YOUNGSTOWN
STATE UNIVERSITY

BOARD OF TRUSTEES
INVESTMENT COMMITTEE
Laura A. Lyden, Chair
Charles T. George, Vice Chair
All Trustees are Members

Wednesday, September 18, 2024
10:01 a.m.

Board Room
Tod Hall

AGENDA

A. Disposition of Minutes for Meeting

B. Old Business

C. Committee Item

1. Discussion Item

C.1.a. = Tab 1 **a. September 18, 2024 Quarterly Portfolio Asset Allocation and Investment Performance Review**
John Colla, Clearstead, will report.

D. New Business

E. Adjournment

September 18, 2024

YOUNGSTOWN STATE UNIVERSITY

clearstead

1100 Superior Avenue East Suite 700
Cleveland, Ohio 44114
216.621.1090 | clearstead.com

CONTENTS

clearstead

INITIATIVES

2024 CALENDAR YEAR INITIATIVES

		1Q	2Q	3Q	4Q	COMMENTS:
STRATEGIC / ADMINISTRATIVE	Investment Policy Review				☐	
	Strategic Asset Allocation Review			✓		
	Peer Review		✓			
	2025 Oversight Dashboard				☐	
	STAR Ohio/Plus Annual Review					
PORTFOLIO	Fixed Income Review				☐	
	Alternative Investments Review		✓			
	Global Equity Review				☐	
PERFORMANCE	Capital Markets Review	✓	✓	✓	☐	
	Quarterly Performance Review	✓	✓	✓	☐	
	Endowed Account Review / Oversight	✓	✓	✓	☐	
OTHER	Fee Review				☐	
	ORC Compliance Review			✓		
	Clearstead Firm Update	✓				

LAST REVIEWED

Investment Policy:	06/21/2023
Strategic Asset Allocation:	09/18/2024
Fee Review:	09/18/2024

MEETING SCHEDULE

1Q:	March 6, 2024
2Q:	June 5, 2024
3Q:	September 18, 2024
4Q:	December 4, 2024

FOLLOW UP / INITIATIVES

clearstead

CAPITAL MARKETS UPDATE

QUARTERLY THEMES

WHAT HAPPENED LAST QUARTER?

- Economic momentum continued, prompting a rise in global equity markets
- Concentrated market: The Fab 5 drove all the S&P 500 return for the quarter; the rest of the index was down 0.4% collectively
- S&P 500 Q1 2024 earnings came in at +5.9%(YoY), exceeding the +3.4% expectation
- The Fed reset expectations for one rate cut in 2024, rather than three

2Q 2024 Returns: S&P 500 +4.3%; Russell 2000 -3.3%; MSCI EAFE -0.4%; Bloomberg US Agg +0.1%

YTD 2024 Returns: S&P 500 +15.3%; Russell 2000 +1.7%; MSCI EAFE +5.3%; Bloomberg US Agg -0.7%

INVESTMENT & ECONOMIC OUTLOOK:

- Soft landing seemed to unfold in the first half of 2024; economy may strengthen in the second half
- Expect inflation to remain choppy but lower by year-end
- Corporate earnings expected to increase 11% for 2024
  - Given high valuations, if earnings, margins, or sales disappoint, downside risks loom
- Tail risks remain in the commercial real estate market
- Lingering geopolitical uncertainty and an upcoming U.S. presidential election underscore the importance of diversification

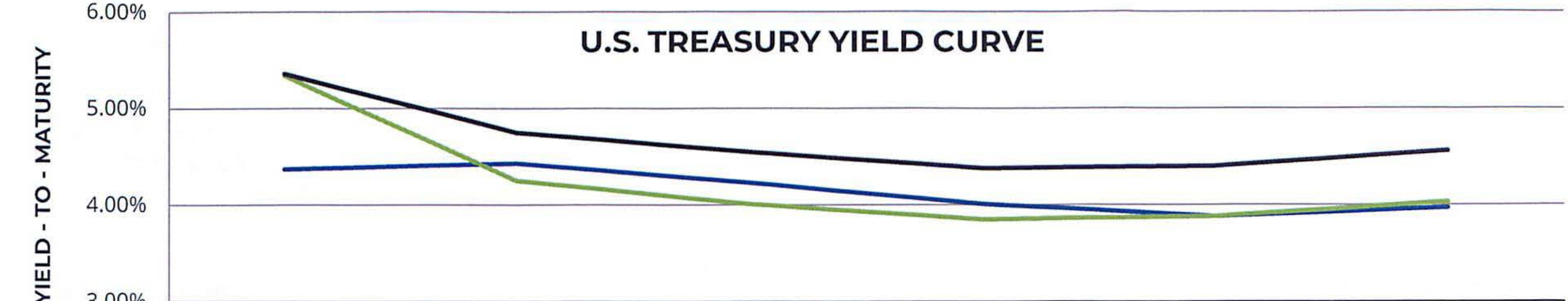
U.S. ECONOMIC PROJECTIONS

		2024	2025	2026	LONG RUN*	
GDP	June 2024	2.1%	2.0%	2.0%	1.8%	Moderate Growth
	March 2024	2.1%	2.0%	2.0%	1.8%	
	December 2023	1.4%	1.8%	1.9%	1.8%	
	September 2023	1.5%	1.8%	1.8%	1.8%	
Unemployment Rate	June 2024	4.0%	4.2%	4.1%	4.2%	Stable Employment
	March 2024	4.0%	4.1%	4.0%	4.1%	
	December 2023	4.1%	4.1%	4.1%	4.1%	
	September 2023	4.1%	4.1%	4.0%	4.0%	
Core PCE Inflation	June 2024	2.8%	2.3%	2.0%		Slightly Elevated Inflation Expectations
	March 2024	2.6%	2.2%	2.0%		
	December 2023	2.4%	2.2%	2.0%		
	September 2023	2.6%	2.3%	2.0%		
Federal Funds Rate	June 2024	5.1%	4.1%	3.1%	2.8%	Fewer Rate Cuts
	March 2024	4.6%	3.9%	3.1%	2.6%	
	December 2023	4.6%	3.6%	2.9%	2.5%	
	September 2023	5.1%	3.9%	2.9%	2.5%	
# of implied 25 bps rate changes year	June 2024	-1	-4	-4		
	March 2024	-3	-3	-3		
	December 2023	-3	-4	-3		
	September 2023	-2	-5	-4		

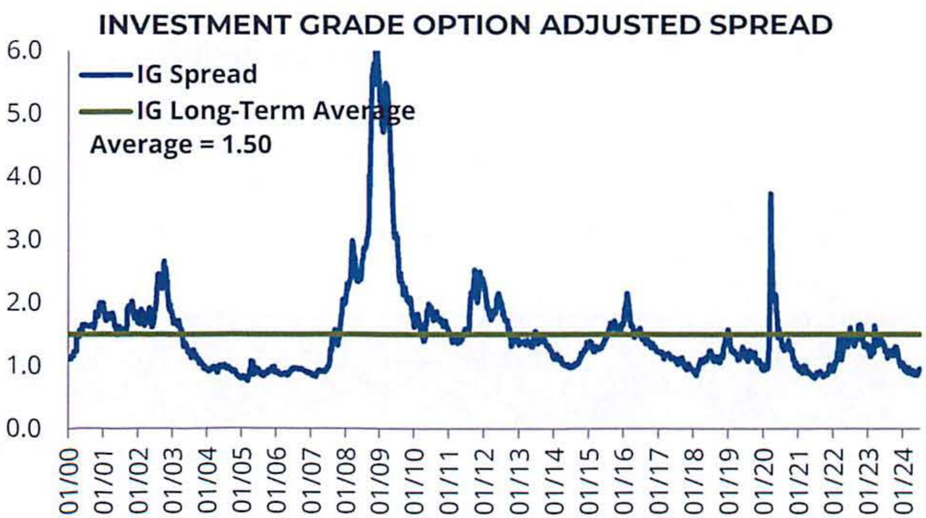
*Long run projections: The rates to which a policymaker expects the economy to converge over time – maybe in five or six years – in the absence of further shocks and under appropriate monetary policy.

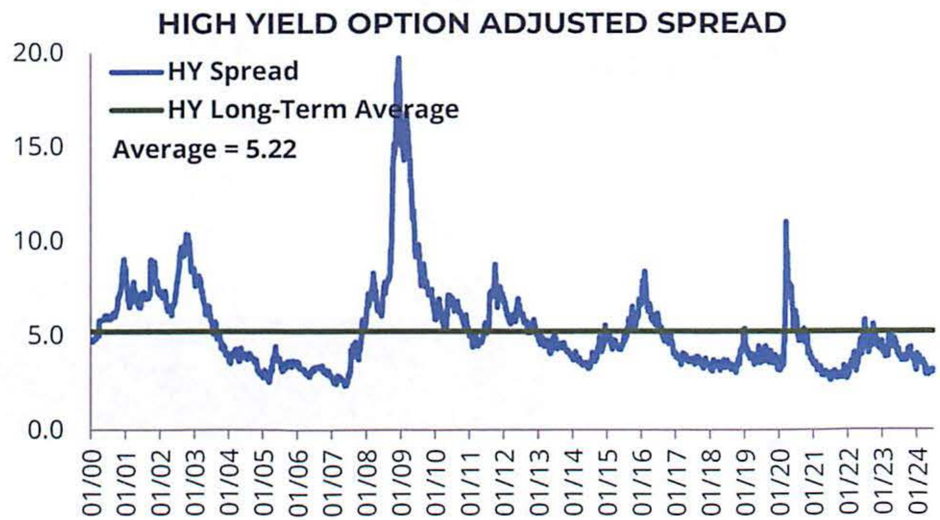
Source: Clearstead, U.S. Federal Reserve. Expectations of Fed board members/bank presidents.
Data as of 6/30/2024. Past performance is not an indicator of future results.

FIXED INCOME



	3M	2Y	3Y	5Y	10Y	30Y
12/31/2022	4.37%	4.43%	4.23%	4.01%	3.88%	3.97%
12/31/2023	5.34%	4.25%	4.01%	3.85%	3.88%	4.03%
6/30/2024	5.36%	4.75%	4.55%	4.38%	4.40%	4.56%
YTD Change	0.02%	0.50%	0.54%	0.53%	0.52%	0.53%





Source: Bloomberg. Data as of 6/30/2024. Past performance is not an indicator of future results.

AUGUST MARKET PERFORMANCE

U.S. large caps gained, interest rates were volatile and ended lower, U.S. dollar weakened, and softer macro data highlighted August

- International > U.S. large > U.S. mid > U.S. small; Emerging market lagged U.S. large caps
- Only by a modest difference, but value outpaced growth

In fixed income, rates moved lower while the yield curve steepened during the month.

Markets sold-off the first week of August but then sharply rebounded; S&P 500 closed August near mid-July's record high; Fed (finally) telegraphed a rate cut in September.

- Market expectations are for up to four (-0.25%) rate cuts by Dec-2024; geopolitical risks taking center stage, September volatility likely to pick up as investors reposition portfolios

MARKET	2023	Q1-2024	Q2-2024	Jul-2024	Aug-2024	YTD	Trend
S&P 500	26.3%	10.6%	4.3%	1.2%	2.4%	19.5%	
Russell 2000	16.9%	5.2%	-3.3%	10.2%	-1.5%	10.4%	
MSCI EAFE	18.2%	5.8%	-0.4%	2.9%	3.3%	12.0%	
MSCI EM	9.8%	2.4%	5.0%	0.3%	1.6%	9.6%	
MSCI China	-11.2%	-2.2%	7.1%	-1.3%	1.0%	4.4%	
MSCI ACWI	22.8%	8.3%	3.0%	1.6%	2.6%	16.3%	
Bloomberg US Agg Bond	5.5%	-0.8%	0.1%	2.3%	1.4%	3.1%	
Bloomberg High Yield Bond	13.5%	1.5%	1.1%	1.9%	1.6%	6.3%	
Bloomberg Muni Bond	6.4%	-0.4%	0.0%	0.9%	0.8%	1.3%	

Source: Bloomberg 8/30/2024. Past performance is not an indicator of future results

clearstead

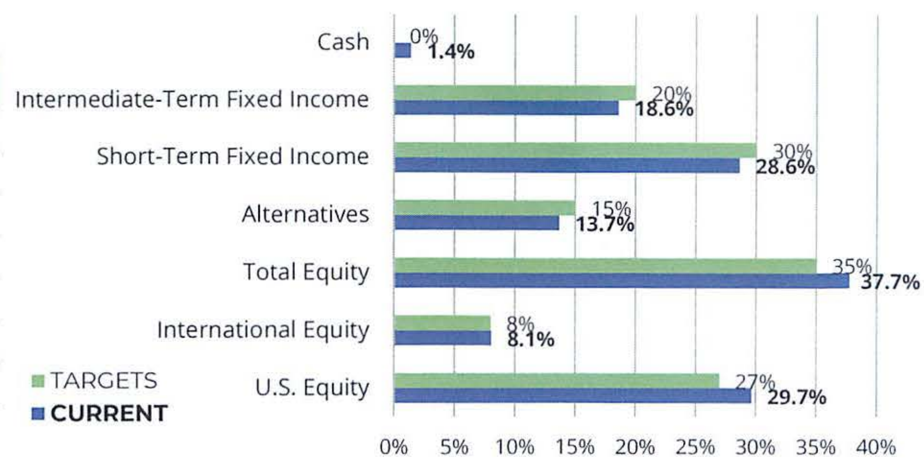
NON-ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION REVIEW

NON-ENDOWMENT PERFORMANCE REVIEW (AS OF 6/30/2024)

NON-ENDOWMENT ASSETS	MARKET VALUE ($MM)	TRAILING PERIODS QTD	FYTD	CYTD	1 YR	3 YR	5 YR	7 YR	10 YR	CALENDAR YEARS 2023	2022	2021	SINCE INCEPTION[4]
Total Non-Endowment Assets	$81.614	1.3%	9.5%	4.5%	9.5%	3.0%	5.6%	5.3%	4.5%	11.0%	-7.8%	7.8%	4.3%
Benchmark [1]		*1.4%*	*8.4%*	*4.1%*	*8.4%*	*3.0%*	*4.1%*	*4.0%*	*3.4%*	*8.7%*	*-4.7%*	*4.3%*	*3.3%*
Operating & Short-Term Pool	$11.732	1.2%	5.1%	2.5%	5.1%	2.9%	2.2%	2.0%	1.5%	4.8%	1.4%	0.0%	1.1%
Benchmark [2]		*1.3%*	*5.4%*	*2.6%*	*5.4%*	*2.9%*	*2.1%*	*2.0%*	*1.5%*	*5.0%*	*1.2%*	*0.0%*	*1.1%*
Long-Term Pool	$69.882	1.2%	10.2%	5.0%	10.2%	2.3%	5.4%	5.4%	4.9%	11.9%	-11.2%	9.5%	5.3%
Benchmark [3]		*1.5%*	*10.7%*	*5.3%*	*10.7%*	*2.9%*	*5.5%*	*5.6%*	*4.9%*	*11.7%*	*-9.7%*	*8.0%*	*5.0%*

