



**YOUNGSTOWN
STATE UNIVERSITY**

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

**Wednesday, December 11, 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. December 11, 2024 Quarterly Portfolio Asset Allocation and Investment Performance Review
John Colla, Clearstead, will report.

D. New Business

E. Adjournment



December 11, 2024

**YOUNGSTOWN STATE
UNIVERSITY**



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

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1. Initiatives
2. Capital Markets Update
3. Non-Endowment Assets: Performance & Asset Allocation Review
 - Equity Review & Positioning
4. Fee Review

APPENDIX

Endowment Assets: Performance & Asset Allocation Review

Detailed Performance

Supporting Information



INITIATIVES

2024 CALENDAR YEAR INITIATIVES

		1Q	2Q	3Q	4Q	COMMENTS:
STRATEGIC / ADMINISTRATIVE	Investment Policy Review			✓		Board approved revisions to guidelines
	Strategic Asset Allocation Review			✓		
	Peer Review		✓			
	2025 Oversight Dashboard					Follow up for March Board meeting
	STAR Ohio/Plus Annual Review					2025 Initiative as Money Market yields drop
PORTFOLIO	Fixed Income Review			✓		Lowered ST Fixed, Added Intermediate Manager
	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: 09/18/2024

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 11, 2024

FOLLOW UP / INITIATIVES



CAPITAL MARKETS UPDATE

WHAT HAPPENED LAST QUARTER?

- Inflation moved lower, and some weakness in employment prompted the Federal Reserve to start cutting interest rates in September
- S&P 500 Q2 2024 earnings came in at +11.2 %(YoY), ahead of expectations
- Market returns broadened; Fab 5 stocks were collectively down for the quarter while the rest of the S&P 500 index was up 6.1%
 - 78% of the S&P 500 index and 10 of 11 sectors had positive returns in the quarter
 - US value stocks outperformed growth stocks by 7% during the quarter
- Fixed income markets rallied on the prospect of the Federal Reserve more aggressively lowering rates

3Q 2024 Returns: S&P 500 +5.9%; Russell 2000 +9.3%; MSCI EAFE +7.3%; Bloomberg US Agg +5.2%

YTD 2024 Returns: S&P 500 +22.1%; Russell 2000 +11.2%; MSCI EAFE +13.0%; Bloomberg US Agg +4.5%

INVESTMENT & ECONOMIC OUTLOOK:

- Slower growth, but growth, as the Federal Reserve balances inflation, employment, and economic conditions
 - Likely to get two additional interest rate cuts by year-end
 - Globally, central banks will continue to ease, which should promote growth
- The consumer remains strong overall; monitoring pockets of weakness
- S&P 500 earnings are expected to grow ~10% for calendar year 2024 and ~15% for 2025
 - Given elevated valuations, if earnings disappoint, downside risks loom
- Worsening geopolitical tensions in the Middle East and uncertainty with the U.S. election could prompt elevated volatility, but historically, market returns are generally positive in 4Q

U.S. ECONOMIC PROJECTIONS

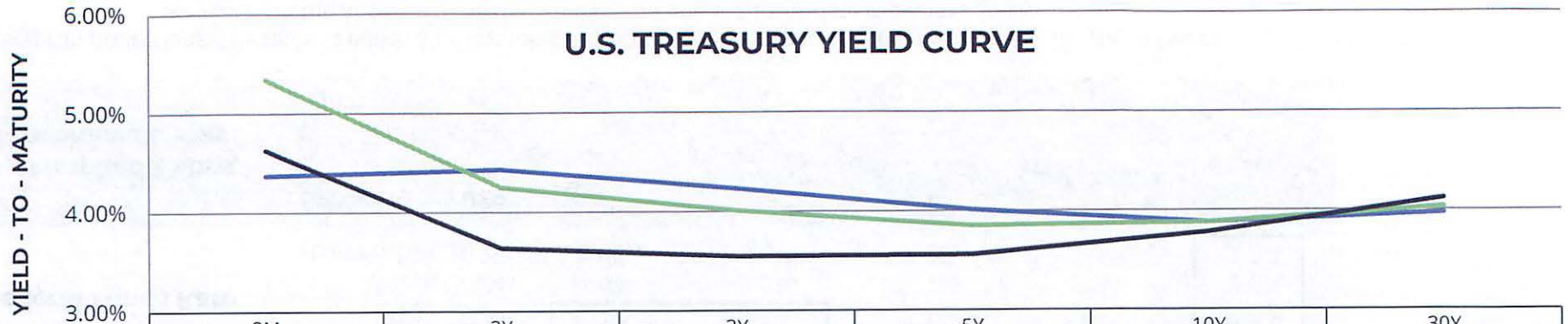
		2024	2025	2026	2027	LONG RUN*
GDP	September 2024	2.0%	2.0%	2.0%	2.0%	1.8%
	June 2024	2.1%	2.0%	2.0%		1.8%
	March 2024	2.1%	2.0%	2.0%		1.8%
	December 2023	1.4%	1.8%	1.9%		1.8%
Unemployment Rate	September 2024	4.4%	4.4%	4.3%	4.2%	4.2%
	June 2024	4.0%	4.2%	4.1%		4.2%
	March 2024	4.0%	4.1%	4.0%		4.1%
	December 2023	4.1%	4.1%	4.1%		4.1%
Core PCE Inflation	September 2024	2.6%	2.2%	2.0%	2.0%	
	June 2024	2.8%	2.3%	2.0%		
	March 2024	2.6%	2.2%	2.0%		
	December 2023	2.4%	2.2%	2.0%		
Federal Funds Rate	September 2024	4.4%	3.4%	2.9%	2.9%	2.9%
	June 2024	5.1%	4.1%	3.1%		2.8%
	March 2024	4.6%	3.9%	3.1%		2.6%
	December 2023	4.6%	3.6%	2.9%		2.5%
# of implied 25 bps rate changes year	September 2024	-2	-4	-2		
	June 2024	-1	-4	-4		
	March 2024	-3	-3	-3		
	December 2023	-3	-4	-3		

"This recalibration of our policy stance will help maintain the strength of the economy and the labor market and will continue to enable further progress on inflation as we begin the process of moving forward (to) a more neutral stance,"
 -Chair Powell

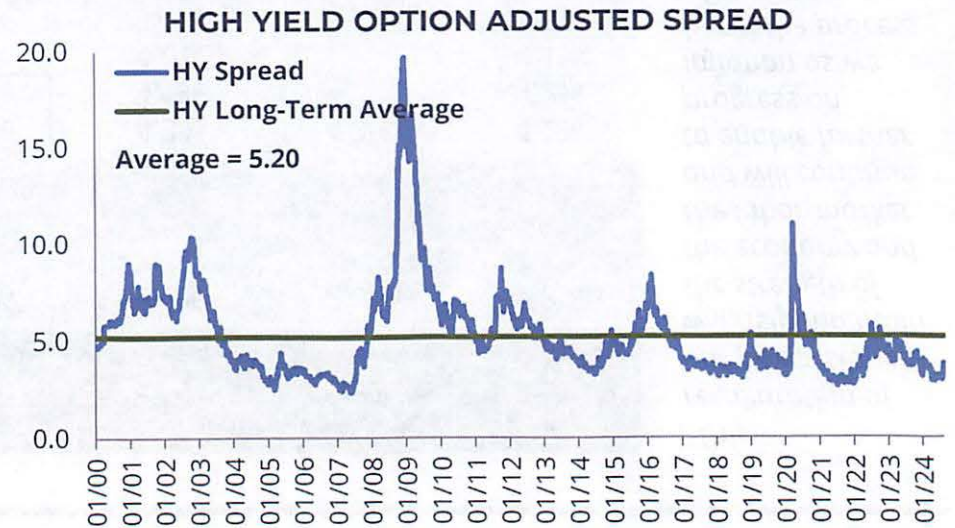
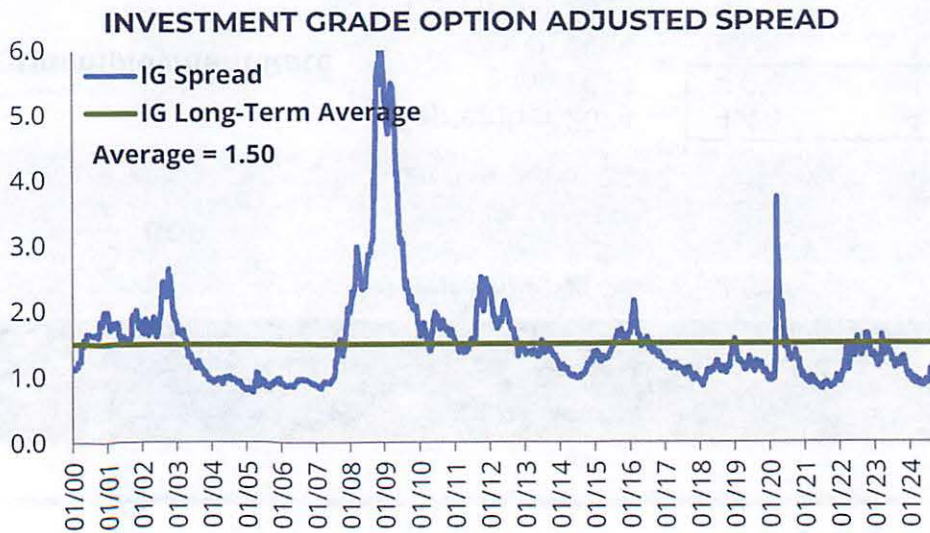
*Long run projections: The rates to which a policymaker expects the economy to converge over time – maybe in five or six years – in the absence of further shocks and under appropriate monetary policy

