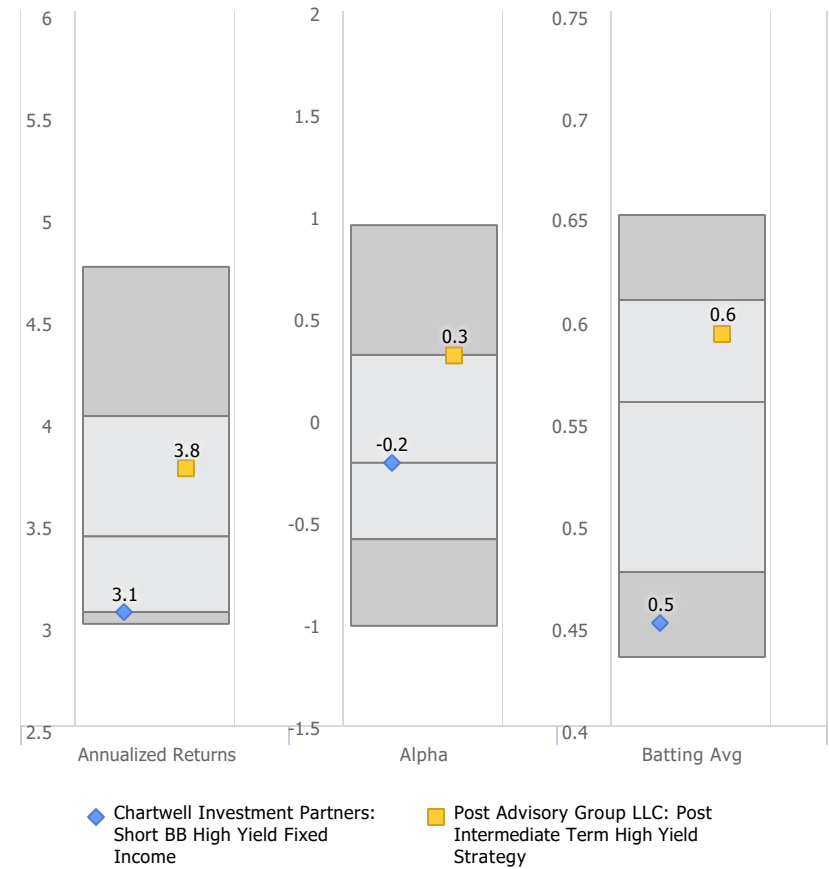
eVestment US High Yield Fixed Income - Short Duration Returns and Statistics Periods Ending 9/2022

5 Year Statistics



Universe: eVestment US High Yield Fixed Income - Short Duration

10 Year Statistics



Universe: eVestment US High Yield Fixed Income - Short Duration

Alpha - The amount of an investment's return that is independent of the return of the market. Alpha is generated by active management through security selection and may be positive or negative relative to a given benchmark.

Batting Average - Defined as the percentage of months the manager outperformed the index (also referred to as "consistency").

Firm

Investment Summary

Chartwell
Investment
Partners

Chartwell's philosophy of high yield bond management is defensive, stressing preservation of principal and compounding of the income stream. We prefer low beta companies with predictable business models, and we favor issuers with stable or improving cash flow, internal deleveraging capacity, and ample liquidity. We opportunistically look for securities that appear undervalued based on our assessment of the issuers risk profile. Our decision-making process is both discretionary and systematic. The data analysis portion of our credit research is systematic, while final investment decisions are discretionary, incorporating the teams judgement of relative values and credit risk. Our investment process relies heavily on the collective judgment of the portfolio management team.

Post
Advisory
Group LLC

The foundation of Post's investment approach is based on extensive bottom-up fundamental credit research to achieve superior credit selection. They focus on the identification of investments with what they believe to have downside risk reduction and asymmetric upside potential. Instead of trying to identify loans and bonds which are simply inexpensive on a relative value basis, a mentality they believe is a common trap for many high yield investors, they focus on identifying high quality businesses in attractive industries which have the business models and balance sheets to withstand different kinds of market volatility. Post augments its bottom-up fundamental credit research with a top-down macro and technical overlay to tactically construct and reposition its portfolios depending upon its view of market conditions. The interplay between the bottom-up fundamental credit research and the top-down macro and technical overlay results in a focused approach to portfolio construction.

Firm

Firm Background

Chartwell Investment Partners

Chartwell Investment Partners, Inc., is a Berwyn, Pennsylvania based investment firm, founded in 1997, focusing on institutional, sub-advisory and private client relationships. On January 3, 2014, Chartwell Investment Partners, LP (Chartwell, LP), entered into a definitive agreement to join TriState Capital Holdings, Inc. (NASDAQ: TSC, TriState Capital). On March 5, 2014, Chartwell, LP sold substantially all of its assets and business to Chartwell, a newly formed Pennsylvania corporation and wholly owned subsidiary of TriState Capital. The roster of employees, investment teams, address and phone number of Chartwell was the same as Chartwell, LP upon closing of the transaction. Effective July 1, 2015, Chartwell's organizational structure changed from a Pennsylvania corporation to a Pennsylvania Limited Liability Company "LLC". This modification was made strictly for tax purposes only, with no effect on Chartwell's ownership, management, roster of employees or investment advisory services provided to its clients. On April 29, 2016, The Killen Group, Inc.'s (TKG) personnel, operations and assets were acquired and merged into Chartwell's business as a result Chartwell's prior parent company acquisition. The TKG assets are included in Firm Managed Assets beginning the period ended Q2 2016. On April 6, 2018, Chartwell's prior parent company acquired the long-only investment management business of Columbia Partners, based in Chevy Chase, MD. The deal represented approximately \$1 billion of AUM in Fixed Income and Equity relationships. Along with the AUM, three of Columbia's employees were integrated into Chartwell's business. They included a Marketing Director, a Large Cap Growth Portfolio Manager and a Senior Analyst. On June 1, 2022, Chartwell Investment Partners, LLC., was acquired by Carillon Tower Advisers, the asset management subsidiary of Raymond James, Inc. (NYSE: RJF) which is based in St. Petersburg, Florida, with no effect on Chartwell's management, roster of employees, or investment advisory services provided to its clients. .

Post Advisory Group LLC

Post Advisory Group, LLC ("Post") has been in the high yield asset management business since its inception in April 1992. Post is a leading multi-strategy, value-oriented asset manager specializing in global high yield securities and senior loans and offers a broad range of high yield and senior loan products with customized risk and duration profiles within six investment strategies. Post currently manages assets on behalf of institutional investors around the world, including corporate and government pension funds, insurance companies, sovereign wealth funds, foundations, and endowments, as well as high net worth individuals. As of December 31, 2020, Post is currently 77.3% owned by PGI (a member of PFG), 19.3% owned by NLI (wholly owned by Nippon), and 3.4% owned by selected senior investment professionals as a result of a long-term equity incentive plan. The following are selected key events in the evolution of our firm: In 1992, Post launched its High Yield Plus Strategy. In 1993, Post launched its High Yield Strategy. In 2000, Post changed its name to MW Post Advisory Group, LLC in connection with an investment from Metropolitan West Financial, LLC ("Metropolitan"). In 2002, Post launched its Limited Term High Yield Strategy. In 2004, Metropolitan sold its interest, and Principal Global Investors ("PGI"), a member of Principal Financial Group® ("PFG"), acquired a 68% ownership stake and changed the company's name to Post Advisory Group, LLC. In 2009, the alternative investment business of Post Advisory Group, LLC was spun off, and PGI increased its ownership stake to 100%. In 2012, Post launched its Intermediate Term High Yield Strategy. In 2013, Post launched its Senior Loan Strategy. PGI also sold 20% of its ownership stake to NLI US Investments, Inc. ("NLI"), which is wholly owned by Nippon Life Insurance Company ("Nippon"). In 2015, Post implemented a long-term equity incentive plan pursuant to which senior investment team professionals at the time of the award will earn up to a 10% ownership stake. In 2017, Post partnered with its parent company, PFG, to launch the CLO Strategy. Post priced its inaugural CLO in April 2019. In 2021, Post launched its Structured Products Strategy consisting of the Post CLO Equity Fund dedicated to supporting the issuance of Post managed CLOs (second CLO priced in July 2021). In July 2021, Post launched its ESG High Yield Strategy. We believe that the recently launched strategies are natural extensions of our core competencies investing in high yield bonds and senior loans.



eVestment and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable; however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. Not for general distribution.
* All categories not necessarily included; Totals may not equal 100%. Copyright 2022 eVestment Alliance, LLC. All Rights Reserved.

Memo



To: Board of Trustees - FELRA & UFCW Pension Fund
From: Richard I. Sichel, Jr., Christopher McDonough
CC: David Jensen, Anne-Marie Sims, Barry Slevin, Esq., Sarah Sanchez, Esq., Michael Kreps, Esq.
Date: December 12, 2022
Re: FELRA and UFCW Pension Fund - Investment Grade Fixed Income Duration Analysis

Background

- At the September 15, 2022 meeting, the Trustees of the FELRA and UFCW Pension Fund ("FELRA Pension") approved the hire of Segall Bryant & Hamill for a short-term investment grade government/credit mandate for the legacy assets of the FELRA Pension until a decision is made on the investment strategy for the legacy assets.
- At the November 2, 2022 meeting, the Trustees approved an asset allocation for the FELRA Pension's legacy assets that includes a 55% allocation to investment grade fixed income. For modeling purposes, core (full duration) investment grade fixed income was included in the approved allocation. The Trustees requested additional analysis regarding the duration of the investment grade fixed income portfolio.