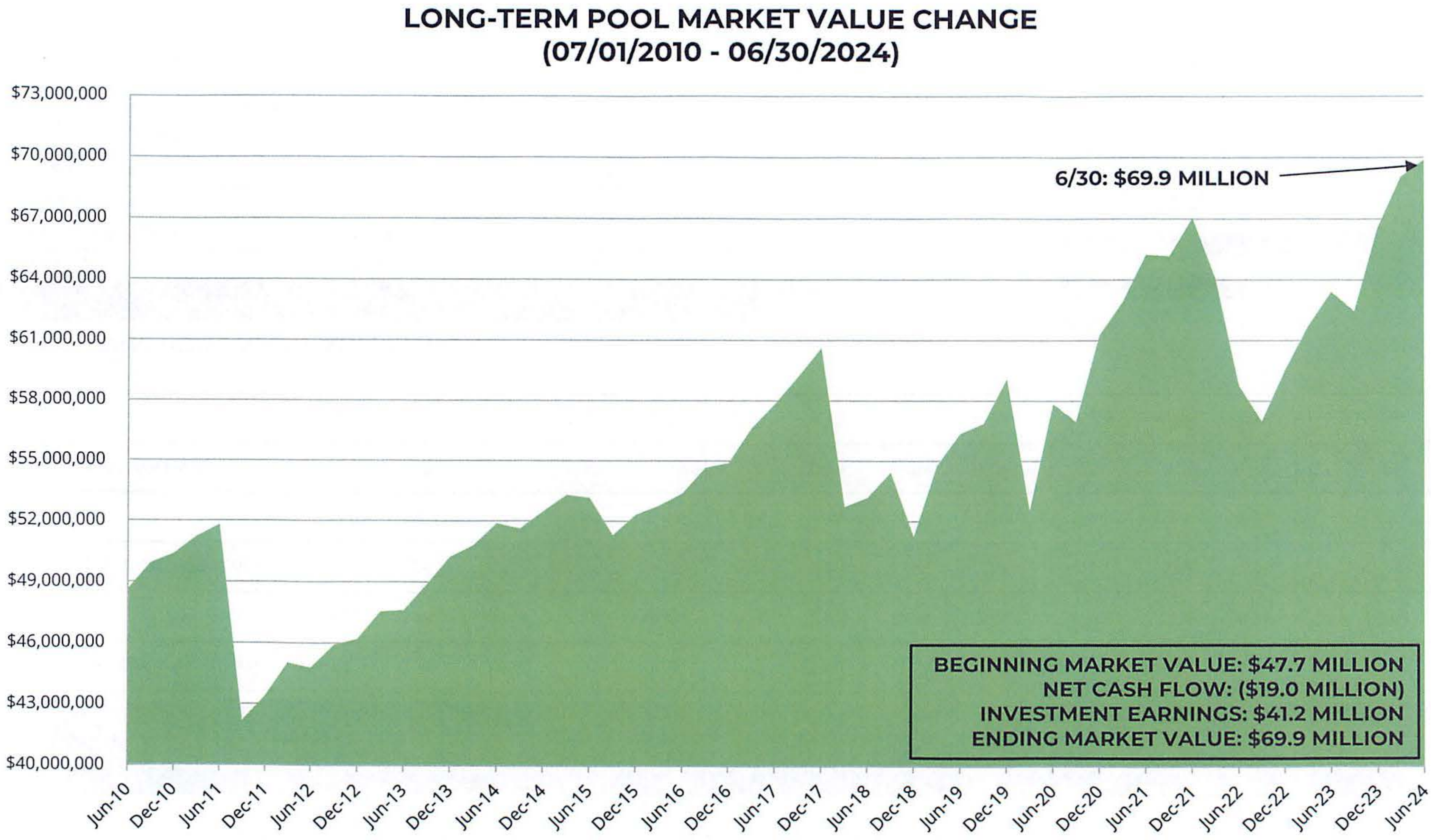
LONG-TERM POOL ASSET ALLOCATION

	CURRENT	TARGETS	RANGE	+/-
U.S. Equity	29.7%	27%	20-35%	2.7%
International Equity	8.1%	8%	0-15%	0.1%
Total Equity	37.7%	35%	25-45%	2.7%
Alternatives	13.7%	15%	0-20%	-1.3%
Short-Term Fixed Income	28.6%	30%	25-45%	-1.4%
Intermediate-Term Fixed Income	18.6%	20%	10-30%	-1.4%
Cash	1.4%	0%	0-5%	1.4%



1) 45% BofA Merrill Lynch 91-Day T-Bill / 17% BofA Merrill Lynch US Corp & Gov 1-3 Yrs / 11% BBgBarc US Govt/Credit Int TR / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.
2) 95% BofA Merrill Lynch 91-Day T-Bill / 5% Barclays 1-3 Yr. Govt.
3) 27% Russell 3000 / 8% MSCI EAFE / 15% Total Alternatives Benchmark / 30% BofA Merrill Lynch US Corp & Gov 1-3 Yrs /20% BBgBarc US Govt/Credit Int TR.
4) Inception date for Long-Term and Short-Term Pools: June 2010, Inception Date for Total Non-Endowment Assets: March 2004.

LONG-TERM POOL: MARKET VALUE GROWTH SINCE INCEPTION



The University made strategic withdrawals from the Long-Term Pool as follows: In 2011 to support an early retirement incentive program that required a large purchase of state service credit; in 2018 to support capital improvement projects on campus; and in 2020 to cover a projected COVID-19-related shortfall in the short-term operating pool.

LONG-TERM POOL: JULY PERFORMANCE UPDATE

AS OF 7/31	MARKET VALUE ($MM)	JULY	CYTD	FYTD
Total University Assets	$73.9	+1.6%	+6.2%	+1.6%
Operating/Short-Term Pool	$2.7	+0.2%	+2.7%	+0.2%
Long-Term Pool*	$71.2	+1.8%	+7.0%	+1.8%

July was a favorable month for both equities and fixed income as rates decreased and more broad market participation occurred, after a quarter where five stocks generated all of the S&P 500's return.

Mixed results from active managers during the month, but all have outpaced their respective benchmarks over the past five years.

- Mixed results from equity managers as U.S. small cap managers performed well
- Alternative managers Evanston (Weatherlow) and Cliffwater continue to generate strong absolute and relative returns; H.I.G. also has performed well, though reports results on a lag (as of 3/31)
- Fixed income managers continue to benefit from higher rates

*Does not include performance from H.I.G. as they report results on a lag. H.I.G. results are through 12/31. H.I.G.'s performance is expected to modestly improve CYTD and FYTD results.

INVESTMENT POOL UPDATE (AS OF 09/04/2024)

YOUNGSTOWN STATE UNIVERSITY

AS OF SEPTEMBER 4, 2024

	TICKER	INVESTMENT STRATEGY	MARKET VALUE (CURRENT)	% OF PORTFOLIO	POLICY TARGET	POLICY RANGE	TACTICAL +/-
Total Operating & Short Term			**$2,761,147**	**100.0%**	**100.0%**		
Federated Hermes Govt Obligations	FOGXX	Money Market	$2,761,147	100.0%			
Star Plus*	-	Cash Equivalent	$0	0.0%			
Star Ohio*	-	Cash Equivalent	$0	0.0%			
Total Long Term Reserves Pool			**$71,166,152**	**100.0%**	**100.0%**		
Domestic Equity			**$21,089,988**	**29.6%**	**27.0%**	**20-35%**	**2.6%**
Vanguard Instl Index	VINIX	Large Cap Core	$15,175,096	21.3%			
Vanguard Mid Cap Index Adm	VIMAX	Mid-Cap Core	$2,621,649	3.7%			
Loomis Sayles Small Growth N2	LSSNX	Small Cap Growth	$1,666,453	2.3%			
Victory Integrity Small Cap Value Y	VSVIX	Small Cap Value	$1,626,791	2.3%			
International Equity			**$5,855,210**	**8.2%**	**8.0%**	**0-15%**	**0.2%**
William Blair International Growth I	BIGIX	Foreign Growth	$2,631,755	3.7%			
Dodge & Cox International Stock	DODFX	Foreign Value	$3,223,455	4.5%			
Total Equity			**$26,945,198**	**37.9%**	**35.0%**	**25-45%**	**2.9%**
Alternatives			**$9,600,289**	**13.5%**	**15.0%**	**0-20%**	**-1.5%**
H.I.G. Principal Lending Fund[1]	-	Private Credit	$2,291,042	3.2%			
Cliffwater Corporate Lending Fund	CCLFX	Private Credit	$2,074,847	2.9%			
Apollo Infrastructure Opps Fund III	-	Real Assets	$0	0.0%			
Weatherlow Fund[2]	-	Diversifying Strategy	$5,234,400	7.4%			
Fixed Income			**$33,935,656**	**47.7%**	**50.0%**	**35-75%**	**-2.3%**
Short Term Fixed Income			**$20,413,327**	**28.7%**	**30.0%**	**25-45%**	**-1.3%**
YSU Short Term Bond	-	Short-Term Fixed	$13,539,242	19.0%			
Lord Abbett Short Duration	LLDYX	Short-Term Fixed	$6,874,085	9.7%			
Intermediate Fixed Income			**$13,522,329**	**19.0%**	**20.0%**	**10-30%**	**-1.0%**
JPMorgan Core Bond Fund R6[3]	JCBUX	Core Plus Fixed	$5,488,765	7.7%			
YSU Intermediate Term Fixed	-	Interm-Term Fixed	$4,633,515	6.5%			
Fidelity Intermediate Treasury Index	FUAMX	Interm-Term Treasury	$3,400,049	4.8%			
Cash & Cash Equivalents			**$685,008**	**1.0%**	**0.0%**	**0-5%**	**1.0%**
Federated Hermes Govt Obligations	-	Money Market	$685,008	1.0%			
Total University Assets			**$73,927,299**				

1) As of 3/31/2024.
2) As of 7/31/2024.
3) Held at JPMorgan.

clearstead

clearstead

STRATEGIC ASSET ALLOCATION REVIEW

HOLISTIC REVIEW OF RISK

ORGANIZATION → **STRATEGIC INVESTMENT APPROACH** → **INVESTMENT PORTFOLIO**

LEVELS OF RISKS

ORGANIZATION	STRATEGIC INVESTMENT APPROACH	INVESTMENT PORTFOLIO
Leadership	Current and effective IPS	Standard deviation
Governance	Pool structure	Correlation
Investment Committee	Strategic asset allocation	Beta
Reliance on investment assets	Discipline to approach	Downside capture
Operational health	Liquidity	Maximum drawdown
Ohio Revised Code	Cash management	Tracking error, R^2
Key financial metrics	Rebalancing	Tactical positioning

OBJECTIVES & RISK CONSIDERATIONS

PORTFOLIO OBJECTIVES

The YSU non-endowment assets have performed well over a full market cycle.

Asset allocation is the most important determinant of portfolio risk and return - looking forward, it is important to align the asset allocation, structure and risk/return objectives of the non-endowment assets with those of the strategic focus of YSU.

- Compliance with Ohio Revised Code 3345.05 (25% average rule*)
- Support YSU cash-flow and financial needs both currently and in the future
- Target a prudent level of investment return once risks have been mitigated

RISK CONSIDERATIONS

- Ohio Revised Code 3345.05
  - Short-Term pool provides compliance; additionally, approximately 10-15% of the Long-Term Pool assets provide additional support
- Liquidity
  - Non-Endowment assets are highly liquid; a majority of assets have daily liquidity
- Cash flow forecast
  - YSU does not anticipate needing to withdraw funds from the Long-Term Pool in the near-term
- Market value volatility
  - YSU staff and trustees have expressed a willingness to except modest increase in investment risk in pursuit of a higher investment return
- Cash flow cyclicality
  - The University's cash flows fluctuate over the year due to operations
- Financial statement sensitivity
  - The University's balance sheet and key financial metrics are sensitive to the University's investment strategy

*A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested according to ORC guidelines (i.e. US government bonds, cash equivalents)

LIQUIDITY MANAGEMENT & INVESTMENT POOL STRUCTURE

- Separate guidelines and asset allocation targets
- The University can allocate assets between investment pools with respect to cash needs
- Allowable asset ranges established between investment pools

ASSET POOL	PURPOSE
Operating Pool	Assets needed in the next 6 months
Short-Term Pool	Contingency to operating accounts
Long-Term / Reserves Pool	Non-Endowment investment assets for reserves & auxiliaries

LONG-TERM POOL GROWTH

CALENDAR YEAR	INVESTMENT ASSETS CASH OUTFLOW	INVESTMENT ASSETS CASH INFLOW	YEAR END (12/31) EQUITY %	YEAR END (12/31) ALTERNATIVES %	YEAR END (12/31) FIXED INCOME %	CALENDAR YEAR RETURN	MARKET VALUE (12/31)
2010	-	+$46,871,000 *(Creation of LT Pool)*	19.2%	0%	80.8%	+5.5%	$50,383,000
2011	-$8,000,000	-	24.9%	0%	75.1%	+1.9%	$43,392,000
2012	-	-	27.1%	0%	72.9%	+6.4%	$46,190,324
2013	-	-	33.8%	0%	66.2%	+8.7%	$50,249,454
2014	-	-	37.7%	0%	62.3%	+4.5%	$52,491,768
2015	-	-	35.0%	11.9%	53.2%	-0.5%	$52,324,443
2016	-	-	36.5%	15.6%	47.9%	+4.0%	$54,892,466
2017	-	-	37.0%	15.1%	47.8%	+10.5%	$60,625,347
2018	-$8,000,000	-	33.2%	15.0%	51.8%	-3.4%	$51,238,803
2019	-	-	35.9%	14.8%	49.2%	+15.3%	$59,067,298
2020	-$2,900,000	-	38.7%	11.2%	50.2%	+8.8%	$66,471,553
2021	-	-	41.2%	10.4%	48.3%	+9.5%	$67,042,600
2022	-	-	38.8%	11.2%	50.0%	-11.2%	$59,507,519
2023	-	-	37.0%	13.5%	49.5%	+11.9%	$66,536,739
2024*	-	-	37.7%	13.7%	48.6%	+5.0%	$69,881,930

*2024 figures as of 6/30/2024 and do not represent year-end or calendar year information.
The University made strategic withdrawals from the Long-Term Pool as follows: In 2011 to support an early retirement incentive program that required a large purchase of state service credit; in 2018 to support capital improvement projects on campus; and in 2020 to cover a projected COVID-19-related shortfall in the short-term operating pool.

FORWARD LOOKING ANALYSIS (LONG-TERM POOL)

	CURRENT TARGETS	ALTERNATE
U.S. Equity	27%	32%
International Equity	8%	8%
Alternative Investments	15%	15%
Fixed Income: Short-Term	30%	20%
Fixed Income: Intermediate-Term	20%	25%
Total	100%	100%

***10-Year Forecasted Return**	**5.8%**	**6.1%**
***10-Year Forecasted Returns (75th – 25th Percentile Outcomes)**	**4.3% - 7.7%**	**4.3% - 8.1%**
***Forecasted (Annual) Volatility**	**8.4%**	**9.1%**

The model does not take into account the potential alpha added from active management and tactical asset allocation.

FY23 ASSET ALLOCATION VS. OHIO STATE UNIVERSITIES (AS OF 6/30/2023)

	Youngstown State University	Small State University	Small State University	Mid-Sized State University	Mid-Sized State University	Mid-Sized State University	Mid-Sized State University	Mid-Sized State University	Large State University	Large State University
Equity	32%	0%	43%	1%	45%	38%	41%	40%	28%	30%
Alternatives	9%	0%	0%	5%	9%	16%	25%	20%	31%	43%
Fixed Income & Cash	59%	100%	57%	94%	46%	45%	34%	40%	41%	26%

- The above peer analysis compares Youngstown State's balance sheet asset allocation to other Ohio State Universities that range in size
  - While University Endowments/Foundations are much more long-term driven, balance sheet assets must support short-term and long-term needs of the institution and align with its strategic plan and financial position
- Comparing YSU to small and mid-sized (Ohio) State Universities, the University is similarly allocated to peers
  - The University historically has been modestly more conservative vs. peers, which has benefitted the institution through volatile periods in the market
  - The cyclicality of higher ed operating revenue also factors into FYE positioning for Universities

Source: State of Ohio Auditor; FY 2023. University asset size ranges from $10 million to $9.5 billion.
As of June 30, 2023.

YSU ASSET ALLOCATION GUIDELINES

Clearstead has reviewed YSU's Asset Allocation Guidelines and recommends modest changes to the current guidelines at this time.

The changes lower the allocation to short-term bonds in favor of locking in higher interest rates, increasing intermediate-term fixed income exposure.