Source: Clearstead, U.S. Federal Reserve. Expectations of Fed board members/bank presidents. Data as of 9/30/2024. 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%
9/30/2024	4.63%	3.64%	3.55%	3.56%	3.78%	4.12%
YTD Change	-0.71%	-0.61%	-0.46%	-0.29%	-0.10%	0.09%



Source: Bloomberg. Data as of 9/30/2024. Past performance is not an indicator of future results.

NOVEMBER MARKET PERFORMANCE

Everything U.S. gained. Interest rates were volatile but finished lower, while the U.S. dollar strengthened. Mixed macro data throughout the month.

- U.S. small > U.S. mid > U.S. large > Developed International > Emerging Markets
- Growth and value on-par; Chinese equities lagged the most; All U.S. sectors made gains led by Consumer Discretionary and Financials

In fixed income, interest rates moved lower amid volatile trading as “duration” helped returns.

Equities gained strongly after the election (S&P 500 set six new record highs in Nov.) and small caps ended the month up nearly +11%; pre-election “uncertainty” faded quickly given the clear Trump win.

- Expectations for another -25bps cut in December are approximately 60%; Geopolitical risks may be moving lower; December is often a seasonally strong month for equities

MARKET	2023	Q1-2024	Q2-2024	Q3-2024	Oct-2024	Nov-2024	YTD	Trend
S&P 500	26.3%	10.6%	4.3%	5.9%	-0.9%	5.9%	28.1%	
Russell 2000	16.9%	5.2%	-3.3%	9.3%	-1.4%	11.0%	21.6%	
MSCI EAFE	18.2%	5.8%	-0.4%	7.3%	-5.4%	-0.6%	6.2%	
MSCI EM	9.8%	2.4%	5.0%	8.7%	-4.5%	-3.6%	7.7%	
MSCI China	-11.2%	-2.2%	7.1%	23.5%	-5.9%	-4.4%	16.3%	
MSCI ACWI	22.8%	8.3%	3.0%	6.7%	-2.2%	3.8%	20.9%	
Bloomberg US Agg Bond	5.5%	-0.8%	0.1%	5.2%	-2.5%	1.1%	2.9%	
Bloomberg High Yield Bond	13.5%	1.5%	1.1%	5.3%	-0.5%	1.2%	8.7%	
Bloomberg Muni Bond	6.4%	-0.4%	0.0%	2.7%	-1.5%	1.7%	2.6%	
Credit Suisse Leveraged Loan	13.0%	2.5%	1.9%	2.1%	0.9%	0.8%	8.4%	

Source: Bloomberg 11/30/2024
Past performance is not an indicator of future results.



NON-ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION REVIEW

NON-ENDOWMENT PERFORMANCE REVIEW (AS OF 9/30/2024)

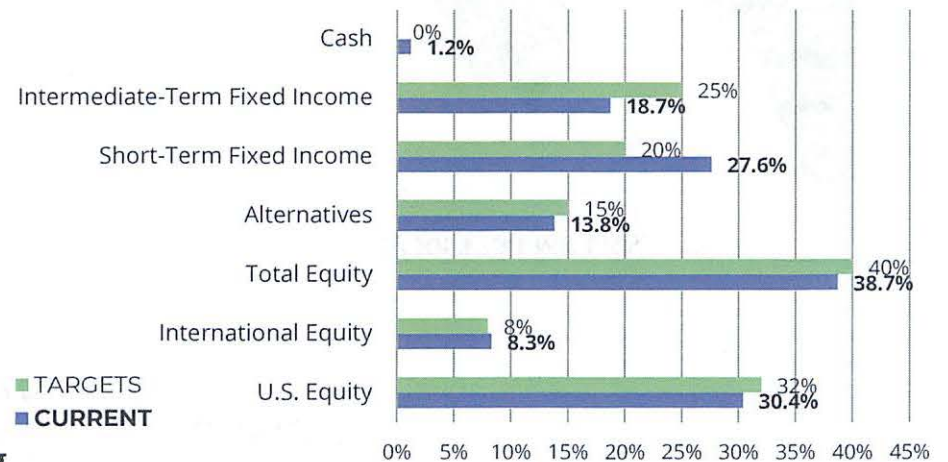
TRAILING PERIODS

CALENDAR YEARS

NON-ENDOWMENT ASSETS	MARKET VALUE (\$MM)	TRAILING PERIODS								CALENDAR YEARS			SINCE INCEPTION ⁴
		QTD	FYTD	CYTD	1 YR	2 YR	3 YR	5 YR	10 YR	2023	2022	2021	
Total Non-Endowment Assets	\$94,944	4.1%	4.1%	8.9%	15.2%	11.6%	4.5%	6.3%	5.0%	11.0%	-7.8%	7.8%	4.4%
<i>Benchmark¹</i>		3.0%	3.0%	7.2%	11.5%	9.4%	4.0%	4.5%	3.8%	8.7%	-4.7%	4.3%	3.4%
Operating & Short-Term Pool	\$21,822	1.0%	1.0%	3.5%	4.8%	4.6%	3.2%	2.2%	1.6%	4.8%	1.4%	0.0%	1.1%
<i>Benchmark²</i>		1.4%	1.4%	4.0%	5.5%	4.9%	3.4%	2.3%	1.6%	5.0%	1.2%	0.0%	1.1%
Long-Term Pool	\$73,122	4.6%	4.6%	9.9%	17.2%	13.3%	3.9%	6.2%	5.4%	11.9%	-11.2%	9.5%	5.5%
<i>Benchmark³</i>		4.3%	4.3%	9.9%	16.8%	13.1%	4.3%	6.3%	5.4%	11.7%	-9.7%	8.0%	5.2%

LONG-TERM POOL ASSET ALLOCATION

	CURRENT	TARGETS	RANGE	+ / -
U.S. Equity	30.4%	32%	20-35%	-1.6%
International Equity	8.3%	8%	0-15%	0.3%
Total Equity	38.7%	40%	25-45%	-1.3%
Alternatives	13.8%	15%	0-20%	-1.2%
Short-Term Fixed Income	27.6%	20%	25-45%	7.6%
Intermediate-Term Fixed Income	18.7%	25%	10-30%	-6.3%
Cash	1.2%	0%	0-5%	1.2%



Reflects updated targets from September Board meeting

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.