Investment Grade Fixed Income Strategies

IPS has capital market assumptions for three investment grade fixed income strategies for use in asset allocation reviews:

- Short-Term Fixed Income: strategies include 1-3 year government and investment grade corporate credit securities.
- Intermediate Fixed Income: strategies include 1-10 year government and investment grade corporate credit securities.
- Core Fixed Income: strategies include 1-30 year government (including mortgage-backed securities, "MBS") and investment grade corporate credit securities.
- IPS' current long term capital market assumptions for each strategy are as follows:

Investment Grade Fixed Income Strategy	Expected Return	Expected Risk
Short-Term Gov./Credit	3.00%	1.50%
Intermediate Investment Grade	3.75%	3.00%
Core Investment Grade	4.00%	4.00%

As shown in the table below, while the three strategies have similar credit quality breakdowns, the core fixed income strategy has a smaller allocation to U.S. government securities, primarily due to the allocation to MBS. The primary difference between the three strategies is duration, which is less than two years for the short-term strategy and over six years for the core strategy. It is reasonable to assume that an active fixed income manager benchmarked to one of the indexes below will manage duration, credit quality, and sector allocation within a fairly tight range around the values below.

As of 9/30/2022	Short-Term Fixed Income	Intermediate Fixed Income	Core Fixed Income
Benchmark	Bloomberg 1-3 Year U.S. Government/Credit Index	Bloomberg Intermediate U.S. Government/Credit	Bloomberg U.S. Aggregate
Effective Duration	1.89 years	3.86 years	6.20 years
Yield-to-Worst	4.54%	4.61%	4.75%
Credit Quality Breakdown			
U.S. Government (non-MBS)	70%	65%	42%
AAA	5%	3%	31%
AA	3%	3%	3%
A	12%	14%	11%
BBB	10%	15%	13%
Sector Breakdown			
U.S. Government (non-MBS)	71%	65%	42%
MBS	-	-	30%
Corporate Credit	29%	35%	28%

Duration: A measure of the sensitivity of a bond's price to changes in interest rates. Duration is cited in years. The higher the duration, the more sensitive a bond's price is to changes in interest rates.

- When interest rates increase, positive duration implies the bond's price will decrease. When interest rates decrease, positive duration implies the bond's price will increase. For example, if a bond portfolio has a duration of five years, then a 1% increase in interest rates means the portfolio will lose 5% ($1\% \times 5 = 5\%$). Conversely, a 1% decrease in interest rates means the same bond portfolio will gain 5%.

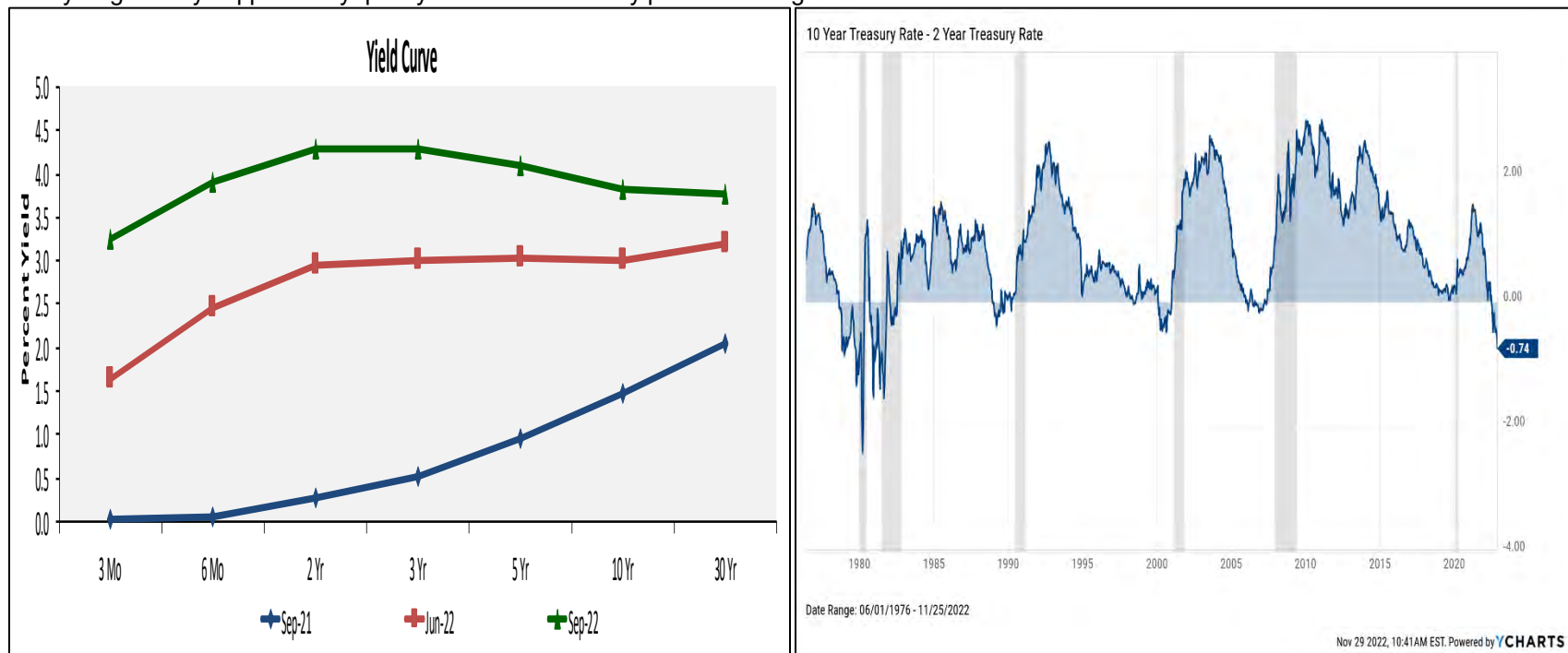
- The table below approximates the sensitivity to interest rate changes for investment grade fixed income strategies and the U.S. 10-year Treasury.
- Due to the significant increase in interest rates in 2022, the impact of further rate increases is cushioned by higher starting yields. For example, as of 12/31/21, the Bloomberg Aggregate had a starting yield of 1.75% and a 100 bps change in yield was projected to result in a one-year return of -5.1%. As of 9/30/22, the starting yield of the Bloomberg Aggregate was 4.75% and a 100 bps increase in interest rates would result in a one-year return of -1.7%, 340 bps better than at the start of the year.
- Longer duration bonds will benefit to a greater degree from falling interest rates going forward. For example, based on a 100 decline in rates, the short-term strategy would be expected to return 6.4% while the core strategy would return 11.2%.

Yield Change (bps)	10 Year Treasury	Bloomberg 1-3 year Govt/Credit	Bloomberg Int Govt/Credit	Bloomberg Aggregate
-300	29.15	10.13	16.55	23.98
-250	24.93	9.20	14.56	20.78
-200	20.70	8.27	12.57	17.57
-150	16.48	7.34	10.58	14.37
-100	12.25	6.41	8.59	11.16
-75	10.14	5.95	7.60	9.56
-50	8.03	5.48	6.60	7.96
-25	5.91	5.02	5.61	6.35
0	3.80	4.54	4.61	4.75
25	1.69	4.09	3.62	3.15
50	-0.43	3.62	2.62	1.55
75	-2.54	3.16	1.63	-0.06
100	-4.65	2.69	0.63	-1.66
150	-8.88	1.76	-1.36	-4.87
200	-13.10	0.83	-3.35	-8.07
250	-17.33	-0.10	-5.34	-11.28
300	-21.55	-1.03	-7.33	-14.48
Duration	8.45	1.86	3.98	6.41

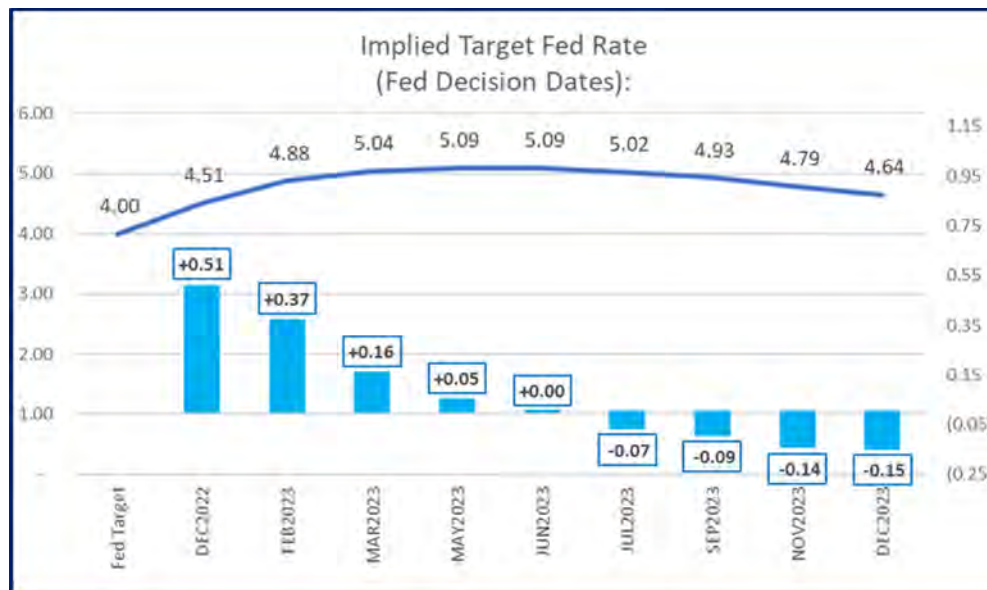
FOR ILLUSTRATIVE PURPOSES ONLY: For each index the current yield to worst as of 9/30/2022 was used as the base case annualized return. The annualized return sensitivity to a uniform increase or decrease in the yield curve was calculated by taking the index's Option-Adjusted Duration as of 9/30/2022 multiplied by the percentage point change in the yield curve (basis point change divided by 100) and then appropriately adding or subtracting this implied percentage change in the value of the index (due to the shift in the yield curve) to the base case annualized return. This is a rough approximation of the annual return sensitivity to parallel shifts in the yield curve.

