



## El Paso County Retirement Plan

2880 International Cir., STE N030  
Colorado Springs, CO 80910

PH (719) 520-7490 • FAX (719) 520-7495  
EPCRPSupport@elpasoco.com

August 28th, 2023, Minutes

Meeting of the Board of Directors of the El Paso County Retirement Plan

August 28, 2023 – 8:00am

Microsoft Teams Teleconference

### Attendees

#### **Board Members:**

Chris Long (Chairman)  
Nikki Simmons (Vice Chairman)  
Chuck Broerman (Treasurer)  
William Jennings (Secretary)  
Andrew Prehm

#### **Other attendees:**

Christopher Del Valle, EPCRP, Retirement Counselor  
Linda Fowler, EPCRP, Senior Retirement Counselor  
Greg Kuppenheimer, EPCRP, Executive Director

#### **Associate Members:**

Heather Laslie  
Taylor Gross  
Victoria Bennett  
Michael Varnet  
Ryan Chacon

Thomas Toth, Wilshire Advisors, Managing Director

### Absent Members

#### **Board Members:**

#### **Associate Members:**

### Meeting

1. **Chairman Long called the meeting to order at 8:02 am, notes quorum, Vice Chairman Simmons, Treasurer Broerman, Secretary Jennings, Board Member Prehm, and Chairman Long.**
2. **Chairman Long noted no public comment.**
3. **Executive Director Kuppenheimer presents Executive Director's Report (see attached).**
  - The unofficial funding ratio is 61%
  - We have found no further successful fraudulent activity, but there was another attempt.
  - We have started our RFP process and have begun contacting new custodians.
  - Insurance is a significant cost for the Plan, approximately 15% per annum, with the cost exploding over the last few years. This growth in cost has slowed recently.
4. **Tom Toth, Managing Director at Wilshire Advisors presents Q2 2023 Performance Update (see attached).**

The three primary drivers of the portfolio were its relatively lower exposure to public equities compared to peers, the exposure to core real estate, and the diversifying alternatives and their risk parity components. Secretary Jennings and Associate Board member Ryan Chacon discussed the attribution of the fund's underperformance relative to a reference fund with Mr. Toth. Chairman Long and Mr. Toth discussed the risk parity portion of the fund and the potential drag of the Global Low Volatility Equity allocation. Wilshire does not foresee an economic slowdown in the next couple of quarters. Executive Director Kuppenheimer and Mr. Toth discussed the impact of increasing rates with how that shifts ideal portfolio composition.
5. **Chairman Long presents the Chairman's Report**

Chairman Long has nothing to report.
6. **Chairman Long presents the Board packet for ratification by consent.**

Board Member Prehm moved to approve the Meeting Minutes. Secretary Jennings seconded the motion. The motion carried unanimously.

**7. Adjournment**

There being no further business, Chairman Long noted the next board meeting is September 25, 2023, at 8:00 a.m., virtually and adjourned the meeting.

**The meeting adjourned at 8:31 am.**

*William Jennings*

William Jennings (Oct 1, 2023 15:38 MDT)

William Jennings, Secretary

*Christopher Del Valle*

Christopher Del Valle, Recording Secretary



# Executive Director Report 28 August 2023

# Executive Director Report

Plan Funding Summary	Month-End	Year-End 2022
Actuarial Liability Value (as updated in latest AVP)	\$725 mil	\$725 mil
Asset Value (Estimate as of Month End)	\$442 mil	\$491 mil
Unfunded Liability	\$283 mil	\$234 mil
Funded Ratio	61%	68%

## Highlights for Board:

Fraud: we have found no further successful fraudulent activity, but there was another attempt.

Custodian: we have begun contacting possible new custodians.

Insurance: insurance renewal for 2023-2024 is reasonable; nearly flat to last year's premium.

# Executive Director Report

## Insurance Renewal:

Insurance is a significant cost for the Plan, but thankfully the renewal for 2023-2024 was surprisingly modest.

Rates jumped in the last two years, particularly in management/fiduciary liability and cyber; the Plan pays approximately double what it paid 5 years ago (grew at approximately 15% per annum, on average).

Type of Insurance	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Umbrella Liability	\$ 435	\$ 435	\$ 435	\$ 435	\$ 435	\$ 435	\$ 435
Workers Compensation	\$ 648	\$ 525	\$ 594	\$ 501	\$ 503	\$ 481	\$ 488
Commercial Package	\$ 728	\$ 787	\$ 765	\$ 797	\$ 890	\$ 1,030	\$ 1,285
Cyber Liability	\$ 5,364	\$ 5,937	\$ 6,117	\$ 8,061	\$ 11,320	\$ 21,068	\$ 20,477
Management Liability	\$ 32,501	\$ 33,198	\$ 35,253	\$ 42,762	\$ 21,013	\$ 22,035	\$ 22,235
Fiduciary Liability					\$ 35,387	\$ 38,511	\$ 39,109
<b>Grand Total</b>	<b>\$ 39,676</b>	<b>\$ 40,882</b>	<b>\$ 43,164</b>	<b>\$ 52,556</b>	<b>\$ 69,548</b>	<b>\$ 83,560</b>	<b>\$ 84,029</b>
<b>YoY % Change</b>		<b>3%</b>	<b>6%</b>	<b>22%</b>	<b>32%</b>	<b>20%</b>	<b>1%</b>

**Wilshire**

Prepared for



# El Paso County

## Quarterly Review

Thomas Toth, CFA – Managing Director

Second Quarter 2023

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- Quarterly Investment Performance Summary
- Operational Review
- Market Review

# Market Performance Summary

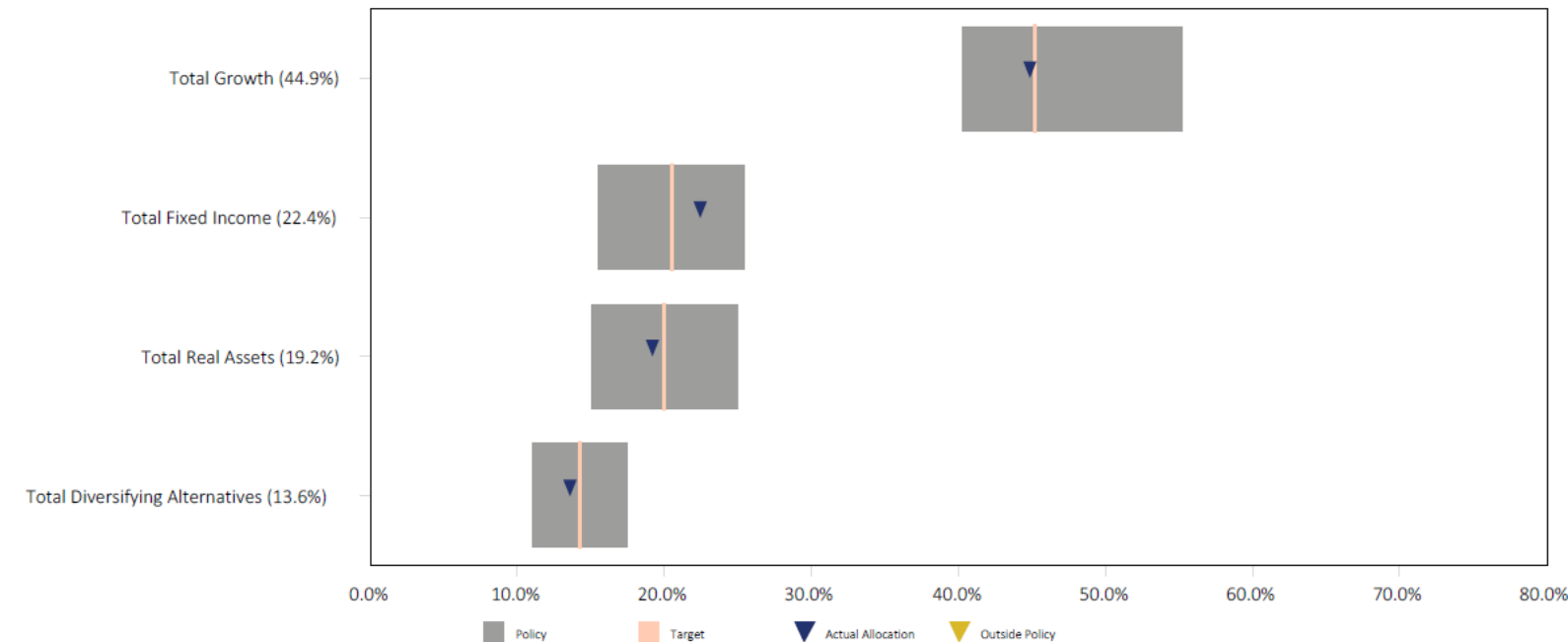
- Public equity markets rose strongly over the second quarter of 2023
  - Led by mega cap growth stocks in the US and developed market stocks in international markets
- Fixed income assets delivered modest negative returns as market expectations for future interest rates rose
  - Treasury yields rose but this was partly offset by credit spreads narrowing
  - Robust economic data continues to push out expectations of when the Fed will begin cutting rates
- Real assets returns have been volatile and mixed in Q2 2023
  - REITS and midstream energy rose while commodities, infrastructure and gold returns fell
- Markets sentiment has improved driven by a strong jobs market and broad economic growth, although credit conditions remain tight for new lending / refinancing
- The Fed paused and then hiked interest rates by 25 basis points to 5.25 % - 5.50%. Economic data will determine the future path of interest rates
  - The US economy rose by 2.0% in the second quarter
  - Core inflation remains above target at 4.7% YOY to July, with headline inflation of 3.2% YOY
  - Unemployment remains low (3.5%) and wage growth robust (4.4% YOY to July)