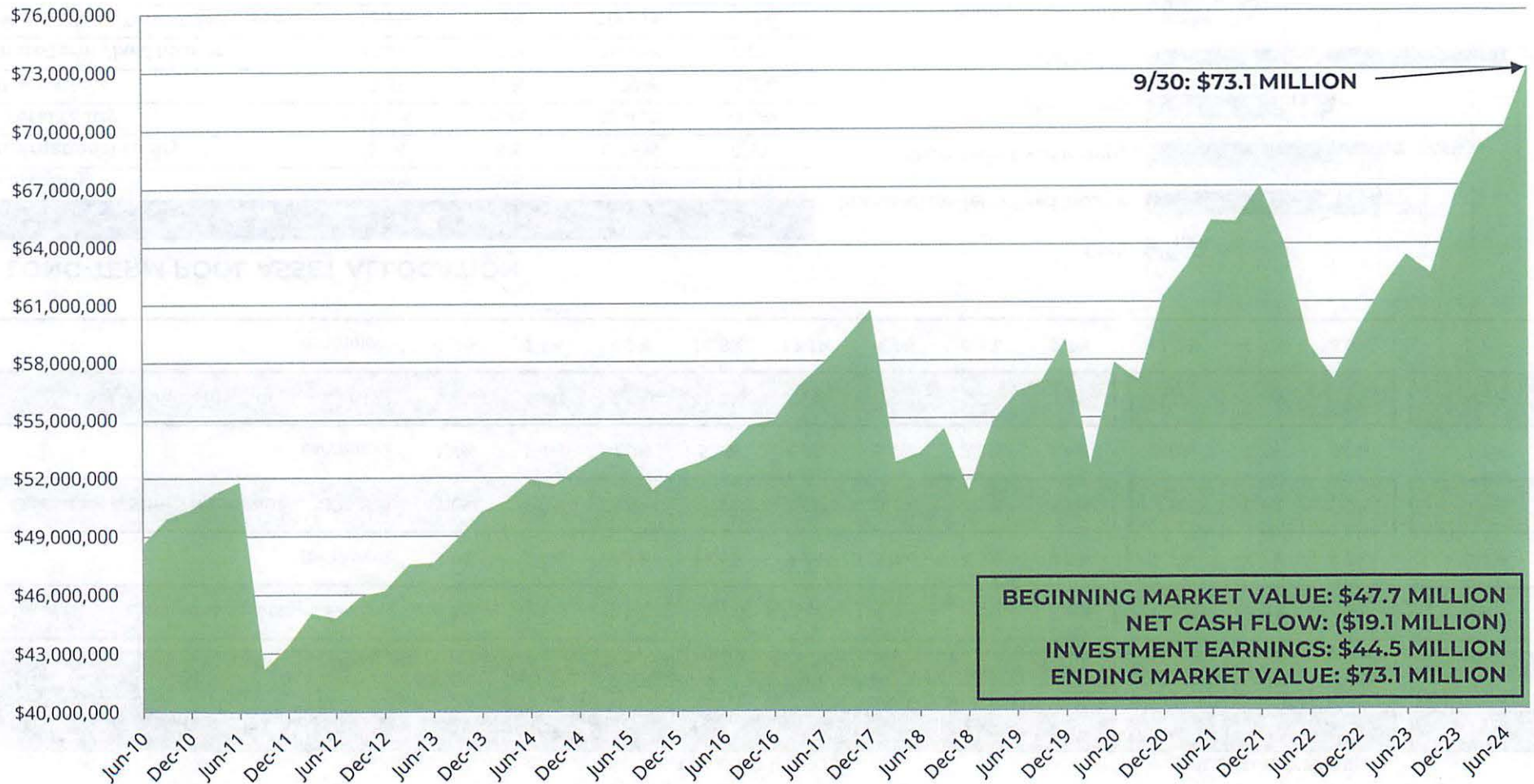
2) 95% BofA Merrill Lynch 91-Day T-Bill / 5% Barclays 1-3 Yr. Govt.

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 12

**LONG-TERM POOL MARKET VALUE CHANGE
(07/01/2010 - 9/30/2024)**



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.

PORTFOLIO CHANGES (THROUGH 11/30)

Since the September Board meeting:

- Modestly increased U.S. small cap managers and private credit manager Cliffwater in late September
- In October, began the reallocation process into intermediate-term bonds (from short-term bonds), aligned with the strategic changes to the asset allocation guidelines endorsed by the Board in September
 - Decreased Lord Abbett (short-term fixed income manager) using as a source of funds for new intermediate-term fixed income manager Breckenridge
 - New intermediate-term fixed income manager: Breckenridge
 - ❖ High-quality manager with a track record of results, deep team and resources
 - ❖ Supports compliance with ORC guidelines
 - ❖ Competitive cost (12 bps)
- Infrastructure manager Apollo made its first capital call in November and is expected to continue deploying capital over the next 12-18 months

LONG-TERM POOL: OCTOBER PERFORMANCE UPDATE

AS OF 10/31	MARKET VALUE (\$MM)	OCT	CYTD	FYTD
Total University Assets	\$88.2	-0.8%	+8.0%	+3.3%
Operating/Short-Term Pool	\$15.9	+0.4%	+4.0%	+1.4%
Long-Term Pool*	\$72.3	-1.1%	+8.7%	+3.4%

Operating/Short-Term Pool market value decreased with operational cash flow needs during the semester. Investments generated +0.4% in October and CYTD +4.0%, though expected returns for this pool will continue to modestly decrease as the Federal Reserve cuts rates.

October was a volatile month as both equities and fixed income posted negative results, driven by investor sentiment and rising interest rates.

Most active managers outpaced their respective benchmarks during the month, while all have outperformed their respective benchmarks, net of fees, over the past five years.

- Alternative managers Evanston (Weatherlow) and Cliffwater continued their strong absolute and relative performance; H.I.G. also has also performed well, though reports results on a lag (as of 6/30)
- While fixed income returns faced headwinds with rising rates in October, the portfolio's transition to lock in higher yields by increasing intermediate-term bonds has been timely

*Does not include performance from H.I.G. as they report results on a lag. H.I.G. results are through 6/30. H.I.G.'s performance is expected to modestly improve CYTD and FYTD results.

INVESTMENT POOL SUMMARY: AS OF 12/4/2024

YOUNGSTOWN STATE UNIVERSITY

AS OF DECEMBER 4, 2024

	TICKER	INVESTMENT STRATEGY	MARKET VALUE (CURRENT)	% OF PORTFOLIO	POLICY TARGET	POLICY RANGE	TACTICAL +/-		
Total Operating & Short Term					\$10,939,574	100.0%			
Federated Hermes Govt Obligations	GOFXX	Money Market	\$10,939,574	100.0%					
Star Plus*	-	Cash Equivalent	\$0	0.0%					
Star Ohio*	-	Cash Equivalent	\$0	0.0%					
Total Long Term Reserves Pool					\$73,863,314	100.0%			
Domestic Equity					\$23,657,186	32.0%	32.0%	25-40%	0.0%
Vanguard Instl Index	VINIX	Large Cap Core	\$16,786,197	22.7%					
Vanguard Mid Cap Index Adm	VIMAX	Mid-Cap Core	\$2,951,531	4.0%					
Loomis Sayles Small Growth N2	LSSNX	Small Cap Growth	\$1,977,636	2.7%					
Victory Integrity Small Cap Value Y	VSVIX	Small Cap Value	\$1,941,822	2.6%					
International Equity					\$5,856,388	7.9%	8.0%	0-15%	-0.1%
William Blair International Growth I	BIGIX	Foreign Growth	\$2,637,791	3.6%					
Dodge & Cox International Stock	DODFX	Foreign Value	\$3,218,597	4.4%					
Total Equity					\$29,513,574	40.0%	40.0%	25-50%	0.0%
Alternatives					\$10,226,137	13.8%	15.0%	0-20%	-1.2%
H.I.G. Principal Lending Fund ¹	-	Private Credit	\$2,300,178	3.1%					
Cliffwater Corporate Lending Fund	CCLFX	Private Credit	\$2,494,671	3.4%					
Apollo Infrastructure Opps Fund III	-	Real Assets	\$22,389	0.0%					
Weatherlow Fund ²	-	Diversifying Strategy	\$5,408,899	7.3%					
Fixed Income					\$33,613,485	45.5%	45.0%	30-70%	0.5%
Short Term Fixed Income					\$15,952,054	21.6%	20.0%	15-35%	1.6%
YSU Short Term Bond	-	Short-Term Fixed	\$13,636,759	18.5%					
Lord Abbett Short Duration	LLDYX	Short-Term Fixed	\$2,315,295	3.1%					
Intermediate Fixed Income					\$17,661,431	23.9%	25.0%	15-35%	-1.1%
JPMorgan Core Bond Fund R6 ³	JCBUX	Core Plus Fixed	\$5,440,023	7.4%					
YSU Intermediate Term Fixed	-	Interm-Term Fixed	\$4,616,945	6.3%					
Breckenridge Intermediate Gov/Credit	-	Interm-Term Fixed	\$4,268,371	5.8%					
Fidelity Intermediate Treasury Index	FUAMX	Interm-Term Treasury	\$3,336,092	4.5%					
Cash & Cash Equivalents					\$510,118	0.7%	0.0%	0-5%	0.7%
Federated Hermes Govt Obligations	GOFXX	Money Market	\$510,118	0.7%					
Total University Assets					\$84,802,888				

1) As of 6/30/2024.