Interest Rates

- While interest rates have increased across the yield curve in 2022, shorter-term segments of the market have experienced more dramatic increases in response to the U.S. Federal Reserve's efforts to tame surging inflation. As a result, the Treasury yield curve is now flat/inverted.
- A yield curve inversion is commonly thought to signal uncertainty and the potential for an upcoming economic recession. The 2-year/10-year spread declined to -74 bps as of 11/28/22, from a positive sloping level of 77 bps at the start of the year. The current inversion is deeper than prior to each of the last four U.S. recessions.
- In the event of or in anticipation of a recession, the Fed has traditionally cut rates to ease financial conditions. It is reasonable to assume that longer duration strategies will outperform should the Fed cut interest rates or pause rate increases. Typically, the market response to the ending of a hiking cycle generally happens very quickly and will dramatically pull forward higher returns.



The below chart illustrates the expected peak for the Fed policy rate, which fell from 5.3% to 5.1%, with the market pricing in approximately +100 bps in additional Fed hikes, including +50 bps at the December 14th meeting before possibly beginning to cut rates in the second half of 2023.



FELRA Pension Considerations

When the yield curve is upward sloping (“normal”), investors are compensated through higher yields for owning longer-dated bonds. Given the flat/inverted shape of the curve currently, the yield advantage for core fixed income relative to short- and intermediate term is minimal. The primary advantage to utilizing a core duration strategy is greater potential upside in the event interest rates falls in response to the Fed easing monetary policy. Core fixed income strategies outperform during periods of weak economic growth and monetary easing. Alternatively, the uncertainty regarding the Fed’s ability to fight inflation could lead to a prolonged period of rate hikes and cause the market to reprice, where duration assets would continue to selloff. Generally, short- and intermediate fixed income strategies outperform during periods of strong economic growth or monetary tightening scenarios.

Recommendation

Given that the FELRA Pension legacy portfolio has a small amount of assets relative to the amount that will be received over the next 10 years, it may be prudent to continue to utilize the short-term government/credit strategy previously approved and consider other options in early 2023 when IPS updates capital market assumptions.



ASSET ALLOCATION REVIEW

FELRA & UFCW Pension Fund



Asset Allocation Overview

- The asset allocation review is provided to assist the Trustees in identifying portfolios that meet the investment objectives, risk tolerance, and liquidity requirements of the Fund.
- The IPS Investment Committee develops and utilizes capital market assumptions for various asset classes to help determine the optimal mix of assets for an investment portfolio. These assumptions are forward-looking projections of an asset class' expected return and risk as measured by standard deviation or volatility of returns.
- All return assumptions are "net of fee" market or index returns and do not include alpha or excess return expected to be generated through active management. Return assumptions are the average expected return over the next 10 – 20 years and not the expected return in any given year.
- IPS capital market assumptions are compared with various assumptions from other providers and published resources for reasonableness. The IPS Investment Committee reviews the assumptions on a semiannual basis but may adjust at anytime, as needed, based on severe market dislocations, sudden changes in interest rates, or extreme events that impact global markets, economic development, and the business cycle.
- IPS capital market assumptions are not a guarantee of future performance. Actual results may differ from the projections included in this review.
- The asset allocation modeling requires the mathematical construction of an efficient frontier of various portfolios with distinct asset allocations and risk and return characteristics. The modeling process also requires the imposition of constraints, so that the efficient frontier represents a prudently diversified portfolio with adequate consideration of the liquidity needs and investment time horizon. Unconstrained optimization frequently generates allocations that have superior risk/reward characteristics, but the resulting allocations may not be adequately diversified and/or may have inappropriate allocations to illiquid investments.
- IPS utilizes the Wilshire Compass system for asset allocation modeling and all returns are based on geometric calculation.

Annualized Expected Returns over 10-20 years

Equity Asset Class	Return	Risk
U.S. Large Cap	6.25%	15.25
U.S. Mid Cap	6.75%	17.25
U.S. Smid Cap	7.00%	18.75
U.S. Small Cap	7.25%	20.50
International Large Cap	7.50%	16.50
International Small Cap	8.00%	19.00
Emerging Markets	8.50%	21.00
Global Equity	7.00%	17.00

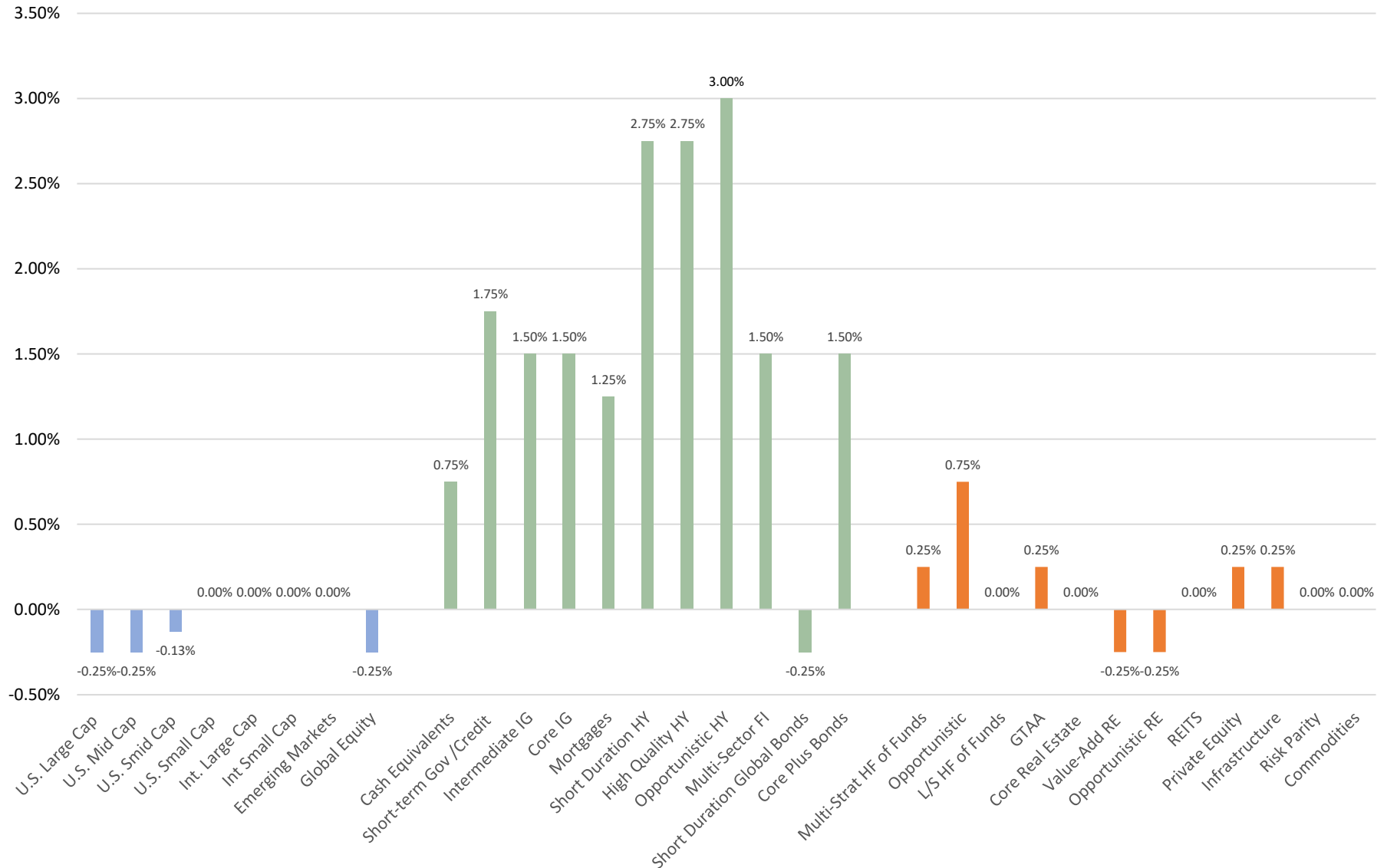
Fixed Income Asset Class	Return	Risk
Cash Equivalents	2.00%	0.50
Short-term Gov / Credit	3.00%	1.50
Intermediate Investment Grade	3.75%	3.00
Core Investment Grade	4.00%	4.00
Mortgages	4.25%	5.00
Short Duration High Quality High Yield	6.25%	5.75
High Quality High Yield	7.00%	8.00
Opportunistic High Yield	7.75%	8.75
Multi-Sector Fixed Income	3.00%	6.25
Short Duration Global Bonds	1.50%	5.00
Core Plus Bonds	4.25%	5.00