# Quarterly Investment Performance Summary

# Asset Allocation

Total Fund  
 Periods Ended As of June 30, 2023  
**Executive Summary**

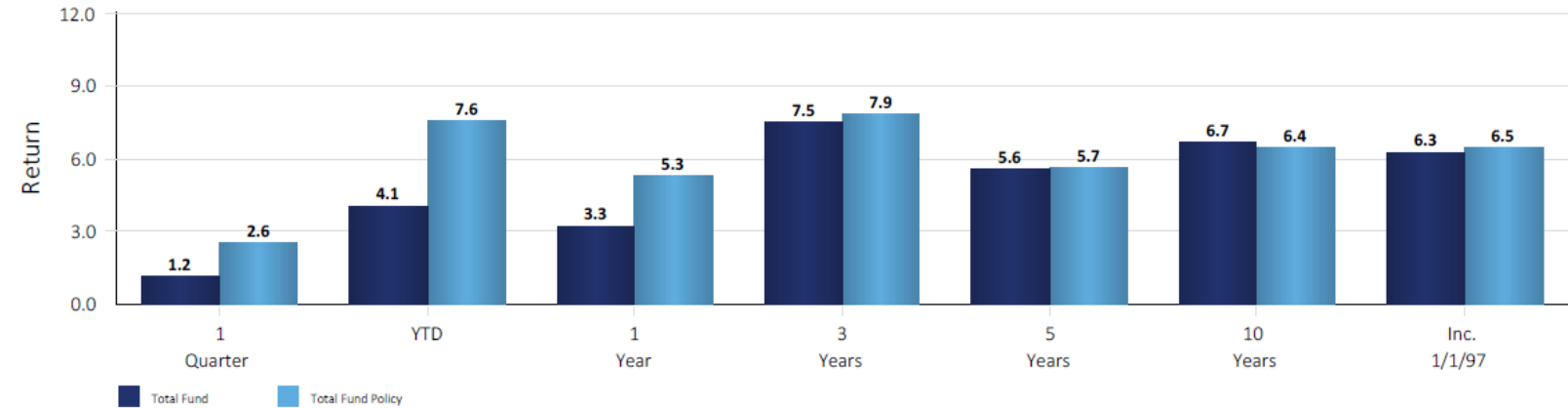


	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Minimum Rebalance \$	Maximum Rebalance \$
Total Fund	443,479,900	100.0			100.0		
Total Growth	199,013,635	44.9	40.3	55.3	45.3	-20,512,976	46,009,009
Total Fixed Income	99,347,253	22.4	15.5	25.5	20.5	-30,607,869	13,740,121
Total Real Assets	84,965,428	19.2	15.0	25.0	20.0	-18,443,443	25,904,547
Total Diversifying Alternatives	60,153,583	13.6	11.0	17.5	14.3	-11,370,794	17,455,399

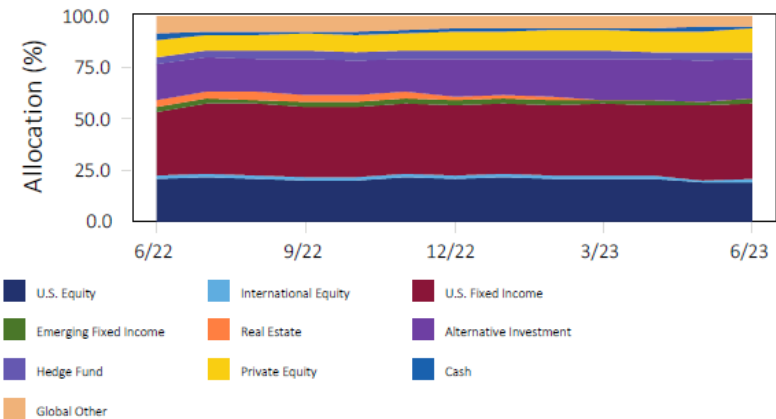
# Total Fund Summary

Total Fund  
Periods Ended June 30, 2023

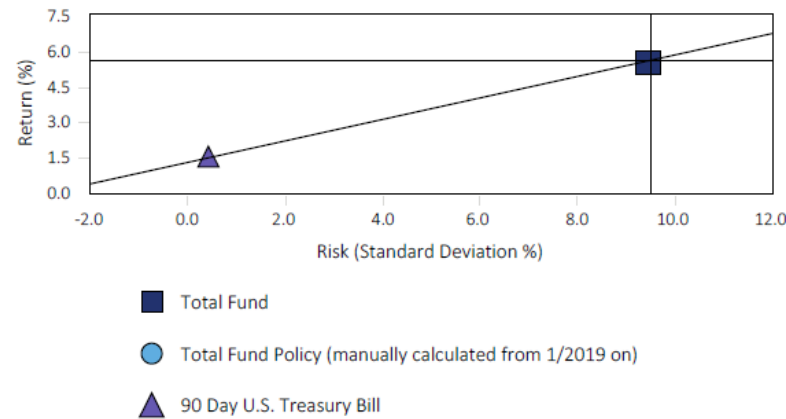
### Comparative Performance



### Historical Asset Allocation by Segment



### Risk and Return 07/1/18 - 06/30/23



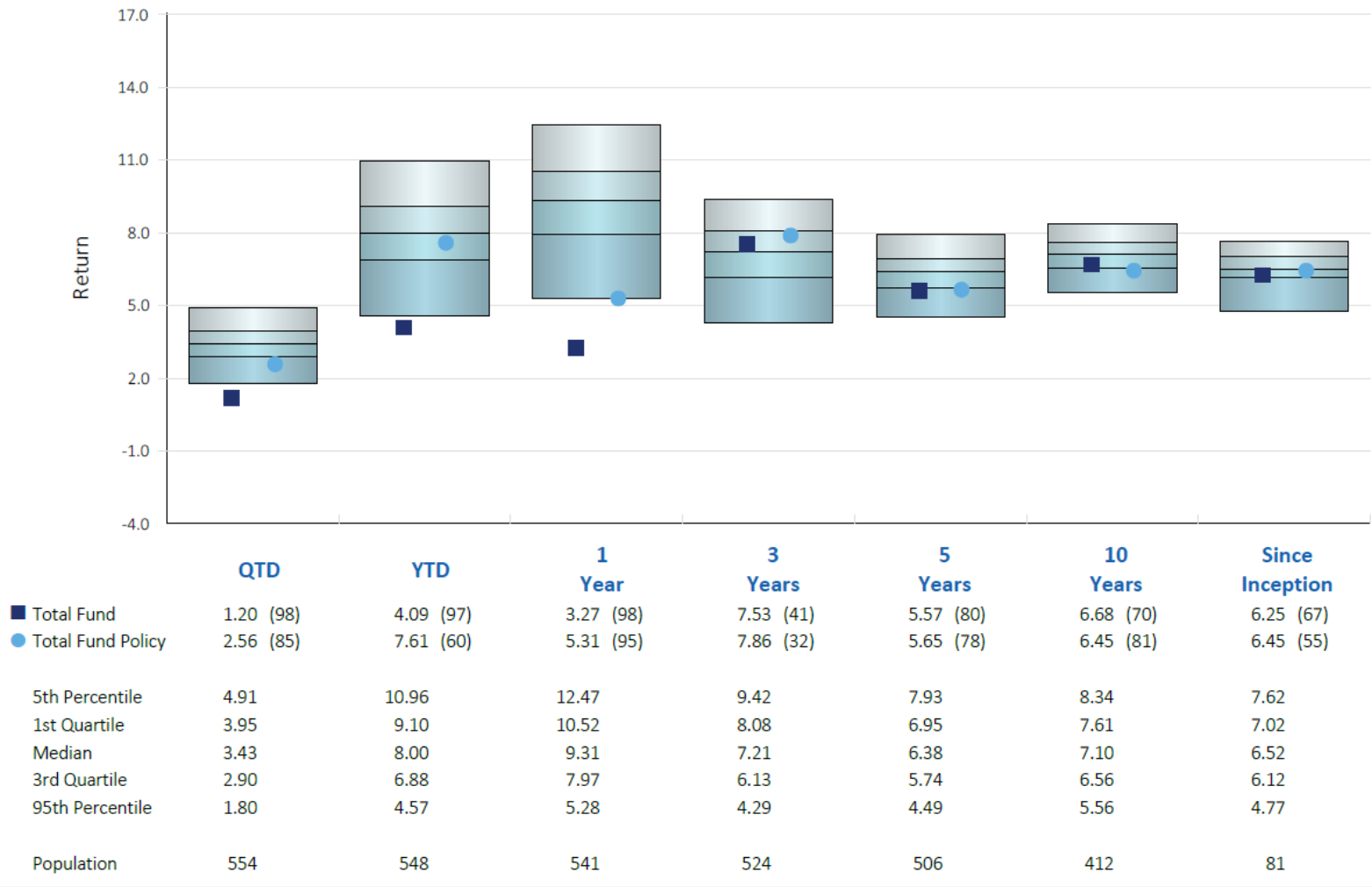
# Asset Allocation & Performance

Periods Ended June 30, 2023

	Allocation		Performance (%) net of fees				
	Market Value \$	%	1 Quarter	YTD	1 Year	3 Years	5 Years
<b>Total Fund</b>	<b>443,479,900</b>	<b>100.00</b>	<b>1.20</b>	<b>4.09</b>	<b>3.27</b>	<b>7.53</b>	<b>5.57</b>
Total Fund Policy			2.56	7.61	5.31	7.86	5.65
Value Added			-1.36	-3.52	-2.04	-0.33	-0.08
Reference Portfolio			4.34	10.78	11.91	6.26	6.07
Value Added			-3.14	-6.69	-8.64	1.27	-0.50
<b>Total Growth</b>	<b>199,013,635</b>	<b>44.88</b>	<b>4.27</b>	<b>9.20</b>	<b>11.58</b>	<b>13.41</b>	<b>8.93</b>
Total Growth Policy			5.86	12.73	10.16	11.09	7.52
Value Added			-1.59	-3.53	1.42	2.32	1.41
<b>Total Fixed Income</b>	<b>99,347,253</b>	<b>22.40</b>	<b>0.40</b>	<b>3.81</b>	<b>3.13</b>	<b>1.44</b>	<b>2.61</b>
Total Fixed Income Policy			1.49	4.44	5.85	0.82	2.26
Value Added			-1.09	-0.63	-2.72	0.62	0.35
<b>Total Real Assets</b>	<b>84,965,428</b>	<b>19.16</b>	<b>-3.51</b>	<b>-5.95</b>	<b>-10.32</b>	<b>6.22</b>	<b>3.96</b>
Total Real Assets Policy			-1.81	0.34	-4.24	9.27	5.51
Value Added			-1.70	-6.29	-6.08	-3.05	-1.55
<b>Total Diversifying Alternatives</b>	<b>60,153,583</b>	<b>13.56</b>	<b>-1.24</b>	<b>2.58</b>	<b>-2.02</b>	<b>-0.11</b>	<b>0.68</b>
Total Diversifying Alternatives Policy			0.50	5.98	3.27	4.75	2.39
Value Added			-1.74	-3.40	-5.29	-4.86	-1.71