2) As of 10/31/2024.

3) Held at JPMorgan.

EQUITY REVIEW & POSITIONING

All equity active managers have performed in-line or exceeded their respective benchmark (net of fees) since their inception in YSU's portfolio.

ASSET CLASS	3-YR RETURN > BENCHMARK (ACTIVE MANAGERS ONLY)	3-YR RETURN > PEER MEDIAN (ALL MANAGERS)	5-YR RETURN > BENCHMARK (ACTIVE MANAGERS ONLY)	5-YR RETURN > PEER MEDIAN (ALL MANAGERS)	10-YR RETURN > BENCHMARK (ACTIVE MANAGERS ONLY)	10-YR RETURN > PEER MEDIAN (ALL MANAGERS)
U.S. Equity (2 active, 2 passive)	2/2	3/4	2/2	4/4	2/2	4/4
International Equity (2 active, 0 passive)	1/2	1/2	1/2	1/2	1/2	1/2

As of 9/30/2024.

Notes:

U.S. equity managers have performed favorable vs. respective benchmarks and peers over short and long-term time periods.

Passive investments in large/mid cap U.S. markets continue to be strong performers relative to peers in their asset class/sub-class.

International active managers have had mixed results over the various time periods, weighed down by more recent headwinds endured. Collectively, long-term performance of international managers remains favorable since their inception in YSU's portfolio. Clearstead is reviewing this area of the portfolio for a potential upgrade and will update the Board at an upcoming meeting.

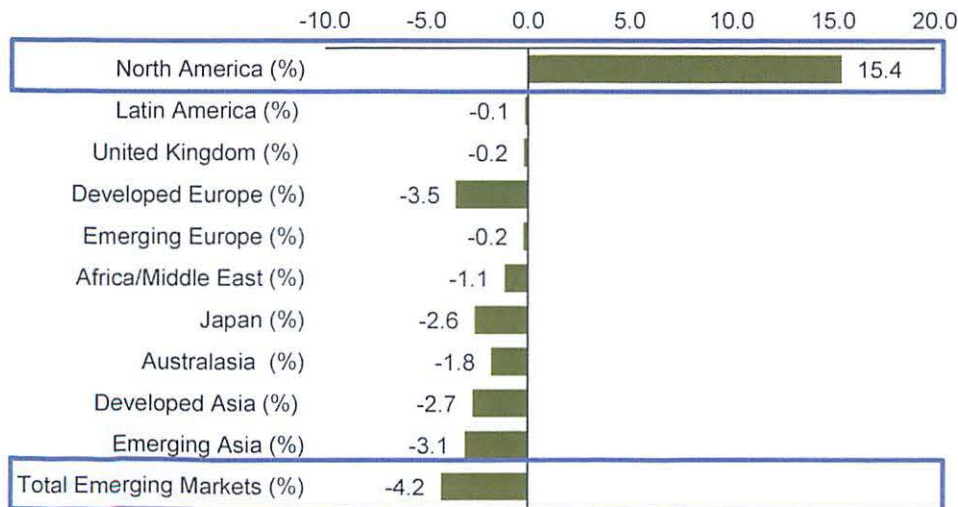
EQUITY REVIEW & POSITIONING

Growth Assets Review

Current Portfolio	56.0%	9.7%	6.3%	6.4%	9.6%	12.0%	100.0%
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	Managers							Current Portfolio	MSCI ACWI NR USD
	Vanguard Institutional Index	Vanguard Mid Cap Index Admiral	Loomis Sayles Small Cap Growth	Victory Integrity Small-Cap Value Y	William Blair International Growth I	Dodge & Cox International Stock	I		
Subadvisor	0	0	0	0	0	0	0		
Expense Ratio (%)	0.04	0.05	0.82	1.06	0.99	0.62	0.31		
Manager Tenure (Longest # Yrs)	6	3	19	20	11	20			
# of Stock Holdings	506	341	96	127	180	88		2,921	
Top 10 Holdings (%)	31.5	7.8	16.9	12.1	16.3	30.6	25.5	18.4	
Cash (%)	0.3	0.4	2.1	0.8	1.3	4.4	1.0	0.0	
Turnover Ratio (%)	3	12	37	61	50	12			
Market Cap									
Average Market Cap (\$ millions)	237,668	25,221	3,589	2,922	40,978	49,866	145,871	121,334	
Market Cap Giant (%)	46.8	0.0	0.0	0.0	47.9	55.2	37.4	47.7	
Market Cap Large (%)	35.1	11.1	0.0	0.0	31.2	31.7	27.5	35.7	
Market Cap Mid (%)	17.8	88.5	4.8	0.7	20.2	12.9	22.4	16.5	
Market Cap Small (%)	0.3	0.4	75.9	77.2	0.7	0.3	10.1	0.1	
Market Cap Micro (%)	0.0	0.0	19.3	22.1	0.0	0.0	2.6	0.0	

Geographical Positioning Relative to Benchmark



Sector Positioning Relative to Benchmark





FEE REVIEW

FEE REVIEW

YOUNGSTOWN STATE UNIVERSITY INVESTMENTS

AS OF SEPTEMBER 30, 2024

NON-ENDOWMENT ASSETS FEE REVIEW

	Market Value (\$)	% of Pool	Expense Ratio (%)	Morningstar Institutional Average Fee (%)
Total Operating & Short Term				
Federated Hermes Government Obligations Fund	\$21,821,830	100%	0.45%	-
Total Operating & ST Investment Management Fee	\$21,821,830		0.45%	
Total Domestic Equity	\$22,200,840	30.4%		
Vanguard Institutional Index	\$15,856,826	21.7%	0.04%	0.06%
Vanguard Mid Cap Index Adm	\$2,739,109	3.7%	0.05%	0.84%
Loomis Sayles Sm Growth N	\$1,793,642	2.5%	0.82%	0.94%
Victory Integrity Small Value Y	\$1,811,263	2.5%	1.07%	0.94%
Total International Equity	\$6,091,865	8.3%		
William Blair International Growth I	\$2,705,051	3.7%	0.99%	0.85%
Dodge & Cox Internat'l Stock	\$3,386,814	4.6%	0.62%	0.85%
Total Alternatives	\$10,073,603	13.8%		
Weatherlow Offshore Fund I Ltd. CI IA	\$5,343,936	7.3%	1.00%	n/a
Cliffwater Corporate Lending Fund	\$2,446,629	3.3%	1.58%	3.56%
H.I.G. Principal Lending Fund	\$2,283,038	3.1%	1.25%	n/a
Total Fixed Income	\$33,889,740	46.3%		
JPMorgan Core Bond	\$5,530,945	7.6%	0.50%	0.43%
YSU Intermediate Term Bond	\$4,685,331	6.4%	0.15%	0.43%
Fidelity Intermediate Treasury Bond Index	\$3,408,156	4.7%	0.03%	0.46%
YSU Short Term Bond	\$13,703,414	18.7%	0.15%	0.41%
Lord Abbett Short Duration Income I	\$6,561,894	9.0%	0.38%	0.41%
Total Cash & Cash Equivalents	\$865,875	0.0%		
Federated Hermes Government Obligations	\$865,875	1.2%	0.45%	-
Total LT/Reserves Pool Investment Management Fee	\$73,121,923		0.40%	
Total Assets	\$94,943,753		0.41%	
Clearstead Consulting Fees			0.05%	
Trustee & Custody Fee (PNC)			0.03%	
Total Non-Endowment Assets Fees			0.50%	

Weatherlow and H.I.G. fee is management expense only, and does not include underlying investment management expenses or performance based fees.