Alternatives Asset Class	Return	Risk
Multi-Strategy Hedge Fund of Funds	4.50%	6.00
Opportunistic Strategies	8.00%	10.75
Long Short Equity Hedge Fund of Funds	5.00%	8.50
Global Tactical Asset Allocation	6.00%	12.25
Core Real Estate	6.25%	9.75
Value-Add Real Estate	7.50%	11.50
Opportunistic Real Estate	9.25%	14.25
REITS	6.00%	20.00
Diversified Private Equity	10.00%	20.00
Core Infrastructure	6.25%	11.00
Core+/Value Add Infrastructure	8.25%	14.00
Risk Parity	5.50%	16.00
Commodities	3.75%	17.00

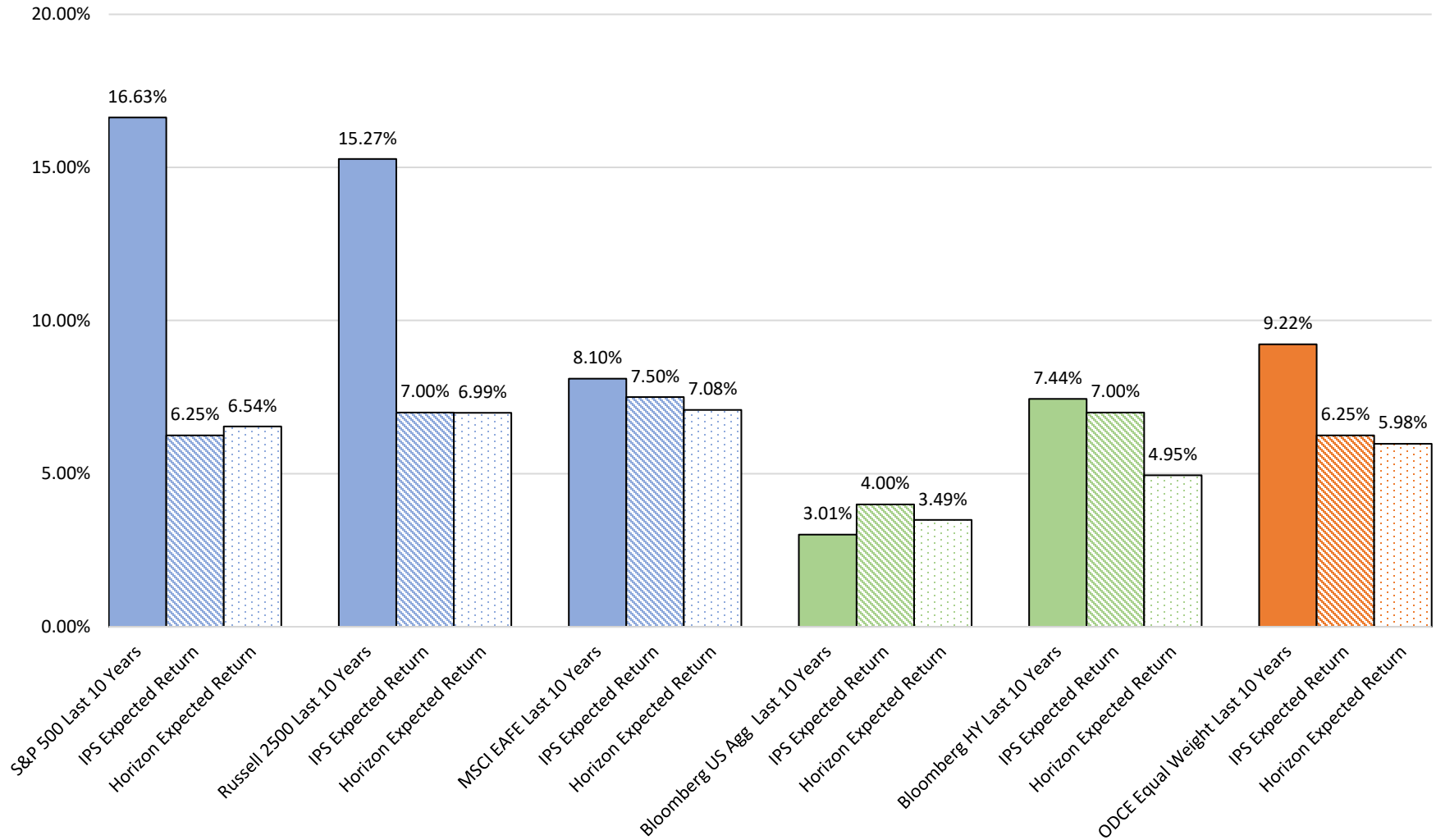


- IPS Investment Committee July 2022.
- Inflation expectation 2.3%.

Change in Expected Returns¹



Historical Returns vs. Forward Looking Assumptions



- "Last 10 Years" returns are as of 12/31/2021.

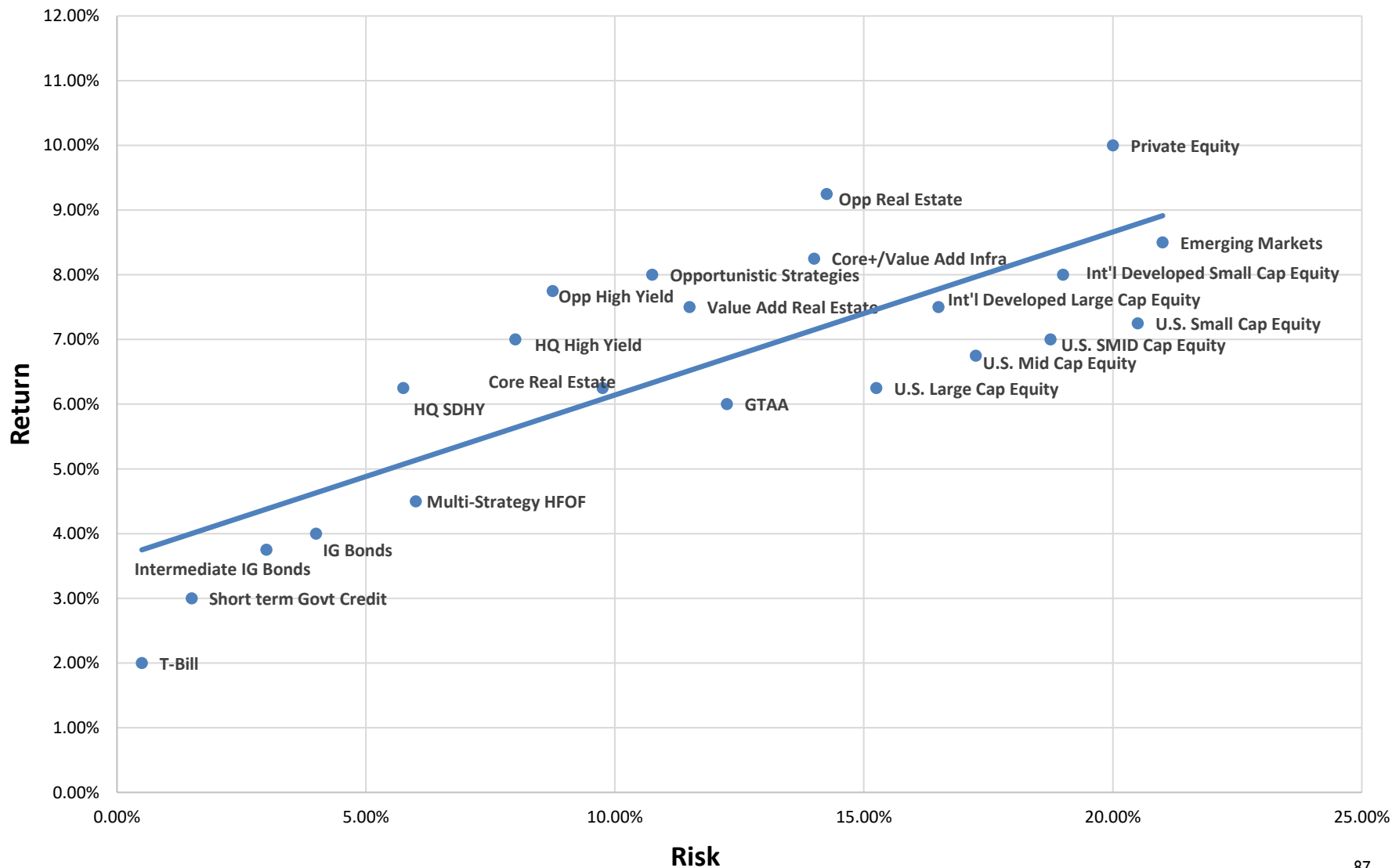
- "Horizon Expected Returns" are sourced from the Survey of Capital Market Assumptions (20-year horizon) published by Horizon Actuarial Services, LLC published in the August 2022 edition.

Asset Class Constraints

Total Domestic Equity	60%	Max
Domestic Large Cap Equity	20%	Min
Small, Mid and Smid Cap Equity	20%	Max
International Equity Large Cap	20%	Max
International Small Cap Equity	10%	Max
Cash	5%	Max
Fixed Investment Grade (Includes Short Term & Intermediate)	10%	Min
High Quality High Yield Bonds (Includes Short Duration)	20%	Max
Real Estate – Core	10%	Max
Real Estate – Value Add	10%	Max
Hedge Fund of Funds – Multi Strategy	5%	Max
Opportunistic Strategies	10%	Max
Global Tactical Asset Allocation	10%	Max
Private Equity	5%	Max
Total Alternatives	40%	Max

The constraints shown are used for modeling purposes only. They should not be construed as suggested or recommended allocations, or limits on allocations, to any asset class or investment strategy. Each client fund has different facts, circumstances, time horizon, risk tolerance levels, return objectives, investment preferences, cash flows, and liquidity requirements. As such, each client's investment policy may differ materially from the constraints shown above.