The changes also modestly increase the target to U.S. equities, which remains appropriate from an investment risk perspective, in-line with objectives of prudently growing the Long-Term Pool, and similarly allocated compared to peers.

OPERATING & SHORT-TERM POOL		ALLOCATION	
Asset Class/Investment Strategy	**Pool Target**	**Pool Range**	**Total Range**
Total Cash/Operating Assets	n/a	60-100%	
Total Short-Term Fixed Income	n/a	0-40%	
			0-50%
LONG TERM / RESERVES POOL			
Total Domestic Equity	~~27%~~ 32%	~~20-35%~~ 25%-40%	
Total International Equity	8%	0-15%	
Total Equity	~~35%~~ 40%	~~25-45%~~ 25-50%	
Total Alternatives	15%	0-20%	
Total Short-Term Fixed Income	~~30%~~ 20%	~~25-45%~~ 15-35%	
Total Intermediate-Term Fixed Income	~~20%~~ 25%	~~10-30%~~ 15-35%	
Cash	0%	0-5%	
	100%		50-100%

The current asset allocation strategy conservatively factors:
- Adherence with State of Ohio guidelines
- Contingency for cash flow fluctuations in operating funds
- Adequate liquidity
- Growth opportunity through equity allocation
- Diversification with the incorporation of alternative investments
- Mitigates impact of equity market volatility on YSU balance sheet & income statement

clearstead

ORC COMPLIANCE

ORC COMPLIANCE REVIEW (AS OF 6/30/2024)

	TOTAL NON-ENDOWMENT ORC 3345.05 DEFINED ASSETS*	% FROM SHORT-TERM POOL	% FROM LONG-TERM POOL
9/30/23	37%	26%	11%
12/31/23	20%	7%	13%
3/31/24	35%	25%	10%
6/30/24	25%	14%	11%
Average	***29%***	***18%***	***11%***

YSU is in-line with the Ohio Revised Code 3345.05 Compliance requirements.

OHIO REVISED CODE 3345.05 COMPLIANCE	
	COMPLIANT
Over 25% of Total Portfolio in Cash Equivalents/Govt Securities (average amount over previous FY)	Yes
Investment policy adopted in public session	Yes
Quarterly Investment Committee meetings	Yes
Recommend changes to the Board's Investment Policy that assist in meeting the Committee's fiduciary duties	Yes
Retain an investment advisor who meets the qualifications	Yes

*A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested according to ORC guidelines (i.e., US government bonds, cash equivalents). Analysis does not include cash equivalent or government security exposure in Long-Term Pool fixed income managers invested in through mutual funds. With this exposure, YSU's allocation and average would be higher.

clearstead

APPENDIX

clearstead

ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION REVIEW

ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION (AS OF 6/30/2024)

		TRAILING PERIODS								CALENDAR YEARS			
ENDOWMENT ASSETS	MARKET VALUE ($MM)	QTD	FYTD	CYTD	1 YR	3 YR	5 YR	7 YR	10 YR	2023	2022	2021	SINCE INCEPTION[3]
YSU Endowment Fund	$17.204	**3.6%**	16.9%	10.5%	16.9%	4.7%	9.8%	9.5%	8.5%	12.8%	**-15.7%**	**20.9%**	9.0%
	Benchmark [1]	*3.2%*	*18.8%*	*11.1%*	*18.8%*	*6.8%*	*11.3%*	*11.0%*	*10.1%*	*20.9%*	*-16.6%*	*20.6%*	*10.9%*
	Benchmark [2]	*2.6%*	*15.4%*	*8.7%*	*15.4%*	*4.8%*	*9.0%*	*9.0%*	*8.4%*	*17.7%*	*-15.8%*	*15.9%*	*9.1%*

COMPLIANCE

- Reporting & Oversight by Clearstead, Management/Implementation by Huntington
- Asset Allocation Guidelines: 70% Equities (60-80%) / 30% Cash & Fixed Income (20-40%) **(IN COMPLIANCE)**

HOLDINGS

- Equity Mutual Funds – 10% (Mutual Funds & ETFs)
- Stocks – 62% (30-60 Concentrated U.S. Large/Mid-Cap Stock Portfolio)
- Alternatives – 2% (Real Estate Mutual Fund)
- Fixed Income Mutual Funds – 2% (Federated High Yield, Stone Ridge)
- Individual Bonds – 23% (Individual Bond Portfolio: U.S. Corporate / Gov't / Asset Backed Debt)
- Cash – 2%

1) Benchmark: 75% S&P 500 / 25% BBg US Aggregate.
2) Benchmark: 60% S&P 500 / 40% BBg US Aggregate.
3) Inception date: 06/2013,

clearstead

DETAILED PERFORMANCE

EXECUTIVE SUMMARY

	Market Value 04/01/2024	Market Value 06/30/2024	% of Portfolio	2nd Quarter 2024 (%)	YTD (%)
Total University Assets	**$92,549,492**	**$81,613,658**	**100.0**	**1.3**	**4.5**
Total Policy Benchmark[1]				*1.4*	*4.1*
Total Operating & Short Term	**$23,511,897**	**$11,731,728**	**14.4**	**1.2**	**2.5**
Total Operating & Short Term Benchmark[2]				*1.3*	*2.6*
Total Long Term/ Reserves Pool	**$69,037,595**	**$69,881,930**	**85.6**	**1.2**	**5.0**
Total Long Term/ Reserves Fund Benchmark[3]				*1.5*	*5.3*
Total Domestic Equity	**$20,235,958**	**$20,696,842**	**25.4**	**2.3**	**11.8**
Russell 3000 Index				*3.2*	*13.6*
Total International Equity	**$5,712,402**	**$5,665,582**	**6.9**	**-0.8**	**3.8**
MSCI AC World ex USA (Net)				*1.0*	*5.7*
Total Alternatives	**$9,400,475**	**$9,512,700**	**11.7**	**1.6**	**6.3**
Total Alternatives Benchmark[4]				*0.4*	*4.6*
Total Fixed Income	**$32,740,671**	**$33,012,493**	**40.4**	**0.8**	**1.1**
Total Fixed Income Benchmark[5]				*0.9*	*1.1*
Total Cash & Cash Equivalents	**$948,090**	**$994,312**	**1.2**	**1.3**	**2.6**
90 Day U.S. Treasury Bill				*1.3*	*2.6*

1) Total Policy Benchmark: 45% ICE BofA 91 Days T-Bills / 17% ICE BofA 1-3 Yr US Corp & Govt / 11% BBgBarc US Govt/Credit Int / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.
2) Total Operating & Short-Term Benchmark: 95% ICE BofA 91 Days T-Bills / 5% BBgBarc US Govt 1-3 Yr.
3) Total Long-Term / Reserves Fund Benchmark: 27% Russell 3000 / 8% MSCI EAFE / 15% Total Alternatives Benchmark / 30% ICE BofA 1-3 Yr US Corp & Govt / 20% BBgBarc US Govt/Credit Int,
4) Total Alternatives Benchmark: 100% HFRI Fund of Funds Composite.
5) Total Fixed Income Benchmark: 64% ICE BofA 1-3 Yr US Corp & Govt / 36% BBgBarc US Govt/Credit Int.

ASSET ALLOCATION GUIDELINES COMPLIANCE

Total Plan Asset Allocation Policy	Range	Current
Operating & Short-Term Pool	0% - 50%	14%
Long Term/ Reserves Pool	50% - 100%	86%

Operating & Short-Term Pool		Range	Current
Operating Assets		60% - 100%	100%
Short-Term Assets		0% - 40%	0%

Long Term/ Reserves Pool	Target	Range	Current
Domestic Equity	27%	20% - 35%	30%
International Equity	8%	0% - 15%	8%
Total Equity	35%	25% - 45%	38%
Alternatives	15%	0%-20%	14%
Short-Term Fixed Income	30%	25% - 45%	29%
Intermediate Fixed Income	20%	10% - 30%	19%
Cash & Cash Equivalents	0%	0% - 5%	1%

In Line | Within Tolerance | Review

SCHEDULE OF ASSETS

	Ticker	Account Type	Begin Market Value $	Market Value 06/30/2024	% of Portfolio
Total University Assets			**$92,549,492**	**$81,613,658**	**100.0**
Total Operating & Short Term			**$23,511,897**	**$11,731,728**	**14.4**
Federated Hermes Government Obligations Fund	GOSXX	Cash	$23,511,897	$11,731,728	14.4
Total Long Term/ Reserves Pool			**$69,037,595**	**$69,881,930**	**85.6**
Total Domestic Equity			**$20,235,958**	**$20,696,842**	**25.4**
Vanguard Institutional Index	VINIX	US Stock Large Cap Core	$14,362,680	$14,976,735	18.4
Vanguard Mid Cap Index Adm	VIMAX	US Stock Mid Cap Core	$2,575,501	$2,504,708	3.1
Loomis Sayles Sm Growth N	LSSNX	US Stock Small Cap Growth	$1,643,949	$1,638,178	2.0
Victory Integrity Small Value Y	VSVIX	US Stock Small Cap Value	$1,653,829	$1,577,221	1.9
Total International Equity			**$5,712,402**	**$5,665,582**	**6.9**
William Blair International Growth I	BIGIX	International	$2,633,480	$2,586,053	3.2
Dodge & Cox Internat'l Stock	DODFX	International	$3,078,922	$3,079,529	3.8
Total Alternatives			**$9,400,475**	**$9,512,700**	**11.7**
Weatherlow Offshore Fund I Ltd Cl IIA		Hedge Fund	$5,117,137	$5,190,661	6.4
Cliffwater Corporate Lending I		Private Debt	$1,958,594	$2,030,997	2.5
H.I.G. Whitehorse Principal Lending Offshore Feeder Fd, L.P.		Direct Lending	$2,324,743	$2,291,042	2.8
Total Fixed Income			**$32,740,671**	**$33,012,493**	**40.4**
JPMorgan Core Bond	WOBDX	US Fixed Income Core	$5,236,868	$5,251,856	6.4
YSU Intermediate Term Bond		US Fixed Income Core	$4,461,359	$4,493,424	5.5
Fidelity Interm Treasury Bond Index	FUAMX	US Fixed Income Core	$3,230,593	$3,233,961	4.0
YSU Short Term Bond		US Fixed Income Short Term	$13,171,279	$13,307,751	16.3
Lord Abbett Short Duration Income I	LLDYX	US Fixed Income Short Term	$6,640,572	$6,725,502	8.2
Total Cash & Cash Equivalents			**$948,090**	**$994,312**	**1.2**
Federated Hermes Government Obligations Fund	GOSXX	Cash	$948,090	$994,312	1.2

ATTRIBUTION OF MARKET VALUE

TOTAL UNIVERSITY ASSETS

	Q3-2023	Q4-2023	Q1-2024	Q2-2024	One Year
Total University Assets					
Beginning Market Value	$77,367,011	$84,550,946	$71,834,657	$92,549,492	$77,367,011
Contributions	$15,000,000	-	$18,000,000	-	$33,000,000
Distributions	-$7,026,806	-$17,000,000	-$24,332	-$12,000,000	-$36,051,138
Net Cash Flows	$7,973,194	-$17,000,000	$17,975,668	-$12,000,000	-$3,051,138
Net Investment Change	-$789,259	$4,283,710	$2,739,168	$1,064,166	$7,297,785
Ending Market Value	$84,550,946	$71,834,657	$92,549,492	$81,613,658	$81,613,658
Change $	$7,183,935	-$12,716,290	$20,714,836	-$10,935,834	$4,246,647

LONG-TERM POOL

	Q3-2023	Q4-2023	Q1-2024	Q2-2024	One Year
Total Long Term/ Reserves Pool					
Beginning Market Value	$63,401,993	$62,447,104	$66,536,739	$69,037,595	$63,401,993
Contributions	-	-	-	-	-
Distributions	-$26,806	-	-$24,332	-	-$51,138
Net Cash Flows	-$26,806	-	-$24,332	-	-$51,138
Net Investment Change	-$928,083	$4,089,635	$2,525,188	$844,335	$6,531,076
Ending Market Value	$62,447,104	$66,536,739	$69,037,595	$69,881,930	$69,881,930
Change $	-$954,889	$4,089,635	$2,500,856	$844,335	$6,479,938

PERFORMANCE SUMMARY (AS OF 06/30/2024)

	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2023 (%)	2022 (%)	2021 (%)	Inception (%)	Inception Date
Total University Assets	**100.0**	**1.3**	4.5	9.5	8.2	**3.0**	5.6	5.3	4.5	11.0	**-7.8**	7.8	4.3	**Apr-04**
Total Policy Benchmark		*1.4*	*4.1*	*8.4*	*7.0*	*3.0*	*4.1*	*4.0*	*3.4*	*8.7*	*-4.7*	*4.3*	3.3	
Total Operating & Short Term	**14.4**	**1.2**	**2.5**	**5.1**	**4.3**	**2.9**	2.2	**2.0**	**1.5**	**4.8**	1.4	**0.0**	**1.1**	**Jul-10**
Total Operating & Short Term Benchmark		*1.3*	*2.6*	*5.4*	*4.4*	*2.9*	*2.1*	*2.0*	*1.5*	*5.0*	*1.2*	*0.0*	*1.1*	
Federated Hermes Government Obligations Fund	14.4	1.2	2.5	5.1	4.3	2.9	1.9	1.8	1.3	4.8	1.4	0.0	3.2	Nov-21
90 Day U.S. Treasury Bill		*1.3*	*2.6*	*5.4*	*4.5*	*3.0*	*2.2*	*2.1*	*1.5*	*5.0*	*1.5*	*0.0*	3.4	
Total Long Term/ Reserves Pool	**85.6**	**1.2**	**5.0**	**10.2**	**9.1**	**2.3**	**5.4**	**5.4**	**4.9**	11.9	**-11.2**	9.5	5.3	**Jul-10**
Total Long Term/ Reserves Fund Benchmark		*1.5*	*5.3*	*10.7*	*9.1*	*2.9*	*5.5*	*5.6*	*4.9*	*11.7*	*-9.7*	*8.0*	5.0	
Total Domestic Equity	**25.4**	**2.3**	**11.8**	**20.3**	**19.3**	**7.4**	**13.2**	**12.8**	**11.6**	**22.7**	-17.7	26.9	**14.0**	**Jul-10**
Russell 3000 Index		*3.2*	*13.6*	*23.1*	*21.0*	*8.1*	*14.1*	*13.5*	*12.1*	*26.0*	*-19.2*	*25.7*	*14.4*	
Vanguard Institutional Index	18.4	4.3	15.3	24.5	22.0	10.0	15.0	14.2	12.8	26.2	-18.1	28.7	14.8	Jul-10
S&P 500 Index		*4.3*	*15.3*	*24.6*	*22.0*	*10.0*	*15.0*	*14.3*	*12.9*	*26.3*	*-18.1*	*28.7*	*14.8*	
Vanguard Mid Cap Index Adm	3.1	-2.7	4.9	11.8	12.8	2.2	9.4	9.5	9.1	16.0	-18.7	24.5	11.6	Oct-10
Vanguard Mid Cap Index Benchmark		*-2.7*	*4.9*	*11.8*	*12.8*	*2.2*	*9.4*	*9.6*	*9.1*	*16.0*	*-18.7*	*24.5*	*11.6*	
Loomis Sayles Sm Growth N	2.0	-0.4	6.4	9.2	13.7	-1.8	7.2	9.8	9.2	12.1	-22.8	10.2	7.8	Sep-19
Russell 2000 Growth Index		*-2.9*	*4.4*	*9.1*	*13.7*	*-4.9*	*6.2*	*7.3*	*7.4*	*18.7*	*-26.4*	*2.8*	*7.1*	
Victory Integrity Small Value Y	1.9	-4.6	0.4	10.8	13.7	4.5	9.4	7.4	6.9	17.6	-7.7	33.6	10.2	Oct-10
Russell 2000 Value Index		*-3.6*	*-0.8*	*10.9*	*8.4*	*-0.5*	*7.1*	*5.9*	*6.2*	*14.6*	*-14.5*	*28.3*	*9.1*	
Total International Equity	**6.9**	**-0.8**	**3.8**	**8.6**	**11.7**	**-0.3**	6.8	5.6	4.3	16.2	**-17.6**	10.0	5.4	**Oct-10**
MSCI AC World ex USA (Net)		*1.0*	*5.7*	*11.6*	*12.2*	*0.5*	*5.5*	*5.2*	*3.8*	*15.6*	*-16.0*	*7.8*	4.8	
William Blair International Growth I	3.2	-1.8	4.6	8.5	11.6	-4.6	6.4	6.1	4.7	15.4	-28.3	9.0	7.0	Jul-12
MSCI AC World ex USA (Net)		*1.0*	*5.7*	*11.6*	*12.2*	*0.5*	*5.5*	*5.2*	*3.8*	*15.6*	*-16.0*	*7.8*	*6.0*	
Dodge & Cox Internat'l Stock	3.8	0.0	3.2	8.7	11.7	3.6	6.7	4.8	3.5	16.7	-6.8	11.0	5.6	Oct-10
MSCI EAFE (Net)		*-0.4*	*5.3*	*11.5*	*15.1*	*2.9*	*6.5*	*5.7*	*4.3*	*18.2*	*-14.5*	*11.3*	*5.8*	
Total Alternatives	**11.7**	1.6	6.3	9.2	7.8	**1.6**	**2.3**	**2.6**	-	7.3	**-6.9**	**5.3**	**2.2**	**Mar-15**
Total Alternatives Benchmark		*0.4*	*4.6*	*8.5*	*6.1*	*2.1*	*3.0*	*3.3*	-	*6.1*	*-5.3*	*6.2*	2.7	
Weatherlow Offshore Fund I Ltd Cl IIA	6.4	1.5	7.7	11.6	8.8	1.2	7.6	6.9	5.2	7.6	-8.9	5.6	1.2	Jul-21
HFRI Fund of Funds Composite Index		*0.4*	*4.6*	*8.5*	*6.1*	*2.1*	*4.8*	*4.3*	*3.5*	*6.1*	*-5.3*	*6.2*	2.1	
Cliffwater Corporate Lending I	2.5	3.7	6.7	13.9	11.8	10.2	9.6	-	-	12.7	6.6	10.3	7.9	Dec-23
Credit Suisse Leveraged Loan Index		*1.9*	*4.4*	*11.0*	*10.6*	*6.0*	*5.4*	*5.1*	*4.6*	*13.0*	*-1.1*	*5.4*	*4.4*	
H.I.G. Whitehorse Principal Lending Offshore Feeder Fd, L.P.	2.8	0.0	2.5	6.9	8.6	-	-	-	-	10.6	-	-	8.6	Jul-22
Credit Suisse Leveraged Loan Index		*1.9*	*4.4*	*11.0*	*10.6*	*6.0*	*5.4*	*5.1*	*4.6*	*13.0*	*-1.1*	*5.4*	*10.6*	