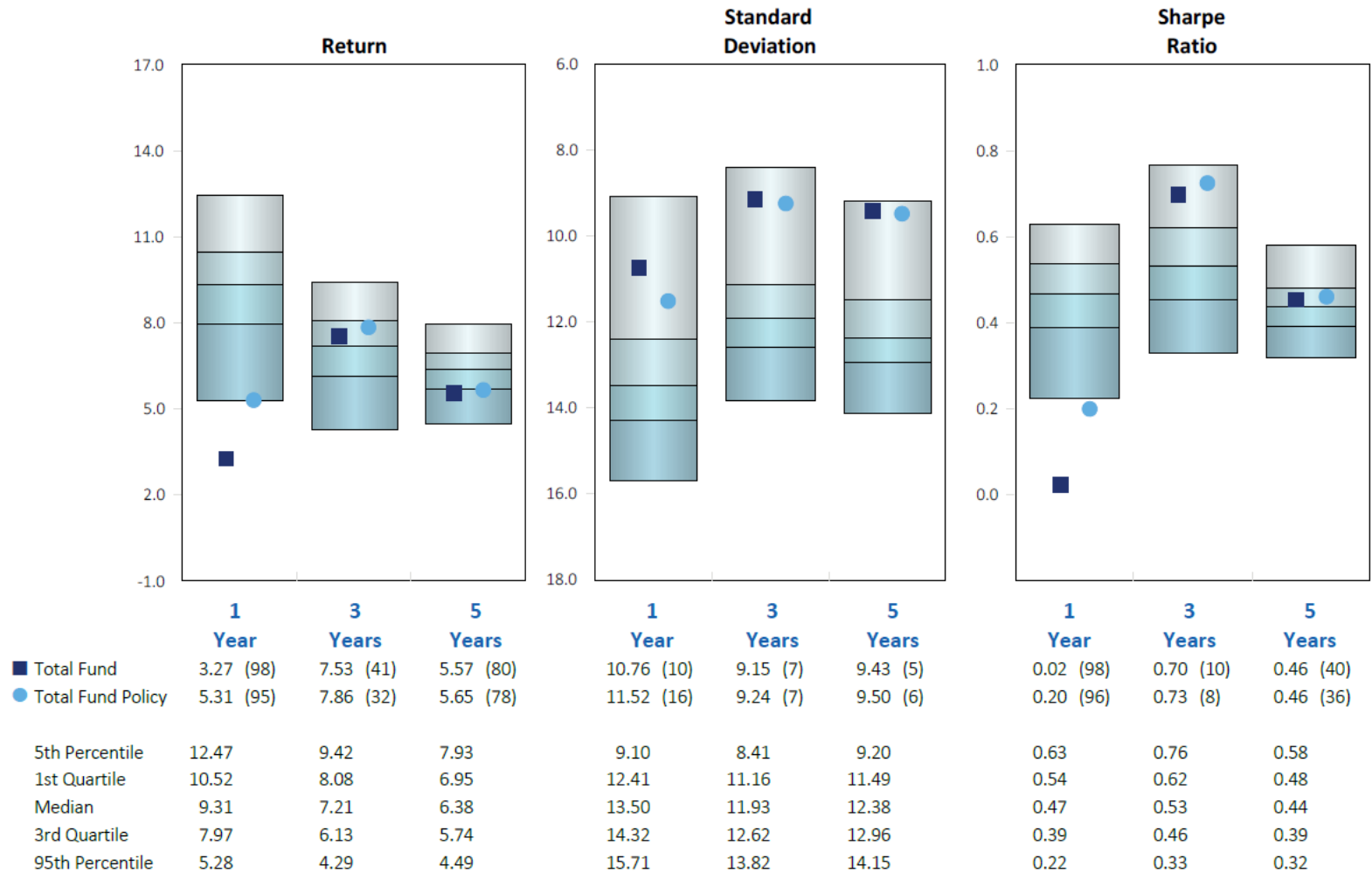
# Peer Group Analysis

Total Fund vs All Public Plans < \$1B-Total Fund  
 Periods Ended June 30, 2023



# Peer Group Analysis

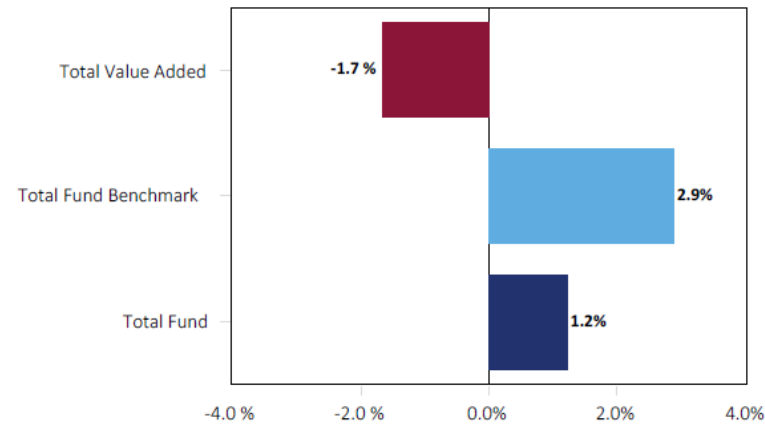
Total Fund vs All Public Plans < \$1B-Total Fund  
Periods Ended June 30, 2023