2022 Capital Market Assumptions



Asset Class Correlations



Assumption table:	US Large Cap Equity	US Mid Cap Equity	US Smid Cap Equity	US Small Cap Equity	Int'l Large Cap Equity	Int'l Small Cap Equity	Emerging Markets Equity	Cash	Short Term Govt / Credit	Interm. Invest. Grade	Core Invest. Grade	Short Duration High Yield	High Yield	Real Estate Core	Real Estate Value Add	Private Equity	HFoF Multi-Strategy	Opp. Strategies	GTAA	Infrastructure
US Large Cap Equity	1.00																			
US Mid Cap Equity	0.96	1.00																		
US Smid Cap Equity	0.93	0.97	1.00																	
US Small Cap Equity	0.90	0.95	0.98	1.00																
Int'l Equity	0.87	0.87	0.83	0.79	1.00															
Int'l Small Cap Equity	0.84	0.86	0.83	0.79	0.96	1.00														
Emerging Markets Equity	0.75	0.77	0.74	0.70	0.86	0.85	1.00													
Cash	-0.13	-0.14	-0.14	-0.13	-0.06	-0.12	-0.01	1.00												
Short Term Govt / Credit	-0.09	-0.07	-0.10	-0.12	0.03	0.03	0.09	0.40	1.00											
Int. Investment Grade	0.01	0.03	-0.01	-0.05	0.10	0.11	0.15	0.15	0.85	1.00										
Core Investment Grade	0.03	0.05	0.00	-0.04	0.09	0.10	0.14	0.11	0.77	0.96	1.00									
Short Duration High Yield	0.62	0.70	0.65	0.60	0.66	0.70	0.66	-0.13	0.19	0.31	0.29	1.00								
High Yield	0.70	0.77	0.73	0.69	0.73	0.74	0.71	-0.14	0.13	0.27	0.28	0.93	1.00							
Real Estate Core	0.12	0.09	0.08	0.09	0.07	0.04	0.00	0.21	-0.20	-0.15	-0.12	-0.15	-0.08	1.00						
Real Estate Value Add	0.12	0.09	0.08	0.09	0.07	0.04	0.00	0.21	-0.20	-0.15	-0.12	-0.15	-0.08	0.99	1.00					
Private Equity	0.90	0.95	0.98	0.99	0.79	0.79	0.70	-0.13	-0.12	-0.05	-0.04	0.60	0.69	0.09	0.09	1.00				
HFoF Multi-Strategy	0.75	0.79	0.76	0.72	0.80	0.84	0.77	-0.06	-0.04	0.01	0.03	0.65	0.68	0.14	0.14	0.72	1.00			
Opportunistic Strategies	0.72	0.79	0.75	0.71	0.75	0.76	0.73	-0.15	0.11	0.24	0.24	0.92	0.98	-0.10	-0.10	0.71	0.68	1.00		
GTAA	0.94	0.91	0.87	0.83	0.96	0.93	0.85	-0.07	0.10	0.20	0.21	0.67	0.74	0.07	0.07	0.83	0.77	0.76	1.00	
Infrastructure	0.77	0.75	0.69	0.64	0.83	0.77	0.70	-0.01	0.06	0.19	0.22	0.57	0.64	0.11	0.11	0.64	0.64	0.65	0.85	1.00

A correlation of 1.00 indicates two series move perfectly together while a -1.00 shows they move perfectly opposite one another.

Figures based on historical data from March 2005 - March 2022.

Efficient Frontier Analysis



Efficient Frontier Report										
Asset	Portfolio 1	Portfolio 2	Portfolio 3	Portfolio 4	Portfolio 5	Portfolio 6	Portfolio 7	Portfolio 8	Portfolio 9	Portfolio 10
US Large Cap Equity	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
US Mid Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
US Smid Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
US Small Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
Int'l Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.14	20.00
Int'l Small Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.43	10.00	10.00
Emerging Markets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short Term Govt/Credit	75.00	66.53	30.29	4.54	0.00	0.00	0.00	0.00	0.00	0.00
Int. Investment Grade	0.00	5.55	35.16	49.95	17.33	0.00	0.00	0.00	0.00	0.00
Core Investment Grade	0.00	0.00	0.00	0.00	22.53	29.81	21.68	16.57	10.00	10.00
Short Duration High Yield	0.00	0.00	2.55	10.04	20.00	20.00	20.00	0.00	0.00	0.00
High Yield	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	11.41	0.00
Real Estate – Core	0.00	0.00	2.00	5.46	10.00	10.00	10.00	10.00	9.45	0.00
Real Estate – Value Add	0.00	7.92	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.00
Private Equity	0.00	0.00	0.00	0.00	0.00	0.00	3.32	5.00	5.00	5.00
HFoF - Multi Strategy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opportunistic Strategies	0.00	0.00	0.00	0.00	0.14	10.00	10.00	10.00	10.00	10.00
GTAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure	0.00	0.00	0.00	0.00	0.00	0.19	5.00	5.00	5.00	5.00
Return	3.77	4.27	4.75	5.23	5.71	6.17	6.61	7.02	7.37	7.40
Risk	3.15	3.34	3.74	4.22	4.77	5.54	6.52	7.79	9.66	14.04
Return/Risk	1.20	1.28	1.27	1.24	1.20	1.11	1.01	0.90	0.76	0.53

Current Policy Comparison

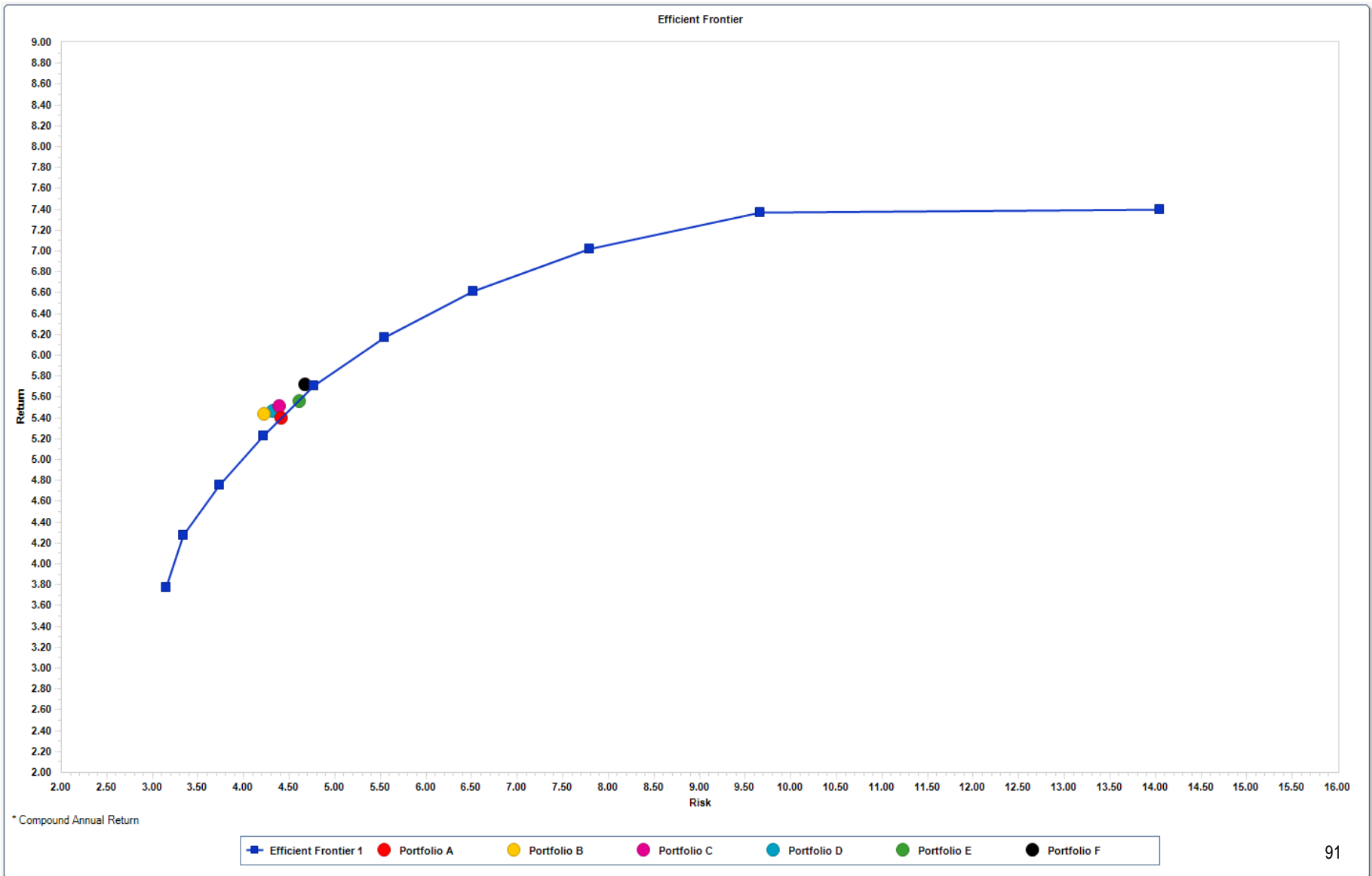


		% Equity Target		% Fixed Income Target			% Alternatives Target			Expected Return (net of fees)	Risk	Comments
		US LC Equity	US SMID Cap Equity	Fixed Income Interm	SDHY	High Yield	Real Estate Value Add	Opp	Infra			
1	Portfolio A	12.5	2.5	55.0	15.0	7.5	7.5	0.0	0.0	5.40%	4.42	Current Policy
2	Portfolio B	10.0	0.0	55.0	15.0	7.5	7.5	5.0	0.0	5.43%	4.23	Add 5% Opportunistic
3	Portfolio C	10.0	0.0	55.0	12.5	5.0	7.5	10.0	0.0	5.51%	4.39	Add 10% Opportunistic
4	Portfolio D	10.0	0.0	55.0	15.0	7.5	7.5	0.0	5.0	5.46%	4.32	Add 5% Infrastructure
5	Portfolio E	10.0	0.0	55.0	12.5	5.0	7.5	0.0	10.0	5.56%	4.61	Add 10% Infrastructure
6	Portfolio F	5.0	0.0	55.0	7.5	5.0	7.5	10.0	10.0	5.72%	4.68	Add 10% Opportunistic and 10% Infrastructure