1) Total Policy Benchmark: 45% ICE BofA 91 Days T-Bills / 17% ICE BofA 1-3 Yr US Corp & Govt / 11% BBgBarc US Govt/Credit Int / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.
2) Total Operating & Short-Term Benchmark: 95% ICE BofA 91 Days T-Bills / 5% BBgBarc US Govt 1-3 Yr.
3) Total Long-Term / Reserves Fund Benchmark: 27% Russell 3000 / 8% MSCI EAFE / 15% Total Alternatives Benchmark / 30% ICE BofA 1-3 Yr US Corp & Govt / 20% BBgBarc US Govt/Credit Int,
4) Total Alternatives Benchmark: 100% HFRI Fund of Funds Composite.
5) Total Fixed Income Benchmark: 64% ICE BofA 1-3 Yr US Corp & Govt / 36% BBgBarc US Govt/Credit Int.

PERFORMANCE SUMMARY (AS OF 6/30/2024)

	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2023 (%)	2022 (%)	2021 (%)	Inception (%)	Inception Date
Total Fixed Income	**40.4**	**0.8**	**1.1**	**4.9**	**3.1**	**-0.1**	**1.4**	**1.9**	**1.8**	**5.9**	**-6.7**	**0.1**	**2.0**	**Jul-10**
Total Fixed Income Benchmark		*0.9*	*1.1*	*4.7*	*2.5*	*-0.1*	*1.1*	*1.5*	*1.4*	*4.9*	*-5.4*	*-0.8*	*1.6*	
JPMorgan Core Bond	6.4	0.2	-0.1	3.0	1.1	-2.6	0.2	1.2	1.6	5.8	-12.3	-1.1	1.0	Sep-17
Blmbg. U.S. Aggregate Index		*0.1*	*-0.7*	*2.6*	*0.8*	*-3.0*	*-0.2*	*0.9*	*1.3*	*5.5*	*-13.0*	*-1.5*	*0.7*	
YSU Intermediate Term Bond	5.5	0.7	0.7	4.5	2.5	-0.9	1.1	1.7	1.7	5.7	-8.0	-1.3	3.1	Apr-04
Blmbg. Intermed. U.S. Government/Credit		*0.6*	*0.5*	*4.2*	*2.0*	*-1.2*	*0.7*	*1.4*	*1.5*	*5.2*	*-8.2*	*-1.4*	*2.8*	
Fidelity Interm Treasury Bond Index	4.0	0.1	-0.9	1.6	-0.4	-3.6	-0.7	0.5	1.1	4.1	-12.7	-3.0	2.4	Dec-23
Blmbg. U.S. Treasury: 5-10 Year		*0.1*	*-1.0*	*1.6*	*-0.4*	*-3.5*	*-0.7*	*0.5*	*1.1*	*4.1*	*-12.6*	*-3.0*	*-1.0*	
YSU Short Term Bond	16.3	1.0	1.6	5.2	3.1	0.9	1.5	1.8	1.5	5.0	-3.3	-0.4	2.3	Apr-04
ICE BofA 1-3 Yr. Gov/Corp		*1.0*	*1.4*	*4.9*	*2.7*	*0.6*	*1.3*	*1.5*	*1.4*	*4.6*	*-3.8*	*-0.4*	*2.1*	
Lord Abbett Short Duration Income I	8.2	1.3	2.3	6.0	3.6	1.0	1.8	2.2	2.1	5.4	-4.6	1.1	2.3	Apr-18
ICE BofA 1-3 Yr. Gov/Corp		*1.0*	*1.4*	*4.9*	*2.7*	*0.6*	*1.3*	*1.5*	*1.4*	*4.6*	*-3.8*	*-0.4*	*1.7*	
Total Cash & Cash Equivalents	**1.2**	**1.3**	**2.6**	**5.2**	**4.3**	**2.9**	**2.0**	**-**	**-**	**4.8**	**1.5**	**0.0**	**1.8**	**Apr-18**
90 Day U.S. Treasury Bill		*1.3*	*2.6*	*5.4*	*4.5*	*3.0*	*2.2*	*2.1*	*1.5*	*5.0*	*1.5*	*0.0*	*2.2*	
Federated Hermes Government Obligations Fund	1.2	1.2	2.5	5.1	4.3	2.9	1.9	1.8	1.3	4.8	1.4	0.0	2.0	Dec-19
90 Day U.S. Treasury Bill		*1.3*	*2.6*	*5.4*	*4.5*	*3.0*	*2.2*	*2.1*	*1.5*	*5.0*	*1.5*	*0.0*	*2.2*	

1) Total Policy Benchmark: 45% ICE BofA 91 Days T-Bills / 17% ICE BofA 1-3 Yr US Corp & Govt / 11% BBgBarc US Govt/Credit Int / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.
2) Total Operating & Short-Term Benchmark: 95% ICE BofA 91 Days T-Bills / 5% BBgBarc US Govt 1-3 Yr.
3) Total Long-Term / Reserves Fund Benchmark: 27% Russell 3000 / 8% MSCI EAFE / 15% Total Alternatives Benchmark / 30% ICE BofA 1-3 Yr US Corp & Govt / 20% BBgBarc US Govt/Credit Int,
4) Total Alternatives Benchmark: 100% HFRI Fund of Funds Composite.
5) Total Fixed Income Benchmark: 64% ICE BofA 1-3 Yr US Corp & Govt / 36% BBgBarc US Govt/Credit Int.

clearstead

SUPPORTING INFORMATION

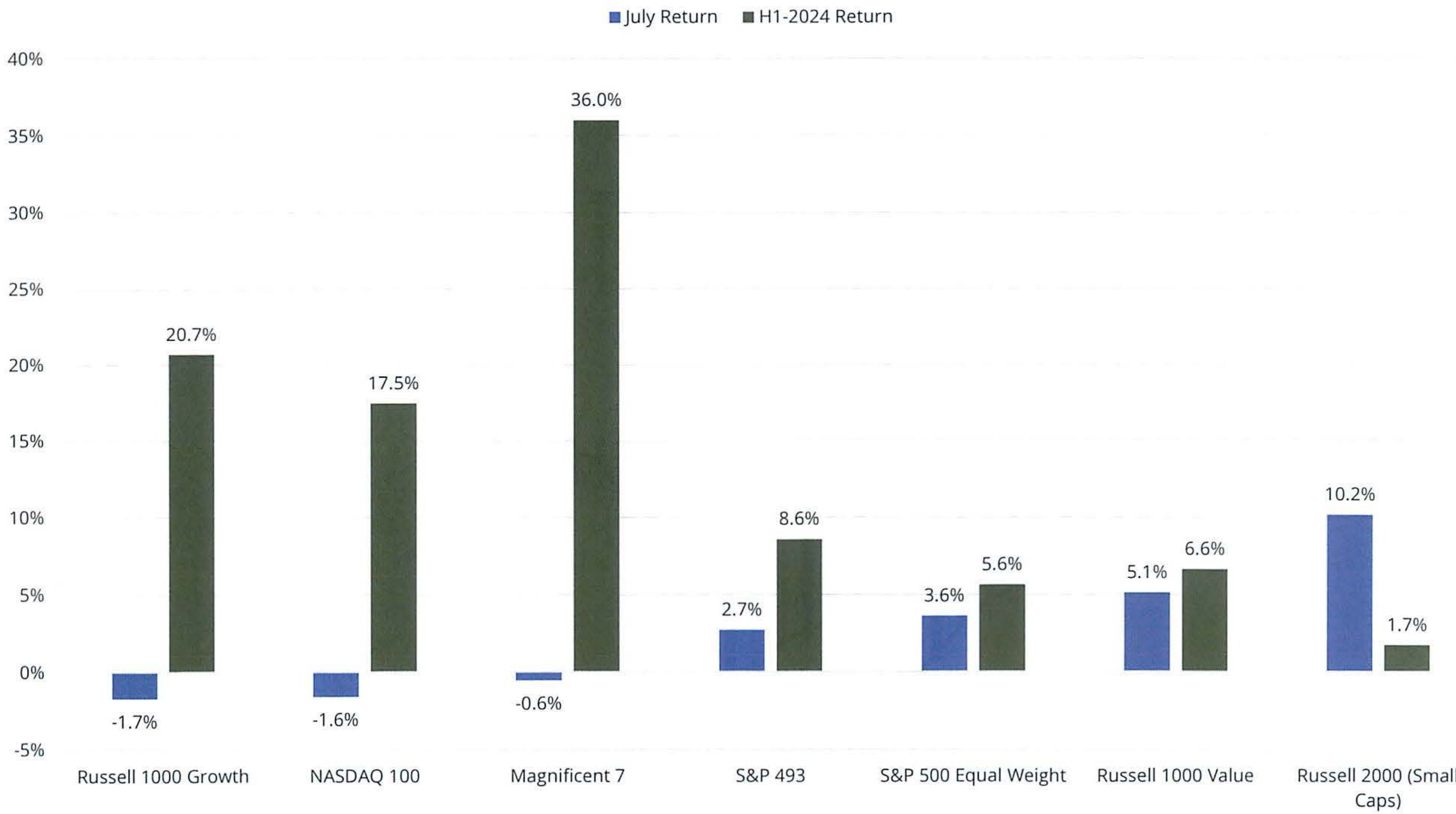
ASSET CLASS RETURNS

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Q1 2024	Q2 2024	2024 YTD
Large Cap 13.7%	Large Cap 1.4%	Sm/Mid 17.6%	Em Mkt 37.3%	Cash 1.9%	Large Cap 31.5%	Sm/Mid 20.0%	Large Cap 28.7%	Cash 1.5%	Large Cap 26.3%	Large Cap 10.6%	Em Mkt 5.0%	Large Cap 15.3%
Sm/Mid 7.1%	US Bonds 0.6%	Hi Yld 17.5%	Dev Intl 25.0%	US Bonds 0.0%	Sm/Mid 27.8%	Large Cap 18.4%	Sm/Mid 18.2%	Hdg Fnds -5.3%	Dev Intl 18.2%	Sm/Mid 6.9%	Large Cap 4.3%	Em Mkt 7.5%
US Bonds 6.0%	Cash 0.1%	Large Cap 12.0%	Large Cap 21.8%	Glb Bond -0.9%	Dev Intl 22.0%	Em Mkt 18.3%	Dev Intl 11.3%	Hi Yld -11.2%	Sm/Mid 17.4%	Dev Intl 5.8%	Cash 1.3%	Dev Intl 5.3%
Hdg Fnds 3.4%	Hdg Fnds -0.3%	Em Mkt 11.2%	Sm/Mid 16.8%	Hi Yld -2.3%	Em Mkt 18.4%	Hdg Fnds 10.9%	Hdg Fnds 6.2%	US Bonds -13.0%	Hi Yld 13.5%	Hdg Fnds 4.2%	Hi Yld 1.1%	Hdg Fnds 4.7%
Hi Yld 2.5%	Dev Intl -0.8%	US Bonds 2.7%	Glb Bond 9.3%	Hdg Fnds -4.0%	Hi Yld 14.4%	Glb Bond 9.5%	Hi Yld 5.4%	Dev Intl -14.5%	EM Mkt 9.8%	Em Mkt 2.4%	Hdg Fnds 0.5%	Cash 2.7%
Cash 0.0%	Sm/Mid -2.9%	Glb Bond 1.9%	Hdg Fnds 7.8%	Large Cap -4.4%	US Bonds 8.8%	Dev Intl 7.8%	Cash 0.1%	Large Cap -18.1%	Hdg Funds 6.1%	Hi Yld 1.5%	US Bonds 0.1%	Hi Yld 2.6%
Em Mkt -2.2%	Hi Yld -4.6%	Dev Intl 1.0%	Hi Yld 7.5%	Sm/Mid -10.0%	Hdg Fnds 8.4%	US Bonds 7.5%	US Bonds -1.5%	Sm/Mid -18.4%	US Bonds 5.5%	Cash 1.3%	Dev Intl -0.4%	Sm/Mid 2.4%
Glb Bond -2.8%	Glb Bond -4.8%	Hdg Fnds 0.5%	US Bonds 3.5%	Dev Intl -13.8%	Glb Bond 5.0%	Hi Yld 6.2%	Em Mkt -2.5%	Glb Bond -19.6%	Cash 5.1%	US Bonds -0.8%	Glb Bond -3.1%	US Bonds -0.7%
Dev Intl -4.5%	Em Mkt -14.9%	Cash 0.3%	Cash 0.9%	Em Mkt -14.6%	Cash 2.3%	Cash 0.5%	Glb Bond -8.2%	Em Mkt -20.1%	Glb Bonds 4.2%	Glb Bond -3.8%	Sm/Mid -4.3%	Glb Bond -6.8%

Past performance is not an indicator of future results. Asset classes represented by: Large Cap – S&P 500 Index; Sm/Mid – Russell 2500 Index; Dev Intl – MSCI EAFE Index; Em Mkt – MSCI Emerging Markets Index; Hi Yld – Bank of America Merrill Lynch U.S. High Yield Master II; US Bonds – Barclays Capital U.S. Aggregate; Glb Bond – Barclays Capital Global Treasury ex US; Hdg Fnds – HFRI FOF: Diversified Index; Cash – Merrill Lynch 91-day Tbill . Data as of 6/30/2024. Source: Morningstar Direct.