ENDOWMENT ASSETS FEE REVIEW

	Market Value (\$)	% of Portfolio	Annual Manager Fee (%)	Morningstar Institutional Average Fee (%)
YSU Endowment Fund				
YSU Endowment Fund Fees	\$18,104,332	100.0%	0.45%	n/a

YSU Endowment Fund does not include any investment management expenses that may be used by Huntington Bank.



APPENDIX



**ENDOWMENT ASSETS:
PERFORMANCE & ASSET ALLOCATION
REVIEW**

ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION (AS OF 9/30/2024)

ENDOWMENT ASSETS	MARKET VALUE (\$MM)	TRAILING PERIODS								CALENDAR YEARS			SINCE INCEPTION ³
		QTD	FYTD	CYTD	1 YR	2 YR	3 YR	5 YR	10 YR	2023	2022	2021	
YSU Endowment Fund	\$18.104	5.2%	5.2%	16.3%	25.5%	17.6%	6.5%	10.5%	9.0%	12.8%	-15.7%	20.9%	9.2%
Benchmark ¹		5.7%	5.7%	17.5%	29.8%	22.8%	8.6%	12.1%	10.6%	20.9%	-16.6%	20.6%	11.2%
Benchmark ²		5.6%	5.6%	14.8%	26.0%	19.3%	6.6%	9.8%	8.9%	17.7%	-15.8%	15.9%	9.4%

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 – 61% (30-60 Concentrated U.S. Large/Mid-Cap Stock Portfolio)
- Alternatives – 2% (Real Estate Mutual Fund)
- Fixed Income Mutual Funds – 2% (iShares 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.



DETAILED PERFORMANCE

EXECUTIVE SUMMARY

	Market Value 07/01/2024	Market Value 09/30/2024	% of Portfolio	3rd Quarter 2024 (%)	YTD (%)
Total University Assets	\$81,652,320	\$94,943,753	100.0	4.1	8.9
<i>Total Policy Benchmark¹</i>				3.0	7.2
Total Operating & Short Term	\$11,731,728	\$21,821,830	23.0	1.0	3.5
<i>Total Operating & Short Term Benchmark²</i>				1.4	4.0
Total Long Term/ Reserves Pool	\$69,920,593	\$73,121,922	77.0	4.6	9.9
<i>Total Long Term/ Reserves Fund Benchmark³</i>				4.3	9.9
Total Domestic Equity	\$20,696,842	\$22,200,840	23.4	6.4	18.9
<i>Russell 3000 Index</i>				6.2	20.6
Total International Equity	\$5,665,582	\$6,091,865	6.4	7.5	11.6
<i>MSCI AC World ex USA (Net)</i>				8.1	14.2
Total Alternatives	\$9,551,363	\$10,073,603	10.6	2.2	9.1
<i>Total Alternatives Benchmark⁴</i>				1.9	6.8
Total Fixed Income	\$33,012,493	\$33,889,740	35.7	3.7	4.9
<i>Total Fixed Income Benchmark⁵</i>				3.4	4.5
Total Cash & Cash Equivalents	\$994,312	\$865,875	0.9	1.2	3.8
<i>90 Day U.S. Treasury Bill</i>				1.4	4.0

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%	4%
Long Term/ Reserves Pool	50% - 100%	96%

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%	39%
Alternatives	15%	0%-20%	14%
Short-Term Fixed Income	30%	25% - 45%	28%
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 09/30/2024	% of Portfolio
Total University Assets			\$81,652,320	\$94,943,753	100.0
Total Operating & Short Term			\$11,731,728	\$21,821,830	23.0
Federated Hermes Government Obligations Fund	GOSXX	Cash	\$11,731,728	\$21,821,830	23.0
Total Long Term/ Reserves Pool			\$69,920,593	\$73,121,922	77.0
Total Domestic Equity			\$20,696,842	\$22,200,840	23.4
Vanguard Institutional Index	VINIX	US Stock Large Cap Core	\$14,976,735	\$15,856,826	16.7
Vanguard Mid Cap Index Adm	VIMAX	US Stock Mid Cap Core	\$2,504,708	\$2,739,109	2.9
Loomis Sayles Sm Growth N	LSSNX	US Stock Small Cap Growth	\$1,638,178	\$1,793,642	1.9
Victory Integrity Small Value Y	VSVIX	US Stock Small Cap Value	\$1,577,221	\$1,811,263	1.9
Total International Equity			\$5,665,582	\$6,091,865	6.4
William Blair International Growth I	BIGIX	International	\$2,586,053	\$2,705,051	2.8
Dodge & Cox Internat'l Stock	DODFX	International	\$3,079,529	\$3,386,814	3.6
Total Alternatives			\$9,551,363	\$10,073,603	10.6
Weatherlow Offshore Fund I Ltd CI IIA		Hedge Fund	\$5,193,803	\$5,343,936	5.6
Cliffwater Corporate Lending I		Private Debt	\$2,030,997	\$2,446,629	2.6
H.I.G. Whitehorse Principal Lending Offshore Feeder Fd, L.P.		Direct Lending	\$2,326,562	\$2,283,038	2.4
Total Fixed Income			\$33,012,493	\$33,889,740	35.7
JPMorgan Core Bond	WOBDX	US Fixed Income Core	\$5,251,856	\$5,530,945	5.8
YSU Intermediate Term Bond		US Fixed Income Core	\$4,493,424	\$4,685,331	4.9
Fidelity Interim Treasury Bond Index	FUAMX	US Fixed Income Core	\$3,233,961	\$3,408,156	3.6
YSU Short Term Bond		US Fixed Income Short Term	\$13,307,751	\$13,703,414	14.4
Lord Abbett Short Duration Income I	LLDYX	US Fixed Income Short Term	\$6,725,502	\$6,561,894	6.9
Total Cash & Cash Equivalents			\$994,312	\$865,875	0.9
Federated Hermes Government Obligations Fund	GOSXX	Cash	\$994,312	\$865,875	0.9

ATTRIBUTION OF MARKET VALUE

TOTAL UNIVERSITY ASSETS

	Q4-2023	Q1-2024	Q2-2024	Q3-2024	One Year
Total University Assets					
Beginning Market Value	\$84,550,946	\$71,834,657	\$92,549,492	\$81,652,320	\$84,550,946
Contributions	-	\$18,000,000	-	\$19,000,000	\$37,000,000
Distributions	-\$17,000,000	-\$24,332	-\$12,020,954	-\$9,000,000	-\$38,045,286
Net Cash Flows	-\$17,000,000	\$17,975,668	-\$12,020,954	\$10,000,000	-\$1,045,286
Net Investment Change	\$4,283,710	\$2,739,168	\$1,123,782	\$3,291,432	\$11,438,092
Ending Market Value	\$71,834,657	\$92,549,492	\$81,652,320	\$94,943,753	\$94,943,753
Change \$	-\$12,716,290	\$20,714,836	-\$10,897,172	\$13,291,432	\$10,392,806

LONG-TERM POOL

	Q4-2023	Q1-2024	Q2-2024	Q3-2024	One Year
Total Long Term/ Reserves Pool					
Beginning Market Value	\$62,447,104	\$66,536,739	\$69,037,595	\$69,920,593	\$62,447,104
Contributions	-	-	-	-	-
Distributions	-	-\$24,332	-\$20,954	-	-\$45,286
Net Cash Flows	-	-\$24,332	-\$20,954	-	-\$45,286
Net Investment Change	\$4,089,635	\$2,525,188	\$903,952	\$3,201,330	\$10,720,105
Ending Market Value	\$66,536,739	\$69,037,595	\$69,920,593	\$73,121,922	\$73,121,922
Change \$	\$4,089,635	\$2,500,856	\$882,998	\$3,201,330	\$10,674,819