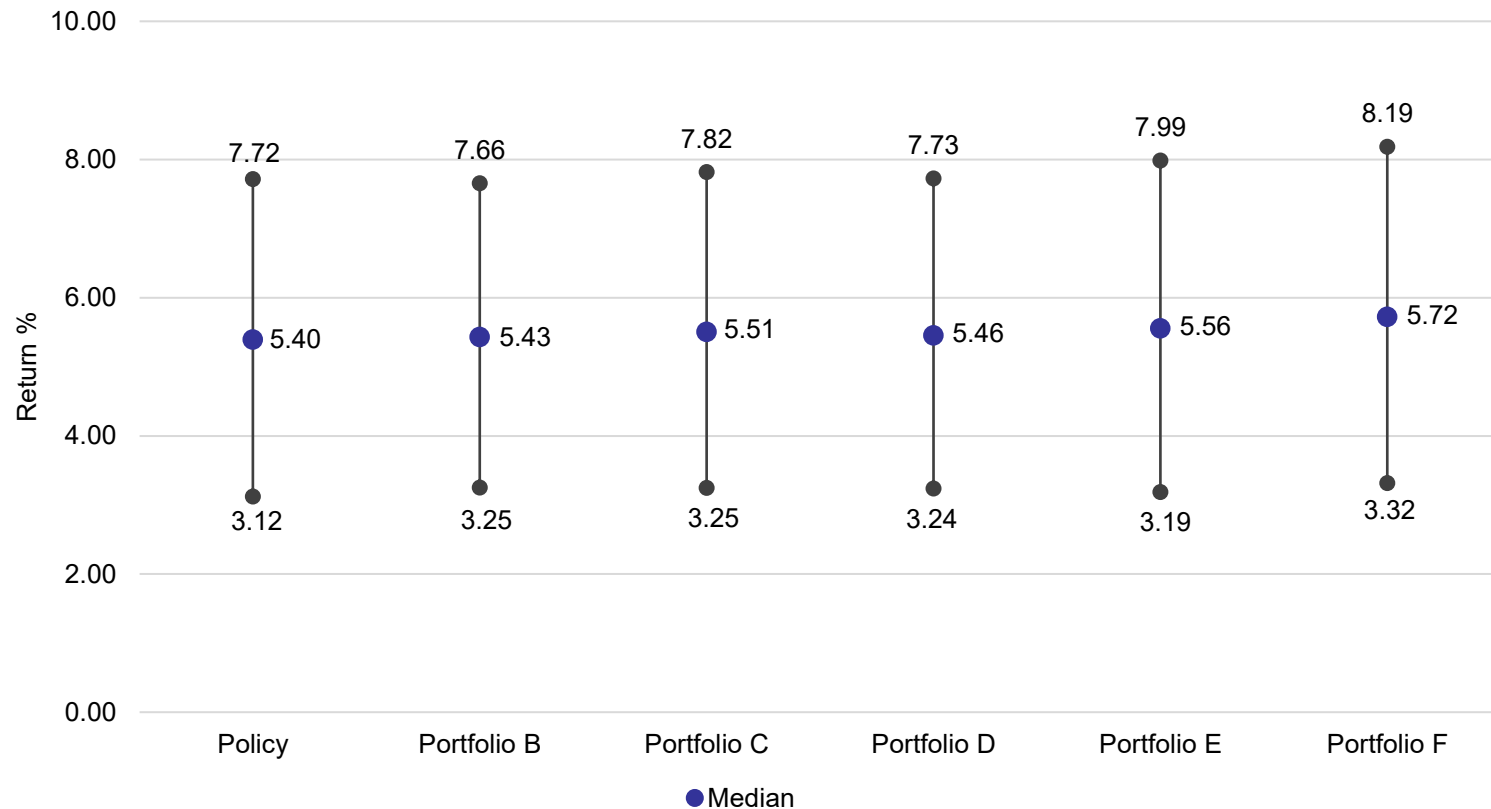
Scenarios are shown for illustrative purposes.

Green	Increase allocation
Red	Decrease allocation
Blue	New asset class

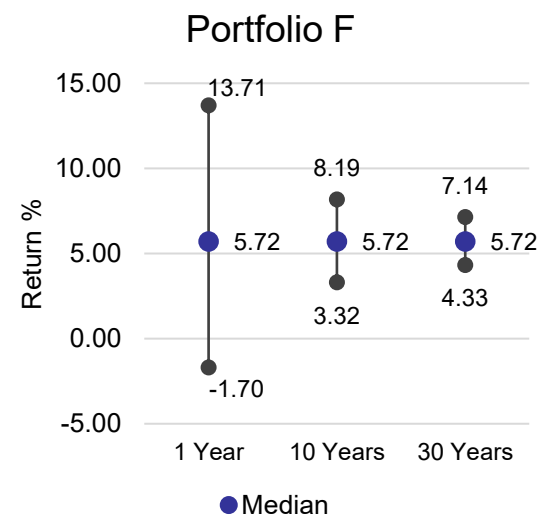
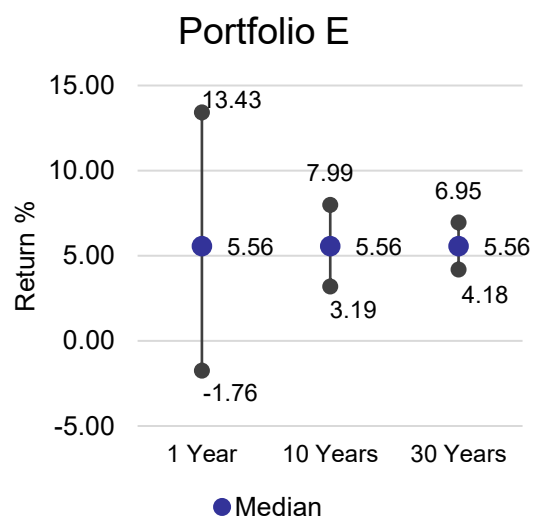
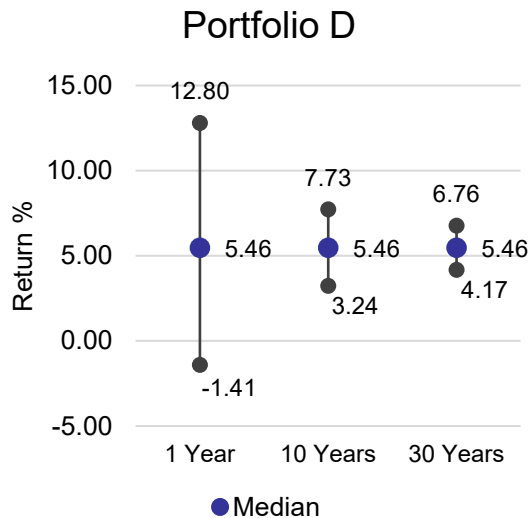
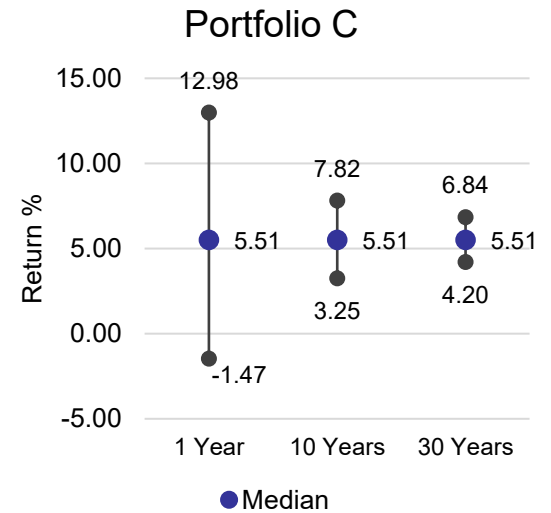
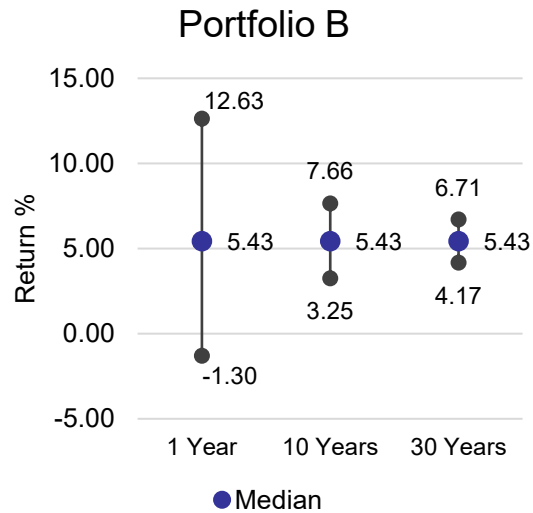
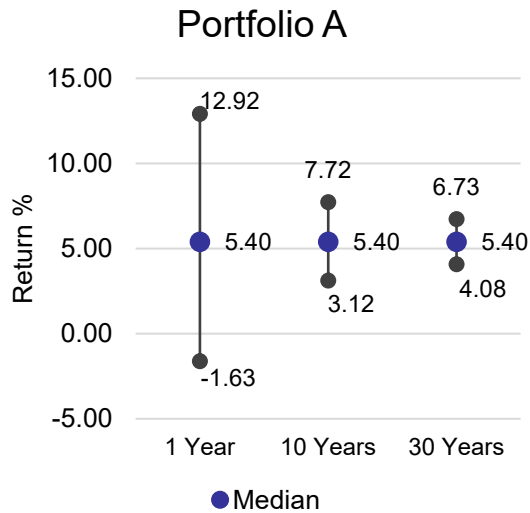
Efficient Frontier Comparison