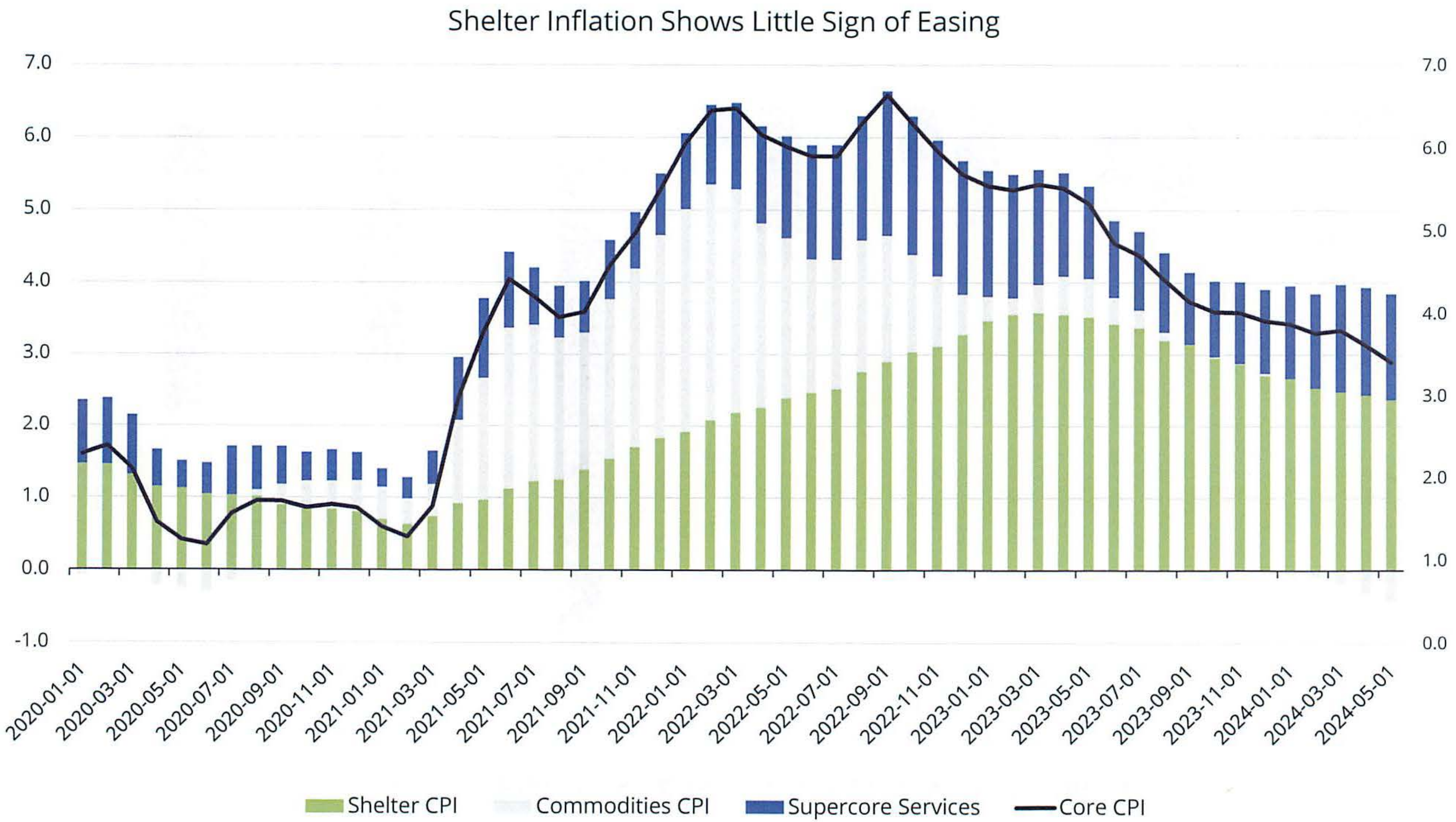
STAYING DIVERSIFIED THROUGH NARROW MARKETS: ROTATION - GROWTH / VALUE; EQUAL VS. REG VS. NASDAQ

ROTATION FROM LARGE TO SMALL; GROWTH TO VALUE



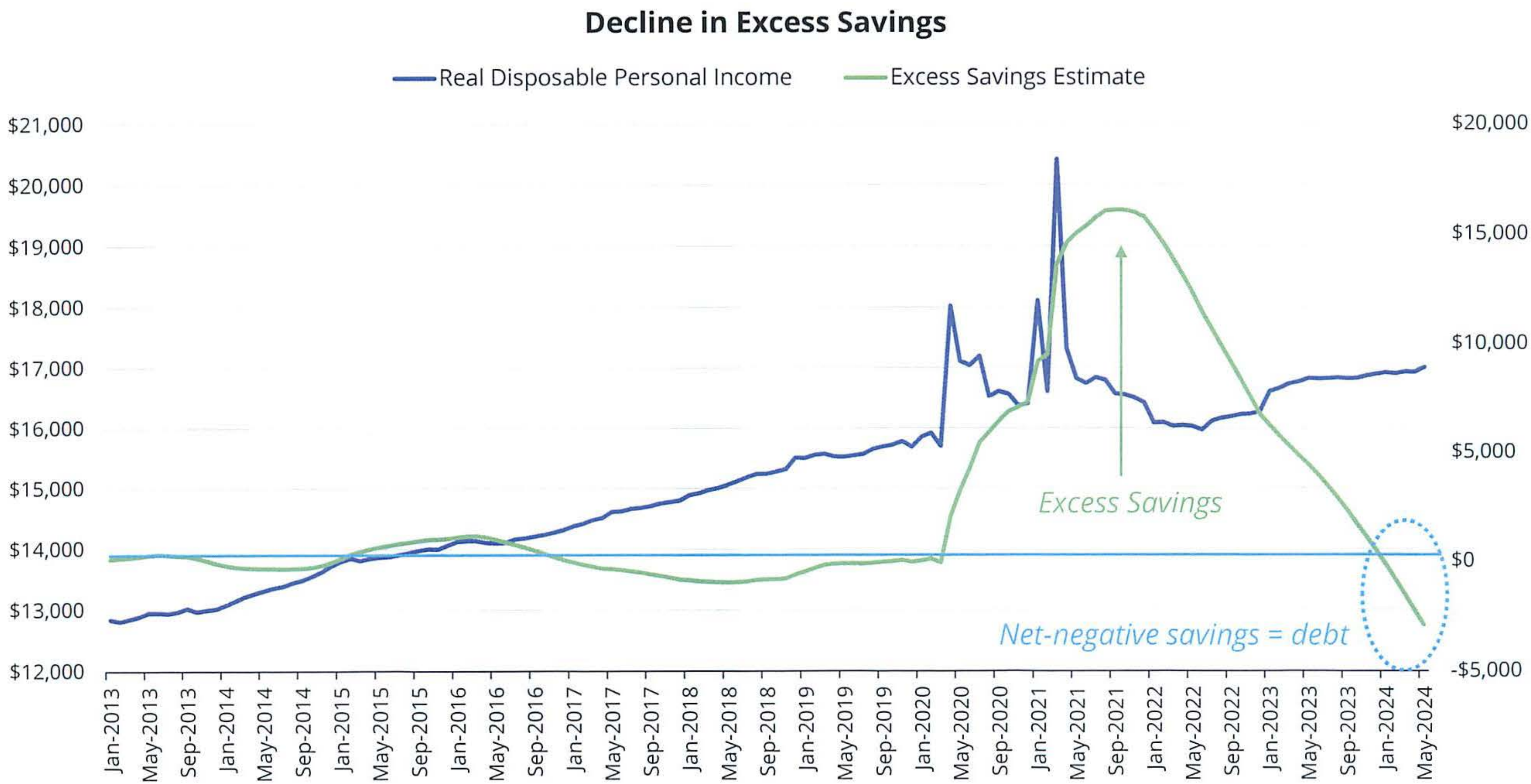
Source: Clearstead, Bloomberg LP, as of 7/31/2024, Past performance is not an indicator of future returns.

SHELTER INFLATION SPOILING THE FED'S PARTY



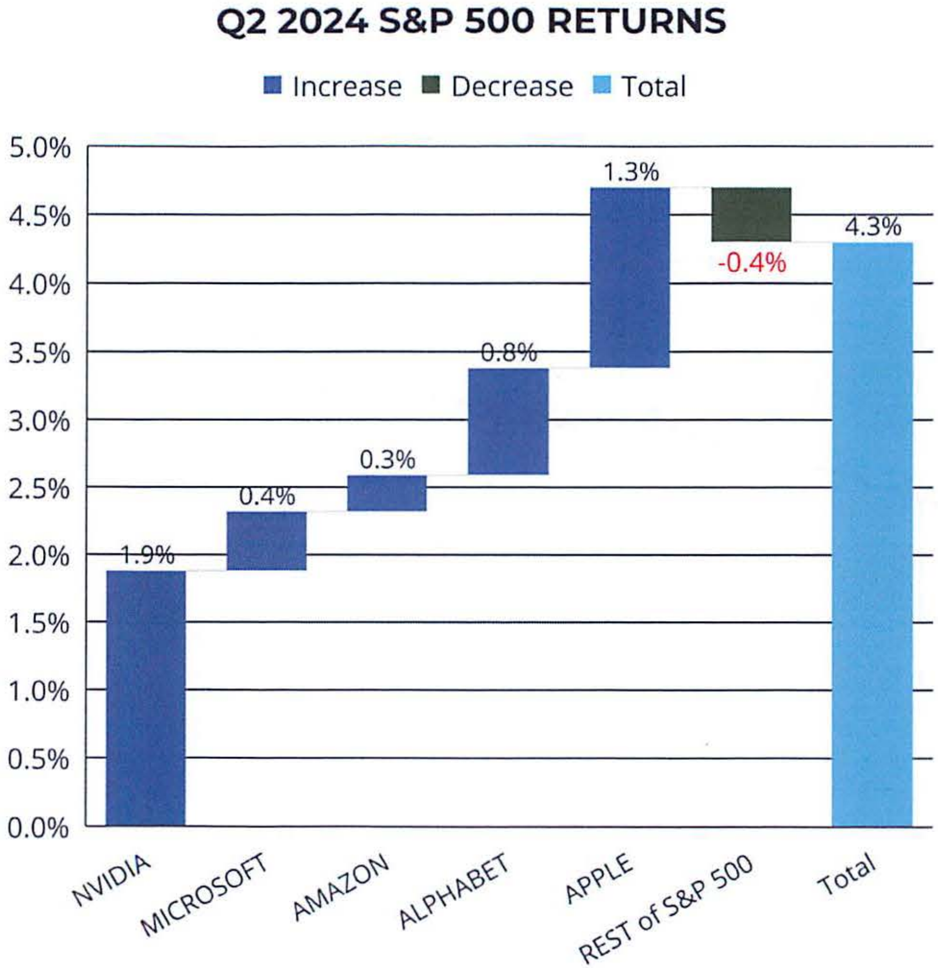
Source: Clearstead, BLS, Bloomberg, 7/3/2024