PERFORMANCE SUMMARY (AS OF 09/30/2024)

	% of Portfolio	QTD (%)	FYTD (%)	YTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2023 (%)	2022 (%)	2021 (%)	Inception (%)	Inception Date
Total University Assets	100.0	4.1	4.1	8.9	15.2	11.6	4.5	6.3	5.7	5.0	11.0	-7.8	7.8	4.4	Apr-04
<i>Total Policy Benchmark</i>		3.0	3.0	7.2	11.5	9.4	4.0	4.5	4.3	3.8	8.7	-4.7	4.3	3.4	
Total Operating & Short Term	23.0	1.0	1.0	3.5	4.8	4.6	3.2	2.2	2.2	1.6	4.8	1.4	0.0	1.1	Jul-10
<i>Total Operating & Short Term Benchmark</i>		1.4	1.4	4.0	5.5	4.9	3.4	2.3	2.2	1.6	5.0	1.2	0.0	1.2	
Federated Hermes Government Obligations Fund	23.0	1.2	1.2	3.8	5.1	4.7	3.3	2.1	1.9	1.4	4.8	1.4	0.0	3.4	Nov-21
<i>90 Day U.S. Treasury Bill</i>		1.4	1.4	4.0	5.5	5.0	3.5	2.3	2.2	1.6	5.0	1.5	0.0	3.6	
Total Long Term/ Reserves Pool	77.0	4.6	4.6	9.9	17.2	13.3	3.9	6.2	5.8	5.4	11.9	-11.2	9.5	5.5	Jul-10
<i>Total Long Term/ Reserves Fund Benchmark</i>		4.3	4.3	9.9	16.8	13.1	4.3	6.3	5.9	5.4	11.7	-9.7	8.0	5.2	
Total Domestic Equity	23.4	6.4	6.4	18.9	32.7	25.7	9.7	14.5	13.1	12.4	22.7	-17.7	26.9	14.2	Jul-10
<i>Russell 3000 Index</i>		6.2	6.2	20.6	35.2	27.6	10.3	15.3	13.7	12.8	26.0	-19.2	25.7	14.6	
Vanguard Institutional Index	16.7	5.9	5.9	22.0	36.3	28.7	11.9	15.9	14.5	13.3	26.2	-18.1	28.7	15.0	Jul-10
<i>S&P 500 Index</i>		5.9	5.9	22.1	36.4	28.8	11.9	16.0	14.5	13.4	26.3	-18.1	28.7	15.0	
Vanguard Mid Cap Index Adm	2.9	9.4	9.4	14.7	28.8	20.4	5.3	11.2	10.4	10.2	16.0	-18.7	24.5	12.1	Oct-10
<i>Vanguard Mid Cap Index Benchmark</i>		9.4	9.4	14.7	28.8	20.4	5.3	11.2	10.4	10.2	16.0	-18.7	24.5	12.1	
Loomis Sayles Sm Growth N	1.9	6.4	6.4	13.3	22.6	17.1	1.1	9.8	9.8	10.5	12.1	-22.8	10.2	8.7	Sep-19
<i>Russell 2000 Growth Index</i>		8.4	8.4	13.2	27.7	18.3	-0.4	8.8	7.6	8.9	18.7	-26.4	2.8	8.5	
Victory Integrity Small Value Y	1.9	6.2	6.2	6.7	19.4	19.3	7.5	11.1	7.5	8.3	17.6	-7.7	33.6	10.5	Oct-10
<i>Russell 2000 Value Index</i>		10.2	10.2	9.2	25.9	16.5	3.8	9.3	6.6	8.2	14.6	-14.5	28.3	9.6	
Total International Equity	6.4	7.5	7.5	11.6	22.6	21.8	2.8	8.7	5.6	5.4	16.2	-17.6	10.0	5.9	Oct-10
<i>MSCI AC World ex USA (Net)</i>		8.1	8.1	14.2	25.4	22.8	4.1	7.6	5.4	5.2	15.6	-16.0	7.8	5.3	
William Blair International Growth I	2.8	4.6	4.6	9.4	24.5	19.2	-2.9	7.6	5.6	5.7	15.4	-28.3	9.0	7.2	Jul-12
<i>MSCI AC World ex USA (Net)</i>		8.1	8.1	14.2	25.4	22.8	4.1	7.6	5.4	5.2	15.6	-16.0	7.8	6.6	
Dodge & Cox Internat'l Stock	3.6	10.0	10.0	13.4	21.2	23.9	8.1	9.1	5.2	4.8	16.7	-6.8	11.0	6.2	Oct-10
<i>MSCI EAFE (Net)</i>		7.3	7.3	13.0	24.8	25.2	5.5	8.2	6.0	5.7	18.2	-14.5	11.3	6.2	
Total Alternatives	10.6	2.2	2.2	9.1	12.4	9.2	2.5	2.6	2.9	-	7.3	-6.9	5.3	2.4	Mar-15
<i>Total Alternatives Benchmark</i>		1.9	1.9	6.8	10.2	7.4	2.5	3.3	3.3	-	6.1	-5.3	6.2	2.8	
Weatherlow Offshore Fund I Ltd Cl IIA	5.6	2.9	2.9	10.9	15.4	10.1	2.2	8.3	7.1	5.6	7.6	-8.9	5.6	2.0	Jul-21
<i>HFRI Fund of Funds Composite Index</i>		1.9	1.9	6.8	10.2	7.4	2.5	5.4	4.3	3.7	6.1	-5.3	6.2	2.6	
Cliffwater Corporate Lending I	2.6	2.7	2.7	9.6	13.1	12.3	10.4	9.9	-	-	12.7	6.6	10.3	10.8	Dec-23
<i>Credit Suisse Leveraged Loan Index</i>		2.0	2.0	6.6	9.6	11.0	6.3	5.6	5.2	4.9	13.0	-1.1	5.4	6.6	
H.I.G. Whitehorse Principal Lending Offshore Feeder Fd, L.P.	2.4	0.0	0.0	4.5	5.9	8.4	-	-	-	-	10.6	-	-	8.5	Jul-22
<i>Credit Suisse Leveraged Loan Index</i>		2.0	2.0	6.6	9.6	11.0	6.3	5.6	5.2	4.9	13.0	-1.1	5.4	10.3	

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 9/30/2024)