Potential Distribution of Returns – 10 Year Horizon



Potential Distribution of Returns

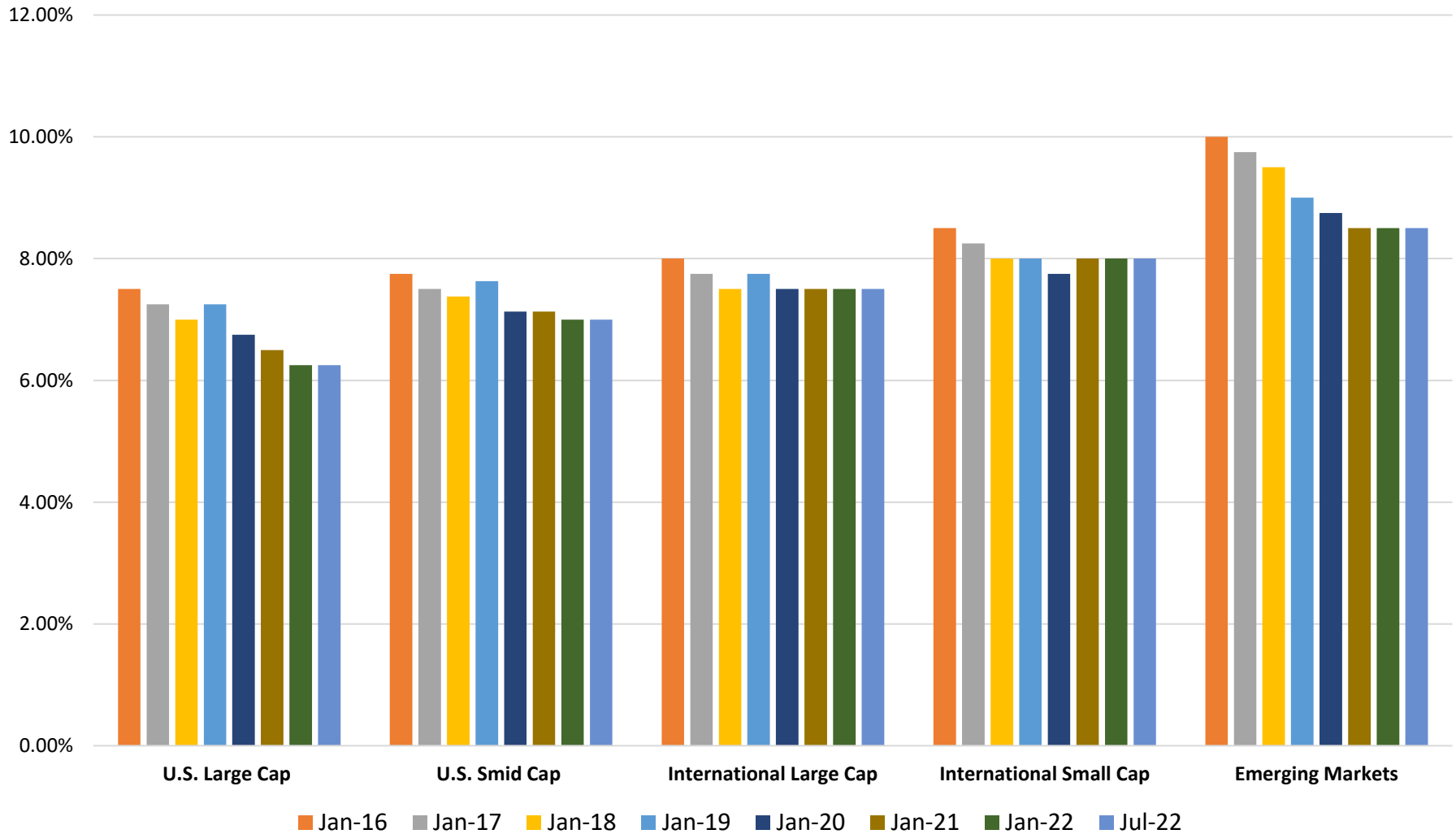


Hurdle Rate Analysis – 10 Year Horizon

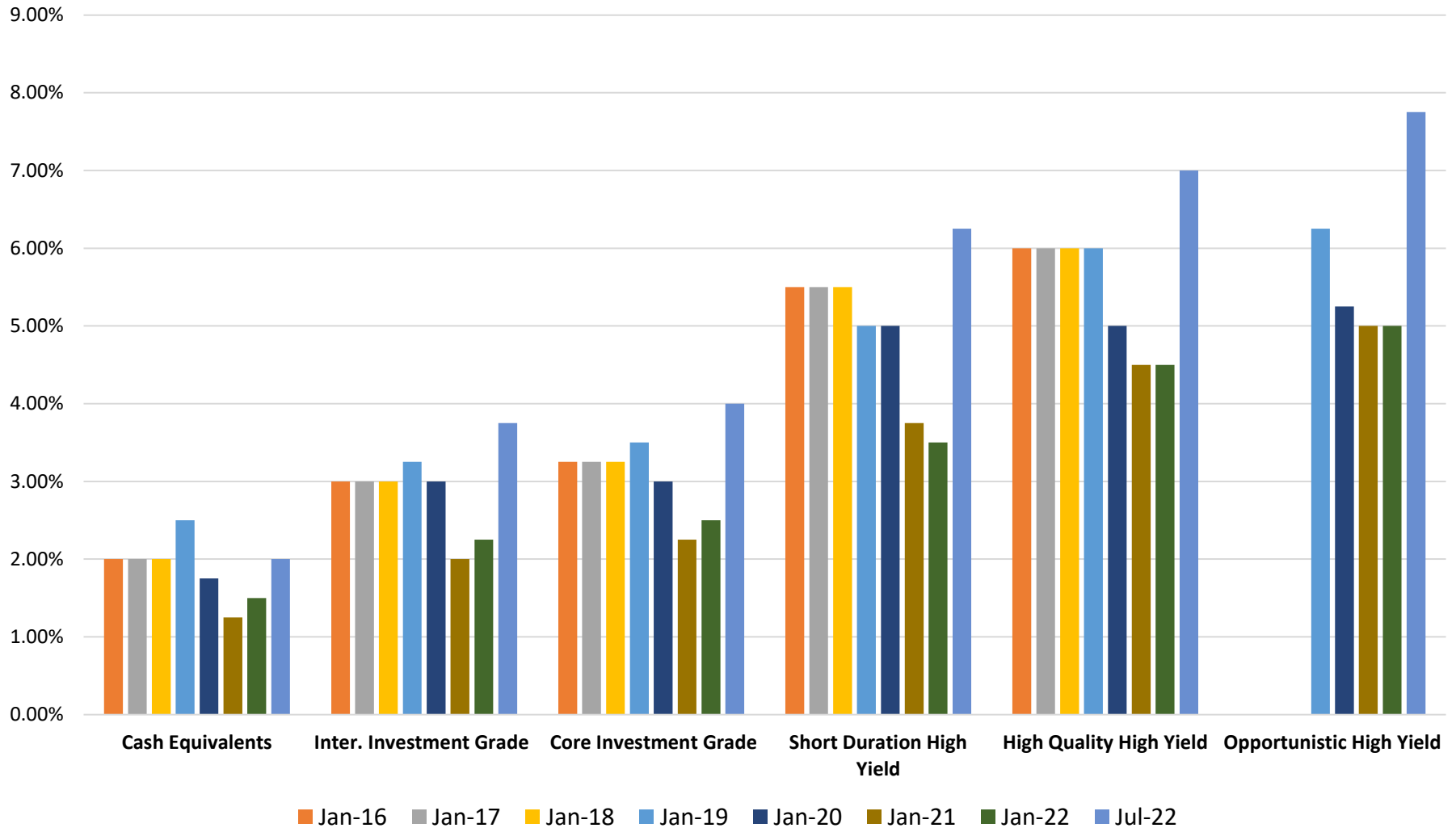
	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E	Portfolio F
Expected Return	5.40%	5.43%	5.51%	5.46%	5.56%	5.72%
Expected Risk	4.42	4.23	4.39	4.32	4.61	4.68
Probability of achieving 5.00%	61.72%	63.31%	65.06%	63.84%	65.75%	69.77%
Probability of achieving 5.25%	54.36%	55.69%	57.80%	56.40%	58.89%	63.27%
Probability of achieving 5.50%	46.84%	47.85%	50.27%	48.72%	51.75%	56.37%
Probability of achieving 5.75%	39.44%	40.09%	42.74%	41.09%	44.55%	49.27%