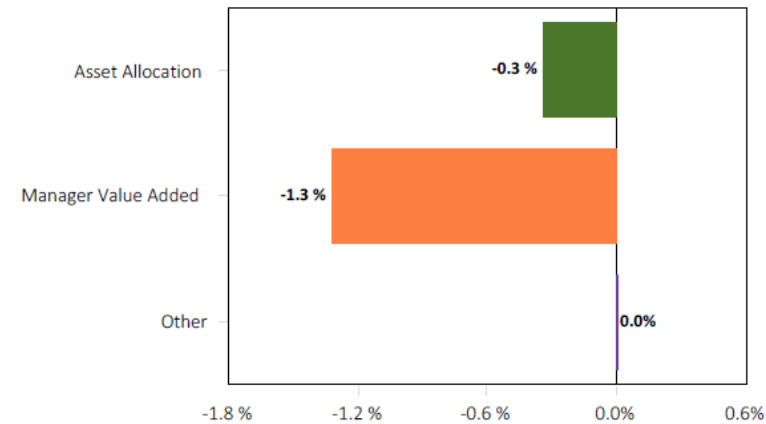
# Total Fund Attribution – 1 Quarter

Total Fund  
Periods Ended 1 Quarter Ending June 30, 2023

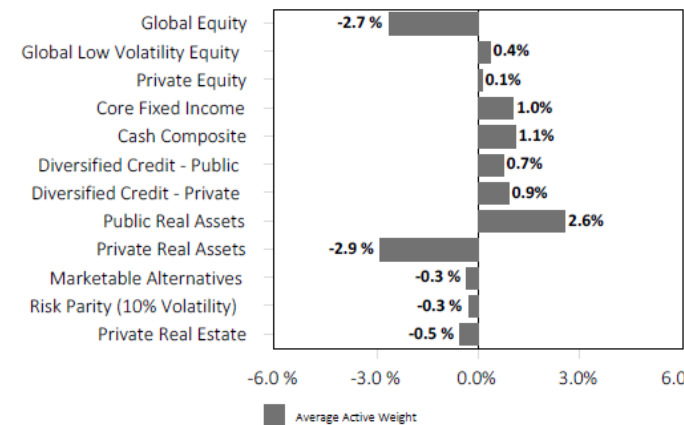
Total Fund Performance



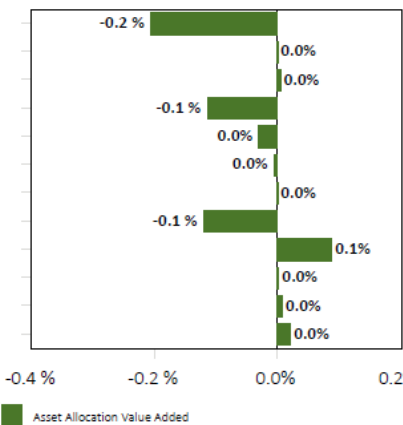
Total Value Added:-1.7 %



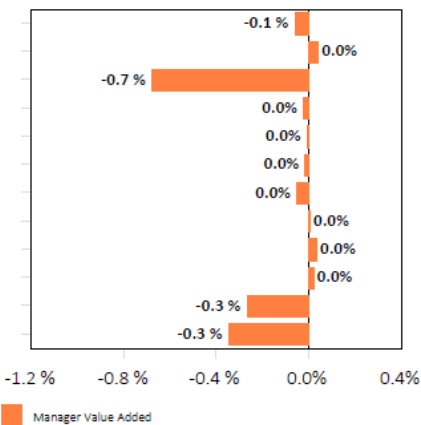
Total Asset Allocation:-0.3 %



Asset Allocation Value Added:-0.3 %



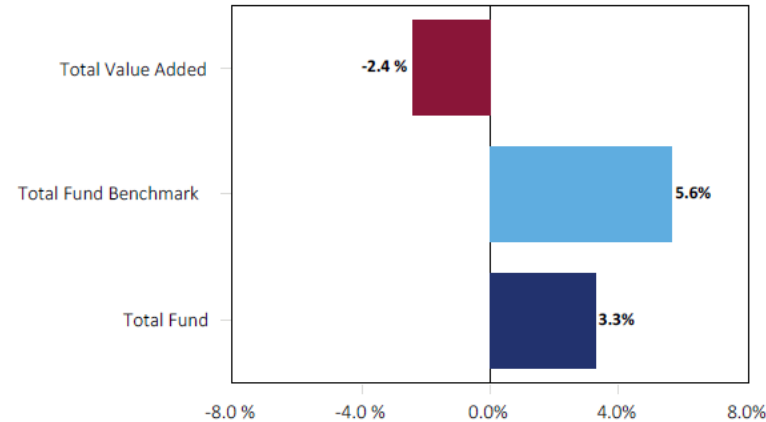
Total Manager Value Added:-1.3 %



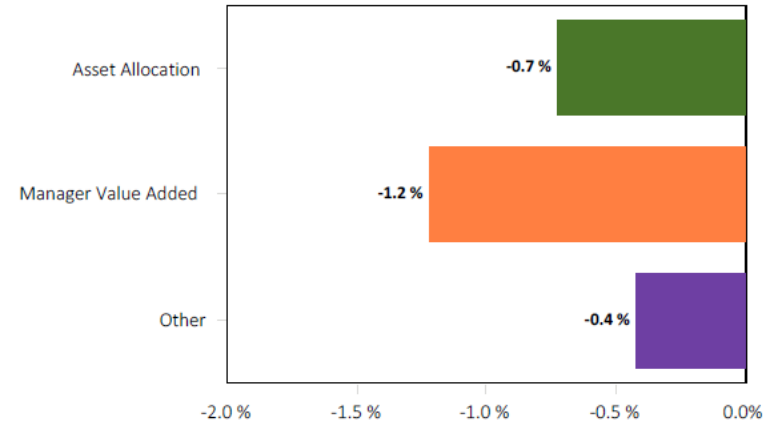
# Total Fund Attribution – 1 Year

Total Fund  
Periods Ended 1 Year Ending June 30, 2023

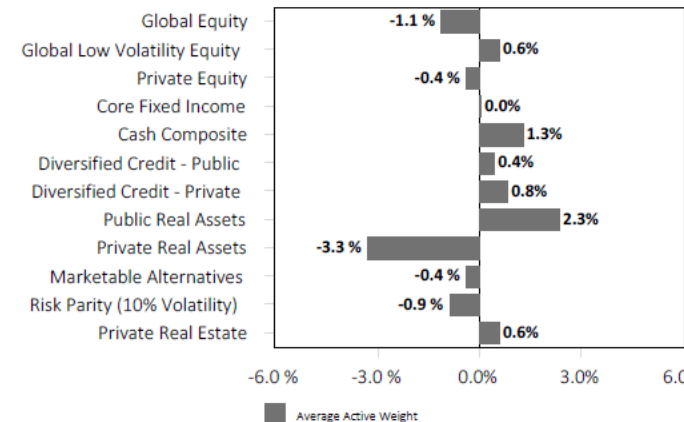
Total Fund Performance



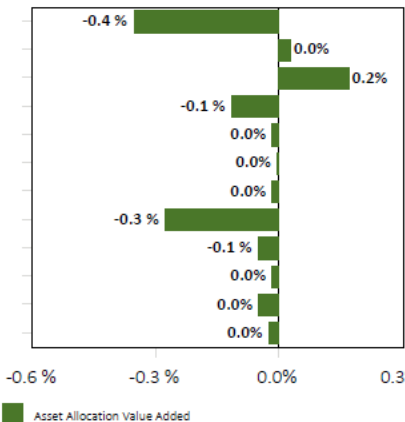
Total Value Added:-2.4 %



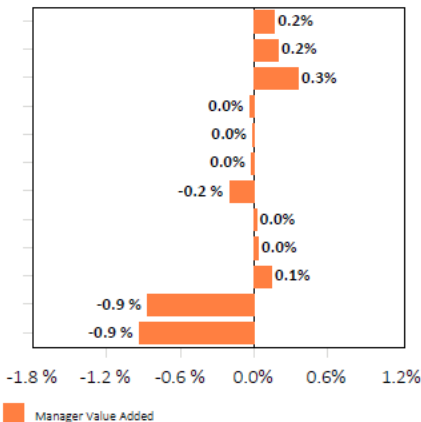
Total Asset Allocation:-0.7 %



Asset Allocation Value Added:-0.7 %



Total Manager Value Added:-1.2 %





**Wilshire**

# Operational Review

# OPERATIONAL SUMMARY

## Quarterly Transaction Overview

- In total, the OCIO Solutions Group engaged in 115 transactions during the quarter (12 benefit payment transactions, 22 portfolio rebalancing transactions, 15 plan contributions, 46 LP transactions, and 20 fee related transactions).

## Fee Analysis

- The OCIO Solutions Group has negotiated reduced investment management fees for eight mandates in the El Paso County DB Portfolio. As a result of these negotiations, the OCIO Solutions Group has saved the El Paso County DB Plan an approximate \$129,958 management fees on an annual basis.

## Documentation Review & Compliance Notice

- The OCIO Solutions Group initiated one legal review project for the portfolio, which was related to new private equity investments. Wilshire has engaged external counsels, Ropes & Gray LLP and Paul Hastings LLP, to perform legal reviews for the private equity managers' Subscription/LP Agreements, side letter provisions and their AML/KYC requested items.

# TRANSACTION REVIEW

April 2023						
Transaction Category	Transaction Description	Transaction Amount	(Growth)	(Fixed Income)	(Real Assets)	(Diversifying)
Benefit Payment Transactions	Benefit Payments, Lump Sum Payments, Reversals	(3,658,827)	--	--	--	--
Portfolio Rebalancing	Manager Redemptions/Contributions	2,000,000	(2,000,000)	--	--	--
Plan Contributions	Employer Contributions, Check Deposits	3,242,225	--	--	--	--
LP Activity	Distributions & Capital Calls	1,588,823	(1,009,493)	(445,388)	(133,942)	--
Fee Related Transactions	Admin Fees, Actuary Fees, Management Fees, etc.	(294,681)	--	--	--	--
May 2023						
Transaction Description	Transaction Description	Transaction Amount	(Growth)	(Fixed Income)	(Real Assets)	(Diversifying)
Benefit Payment Transactions	Benefit Payments, Lump Sum Payments, Reversals	(3,756,302)	--	--	--	--
Portfolio Rebalancing	Manager Redemptions/Contributions	20,753,876	(25,954,176)	18,750,000	4,000,300	1,200,000
Plan Contributions	Employer Contributions, Check Deposits	2,724,334	--	--	--	--
LP Activity	Distributions & Capital Calls	1,588,353	(846,259)	15,354	(757,448)	--
Fee Related Transactions	Admin Fees, Actuary Fees, Management Fees, etc.	(72,244)	--	--	--	--
June 2023						
Transaction Description	Transaction Description	Transaction Amount	(Growth)	(Fixed Income)	(Real Assets)	(Diversifying)
Benefit Payment Transactions	Benefit Payments, Lump Sum Payments, Reversals	(3,752,387)	--	--	--	--
Portfolio Rebalancing	Manager Redemptions/Contributions	1,000,000	(5,750,000)	4,750,000	--	--
Plan Contributions	Employer Contributions, Check Deposits	3,213,039	--	--	--	--
LP Activity	Distributions & Capital Calls	842,155	(270,660)	(430,754)	(140,741)	--
Fee Related Transactions	Admin Fees, Actuary Fees, Management Fees, etc.	(95,492)	--	--	--	--
Date Range	Transaction Description	Transaction Amount	Number of Transactions			
April 1st to June 30th	Benefit Payment Transactions	(11,167,516)	12			
	Portfolio Rebalancing	23,753,876	22			
	Plan Contributions	9,179,598	15			
	LP Activity	4,019,331	46			
	Fee Related Transactions	(462,417)	20			

# DOCUMENTATION REVIEW

Legal Reviews			
Account	Documentation Review Description	Start Date	Completion Date
Private Investments	Wilshire initiated legal reviews for the new private investment managers' subscription/LP agreements, side letters, and their AML/KYC requests. Wilshire utilized the services of Ropes & Gray LLP and Paul Hastings LLP to review the relevant agreements and negotiate the side letter provisions.	4/1/2023	6/30/2023

# Market Review

# Quarterly Market Commentary

## Market Dashboard

Multi-Asset	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Global 60/40 (ACWI/U.S. Core Bonds)	3.34	3.36	9.11	9.43
Wilshire Risk Parity Index™ – 12% Volatility	1.80	(0.20)	8.44	2.53
Source: Bloomberg. Indexes are total return.				
Strategic Allocation Themes	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Growth <sup>1</sup>	5.81	6.18	13.93	16.53
Defensive Growth <sup>2</sup>	3.45	2.99	5.52	7.59
Diversified Credit <sup>3</sup>	2.00	2.14	4.98	8.60
Real Assets <sup>4</sup>	2.16	(1.92)	(1.04)	(5.13)
Defensive <sup>5</sup>	(0.36)	(0.84)	2.09	(0.94)

Source: Bloomberg. Indexes are total return.

<sup>1</sup> 100% Global Equity  
<sup>2</sup> 60% Low Vol Global Equity, 40% U.S. Convertibles  
<sup>3</sup> 42.5% U.S. High Yield, 42.5% EMD, 15% Banks Loans  
<sup>4</sup> 43% Global REITS/GLI, 33% Commodities, 48% TIPS, 9% Gold, -31% Cash  
<sup>5</sup> 100% U.S. Core Bonds

## Quarterly Insight

Large-cap growth stocks are outperforming value stocks by an astonishing margin this year. While growth tends to lead during bull markets, the current 6-month return difference is the largest in 25 years at +29.4%. This can be dissected further to find that just a few stocks are contributing a vast majority of the overall market return through June. Additionally, most of these names are technology sector stocks – Amazon, Apple, Google and Meta. It is worth noting that these companies are highly dependent on the consumer’s ability to spend. U.S. real personal consumption’s steady growth during the past 1.5 years will need to continue to support not just economic growth but also current stock prices.

## Economic highlights

**GDP:** Real GDP growth continued to slow during the first quarter but was still positive, expanding an annualized 2.0%. Consumer spending was quite strong, registering its best quarter in nearly two years and contributing 2.8% to growth. However, private spending was down by double-digits. The Atlanta Federal Reserve’s (Fed) GDPNow forecast for the second quarter of 2023 currently stands at 2.2%.

Source: Bureau of Economic Analysis.

**Interest Rates:** The Treasury curve rose across all maturities during the second quarter. The 10-year Treasury closed at 3.84%, up 37 basis points. The 10-year real yield (i.e., net of inflation) rose 47 basis points to 1.62%. The Federal Open Market Committee (FOMC) increased their overnight rate by 0.25%, targeting a range of 5.00% to 5.25%. The committee’s current median outlook is for a rate of approximately 5.6% by the end of 2023.

Source: U.S. Treasury.

**Inflation:** Consumer price changes have moderated as the Consumer Price Index rose 0.5% for the three months ending May. For the one-year period, the CPI was up 4.1%. The 10-year breakeven inflation rate was down slightly at 2.23% in June versus 2.32% in March.

Source: Dept. of Labor (BLS), U.S. Treasury.

**Employment:** Jobs growth remains solid, with an average of 283,000 jobs/month added during the three months ending in May. The unemployment rate was little changed at 3.7%, up from 3.6% in February. Wage growth has slowed this year, up 0.3% in May, a likely welcome sign for the Federal Reserve.

Source: Dept. of Labor (BLS).

**Housing:** New data suggests that the housing market has started to rebound from a precipitous decline that started last June. The S&P Case-Shiller 20-City Home Price Index was up 1.3% during the three-months through April but is still down -1.7% during the trailing 12-months.

Source: Standard & Poor’s.