	% of Portfolio	QTD (%)	FYTD (%)	YTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2023 (%)	2022 (%)	2021 (%)	Inception (%)	Inception Date
Total Fixed Income	35.7	3.7	3.7	4.9	9.0	6.2	1.1	1.9	2.3	2.2	5.9	-6.7	0.1	2.2	Jul-10
<i>Total Fixed Income Benchmark</i>		3.4	3.4	4.5	8.0	5.3	1.0	1.6	1.9	1.8	4.9	-5.4	-0.8	1.8	
JPMorgan Core Bond	5.8	5.3	5.3	5.2	11.8	6.1	-0.9	0.8	1.9	2.1	5.8	-12.3	-1.1	1.7	Sep-17
<i>Blmbg. U.S. Aggregate Index</i>		5.2	5.2	4.4	11.6	6.0	-1.4	0.3	1.5	1.8	5.5	-13.0	-1.5	1.4	
YSU Intermediate Term Bond	4.9	4.3	4.3	5.0	9.9	6.3	0.5	1.7	2.3	2.1	5.7	-8.0	-1.3	3.3	Apr-04
<i>Blmbg. Intermed. U.S. Government/Credit</i>		4.2	4.2	4.7	9.4	5.8	0.2	1.3	1.9	2.0	5.2	-8.2	-1.4	2.9	
Fidelity Intern Treasury Bond Index	3.6	5.4	5.4	4.5	10.5	4.7	-1.8	-0.1	1.2	1.6	4.1	-12.7	-3.0	7.9	Dec-23
<i>Blmbg. U.S. Treasury: 5-10 Year</i>		5.4	5.4	4.3	10.5	4.8	-1.8	-0.1	1.2	1.6	4.1	-12.6	-3.0	4.3	
YSU Short Term Bond	14.4	3.0	3.0	4.6	7.5	5.3	1.8	2.0	2.2	1.8	5.0	-3.3	-0.4	2.4	Apr-04
<i>ICE BofA 1-3 Yr. Gov/Corp</i>		2.9	2.9	4.4	7.2	5.0	1.5	1.7	1.9	1.7	4.6	-3.8	-0.4	2.2	
Lord Abbett Short Duration Income I	6.9	2.9	2.9	5.3	8.0	5.9	1.9	2.2	2.5	2.4	5.4	-4.6	1.1	2.7	Apr-18
<i>ICE BofA 1-3 Yr. Gov/Corp</i>		2.9	2.9	4.4	7.2	5.0	1.5	1.7	1.9	1.7	4.6	-3.8	-0.4	2.1	
Total Cash & Cash Equivalents	0.9	1.2	1.2	3.8	5.2	4.7	3.4	2.2	-	-	4.8	1.5	0.0	1.9	Apr-18
<i>90 Day U.S. Treasury Bill</i>		1.4	1.4	4.0	5.5	5.0	3.5	2.3	2.2	1.6	5.0	1.5	0.0	2.3	
Federated Hermes Government Obligations Fund	0.9	1.2	1.2	3.8	5.1	4.7	3.3	2.1	1.9	1.4	4.8	1.4	0.0	2.1	Dec-19
<i>90 Day U.S. Treasury Bill</i>		1.4	1.4	4.0	5.5	5.0	3.5	2.3	2.2	1.6	5.0	1.5	0.0	2.3	

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.

OCTOBER REPORT

	Market Value 10/01/2024	Market Value 10/31/2024	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	Inception (%)	Inception Date
Total University Assets	\$94,961,718	\$88,213,512	100.0	-0.8	3.3	8.0	15.6	3.5	5.9	4.4	Apr-04
<i>Total Policy Benchmark¹</i>				-0.5	2.5	6.7	11.5	3.5	4.3	3.4	
Total Operating & Short Term	\$21,821,830	\$15,886,994	18.0	0.4	1.4	4.0	4.8	3.4	2.3	1.2	Jul-10
<i>Total Operating & Short Term Benchmark²</i>				0.3	1.8	4.4	5.4	3.5	2.3	1.2	
Federated Hermes Government Obligations Fund	\$21,821,830	\$15,886,994	18.0	0.4	1.6	4.2	5.0	3.4	2.1	3.4	Oct-21
<i>90 Day U.S. Treasury Bill</i>				0.4	1.8	4.4	5.4	3.6	2.4	3.6	
Total Long Term/ Reserves Pool	\$73,139,888	\$72,326,518	82.0	-1.1	3.4	8.7	17.8	2.8	5.7	5.4	Jul-10
<i>Total Long Term/ Reserves Fund Benchmark³</i>				-1.2	3.1	8.5	16.8	3.2	5.8	5.1	
Total Equity	\$28,292,705	\$27,793,728	31.5	-1.8	4.7	15.2	32.7	5.4	12.3	12.4	Jul-10
Total Domestic Equity	\$22,200,840	\$21,959,418	24.9	-1.1	5.2	17.6	35.6	6.9	13.8	14.1	Jul-10
<i>Russell 3000 Index</i>				-0.7	5.4	19.7	37.9	7.6	14.6	14.5	
Vanguard Institutional Index	\$15,856,826	\$15,712,689	17.8	-0.9	4.9	20.9	38.0	9.0	15.2	14.8	Jul-10
<i>S&P 500 Index</i>				-0.9	4.9	21.0	38.0	9.1	15.3	14.8	
Vanguard Mid Cap Index Adm	\$2,739,109	\$2,727,289	3.1	-0.4	8.9	14.2	34.6	2.9	10.9	11.9	Oct-10
<i>Vanguard Mid Cap Index Benchmark</i>				-0.4	8.9	14.2	34.6	3.0	10.9	12.0	
Loomis Sayles Sm Growth N	\$1,793,642	\$1,740,818	2.0	-2.9	3.3	9.9	27.8	-2.3	8.6	8.0	Sep-19
<i>Russell 2000 Growth Index</i>				-1.3	7.0	11.7	36.5	-2.3	7.9	8.1	
Victory Integrity Small Value Y	\$1,811,263	\$1,778,623	2.0	-1.8	4.3	4.8	24.2	5.3	10.5	10.3	Oct-10
<i>Russell 2000 Value Index</i>				-1.6	8.4	7.5	31.8	1.9	8.4	9.5	
Total International Equity	\$6,091,865	\$5,834,310	6.6	-4.2	3.0	6.9	23.1	0.0	7.0	5.5	Oct-10
<i>MSCI AC World ex USA (Net)</i>				-4.9	2.8	8.6	24.3	1.6	5.8	4.9	
William Blair International Growth I	\$2,705,051	\$2,587,777	2.9	-4.3	0.1	4.7	23.9	-5.5	5.8	6.8	Jul-12
<i>MSCI AC World ex USA (Net)</i>				-4.9	2.8	8.6	24.3	1.6	5.8	6.1	
Dodge & Cox Internat'l Stock	\$3,386,814	\$3,246,532	3.7	-4.1	5.4	8.7	22.4	5.2	7.5	5.9	Oct-10
<i>MSCI EAFE (Net)</i>				-5.4	1.4	6.8	23.0	2.7	6.2	5.7	

OCTOBER REPORT

	Market Value 10/01/2024	Market Value 10/31/2024	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	Inception (%)	Inception Date
Total Alternatives	\$10,091,569	\$10,178,433	11.5	0.9	3.2	10.3	14.0	2.9	2.6	2.5	Mar-15
<i>Total Alternatives Benchmark⁴</i>				0.2	2.2	7.1	11.7	2.1	3.2	2.8	
Weatherlow Offshore Fund I Ltd CI IIA	\$5,344,762	\$5,408,899	6.1	1.2	4.1	12.2	17.5	2.5	8.5	2.3	Jul-21
<i>HFRI Fund of Funds Composite Index</i>				0.2	2.2	7.1	11.7	2.1	5.4	2.6	
Cliffwater Corporate Lending I	\$2,446,629	\$2,469,356	2.8	0.9	3.7	10.7	13.1	10.5	10.1	10.7	Jan-24
<i>Credit Suisse Leveraged Loan Index</i>				0.8	2.9	7.5	10.5	6.5	5.9	7.5	
H.I.G. Whitehorse Principal Lending Offshore Feeder Fd, L.P.	\$2,300,178	\$2,300,178	2.6	0.0	0.8	5.3	6.7	-	-	8.5	Jul-22
<i>Credit Suisse Leveraged Loan Index</i>				0.8	2.9	7.5	10.5	6.5	5.9	10.3	
Total Fixed Income	\$33,889,740	\$33,481,607	38.0	-1.2	2.5	3.6	8.1	0.8	1.6	2.1	Jul-10
<i>Total Fixed Income Benchmark⁵</i>				-1.1	2.2	3.3	6.8	0.8	1.2	1.7	
JPMorgan Core Bond	\$5,530,945	\$5,392,730	6.1	-2.5	2.6	2.5	10.8	-1.7	0.2	1.4	Sep-17
<i>Blmbg. U.S. Aggregate Index</i>				-2.5	2.6	1.9	10.5	-2.2	-0.2	1.0	
YSU Intermediate Term Bond	\$4,685,331	\$4,607,780	5.2	-1.7	2.5	3.3	8.8	0.1	1.3	3.2	Apr-04
<i>Blmbg. Intermed. U.S. Government/Credit</i>				-1.6	2.5	3.0	8.2	-0.2	0.9	2.8	
Fidelity Interm Treasury Bond Index	\$3,408,156	\$3,307,226	3.7	-3.0	2.2	1.4	8.7	-2.6	-0.7	1.4	Jan-24
<i>Blmbg. U.S. Treasury: 5-10 Year</i>				-3.0	2.2	1.2	8.7	-2.6	-0.7	1.2	
Breckenridge Intermediate Gov/Credit	-	\$4,235,872	4.8	-0.3	-	-	-	-	-	-	Nov-24
<i>Blmbg. Intermed. U.S. Government/Credit</i>				-1.6	2.5	3.0	8.2	-0.2	0.9	-	
YSU Short Term Bond	\$13,703,414	\$13,632,772	15.5	-0.5	2.4	4.1	6.7	1.8	1.8	2.4	Apr-04
<i>ICE BofA 1-3 Yr. Gov/Corp</i>				-0.5	2.4	3.9	6.3	1.4	1.5	2.2	
Lord Abbett Short Duration Income I	\$6,561,894	\$2,305,227	2.6	-0.3	2.5	4.9	7.8	1.8	2.0	2.6	Apr-18
<i>ICE BofA 1-3 Yr. Gov/Corp</i>				-0.5	2.4	3.9	6.3	1.4	1.5	2.0	
Total Cash & Cash Equivalents	\$865,875	\$872,750	1.0	0.4	1.7	4.3	5.1	3.5	2.2	2.0	Apr-18
<i>90 Day U.S. Treasury Bill</i>				0.4	1.8	4.4	5.4	3.6	2.4	2.3	
Federated Hermes Government Obligations Fund	\$865,875	\$872,750	1.0	0.4	1.6	4.2	5.0	3.4	2.1	2.2	Dec-19
<i>90 Day U.S. Treasury Bill</i>				0.4	1.8	4.4	5.4	3.6	2.4	2.4	