APPENDIX

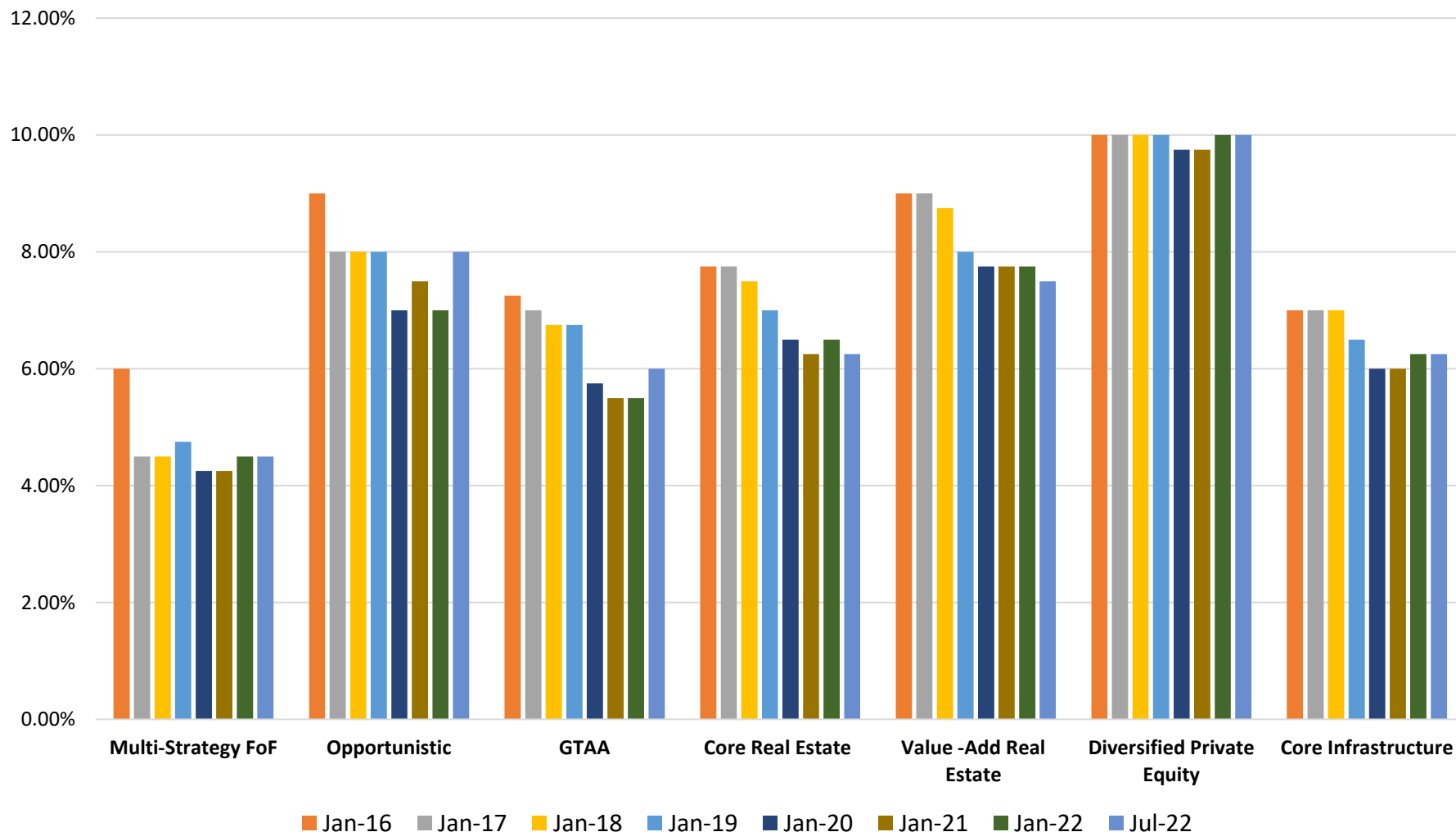
Public Equity – IPS Historical Capital Market Assumptions



Fixed Income – IPS Historical Capital Market Assumptions

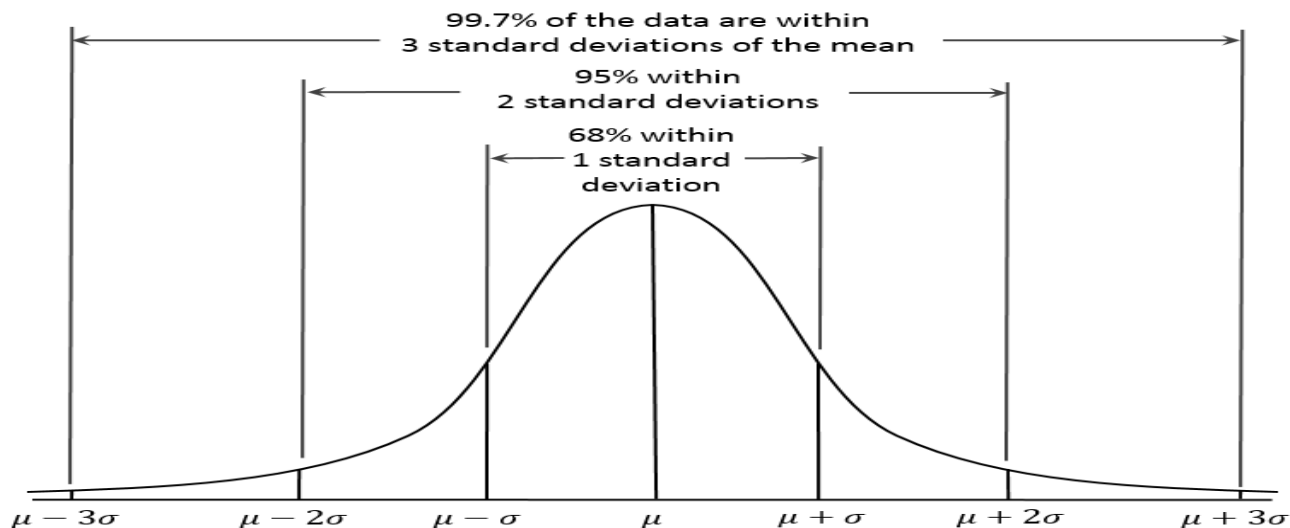


Alternative Investments – IPS Historical Capital Market Assumptions



Explanation of Methodology

- The analysis in this presentation utilizes the parametric method, also known as the variance-covariance method
- The parametric method assumes a normal distribution of returns, commonly referred to as a bell-shaped curve.
 - For a normal distribution, 68% of the observations are within +/- one standard deviation, 95% are within +/- two standard deviations, and 99.7% are within +/- three standard deviations
- The chart below shows a normal distribution



- In reality, financial returns are not “normal;” they exhibit positive skewness (you get more positive returns above the mean than a normal distribution would predict) and kurtosis (the extreme “tails” of both positive and negative returns occur more often and are more extreme than a normal distribution would predict).

Glossary of Investment Terminology

Total Return	The annual return on an investment including appreciation, depreciation and income (interest, dividends, net operating income).
Alpha	The excess return (positive or negative) generated by active portfolio management and security selection, relative to a benchmark.
Beta	A historical measure of an investment's volatility relative to the market. The beta of the market is 1.0 (as represented by a benchmark such as the S&P 500 Index). A beta of greater than 1.0 indicates an investment with greater volatility than the benchmark. A beta of less than 1.0 indicates less volatility than the benchmark.
Standard Deviation	Standard deviation is a statistical measurement of the dispersion of a set of data from its mean. The more spread apart the data are, the greater the standard deviation.
Risk	For an investment portfolio, risk is typically defined as the volatility of the returns, as measured by calculating the standard deviation. The risk does not necessarily indicate the risk of loss, but does indicate the risk of inconsistent returns.
Capture Ratio	Calculates how well a manager performs in a rising or falling market as a percentage of a benchmark. In a rising market, a percentage of 100 or better is preferred, and indicates the manager exceeded the benchmark (upside capture ratio). In a falling market, a percentage of less than 100 is preferred, indicating that the manager lost less than the benchmark (downside capture ratio).
Correlation	A statistical measure of how two asset classes perform in relation to each other. Asset classes with a correlation of 1.0 have perfect positive correlation (exactly the same). Assets with perfect negative correlation of -1.0 will perform equally but in opposite directions.
Efficient Frontier	A series of portfolios with the maximum expected return for any level of risk, which is calculated based on assumptions of risk, return and correlation. These portfolios are shown graphically on a risk and return chart, and represent the most efficient tradeoff between risk and return.
Market Cap	The dollar value of a corporation, which is calculated by multiplying the share price and the number of outstanding shares.
Large Cap	Stocks which typically have a market capitalization of \$20 billion or higher.
Mid Cap	Stocks which typically have a market capitalization of \$5 to \$20 billion.
Small Cap	Stocks which typically have a market capitalization of \$5 billion or less.
Geometric Calculation	Geometric Calculations are used when determining an annualized investment return and tends to dampen the effect of very high or very low values. The result is a number that is smaller than (or equal to) the arithmetic average of the values.
Compound Annual Returns	Compound annual returns show the annual investment return, assuming the investment grew at a constant rate, and reflects the impact of the time in the calculation of an investment return.
Return/Risk Ratio	The return/risk ratio is the expected return of an investment divided by the expected standard deviation (risk). When comparing return/risk ratios a higher value is presumed to be better than a lower value

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