# June 2023 Asset Class Assumptions

	Equity						Fixed Income						Real Assets						
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Private Credit	Dev ex-US Bond (Hdg)	US RES	Global RES	Private RE	Cmdty	Real Assets	US CPI
Compound Return (%)	5.50	6.50	6.75	6.85	6.15	9.00	3.85	4.85	4.80	4.05	6.20	8.35	3.05	5.75	5.90	6.00	6.10	6.60	2.25
Expected Risk (%)	17.00	18.00	26.00	19.05	17.10	29.65	0.75	4.70	9.85	6.00	10.00	12.75	4.00	17.50	16.45	13.90	16.00	12.35	1.75
Cash Yield (%)	1.50	3.10	2.60	2.95	2.05	0.00	3.85	4.95	5.15	4.35	9.40	5.00	3.60	4.05	4.05	2.30	3.85	3.25	0.00
Growth Exposure	8.00	8.00	8.00	8.00	8.00	14.00	0.00	-0.95	-2.40	-3.00	4.00	5.10	-1.00	6.00	6.00	3.50	0.00	2.70	0.00
Inflation Exposure	-3.00	0.00	5.00	1.45	-1.30	-3.75	0.00	-2.50	-6.80	2.50	-1.00	-1.50	-3.00	1.00	1.80	1.00	12.00	5.25	1.00
Correlations																			
US Stock	1.00																		
Dev ex-US Stock (USD)	0.81	1.00																	
Emerging Mkt Stock	0.74	0.74	1.00																
Global ex-US Stock	0.84	0.95	0.89	1.00															
Global Stock	0.95	0.91	0.84	0.94	1.00														
Private Equity	0.72	0.63	0.61	0.67	0.73	1.00													
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.06	0.00	1.00												
Core Bond	0.28	0.13	0.00	0.08	0.20	0.30	0.18	1.00											
LT Core Bond	0.31	0.15	0.01	0.11	0.24	0.31	0.11	0.94	1.00										
TIPS	-0.05	0.00	0.15	0.06	-0.01	-0.03	0.20	0.60	0.48	1.00									
High Yield Bond	0.54	0.39	0.49	0.46	0.53	0.31	-0.10	0.24	0.32	0.05	1.00								
Private Credit	0.68	0.55	0.58	0.60	0.68	0.44	0.00	0.24	0.30	0.00	0.76	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.16	0.17	0.26	0.10	0.68	0.66	0.39	0.26	0.22	1.00						
US RE Securities	0.58	0.47	0.44	0.49	0.57	0.49	-0.05	0.17	0.22	0.10	0.56	0.62	0.05	1.00					
Global RE Securities	0.64	0.57	0.54	0.60	0.65	0.55	-0.05	0.17	0.21	0.11	0.61	0.68	0.04	0.96	1.00				
Private Real Estate	0.55	0.45	0.45	0.49	0.54	0.50	-0.05	0.19	0.25	0.09	0.58	0.63	0.05	0.79	0.78	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.28	0.00	-0.03	-0.03	0.25	0.29	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.62	0.63	0.65	0.69	0.67	0.57	-0.03	0.22	0.24	0.30	0.64	0.69	0.04	0.78	0.84	0.76	0.64	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	0.00	-0.08	0.05	0.04	0.05	0.44	0.22	1.00

# Appendix - Weekly Market Report



# Weekly Market Report – as of August 18, 2023

Returns though Friday August 18, 2023

Portfolio Allocations	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
Global 60/40	(1.73)	(4.10)	2.17	3.34	(2.02)	3.36	6.90	0.63	2.30	4.74
Wilshire Risk Parity (12%)	(2.72)	(6.07)	0.91	1.80	(5.21)	(0.20)	2.79	(7.33)	1.42	3.65
Strategic Allocation Themes *	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
Growth <sup>1</sup>	(2.57)	(5.60)	3.66	5.81	(2.14)	6.18	11.50	3.58	6.92	7.25
Defensive Growth <sup>2</sup>	(1.79)	(3.41)	2.06	3.69	(1.42)	3.23	4.26	(1.13)	3.63	6.41
Diversified Credit <sup>3</sup>	(1.09)	(1.58)	1.59	2.00	(0.02)	2.14	4.96	3.05	(0.48)	2.08
Real Assets <sup>4</sup>	(2.12)	(4.49)	3.54	2.16	(1.11)	(1.92)	(2.13)	(11.82)	5.39	4.89
Defensive <sup>5</sup>	(0.50)	(1.85)	(0.07)	(0.36)	(1.92)	(0.84)	0.13	(4.13)	(4.84)	0.27
Major Asset Classes	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
FT Wilshire 5000	(2.19)	(5.01)	3.58	6.86	(1.60)	8.43	14.44	2.69	10.12	10.21
MSCI ACWI-ex-USA (Net)	(3.34)	(6.72)	4.06	4.49	(2.93)	2.44	6.26	4.59	3.21	3.27
Bloomberg U.S. Aggregate	(0.50)	(1.85)	(0.07)	(0.36)	(1.92)	(0.84)	0.13	(4.13)	(4.84)	0.27
Bloomberg U.S. Corporate High Yield	(0.82)	(1.07)	1.38	1.67	0.30	1.75	5.69	2.35	1.64	3.13
Wilshire Global Real Estate Securities	(2.97)	(5.35)	3.66	4.11	(1.89)	1.87	2.28	(11.70)	4.44	1.53
Bloomberg Commodity	(1.17)	(2.62)	6.26	4.04	3.47	(2.56)	(4.59)	(10.17)	14.90	6.40

Source: Bloomberg, All returns are in USD

\* Strategic Allocations are comprised of the following asset mixes (rebalanced monthly)

<sup>1</sup> Growth : 100% Global Equity

<sup>2</sup> Defensive Growth : 60% Low Vol Global Equity, 40% US Convertibles

<sup>3</sup> Diversified Credit : 42.5% U.S. High Yield, 42.5% EMD, 15% Banks Loans

<sup>4</sup> Real Assets : 43% Global REITS/GLI, 33% Commodities, 48% TIPS, 9% Gold, -31% Cash

<sup>5</sup> Defensive : 100% US Core Bonds

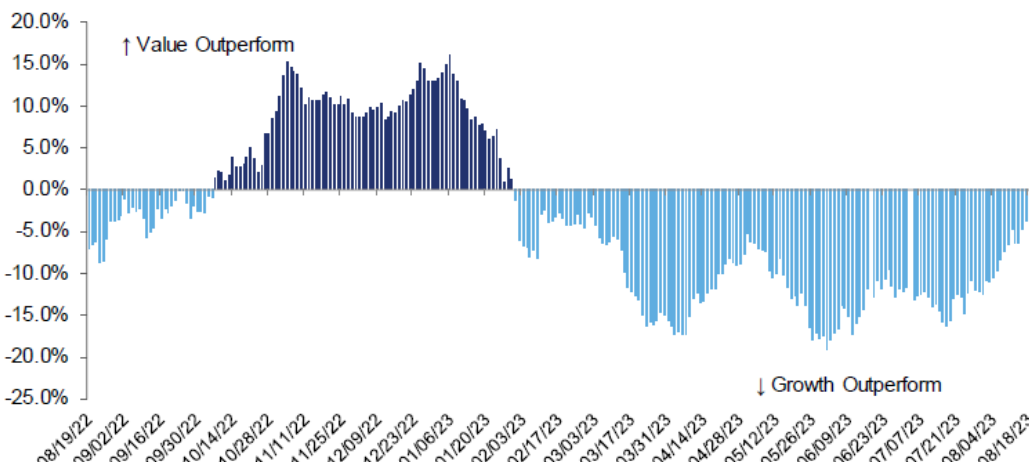
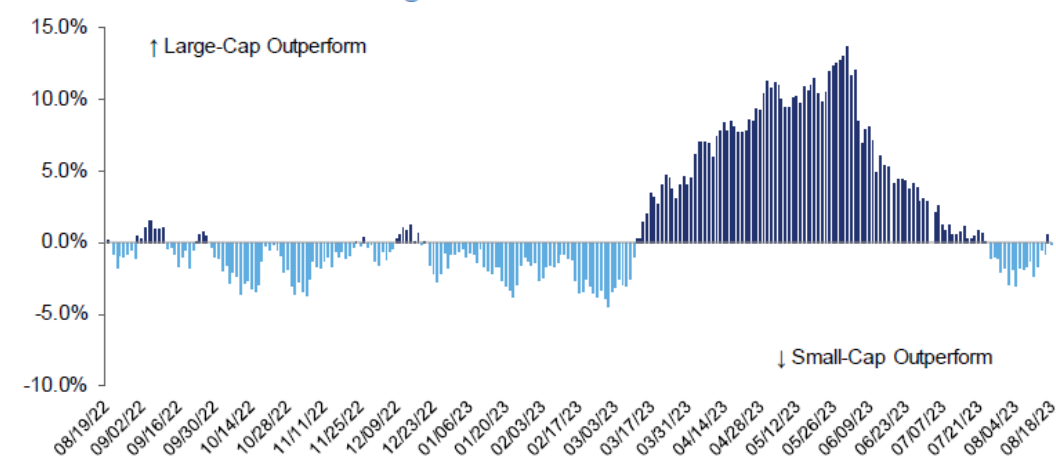
# Weekly Market Report

## U.S. Equity

Returns though Friday August 18, 2023

US Equity	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
FT Wilshire 5000	(2.19)	(5.01)	3.58	6.86	(1.60)	8.43	14.44	2.69	10.12	10.21
Standard & Poor's 500	(2.05)	(4.66)	3.21	6.61	(1.60)	8.74	15.02	3.76	10.56	10.83
Wilshire US Large Cap	(2.10)	(4.86)	3.41	6.73	(1.61)	8.73	15.15	3.35	10.25	10.82
Wilshire US Large-Cap Growth	(2.12)	(6.30)	3.65	7.01	(2.87)	14.19	28.30	6.16	9.81	13.00
Wilshire US Large-Cap Value	(2.07)	(3.05)	3.11	6.38	(0.03)	2.59	2.62	0.17	10.60	8.39
Wilshire US Small Cap	(3.29)	(6.74)	5.64	8.58	(1.48)	5.10	7.22	(3.84)	9.34	4.45
Wilshire US Small-Cap Growth	(2.99)	(7.12)	5.63	9.43	(1.90)	6.74	11.36	(0.26)	5.85	4.95
Wilshire US Small-Cap Value	(3.57)	(6.36)	5.66	7.76	(1.06)	3.54	3.50	(7.06)	13.05	3.96