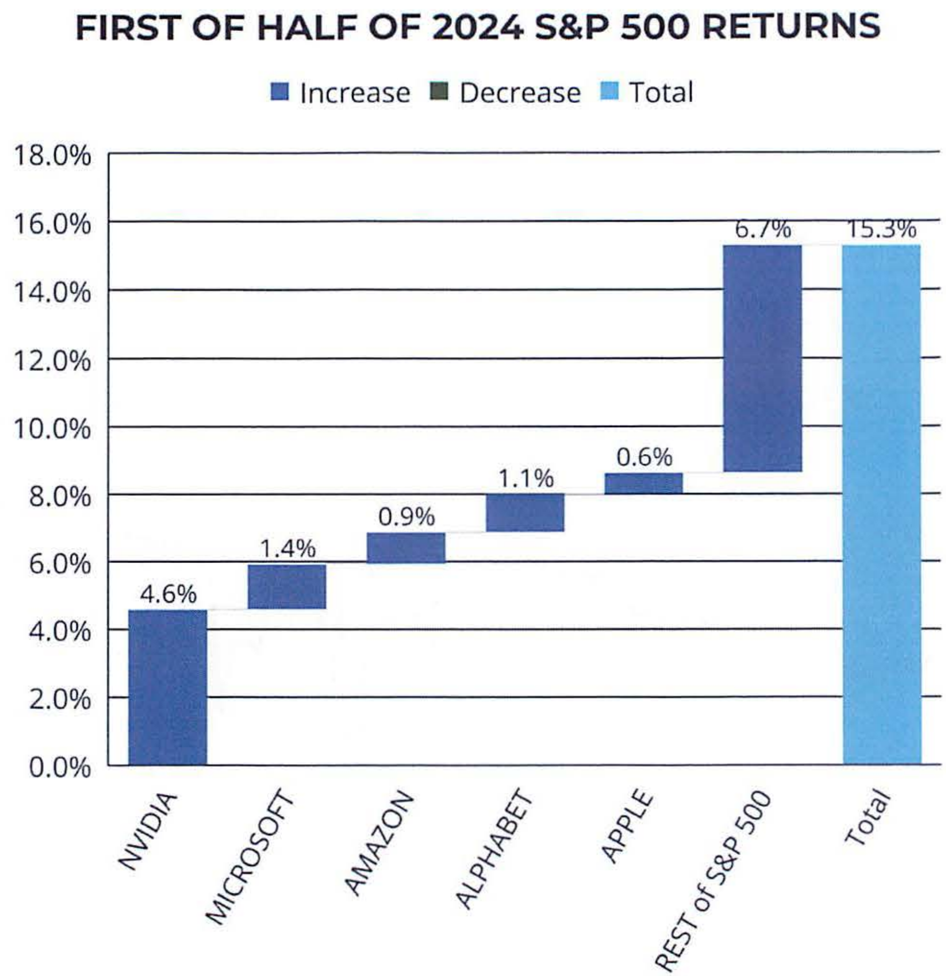
CONSUMER FEELING THE PINCH



Source: Clearstead, BLS, Bloomberg, 7/3/2024

~~MAGNIFICENT 7~~ FAB 5 DRIVES S&P 500 RETURN



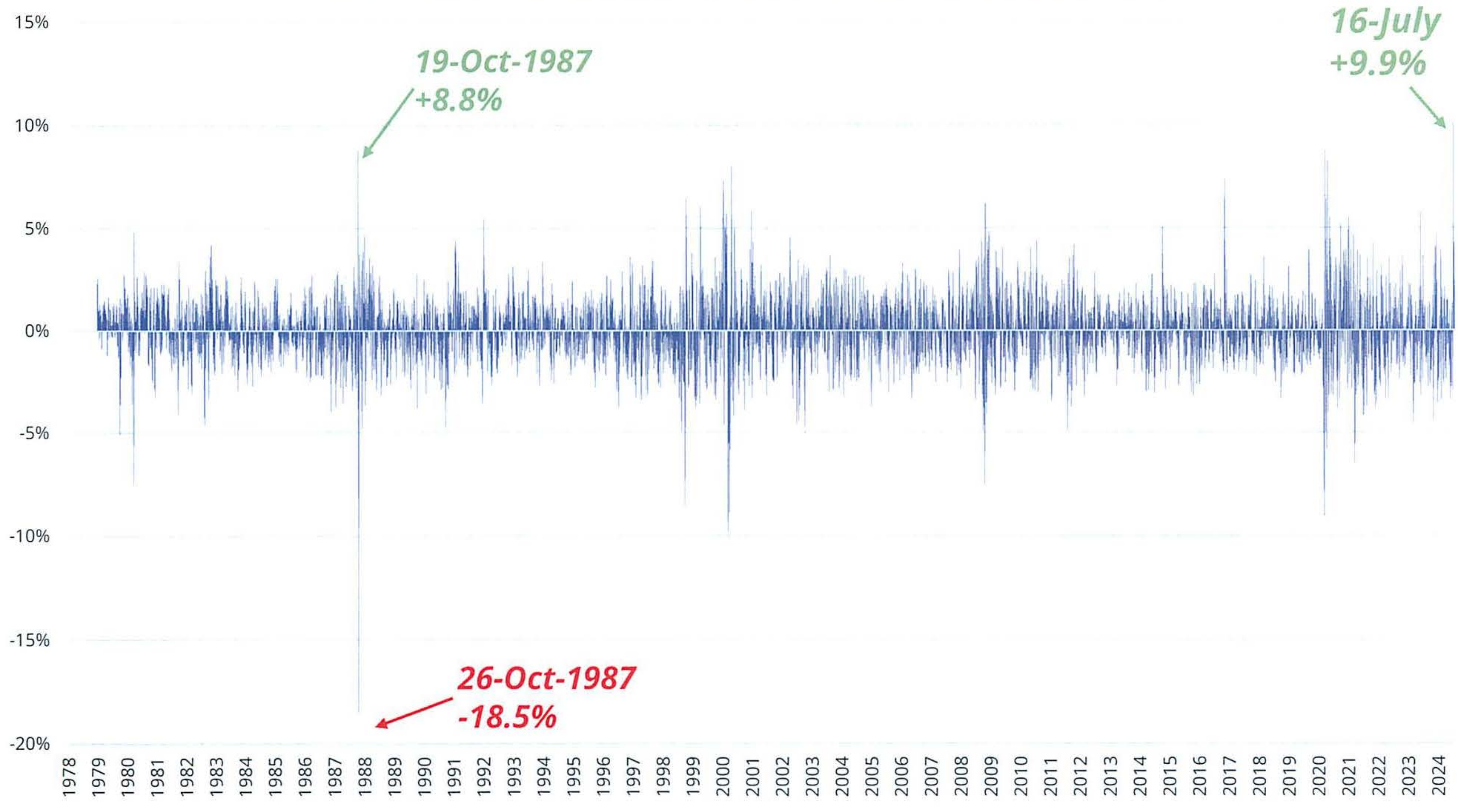


- Q2 performance driven by a handful of macro-independent stocks (e.g., insensitive to inflation and fed rate cuts), while the remaining stocks were generally directionless amidst evolving Fed policy

Source: Clearstead, Bloomberg LP, contribution to total return, as of 6/30/2024
Past performance is not an indicator of future results

U.S. SMALL CAPS: A HISTORIC 5-DAY WIN STREAK

5 DAY RELATIVE PERFORMANCE RUSSELL 2000 VS S&P 500



Source: Clearstead, Bloomberg LP, as of 7/31/2024, Past performance is not an indicator of future returns.

GLOBAL ECONOMY PMI

		Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	12M Trend
Global	Mfg	48.6	49.0	49.2	48.8	49.3	49.0	50.0	50.3	50.6	50.3	51.0	50.9	
	Serv	52.6	51.0	50.7	50.4	50.6	51.6	52.3	52.4	52.4	52.7	54.0	53.1	
US	Mfg	49.0	47.9	49.8	50.0	49.4	47.9	50.7	52.2	51.9	50.0	51.3	51.6	
	Serv	52.3	50.5	50.1	50.6	50.8	51.4	52.5	52.3	51.7	51.3	54.8	55.1	
Eurozone	Mfg	42.7	43.5	43.4	43.1	44.2	44.4	46.6	46.5	46.1	45.7	47.3	45.8	
	Serv	50.9	47.9	48.7	47.8	48.7	48.8	48.4	50.2	51.5	53.3	53.2	52.6	
UK	Mfg	45.3	43.0	44.3	44.8	47.2	46.2	47.0	47.5	50.3	49.1	51.2	50.9	
	Serv	51.5	49.5	49.3	49.5	50.9	53.4	54.3	53.8	53.1	55.0	52.9	51.2	
Japan	Mfg	49.6	49.6	48.5	48.7	48.3	47.9	48.0	47.2	48.2	49.6	50.4	50.0	
	Serv	53.8	54.3	53.8	51.6	50.8	51.5	53.1	52.9	54.1	54.3	53.8	49.8	
China	Mfg	49.2	51.0	50.6	49.5	50.7	50.8	50.8	50.9	51.1	51.4	51.7	51.8	
	Serv	54.1	51.8	50.2	50.4	51.5	52.9	52.7	52.5	52.7	52.5	54.0	51.2	
India	Mfg	57.7	58.6	57.5	55.5	56.0	54.9	56.5	56.9	59.1	58.8	57.5	58.3	
	Serv	62.3	60.1	61.0	58.4	56.9	59.0	61.8	60.6	61.2	60.8	60.2	60.4	
S. Korea	Mfg	49.4	48.9	49.9	49.8	50.0	49.9	51.2	50.7	49.8	49.4	51.6	52.0	

- Global manufacturing have stagnated, while services PMI have remained in positive territory
  - PMIs generally suggest little growth, but are not indicative of a decline
  - Global manufacturing PMIs are neutral-to-mildly positive in most economies—except in Europe
  - Global services PMIs are suggesting stable/modest economic growth in most countries
- India continues to be the one country whose PMIs show universal strength

Source: Bloomberg, Markit/HIS.
Data as of 6/30/2024.

S&P 500 EARNINGS: STRONG OUTLOOK

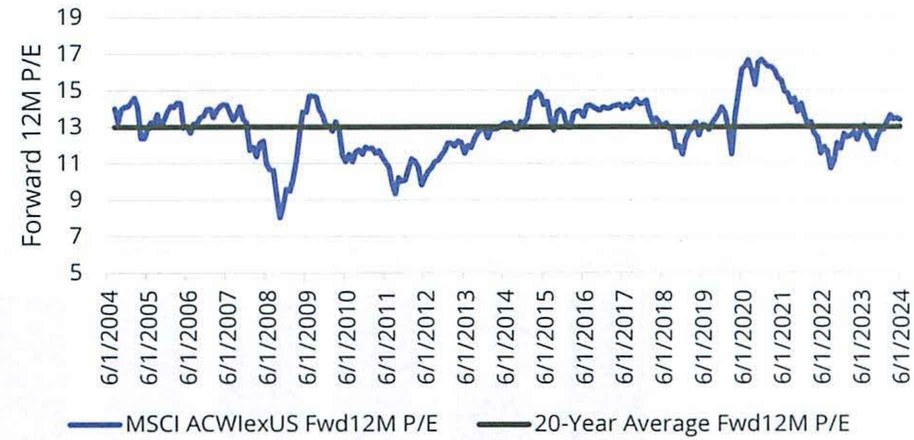
- Bottoms up earnings estimates for CY2024 have held in through the first half of the year, reflecting a stable and positive US macro environment.

Source: Factset, Clearstead, data as of 6/21/2024, Past performance is not an indicator of future results

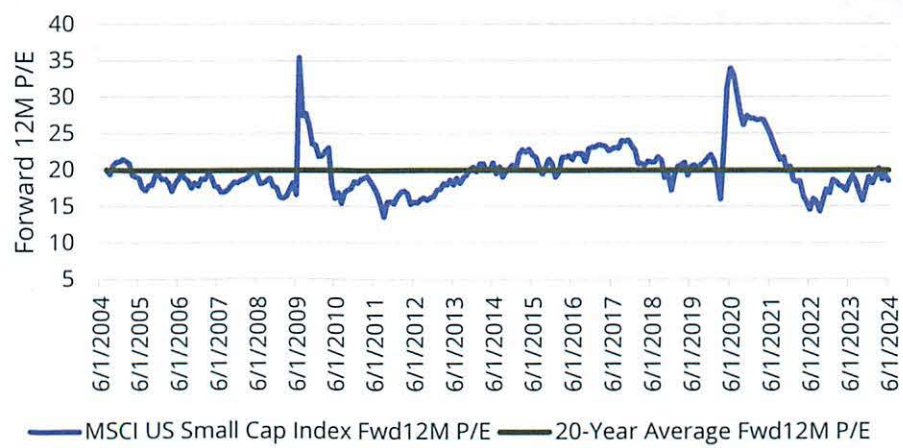
GLOBAL EQUITY VALUATIONS

US LARGE/MID CAP FWD 12M P/E

DEVELOPED INT'L FWD 12M P/E



US SMALL CAP FWD 12M P/E



DEVELOPED INT'L SMALL CAP FWD 12M P/E

Source: Bloomberg.
Data as of 6/30/2024. Past performance is not an indicator of future results.

ECONOMIC OUTLOOK

AREA	EXPECTATIONS
Labor Markets	• U.S. adds 150k-200k jobs per month • Unemployment rate remains at ~4% • Tight labor market may pressure wages • Average hourly wages expected to increase 4%
Manufacturing	• Manufacturing activity stable • Input prices lower • Select sectors may see moderate growth
Services	• Services industry remains positive amidst strong consumer spending • Tighter credit conditions pose risk to select businesses
Inflation	• Core CPI looks range-bound between 3.5% to 4.0% • Headline CPI likely to remain above 3% • Service sector prices remain sticky given elevated wage costs and housing prices
Equity Markets	• Choppy market returns; Volatility may increase • Some technical support at the lower-end • Market's assumption for soft landing playing out
Fixed Income Markets	• 10-Yr US Treasury moving higher • Uncertainty around Fed policy with one expected rate cut at year-end

Source: Clearstead, as of 6/30/2024.
Expectations for 3rd quarter of calendar year 2024.

GLOBAL HEADLINE INFLATION

Global Headline CPI - Year-over-Year % Change

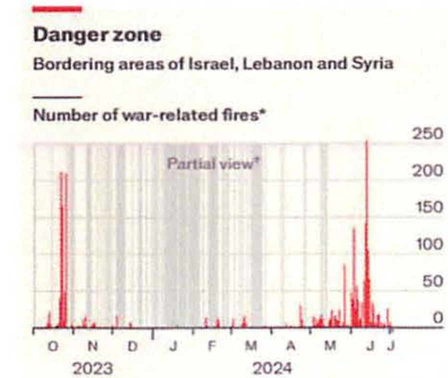
	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
Dev. Markets																								
US	9.1	8.5	8.3	8.2	7.7	7.1	6.5	6.4	6.0	5.0	4.9	4.0	3.0	3.2	3.7	3.7	3.2	3.1	3.4	3.1	3.2	3.5	3.4	3.3
EU	8.6	8.9	9.1	10.0	10.7	10.0	9.2	8.5	8.5	6.9	7.0	6.1	5.5	5.3	5.3	4.3	2.9	2.4	2.9	2.8	2.6	2.4	2.4	2.6
Japan	2.4	2.6	3.0	3.0	3.7	3.8	4.0	4.3	3.3	3.2	3.5	3.2	3.3	3.3	3.2	3.0	3.3	2.8	2.6	2.2	2.8	2.7	2.5	2.8
UK	9.4	10.1	9.9	10.1	11.1	10.7	10.5	10.1	10.4	10.1	8.7	8.7	7.9	6.8	6.7	6.7	4.6	3.9	4.0	4.0	3.4	3.2	2.3	2.0
Canada	8.1	7.6	7.0	6.9	6.9	6.8	6.3	5.9	5.2	4.3	4.4	3.4	2.8	3.3	4.0	3.8	3.1	3.1	3.4	2.9	2.8	2.9	2.7	2.9
Australia	6.1	6.1	6.1	7.3	7.3	7.3	7.8	7.8	7.8	7.0	7.0	7.0	6.0	6.0	6.0	5.4	5.4	5.4	4.1	4.1	4.1	3.6	3.6	3.6
Switzerland	3.4	3.4	3.5	3.3	3.0	3.0	2.8	7.2	3.4	2.9	2.6	2.2	1.7	1.6	1.6	1.7	1.7	1.4	1.7	1.3	1.2	1.0	1.4	1.4
Norway	6.3	6.8	6.5	6.9	7.5	6.5	5.9	7.0	6.3	6.5	6.4	6.7	6.4	5.4	4.8	3.3	4.0	4.8	4.8	4.7	4.5	3.9	3.6	3.0
Sweden	8.7	8.5	8.9	10.8	10.9	11.5	12.3	11.7	12.0	10.6	10.5	9.7	9.3	9.3	7.5	6.5	6.5	5.8	4.4	5.4	4.5	4.1	3.9	3.7
Asia																								
China	2.5	2.7	2.5	2.8	2.1	1.6	1.8	2.1	1.0	0.7	0.1	0.2	0.0	-0.3	0.1	0.0	-0.2	-0.5	-0.3	-0.8	0.7	0.1	0.3	0.3
India	6.2	5.8	5.9	6.5	6.1	5.4	5.8	6.2	6.2	5.8	5.1	4.4	5.6	7.5	6.9	4.7	4.5	5.0	4.9	4.6	4.6	4.2	3.9	3.9
Indonesia	4.4	4.9	4.7	6.0	5.7	5.4	5.5	5.3	5.5	5.0	4.3	4.0	3.5	3.1	3.3	2.3	2.6	2.9	2.8	2.6	2.8	3.1	3.0	2.8
Malaysia	3.4	4.4	4.7	4.5	4.0	4.0	3.8	3.7	3.7	3.4	3.3	2.8	2.4	2.0	2.0	1.9	1.8	1.5	1.5	1.5	1.8	1.8	1.8	2.0
S Koreas	6.0	6.3	5.7	5.6	5.7	5.0	5.0	5.2	4.8	4.2	3.7	3.3	2.7	2.3	3.4	3.7	3.8	3.3	3.2	2.8	3.1	3.1	2.9	2.7
Taiwan	3.6	3.4	2.7	2.8	2.7	2.4	2.7	3.1	2.4	2.4	2.4	2.0	1.8	1.9	2.5	2.9	3.0	2.9	2.7	1.8	3.1	2.2	1.9	2.2
Latin America																								
Brazil	11.9	10.1	8.7	7.2	6.5	5.9	5.8	5.8	5.6	4.7	4.2	3.9	3.2	4.0	4.6	5.2	4.8	4.7	4.6	4.5	4.5	3.9	3.7	3.9
Chile	12.5	13.1	14.1	13.7	12.8	13.3	12.8	12.3	11.9	11.1	9.9	8.7	7.6	6.5	5.3	5.1	5.0	4.8	3.9	3.8	4.5	3.7	4.0	4.1
Colombia	9.7	10.2	10.8	11.4	12.2	12.5	13.1	13.3	13.3	13.3	12.8	12.4	12.1	11.8	11.4	11.0	10.5	10.2	9.3	8.4	7.7	7.4	7.2	7.2
Mexico	8.0	8.2	8.7	8.7	8.4	7.8	7.8	7.9	7.6	6.9	6.3	5.8	5.1	4.8	4.6	4.5	4.3	4.3	4.7	4.9	4.4	4.4	4.7	4.7

- Inflation has eased in most countries, but many countries are seeing less progress (inflation stagnation) towards their central bank targets over the last six-months.

Source: Clearstead, Bloomberg.
Data as of 6/30/2024.