Relative Performance – Rolling Three Months Returns



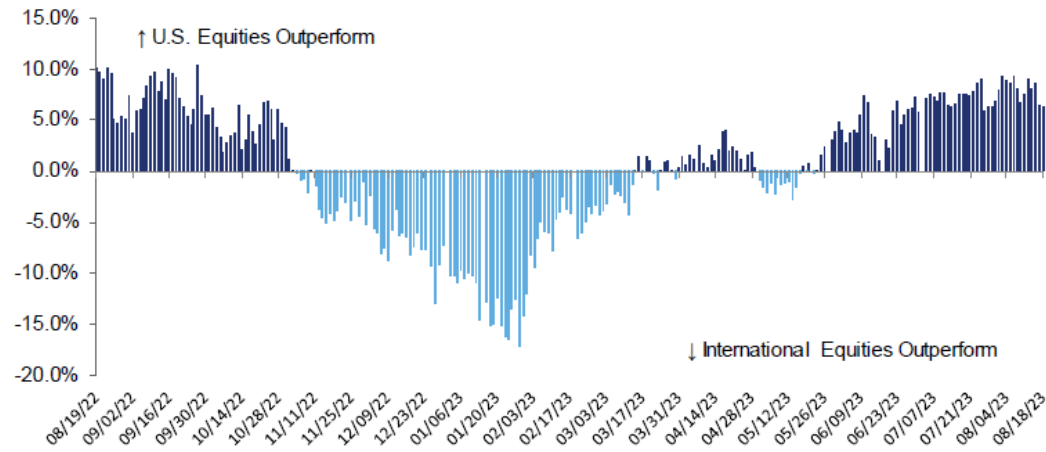
Data Source: Bloomberg

# Weekly Market Report

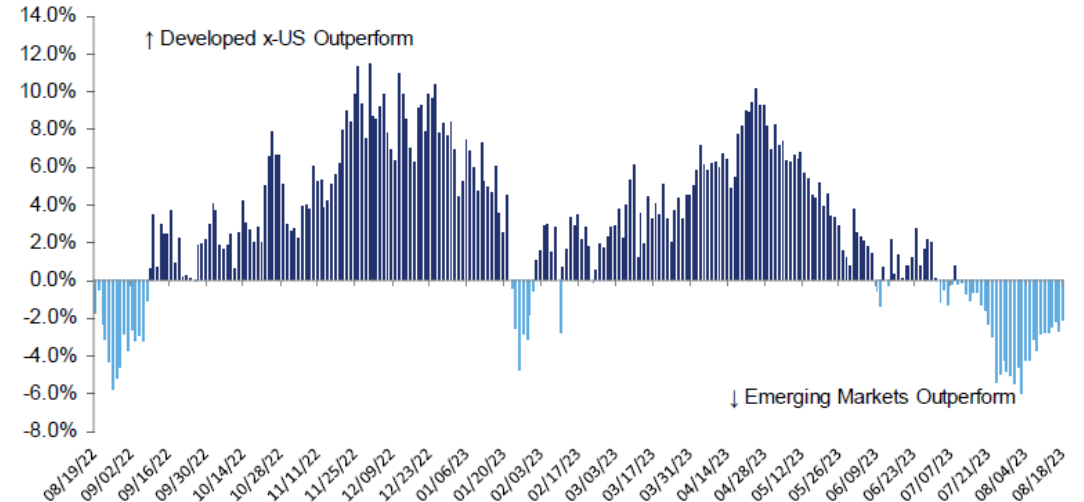
## Global Equity

Non-US Equity	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
MSCI ACWI-ex-USA (Net)	(3.34)	(6.72)	4.06	4.49	(2.93)	2.44	6.26	4.59	3.21	3.27
MSCI EAFE (Net)	(3.30)	(6.27)	3.24	4.55	(3.23)	2.95	8.06	8.74	5.21	3.98
MSCI EM (Net)	(3.29)	(7.74)	6.23	3.80	(1.99)	0.90	2.80	(1.92)	(2.03)	1.30
MSCI ACWI-ex-US Small cap (Net)	(3.02)	(5.75)	5.08	3.44	(0.96)	2.05	5.81	2.47	4.35	3.08
Global Equity	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
MSCI ACWI (Net)	(2.57)	(5.60)	3.66	5.81	(2.14)	6.18	11.50	3.58	6.92	7.25
MSCI ACWI Minimum Volatility (Net)	(1.88)	(2.85)	1.61	2.69	(1.28)	2.22	2.45	(1.20)	3.17	4.40

Relative Performance – Rolling Three Months Returns



Data Source: Bloomberg, All returns are in USD



# Weekly Market Report

## Fixed Income

Returns through Friday August 18, 2023

Fixed Income	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
Bloomberg U.S. Aggregate	(0.50)	(1.85)	(0.07)	(0.36)	(1.92)	(0.84)	0.13	(4.13)	(4.84)	0.27
Bloomberg Long Term Treasury	(1.48)	(5.38)	(2.17)	(0.02)	(7.43)	(2.30)	(3.99)	(14.38)	(14.50)	(2.33)
Bloomberg U.S. TIPS	(0.71)	(1.78)	0.13	(0.34)	(1.66)	(1.42)	0.18	(5.92)	(1.50)	2.17
Bloomberg US Treasury Bills	0.10	0.27	0.44	0.42	0.71	1.15	3.00	4.13	1.46	1.64
Bloomberg U.S. Corporate High Yield	(0.82)	(1.07)	1.38	1.67	0.30	1.75	5.69	2.35	1.64	3.13
Credit Suisse Leveraged Loan	0.24	0.54	1.30	2.24	1.84	3.12	8.29	7.99	5.78	4.19
Bloomberg US Convertibles Index	(1.75)	(4.35)	2.86	5.16	(1.62)	4.39	7.28	(0.55)	3.89	9.14
JPM EMBI Global Diversified	(1.83)	(2.85)	1.91	2.23	(0.99)	2.19	3.06	1.85	(4.79)	0.18

### Market Yields

	Previous 3 Month-ends				Previous 2 Quarter-ends		EOY Prior	1 Yr Ago	3 Yrs Ago	5 Yrs Ago
Govt/Treasury Yields	08/18/23	07/31/23	06/30/23	05/31/23	06/30/23	03/31/23	12/30/22	08/18/22	08/18/20	08/17/18
Fed Funds Target Rate (Upper)	5.50	5.50	5.25	5.25	5.25	5.00	4.50	2.50	0.25	2.00
2-Year Treasury	4.95	4.88	4.90	4.41	4.90	4.03	4.43	3.20	0.14	2.61
5-Year Treasury	4.39	4.18	4.16	3.76	4.16	3.58	4.01	3.03	0.28	2.74
10-Year Treasury	4.26	3.96	3.84	3.65	3.84	3.47	3.88	2.88	0.67	2.86
30-Year Treasury	4.38	4.01	3.86	3.86	3.86	3.65	3.97	3.14	1.40	3.02
10-Year Real Treasury	1.95	1.59	1.62	1.48	1.62	1.15	1.58	0.37	(1.03)	0.77
Term Spreads	08/18/23	07/31/23	06/30/23	05/31/23	06/30/23	03/31/23	12/30/22	08/18/22	08/18/20	08/17/18
5 - 2 Year Treasury Spread	(0.56)	(0.70)	(0.75)	(0.65)	(0.75)	(0.46)	(0.43)	(0.18)	0.13	0.13
10 - 5 Year Treasury Spread	(0.13)	(0.22)	(0.32)	(0.12)	(0.32)	(0.11)	(0.13)	(0.15)	0.39	0.12
10 - 2 Year Treasury Spread	(0.69)	(0.92)	(1.06)	(0.76)	(1.06)	(0.56)	(0.56)	(0.32)	0.52	0.25
30 - 10 Year Treasury Spread	0.12	0.04	0.02	0.21	0.02	0.18	0.08	0.25	0.73	0.16
30 - 2 Year Treasury Spread	(0.57)	(0.87)	(1.04)	(0.55)	(1.04)	(0.38)	(0.47)	(0.07)	1.25	0.41

Market Yields	08/18/23	07/31/23	06/30/23	05/31/23	06/30/23	03/31/23	12/30/22	08/18/22	08/18/20	08/17/18
Bloomberg U.S. Treasury YTW	4.62	4.43	4.37	4.07	4.37	3.83	4.18	3.16	0.49	2.76
Bloomberg U.S. Aggregate YTW	5.12	4.85	4.81	4.59	4.81	4.40	4.68	3.66	1.14	3.30
Bloomberg U.S. Long Treasury YTW	4.50	4.13	3.97	3.95	3.97	3.77	4.08	3.31	1.29	3.01
Bloomberg U.S. Long Govt/Credit YTW	5.24	4.85	4.75	4.78	4.75	4.58	4.91	4.17	2.28	3.93
Credit Spreads	08/18/23	07/31/23	06/30/23	05/31/23	06/30/23	03/31/23	12/30/22	08/18/22	08/18/20	08/17/18
Bloomberg Investment Grade OAS	1.24	1.12	1.23	1.38	1.23	1.38	1.30	1.34	1.31	1.12
Bloomberg High Yield OAS	3.92	3.67	3.90	4.59	3.90	4.55	4.69	4.24	5.01	3.41

Data Source: Bloomberg

# Weekly Market Report

## Yield Curve



Data Source: Bloomberg

- Bloomberg Universal
- Bloomberg U.S. Aggregate
- Bloomberg Gov't/Credit
- Bloomberg Gov't
- Bloomberg Long Treasuries
- Bloomberg Credit
- Bloomberg Corporate
- Bloomberg High Yield
- Bloomberg Global EMD

Option	Adj. Duration	Coupon	Yield to Maturity	Yield to Worst	Time to Maturity	Price
	6.01	3.20	5.48	5.47	8.35	87.56
	6.26	2.94	5.12	5.12	8.59	87.72
	6.29	2.93	5.07	5.07	8.84	88.26
	5.16	3.05	5.15	5.14	8.11	91.83
	15.62	2.70	4.50	4.50	22.87	74.48
	5.95	3.21	5.29	5.29	8.59	88.99
	6.89	3.94	5.80	5.80	10.75	88.32
	3.85	5.52	9.36	9.33	5.86	83.31
	7.10	4.92	8.35	8.35	12.44	78.53

Constant Maturity Treasury Rates									
3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
5.45	5.50	5.35	4.95	4.65	4.39	4.35	4.26	4.56	4.38
4.82	5.02	5.01	4.62	4.32	4.03	3.95	3.82	4.02	3.87
2.67	3.11	3.23	3.20	3.23	3.03	2.98	2.88	3.36	3.14

# Weekly Market Report

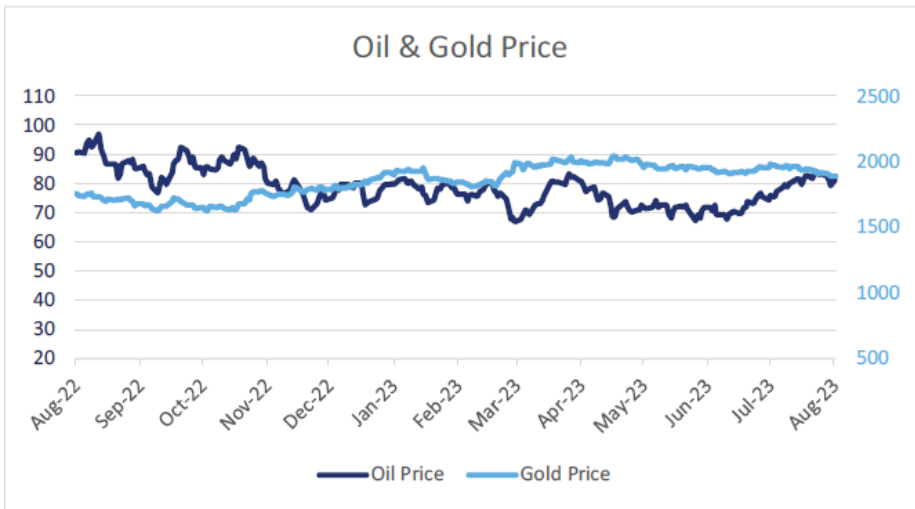
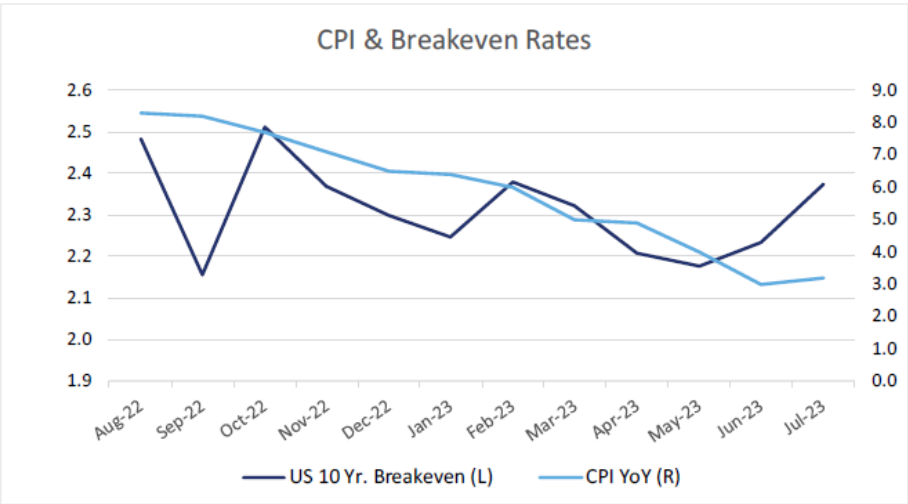
## Real Assets (Inflation-Sensitive)