HEIGHTENED GEOPOLITICAL TENSION

Geopolitical Risk	Potential Market Impact
• Gaza war winding down, but Israel is on the precipice of a war with Hezbollah: o Kamikaze drones, mass blackouts, and potentially the largest missile barrage in history. o Israel is seeking a "security zone" that would, at minimum, a limited invasion of southern Lebanon.	*Commodity price volatility—oil, gas, grains, and select metals.*
• Ukrainian war largely at a stalemate, but Russia is still mounting targeted offensives. o Western aid to Ukraine set to arrive in critical mass throughout July—F16s as well. o Exhaustion/lack of reserves are real constraint on the Ukrainian army in H2-2024.	*Energy price volatility; increased shipping costs to Europe; delayed/disrupted supply chains.*
• China amping up the pressure on Taiwan. o China has seized several Taiwanese fishing vessels; increasing number of incursions into Taiwanese airspace. o Tensions in the Korean Peninsula remain at a multi-year high; N. Korea & Russia have signed a mutual aid agreement/security pact.	*Increased US-China tension; more negative sentiment on select Chinese assets (equities)*



Source: Clearstead, Economist, ISW, 6/30/2024

clearstead

DEFINITIONS & DISCLOSURES

DEFINITIONS & DISCLOSURES

Information provided is general in nature, is provided for informational purposes only, and should not be construed as investment advice. Any views expressed are based upon the data available at the time the information was produced and are subject to change at any time based on market or other conditions. Clearstead disclaims any liability for any direct or incidental loss incurred by applying any of the information in this presentation. All investment decisions must be evaluated as to whether it is consistent with their investment objectives, risk tolerance, and financial situation.
Past performance is no guarantee of future results. Investing involves risk, including risk of loss. Diversification does not ensure a profit or guarantee against loss.
All indices are unmanaged and performance of the indices includes reinvestment of dividends and interest income, unless otherwise noted. An investment cannot be made in any index.
Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, bonds and short-term investments entail greater inflation risk, or the risk that the return of an investment will not keep up with increases in the prices of goods and services, than stocks.
Lower-quality debt securities generally offer higher yields, but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.
The municipal market is volatile and can be significantly affected by adverse tax, legislative, or political changes and by the financial condition of the issuers of municipal securities. Interest rate increases can cause the price of a debt security to decrease. A portion of the dividends you receive may be subject to federal, state, or local income tax or may be subject to the federal alternative minimum tax. Generally, tax-exempt municipal securities are not appropriate holdings for tax advantaged accounts such as IRAs and 401(k)s.
Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which are magnified in emerging markets. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Growth stocks can perform differently from the market as a whole and other types of stocks and can be more volatile than other types of stocks. Value stocks can perform differently than other types of stocks and can continue to be undervalued by the market for long periods of time.
The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.
Changes in real estate values or economic conditions can have a positive or negative effect on issuers in the real estate industry, which may affect your investment.

Index Definitions:

The **S&P 500 Index** is a broad-based market index, comprised of 500 large-cap companies, generally considered representative of the stock market as a whole. The **S&P 400 Index** is an unmanaged index considered representative of mid-sized U.S. companies. The **S&P 600 Index** is a market-value weighted index that consists of 600 small-cap U.S. stocks chosen for market size, liquidity and industry group representation.
The **Russell 1000 Value Index, Russell 1000 Index** and **Russell 1000 Growth Index** are indices that measure the performance of large-capitalization value stocks, large-capitalization stocks and large-capitalization growth stocks, respectively. The **Russell 2000 Value Index, Russell 2000 Index** and **Russell 2000 Growth Index** are indices that measure the performance of small-capitalization value stocks, small-capitalization stocks and small-capitalization growth stocks, respectively. The **Russell Midcap Value Index, Russell Midcap Index** and **Russell Midcap Growth Index** are indices that measure the performance of mid-capitalization value stocks, mid-capitalization stocks and mid-capitalization growth stocks, respectively. The **Russell 2500 Value Index, Russell 2500 Index** and **Russell 2500 Growth Index** measure the performance of small to mid-cap value stocks, small to mid-cap stocks and small to mid-cap growth stocks, respectively, commonly referred to as "smid" cap. The **Russell 3000 Value Index, Russell 3000 Index** and **Russell 3000 Growth Index** measure the performance of the 3,000 largest U.S. value stocks, 3,000 largest U.S. stocks and 3,000 largest U.S. growth stocks, respectively, based on total market capitalization.
The **Wilshire 5000 Index** represents the broadest index for the U.S. equity market, measuring the performance of all U.S. equity securities with readily available price data. The **Wilshire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wilshire 5000 Index below the 2,501st rank.
The **MSCI EAFE (Europe, Australasia, Far East) Index** is designed to measure developed market equity performance, excluding the U.S. and Canada. The **MSCI Emerging Markets (EM) Index** is designed to measure global emerging market equity performance. The **MSCI World Index** is designed to measure global developed market equity performance. The **MSCI World Index Ex-U.S. Index** is designed to measure the equity market performance of developed markets and excludes the U.S. The **MSCI Europe Index** is an unmanaged index considered representative of developed European countries. The **MSCI Japan Index** is an unmanaged index considered representative of stocks of Japan. The **MSCI Pacific ex. Japan Index** is an unmanaged index considered representative of stocks of Asia Pacific countries excluding Japan.
The **U.S. 10-Year treasury Yield** is generally considered to be a barometer for long-term interest rates.
Merrill Lynch 91-day T-bill index includes U.S. Treasury bills with a remaining maturity from 1 up to 3 months.
The Barclays Capital® (BC) U.S. Treasury Index is designed to cover public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC Aggregate Bond Index** is an unmanaged, market value-weighted performance benchmark for investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities with maturities of at least one year. The **BC U.S. Credit Bond Index** is designed to cover publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements; bonds must be SEC-registered to qualify. The **BC U.S. Agency Index** is designed to cover publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government. The **BC CMBS Index** is designed to mirror commercial mortgage-backed securities of investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch respectively, with maturity of at least one year. The **BC MBS Index** covers agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARMs) issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The **BC U.S. Municipal Bond Index** covers the U.S. dollar-denominated, long-term tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The **BC TIPS Index** is an unmanaged market index made up of U.S. Treasury Inflation Linked Index securities. The **BC U.S. Government Bond Index** is a market value-weighted index of U.S. Government fixed-rate debt issues with maturities of one year or more. The **BC ABS Index** is a market value-weighted index that covers fixed-rate asset-backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices; the U.S. Aggregate Index, Pan-European Aggregate Index, and the Asian-Pacific Aggregate Index. In aggregate the index is created to be a broad-based measure of the performance of investment grade fixed rate debt on a global scale. The **BC US Corporate Long Aa Index** is an unmanaged index representing public obligations of U.S. corporate and specified foreign debentures and secured notes with a remaining maturity of 10 years or more. **The BC U.S. Corporate High-Yield Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. T**he BC Intermediate Corporate Index** includes dollar-denominated debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers with a duration of 1-10 years. The **BC U.S. Treasury Long Index** is an unmanaged index representing public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC U.S. Government 10 Year Treasury Index** measures the performance of U.S. Treasury securities that have a remaining maturity of less than 10 years. The **BC BAA Corporate Index** measures the performance of the taxable Baa rated fixed-rate U.S. dollar-denominated corporate bond market. The **BC Global Treasury ex US Index** includes government bonds issued by investment-grade countries outside the United States, in local currencies, that have a remaining maturity of one year or more and are rated investment grade or higher. The **BC Emerging Market Bond Index** is an unmanaged index that total returns for external-currency-denominated debt instruments of the emerging markets. The **BC U.S. Securitized Bond Index** is a composite of asset-backed securities, collateralized mortgage-backed securities (ERISA-eligible) and fixed rate mortgage-backed securities. The **BC Quality Distribution AAA, B, and CC-D Indices** measure the respective credit qualities of U.S. corporate and specified foreign debentures and secured notes. The **BC Universal Index** represents the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, and the non-ERISA portion of the CMBS Index. The **BC 1-3 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to three years. The **BC Long-term Government Index** is an unmanaged index reflecting performance of the long-term government bond market. **The BC Intermediate Aggregate Index** measures the performance of intermediate-term investment grade bonds. **The BC Intermediate 1-3 Year Government/Credit Index** measures the performance of U.S. Dollar denominated U.S. Treasuries, government-related and investment grade U.S. corporate securities that have a remaining maturity of greater than one year and less than ten years.
The **Bank of America ML U.S. High Yield Index** tracks the performance of below investment grade US Dollar Denominated corporate bonds publicly issued in the US market. Qualifying bonds have at least one year remaining term to maturity, are fixed coupon schedule and minimum outstanding of $100 million.
The **HFRI Funds of Funds Index (HFRI FOF)** is an equal weighted index designed to measure the performance of hedge fund of fund managers. The more than 800 multi-strategy constituents are required to have at least $50 million in assets under management and a trading track record spanning at least 12 months. The index includes both on and offshore funds and all returns are reported in USD
The **NCREIF Property Index (NPI)** represents quarterly time series composite total rate of return measure of a very large pool of individual commercial real estate properties acquired in the private market. The index represents apartments, hotels, industrial properties, office buildings and retail properties which are at least 60% occupied and owned or controlled, at least in part by tax-exempt institutional investors or its designated agent. In addition these properties that are included must be investment grade, non-agricultural and income producing and all development projects are excluded. Constituents included in the NPI be valued at least quarterly, either internally or externally, using standard commercial real estate appraisal methodology. Each property must be independently appraised a minimum of once every three years.
The **FTSE NAREIT All REITs Index** is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified Real Estate Investment Trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange, or the NASDAQ National Market List.
The **Dow Jones U.S. Select Real Estate Securities Index** is a float-adjusted market capitalization-weighted index of publicly traded real estate securities such as real estate investment trusts (REITs) and real estate operating companies (REOCs).
The **Cambridge PE Index** is a representation of returns for over 70% of the total dollars raised by U.S. leveraged buyout, subordinated debt and special situation managers from 1986 to December 2007. Returns are calculated based on the pooled time weighted return and are net of all fees. These pooled means represent the end to end rate of return calculated on the aggregate of all cash flows and market values reported by the general partners of the underlying constituents in the quarterly and annual reports.
The **University of Michigan Consumer Sentiment Index** is a consumer confidence index published monthly by the University of Michigan and Thomson Reuters. The index is normalized to have a value of 100 in December 1964.
VIX - The CBOE Volatility Index (VIX) is based on the prices of eight S&P 500 index put and call options.
Gold - represented by the dollar spot price of one troy ounce
WTI Crude - West Texas Intermediate is a grade of crude oil used as a benchmark in oil pricing
The **Affordability Index** measures of a population's ability to afford to purchase a particular item, such as a house, indexed to the population's income
The **Homeownership %** is computed by dividing the number of owner-occupied housing units by the number of occupied housing units or households.
HFRI Emerging Markets: Asia ex-Japan, Global Index, Latin America Index, Russia/Eastern Europe Index: The constituents of the HFRI Emerging Markets Indices are selected according to their Regional Investment Focus only. There is no Investment Strategy criteria for inclusion in these indices. Funds classified as Emerging Markets have a regional investment focus in one of the following geographic areas: Asia ex-Japan, Russia/Eastern Europe, Latin America, Africa or the Middle East. **HFRI EH: Energy/Basic Materials** strategies which employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintains a level of expertise which exceeds that of a market generalist. **HFRI EH: Equity Market Neutral** strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. **HFRI EH: Quantitative Directional** strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. **HFRI EH: Short-Biased** strategies employ analytical techniques in which the investment thesis is predicated on assessment of the valuation characteristics on the underlying companies with the goal of identifying overvalued companies. **HFRI EH: Technology/Healthcare** strategies employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintain a level of expertise which exceeds that of a market generalist in identifying opportunities in companies engaged in all development, production and application of technology, biotechnology and as related to production of pharmaceuticals and healthcare industry. **HFRI ED: Distressed Restructuring** strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. **HFRI ED: Merger Arbitrage** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction. **HFRI ED: Private Issue/Regulation D** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are primarily private and illiquid in nature. **HFRI Macro: Systematic Diversified** strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. **HFRI RV: Fixed Income - Asset Backed** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed income instrument backed physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. **HFRI RV: Fixed Income - Convertible Arbitrage** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument. **HFRI RV: Fixed Income - Corporate** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. **HFRI RV: Multi-Strategies** employ an investment thesis is predicated on realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. **HFRI RV: Yield Alternatives Index** strategies employ an investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread contains a derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager.
The **Consumer Price Index (CPI)** is an inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The CPI is published monthly. Unless otherwise noted, the CPI figure is as of the date this report is created.
The **Credit Suisse Leveraged Loan Index** is a market value-weighted index designed to represent the investable universe of the U.S. dollar-denominated leveraged loan market.
The **Dow Jones-UBS Commodity Index** measures the performance of the commodities market. It consists of exchange-traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.
The **S&P 500 Value Index, Index S&P 500 Index** and **S&P 500 Growth Index** are a broad-based market indices that measure the performance of large-capitalization value companies, large-capitalization companies and large-capitalization growth companies, respectively. The **S&P 400 MidCap Value, Index S&P MidCap 400 Index** and **S&P 400 MidCap Growth Index** are indices that measure the performance of mid-sized value companies, mid-sized companies and mid-sized growth companies, respectively. The **S&P 600 SmallCap Index** is a market-value weighted index that consists of 600 small-cap U.S. stocks chosen for market size, liquidity and industry group representation. The **S&P 900 Index** combines the large-cap S&P 500 and the S&P MidCap 400. **S&P Completion Index TR** is a sub-index of the S&P Total Market Index (TMI), including all stocks eligible for the S&P TMI and excluding all current constituents of the S&P 500. **S&P Global Ex US Property Index** defines and measures the investable universe of publicly traded property companies domiciled in developed and emerging markets excluding the U.S.
The **Russell 1000 Value Index, Russell 1000 Index** and **Russell 1000 Growth Index** are indices that measure the performance of large-capitalization value stocks, large-capitalization stocks and large-capitalization growth stocks, respectively. The **Russell 2000 Value Index, Russell 2000 Index** and **Russell 2000 Growth Index** are indices that measure the performance of small-capitalization value stocks, small-capitalization stocks and small-capitalization growth stocks, respectively. The **Russell Midcap Value Index, Russell Midcap Index** and **Russell Midcap Growth Index** are indices that measure the performance of mid-capitalization value stocks, mid-capitalization stocks and mid-capitalization growth stocks, respectively. The **Russell 2500 Value Index, Russell 2500 Index** and **Russell 2500 Growth Index** measure the performance of small to mid-cap value stocks, small to mid-cap stocks and small to mid-cap growth stocks, respectively, commonly referred to as "SMID" cap. The **Russell 3000 Value Index, Russell 3000 Index** and **Russell 3000 Growth Index** measure the performance of the 3,000 largest U.S. value stocks, 3,000 largest U.S. stocks and 3,000 largest U.S. growth stocks, respectively, based on total market capitalization. The **Russell Microcap Index** measures the performance of the microcap segment of the U.S. equity market. The **Russell Top 200 Value Index** measures the performance of the especially large cap segment of the U.S. equity universe represented by stocks in the largest 200 by market cap that exhibit value characteristics. The **Russell Developed ex-US Large Cap Index** measures the performance of the largest investable securities in developed countries globally, excluding companies assigned to the United States.

DEFINITIONS & DISCLOSURES

The **Wilshire 5000 Index** represents the broadest index for the U.S. equity market, measuring the performance of all U.S. equity securities with readily available price data. The **Wilshire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wilshire 5000 Index below the 2,501st rank. The **Wilshire 4500 Index** is comprised of all stocks in the Wilshire 5000 minus the stocks in the S&P 500. The **Wilshire Real Estate Securities Index (RESI)** is comprised of publically traded real estate equity securities.

All MSCI indices are gross, defined as With Gross Dividends: Gross total return indices reinvest as much as possible of a company's dividend distributions. The reinvested amount is equal to the total dividend amount distributed to persons residing in the country of the dividend-paying company. Gross total return indices do not, however, include any tax credits. The **MSCI EAFE (Europe, Australasia, Far East) Gross Index** is designed to measure developed market equity performance, excluding the U.S. and Canada. The **MSCI Emerging Markets (EM) Gross Index** is designed to measure global emerging market equity performance. The **MSCI World Gross Index** is designed to measure global developed market equity performance. The **MSCI World Index Ex-U.S. Gross Index** is designed to measure the equity market performance of developed markets and excludes the U.S. The **MSCI Europe Gross Index** is an unmanaged index considered representative of developed European countries. The **MSCI Japan Gross Index** is an unmanaged index considered representative of stocks of Japan. The **MSCI Pacific ex. Japan Gross Index** is an unmanaged index considered representative of stocks of Asia Pacific countries excluding Japan. The **MSCI AC (All Country) Asia ex Japan Gross Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of Asia, excluding Japan. The **MSCI ACWI Gross Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The **MSCI ACWI ex USA Gross Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding US. The **MSCI ACWI ex US Small Cap Growth Gross Index** is a market capitalization weighted total return index measured in U.S. dollars based on share prices and reinvested net dividends that is designed to measure the equity market performance of the small cap growth segments of developed and emerging markets, excluding the U.S.. The **MSCI Canada Gross Index** is designed to measure the performance of the large and midcap segments of the Canada market. The **MSCI EAFE Small Cap Gross Index** measures the performance of small cap stocks in European, Australasian, and Far Eastern markets. The **MSCI EAFE Value Gross Index** is a market capitalization-weighted index that monitors the performance of value stocks from Europe, Australasia, and the Far East. The **MSCI EM Latin America Gross Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of emerging markets in Latin America. The **MSCI Pacific Free ex Japan Gross Index** measures the performance of the Australian, Hong Kong, New Zealand, and Singapore equity markets. The **MSCI World Small Cap Gross Index** is designed to measure the equity market performance of the small cap segment of developed markets. The **MSCI US Small Cap 1750 Gross Index** represents the universe of small capitalization companies in the US equity market. The **MSCI US Mid Cap 450 Index** represents the universe of medium capitalization companies in the US equity market. The **MSCI US Mid Cap Value Index** represents the value companies of the MSCI US Mid Cap 450 Index. The **MSCI US Prime Market 750 Index** represents the universe of large and medium capitalization companies in the US equity market. The **MSCI US Prime Market Value Index** represents the value companies of the MSCI US Prime Market 750 Index. The **MSCI US Prime Market Growth Index** represents the growth companies of the MSCI US Prime Market 750 Index.

The **Barclays Capital® (BC) U.S. Treasury Index** is designed to cover public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC Aggregate Bond Index** is an unmanaged, market value-weighted performance benchmark for investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities with maturities of at least one year. The **BC U.S. Credit Bond Index** is designed to cover publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements; bonds must be SEC-registered to qualify. The **BC U.S. Agency Index** is designed to cover publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government. The **BC CMBS Index** is designed to mirror commercial mortgage-backed securities of investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch respectively, with maturity of at least one year. The **BC MBS Index** covers agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARMs) issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The **BC U.S. Municipal Bond Index** covers the U.S. dollar-denominated, long-term tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The **BC US TIPS Index** is an unmanaged market index made up of U.S. Treasury Inflation Linked Index securities. The **BC U.S. Government Bond Index** is a market value-weighted index of U.S. Government fixed-rate debt issues with maturities of one year or more. The **BC ABS Index** is a market value-weighted index that covers fixed-rate asset backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices: the U.S. Aggregate Index, Pan-European Aggregate Index, and the Asian-Pacific Aggregate Index. In aggregate the index is created to be a broad-based measure of the performance of investment grade fixed rate debt on a global scale. The **BC US Corporate Long Aa Index** is an unmanaged index representing public obligations of U.S. corporate and specified foreign debentures and secured notes with a remaining maturity of 10 years or more. The **BC U.S. Corporate High-Yield Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. The **BC Intermediate Corporate Index** includes dollar-denominated debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers with a duration of 1-10 years. The **BC U.S. Treasury Long Index** is an unmanaged index representing public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC U.S. Government 10 Year Treasury Index** measures the performance of U.S. Treasury securities that have a remaining maturity of less than 10 years. The **BC BAA Corporate Index** measures the performance of the taxable Baa rated fixed-rate U.S. dollar-denominated corporate bond market. The **BC Global Treasury ex US Index** includes government bonds issued by investment-grade countries outside the United States, in local currencies, that have a remaining maturity of one year or more and are rated investment grade or higher. The **BC Emerging Market Bond Index** is an unmanaged index that total returns for external-currency-denominated debt instruments of the emerging markets. The **BC U.S. Securitized Bond Index** is a composite of asset-backed securities, collateralized mortgage-backed securities (ERISA-eligible) and fixed rate mortgage-backed securities. The **BC Quality Distribution AAA, B, and CC-D Indices** measure the respective credit qualities of U.S. corporate and specified foreign debentures and secured notes. The **BC Universal Index** represents the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, and the non-ERISA portion of the CMBS Index. The **BC 1-3 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to three years. The **BC 1-5 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to five years. The **BC Long-term Government Index** is an unmanaged index reflecting performance of the long-term government bond market. The **BC Intermediate Aggregate Index** measures the performance of intermediate-term investment grade bonds. The **BC Intermediate 1-3 Year Government/Credit Index** measures the performance of U.S. Dollar denominated U.S. Treasuries, government-related and investment grade U.S. corporate securities that have a remaining maturity of greater than one year and less than ten years. The **BC U.S. 1-3 Year Government Bond Index** is composed of treasury bond and agency bond and agency bond indices that have maturities of one to three years. The **BC U.S. 1-5 Year Government Bond Index** is composed of treasury bond and agency bond and agency bond indices that have maturities of one to five years. The **BC 1-3 Year US Treasury Index** measures the performance of U.S. Treasury securities that have a maturity between 1 to 3 years. . The **BC Government Credit Index** measures the performance of U.S. Government and corporate bonds rated investment grade or better, with maturities of at least one year.

The **BC High Yield Index** covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and 144-As are also included. The **BC Intermediate Government Index** measures the performance of intermediate U.S. government securities. The **BC Intermediate Government/Credit Bond Index** measures the performance of intermediate term U.S. government and corporate bonds. The **BC U.S. Long Term Corporate Index** measures the performance of investment-grade, fixed-rate, taxable securities issued by industrial, utility, and financial companies, with maturities greater than 10 years. The **BC Global Credit Hedged USD Index** contains investment grade and high yield credit securities from the Multiverse represented in US Dollars on a hedged basis. The **BC Long A+ U.S. Credit Index** measures the performance of investment grade corporate debt and agency bonds that are dollar denominated and have a maturity of greater than 10+ years. The **BC U.S. Gov/Credit: 5-10 Year Index** includes all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities between 5 and 10 years and are publicly issued.

The **Cambridge U.S. Private Equity Index** is a representation of returns for over 70% of the total dollars raised by U.S. leveraged buyout, subordinated debt and special situation managers from 1986 to December 2007. Returns are calculated based on the pooled time weighted return and are net of all fees. These pooled means represent the end to end rate of return calculated on the aggregate of all cash flows and market values reported by the general partners of the underlying constituents in the quarterly and annual reports. Please Note: the performance of this index lags by 1 quarter.

The **Bank of America (BofA) Merrill Lynch (ML) 91-day T-bill Index** includes U.S. Treasury bills with a remaining maturity from 1 up to 3 months. The **BofA ML U.S. High Yield Master Index & Bank of America ML U.S. High Yield Master II Indices** track the performance of below investment grade US Dollar Denominated corporate bonds publicly issued in the US market. Qualifying bonds have at least one year remaining term to maturity, are fixed coupon schedule and minimum outstanding of $100 million. The **BofA ML All US Convertibles Index** consists of convertible bonds traded in the U.S. dollar denominated investment grade and non investment grade convertible securities sold into the U.S. market and publicly traded in the United States. The **BofA ML US Corp & Govt 1-3 Yrs Index** tracks the performance of U.S. dollar-denominated investment grade government and corporate public debt issued in the U.S. domestic bond market with at least 1 yr and less than 3 yrs remaining to maturity, including U.S. Treasury, U.S. agency, foreign government, supranational and corporate securities. The **BofA ML U.S. High-Yield BB-B Constrained Index** is a modified market capitalization-weighted index of U.S. dollar-denominated, below-investment-grade corporate debt publicly issued in the U.S. domestic market. The **BofA Merrill Lynch US Year Treasury 1-3 Year Index** tracks the performance of the direct sovereign debt of the U.S. Government having a maturity of at least one year and less than three years. The **BofA ML Treasuries 1 Year Index** tracks the performance of the direct sovereign debt of the U.S. Government having a maturity of at least one year. The **BofA ML treasury Current 2 Year Index** tracks the most recently issued 2-year U.S. Treasury note. The **BofA ML CMBS Fixed Rate AAA Index** is a subset of the BofA ML U.S. Fixed Rate CMBS Index including all securities rated AAA. The **BofA ML U.S. Fixed Rate CMBS Index** tracks the performance of U.S. dollar-denominated investment-grade fixed rate commercial mortgage-backed securities publicly issued in the U.S. domestic market. The **BofA ML U.S. Dollar 3-Month LIBOR Index** represents the London interbank offered rate (LIBOR) with a constant 3-month average maturity.

The **Citi Select MLP Index** is a USD denominated, price return index, comprised of the common units of up to 30 of the most liquid master limited partnerships in the Energy Sector. The **Citigroup World Government Bond Index (WGBI) 1-5 Year Hedged USD Index** is a comprehensive measure of the total return performance of the government bond markets of approximately 22 countries with maturities ranging from one to five years. The **Citigroup WGBI Index** is a market capitalization weighted bond index consisting of the government bond markets of the multiple countries. The **Citigroup WGBI ex US Index** is a market capitalization weighted bond index consisting of the government bond markets of the multiple countries, excluding the U.S.. The **Citigroup 3-Month U.S. Treasury Bill Index** performance is an average of the last 3-Month Treasury Bill issues.

The **NCREIF Property Index (NPI)** represents quarterly time series composite total rate of return measure of a very large pool of individual commercial real estate properties acquired in the private market. The index represents apartments, hotels, industrial properties, office buildings and retail properties which are at least 60% occupied and owned or controlled, at least in part by tax-exempt institutional investors or its designated agent. In addition these properties that are included must be investment grade, non-agricultural and income producing and all development projects are excluded. Constituents included in the NPI be valued at least quarterly, either internally or externally, using standard commercial real estate appraisal methodology. Each property must be independently appraised a minimum of once every three years. Please Note: the performance of this index lags by 1 quarter. The **NCREIF Timberland Index** is a quarterly time series composite return measure of investment performance of a large pool of individual timber properties acquired in the private market for investment purposes only.

The **Ibbotson Intermediate Government Bond Index** is measured using a one-bond portfolio with a maturity near 5 years.

The **JP Morgan Emerging Markets Bond Index Plus (EMBI+) Index** tracks total returns for traded external debt instruments (external meaning foreign currency denominated fixed income) in the emerging markets. The **JPMorgan GBI Global ex-US Index** represents the total return performance of major non-U.S. bond markets.

The **HFRI Funds of Funds Index (HFRI FOF)** is an equal weighted index designed to measure the performance of hedge fund of fund managers. The more than 800 multi-strategy constituents are required to have at least $50 million in assets under management and a trading track record spanning at least 12 months. The index includes both on and offshore funds and all returns are reported in USD. **HFR Relative Value Index** tracks investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction. **HFRI Fund of Funds Conservative Index** is an equal-weighted index representing funds or funds that invest with multiple managers focused on consistent performance and lower volatility via absolute strategies. **HFRI ED: Merger Arbitrage** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction.

The **FTSE All-World ex US Index** comprises large and midcap stocks providing coverage of developed and emerging markets, excluding the US. The **FTSE NAREIT Developed Index** is a global market capitalization weighted index composed of listed real estate securities from developed market countries in North America, Europe, and Asia. The **FTSE NAREIT Developed ex U.S. Index** is a global market capitalization weighted index composed of listed real estate securities from developed market countries in North America, Europe, and Asia, excluding the U.S.. The **FTSE High Dividend Yield Index** comprises stocks that are characterized by higher-than average dividend yields, and is based on the US component of the FTSE Global Equity Index Series (GEIS). The **FTSE NAREIT All REITs Index** is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified Real Estate Investment Trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange, or the NASDAQ National Market List. The **FTSE NAREIT Equity REIT Index** is an unmanaged index reflecting performance of the U.S. real estate investment trust market.

The **Consumer Price Index (CPI)** is an inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The CPI is published monthly. Please Note: the performance of this index lags by 1 month.

The **Credit Suisse Leveraged Loan Index** is a market value-weighted index designed to represent the investable universe of the U.S. dollar-denominated leveraged loan market. The **Dow Jones (DJ) UBS Commodity Index** measures the performance of the commodities market. It consists of exchange-traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity. The **DJ U.S. Total Stock Market Index** is an all-inclusive measure composed of all U.S. equity securities with readily available prices. The **DJ U.S. Completion Total Stock Market Index** is a subset of the DJ U.S. Total Stock Market Index that excludes components of the S&P 500. The **Dow Jones U.S. Select Real Estate Securities Index** is a float-adjusted market capitalization-weighted index of publicly traded real estate securities such as real estate investment trusts (REITs) and real estate operating companies (REOCs).

The **Dow Jones Target Date (Today, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055) Indices** were created to benchmark portfolios of stocks, bonds and cash. Each index is made up of composite indices representing these three asset classes. The asset class indices are weighted differently within each target date index depending on the time horizon. Each month, the allocations among the asset class indices are rebalanced to reflect an increasingly conservative asset mix.

The **Morningstar Lifetime Allocation Index** series consists of 13 indexes (Income, 2000, 20005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055) available in three risk profiles: aggressive, moderate, and conservative. The indexes are built on asset allocation methodologies developed by Ibbotson Associates, a leader in asset allocation research and a Morningstar company since 2006. The Indexes provide pure asset-class exposure to global equities, global fixed-income, commodities, and Treasury Inflation-Protected Securities (TIPS) by using existing Morningstar indexes as allocation building blocks. The portfolio allocations are held in proportions appropriate to the U.S. investor's number of years until retirement. The Conservative, Moderate and Aggressive risk profiles are for investors who are comfortable with below-average exposure to equity market volatility, investors who are comfortable with average exposure to equity market volatility and well-funded investors who are comfortable with above average exposure to equity market volatility, respectively.

These reports are not to be construed as an offer or the solicitation of an offer to buy or sell securities mentioned herein. Information contained in these reports are based on sources and data believed reliable. The information used to construct these reports was received via a variety of sources. These reports are for informational purposes only and are not intended to satisfy any compliance or regulatory conditions set forth by any governing body of the securities industry. These reports do not take the place of any brokerage statements, any fund company statements, or tax forms. You are urged to compare this report with the statement you receive from your custodian covering the same period. Differences in positions may occur due to reporting dates used and whether certain assets are not maintained by your custodian. There may also be differences in the investment values shown due to the use of differing valuation sources and methods Past performance is no guarantee of future results. Investing involves risk, including risk of loss. Diversification does not ensure a profit or guarantee against loss.

This evaluation report has been prepared for the exclusive use of a specific client and no part of it may be used by any investment manager without permission of that client and Clearstead.

Evaluation of investment managers covers both quantitative and qualitative aspects. In addition to the investment performance evaluation, we monitor ownership structure, track key-employee information, and hold regular meetings with each investment management organization employed by our clients.

The data presented in this report have been calculated on a time-weighted rate of return basis. All returns are net of investment advisory fees, but gross of Clearstead advisory fees and custodian fees, unless otherwise labeled. The deduction of Clearstead advisory fees and custodian fees would have the effect of decreasing the indicated investment performance.

The performance data shown represent past performance. Past performance is not indicative of future results. Current performance data may be lower or higher than the performance data presented.

Returns for periods longer than one year are annualized. Each number is independently rounded.

A current copy of Hartland & Co.'s ADV-Part 2 is available to all clients upon request.