Returns though Friday August 18, 2023

Real Assets	WTD	MTD	JUL	JUN	QTD	Q2 2023	YTD	1 Year	3 Year	5 Year
Wilshire Global Real Estate Securities	(2.97)	(5.35)	3.66	4.11	(1.89)	1.87	2.28	(11.70)	4.44	1.53
FTSE Global Core Infrastructure 50/50	(2.63)	(5.62)	2.12	2.93	(3.62)	(0.10)	(3.01)	(10.50)	4.65	4.80
Alerian Midstream Energy	(1.32)	(0.63)	3.30	6.97	2.65	3.71	7.28	1.15	22.91	6.93
Bloomberg Commodity	(1.17)	(2.62)	6.26	4.04	3.47	(2.56)	(4.59)	(10.17)	14.90	6.40
Gold	(1.28)	(3.86)	2.38	(2.21)	(1.57)	(2.54)	3.58	7.43	(1.92)	9.79
Bitcoin	(11.28)	(10.73)	(3.90)	12.07	(14.21)	7.03	57.26	11.34	29.41	32.10

Breakeven Inflation Rates	08/18/23	07/31/23	06/30/23	05/31/23	06/30/23	03/31/23	12/30/22	08/18/22	08/18/20	08/17/18
1-Year Breakeven Inflation	1.43	1.58	1.83	1.88	1.83	3.14	2.14	2.81	1.32	0.76
2-Year Breakeven Inflation	1.98	2.10	2.11	2.06	2.11	2.68	2.31	2.71	1.37	1.60
5-Year Breakeven Inflation	2.24	2.31	2.19	2.10	2.19	2.48	2.38	2.73	1.57	1.96
10-Year Breakeven Inflation	2.31	2.37	2.23	2.18	2.23	2.32	2.30	2.51	1.70	2.09
5-Year 5-Year Forward Breakeven Inflation	2.35	2.44	2.22	2.24	2.22	2.21	2.20	2.27	1.78	2.20

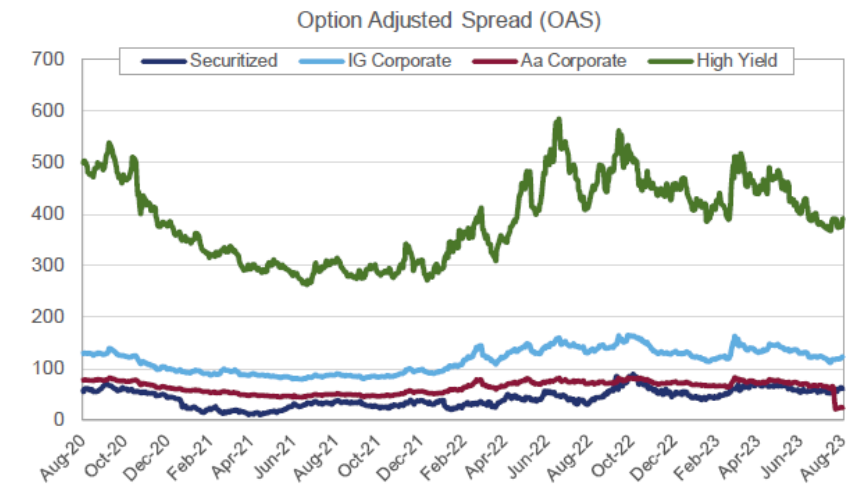
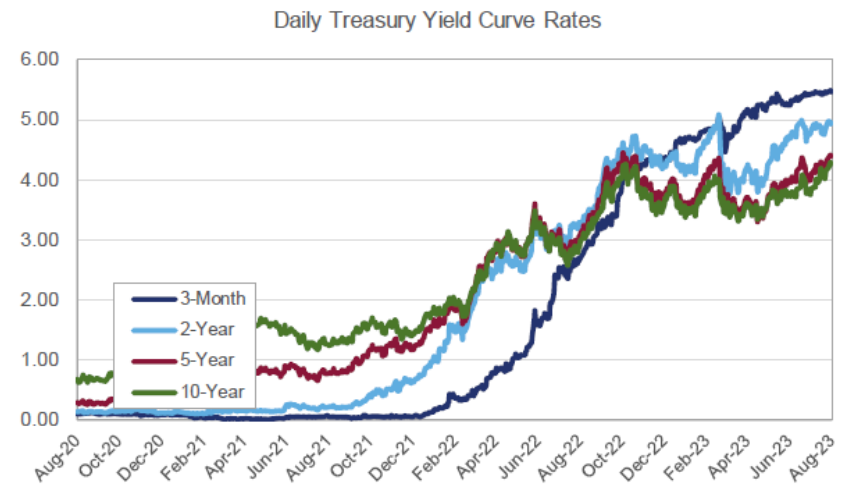
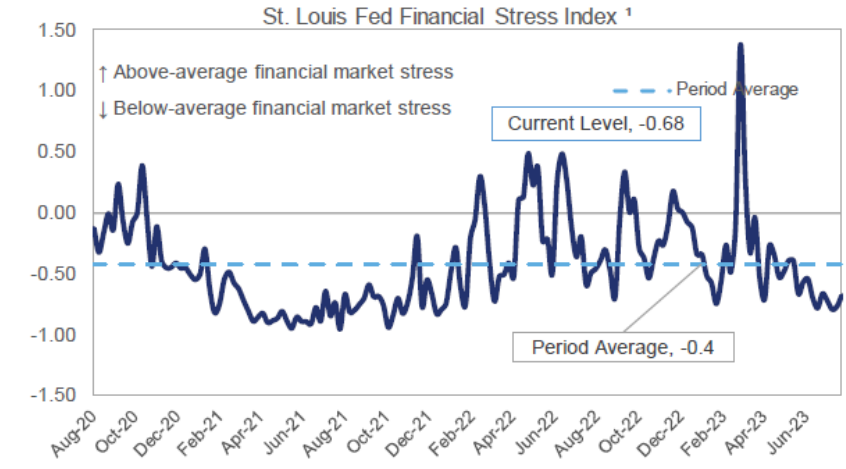
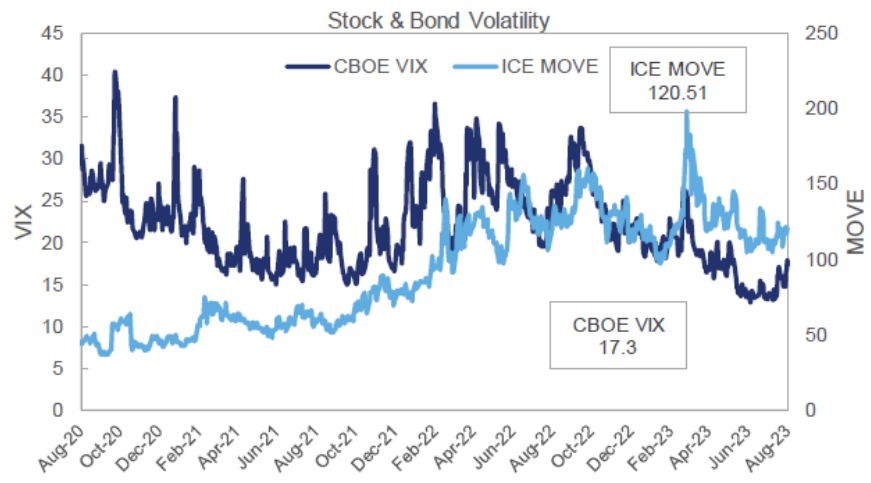


Data Source: Bloomberg



# Weekly Market Report

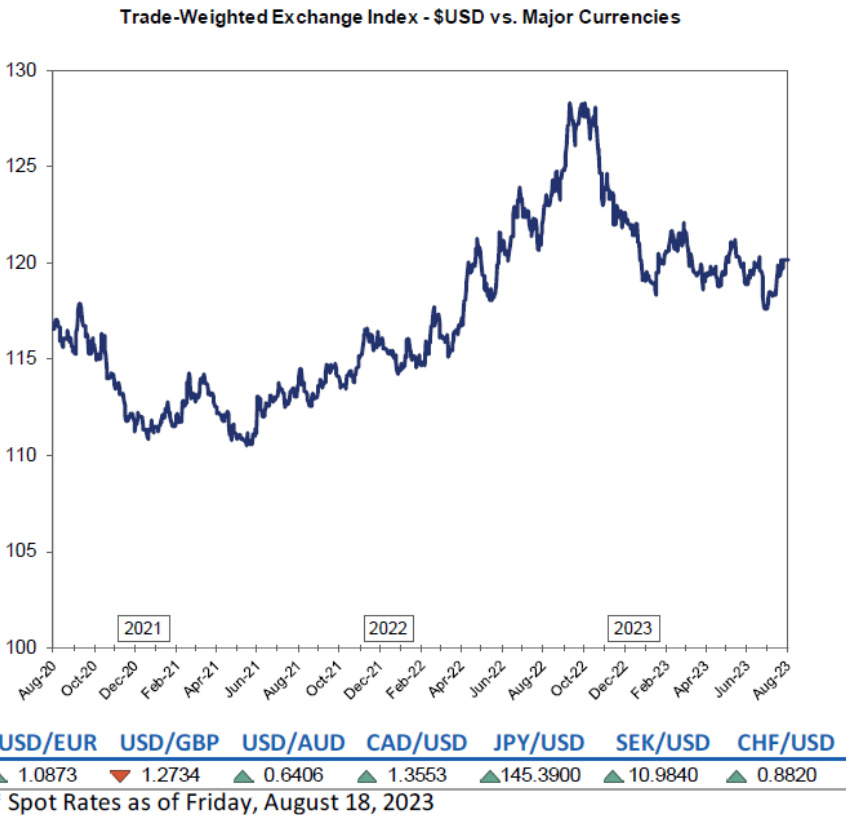
## Market Conditions



Data Source: Bloomberg

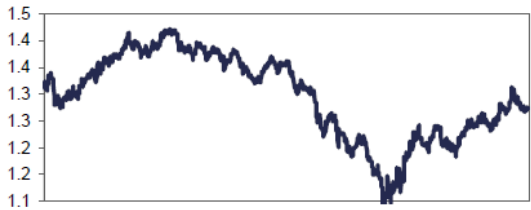
# Weekly Market Report

## Currencies

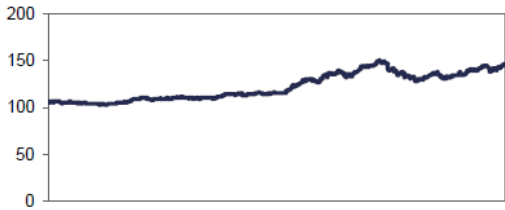


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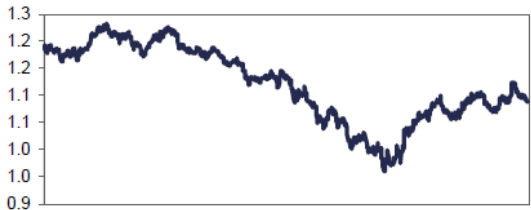
US / UK (GBP)



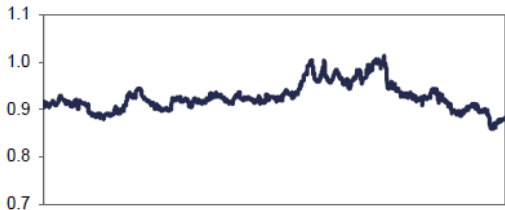
Japan / US



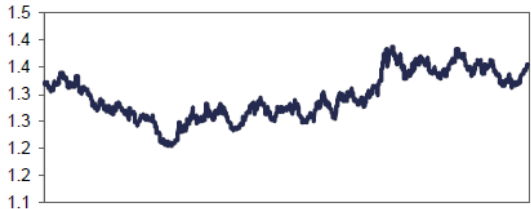
US / Euro (EUR)



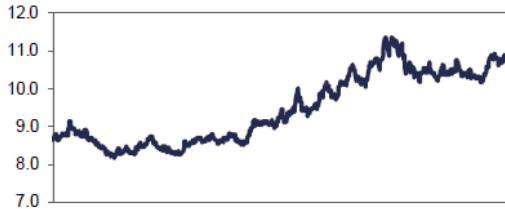
Switzerland (CHF) / US



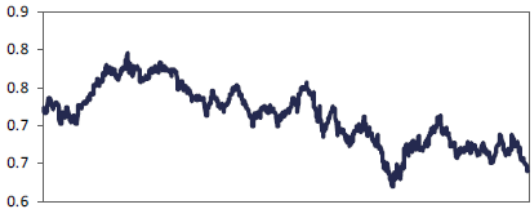
Canada (CAD) / US



Sweden (SEK) / US



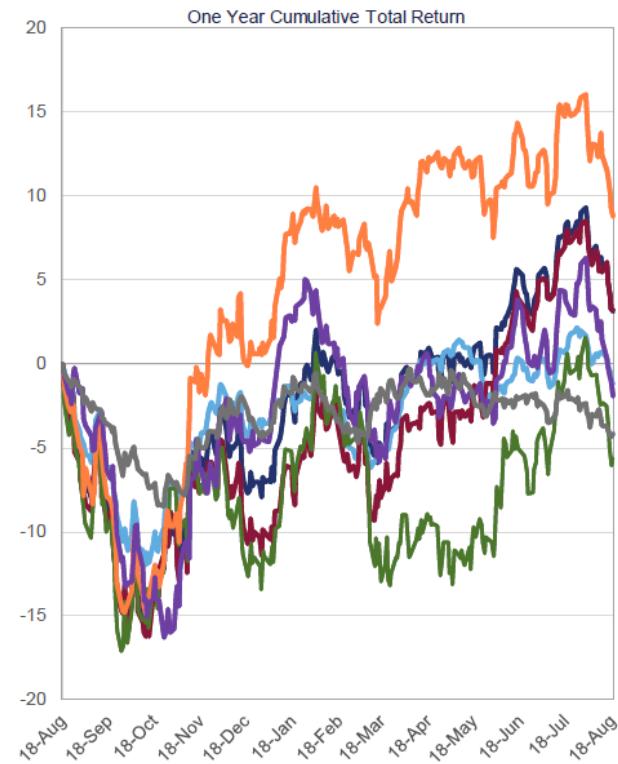
US / Australia (AUD)





# Weekly Market Report

## Daily Market Report



Data Source: Bloomberg

One Year Cumulative Total Return	
MSCI ACWI IMI	3.1
MSCI ACWI Min Vol	-1.2
Russell 1000	3.2
Russell 2000	-5.6
MSCI EAFE	8.7
MSCI Emerging Markets	-1.9
Bloomberg Aggregate	-4.1

U.S. Equity Size & Style Year-to-Date Performance Relative to Russell 3000			
	Core	Growth	Value
Large	0.5	11.3	(9.7)
Mid	(7.6)	(2.9)	(10.5)
Small	(7.7)	(5.1)	(10.8)

August 18, 2023	WTD	MTD	QTD	YTD	1-Year	2-Year	3-Year	5-Year
FT Wilshire 5000	(2.19)	(5.01)	(1.60)	14.44	2.69	0.01	10.12	10.20
S&P 500	(2.05)	(4.66)	(1.60)	15.02	3.76	1.26	10.56	10.82
Russell 3000	(2.19)	(5.00)	(1.60)	14.31	2.71	(0.30)	9.80	9.99
Russell 1000	(2.12)	(4.88)	(1.61)	14.80	3.25	0.06	9.98	10.48
Russell Midcap	(2.87)	(5.84)	(2.11)	6.72	(1.91)	(3.52)	8.65	7.20
Russell 2000	(3.36)	(7.07)	(1.39)	6.58	(5.60)	(5.89)	7.17	3.27
Russell Microcap	(3.70)	(7.58)	(2.65)	(0.39)	(12.87)	(11.30)	4.93	1.40
Russell 1000 Growth	(1.89)	(5.78)	(2.61)	25.65	5.80	(1.07)	8.43	13.36
Russell 1000 Value	(2.37)	(3.88)	(0.50)	4.60	0.44	1.06	11.50	7.02
Russell 2000 Growth	(3.09)	(8.09)	(3.79)	9.25	(4.16)	(9.39)	1.61	2.71
Russell 2000 Value	(3.61)	(6.09)	0.99	3.52	(7.42)	(2.69)	12.69	3.17
MSCI ACWI IMI	(2.63)	(5.67)	(2.06)	10.91	3.10	(2.80)	6.93	6.85
MSCI ACWI	(2.57)	(5.60)	(2.14)	11.50	3.57	(2.41)	6.92	7.24
MSCI ACWI Minimum Volatility	(1.88)	(2.85)	(1.28)	2.45	(1.20)	(2.44)	3.17	4.39
MSCI ACWI x-US	(3.34)	(6.72)	(2.93)	6.26	4.59	(5.52)	3.21	3.27
MSCI EAFE	(3.30)	(6.27)	(3.23)	8.06	8.74	(3.76)	5.21	3.98
MSCI Emerging Markets	(3.29)	(7.74)	(1.99)	2.80	(1.92)	(10.12)	(2.03)	1.30
MSCI Europe	(3.10)	(5.89)	(3.00)	10.18	12.44	(2.98)	6.78	4.92
MSCI Pacific	(3.69)	(7.02)	(3.79)	4.27	2.65	(5.13)	2.49	2.35
Bloomberg Global Aggregate	(0.77)	(2.26)	(1.58)	(0.17)	(3.62)	(9.65)	(6.44)	(1.28)
Bloomberg US Universal	(0.56)	(1.79)	(1.69)	0.59	(3.34)	(6.79)	(4.37)	0.52
Bloomberg US Aggregate	(0.50)	(1.85)	(1.92)	0.13	(4.13)	(7.04)	(4.84)	0.27
Bloomberg Gov't / Credit	(0.52)	(1.79)	(1.87)	0.29	(3.67)	(7.29)	(5.03)	0.53
Bloomberg US Treasury	(0.41)	(1.50)	(1.85)	(0.29)	(4.32)	(7.01)	(5.45)	0.03
Bloomberg US Long Treasury	(1.48)	(5.38)	(7.43)	(3.99)	(14.38)	(17.63)	(14.50)	(2.33)
Bloomberg US TIPS	(0.71)	(1.78)	(1.66)	0.18	(5.92)	(5.08)	(1.50)	2.16
Bloomberg US Corporate	(0.71)	(2.38)	(2.04)	1.10	(2.97)	(8.02)	(4.76)	1.08
Bloomberg US Long Corporate	(1.38)	(4.89)	(5.01)	(0.38)	(7.57)	(14.04)	(8.74)	0.16
Bloomberg US Corporate High Yield	(0.82)	(1.07)	0.30	5.69	2.35	(2.37)	1.64	3.13
Bloomberg US MBS	(0.47)	(2.09)	(2.17)	(0.34)	(5.45)	(6.55)	(4.51)	(0.48)
S&P / LSTA Leveraged Loan 100	0.19	0.53	1.60	8.08	7.90	4.30	4.84	4.05
Bloomberg Municipal Bond	(0.58)	(1.41)	(1.02)	1.62	0.64	(3.63)	(1.50)	1.54
Bloomberg US Treasury Bills	0.10	0.27	0.71	3.00	4.13	2.15	1.46	1.64
Wilshire Global Real Estate	(2.97)	(5.35)	(1.89)	2.28	(11.70)	(8.16)	4.44	1.53
Bloomberg Commodity	(1.17)	(2.62)	3.47	(4.59)	(10.17)	8.40	14.90	6.40
Bloomberg Gold	(1.44)	(4.36)	(1.89)	3.38	7.20	2.50	(2.68)	8.77
Alerian MLP	(0.05)	(0.32)	5.61	15.86	15.84	26.60	32.13	5.03
Alerian Midstream Energy	(1.32)	(0.63)	2.65	7.28	1.15	17.51	22.91	6.93
Wilshire Liquid Alternative Index	(0.59)	(1.06)	(0.24)	2.35	(0.07)	(1.53)	1.69	1.47

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