SUPPORTING INFORMATION

ASSET CLASS RETURNS

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Q1 2024	Q2 2024	Q3 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%	Glb Bonds 9.4%	Large Cap 22.1%
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%	Sm/Mid 8.8%	Em Mkt 16.9%
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%	EM Mkt 8.7%	Dev Intl 13.0%
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%	Dev Intl 7.3%	Sm/Mid 11.3%
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%	Large Cap 5.9%	Hdg Fnds 8.1%
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 5.3%	Hi Yld 8.0%
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%	US Bonds 5.2%	US Bonds 4.5%
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%	Hdg Funds 2.8%	Cash 4.1%
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%	Cash 1.4%	Glb Bond 2.0%

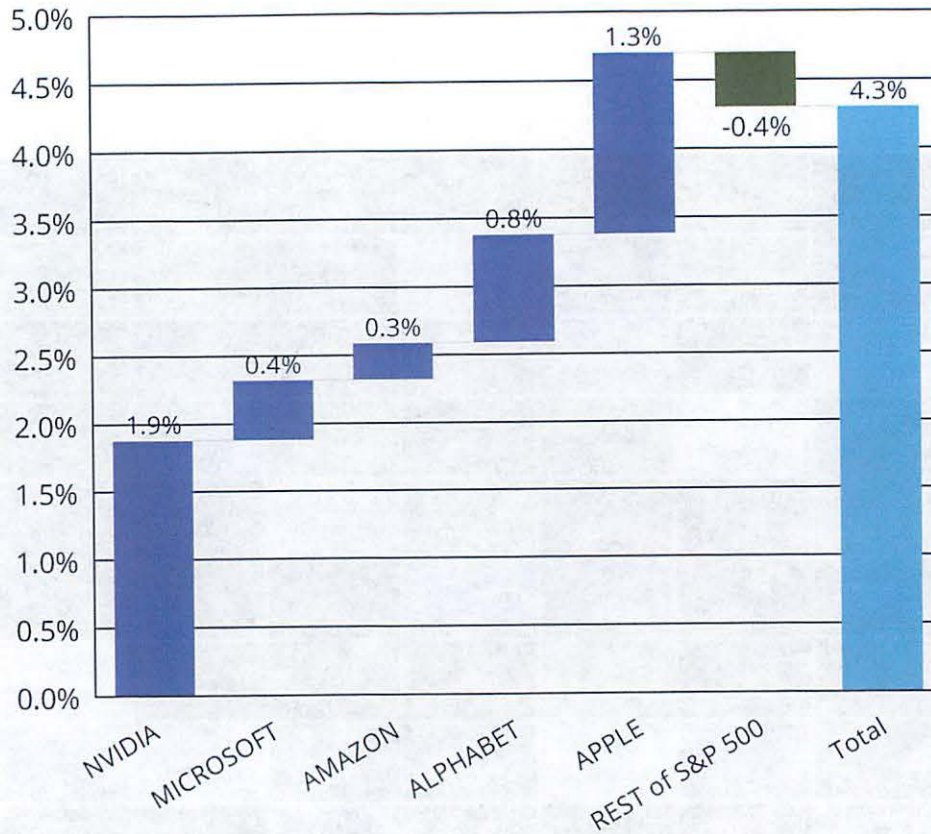
Past performance is not an indicator of future results. Asset classes represented by: Large Cap – S&P 500 Index; Sm/Mid – Russell 2500 Index; Dev Intl – MSCI EAFE Index; Em Mkt – MSCI Emerging Markets Index; Hi Yld – Bank of America Merrill Lynch U.S. High Yield Master II; US Bonds – Barclays Capital 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 9/30/2024. Source: Morningstar Direct.



MARKET REVERSAL: FAB 5 DETRACTS FROM S&P 500 RETURN

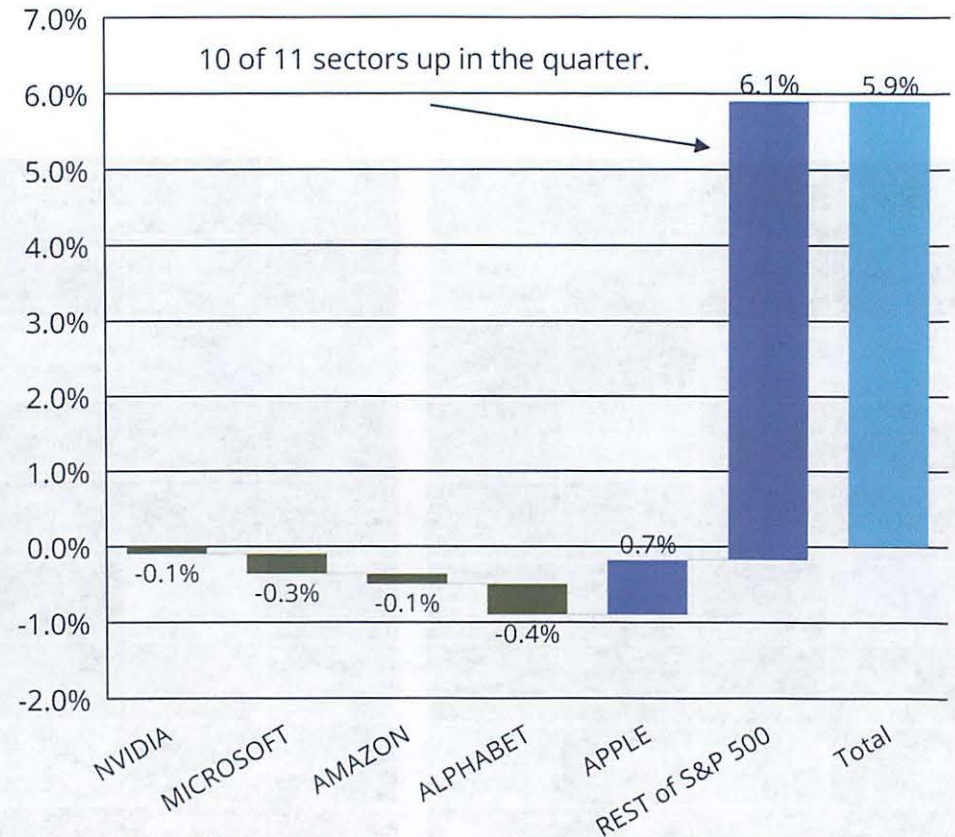
Q2 2024 S&P 500 RETURNS

■ Increase ■ Decrease ■ Total



Q3 2024 S&P 500 RETURNS

■ Increase ■ Decrease ■ Total

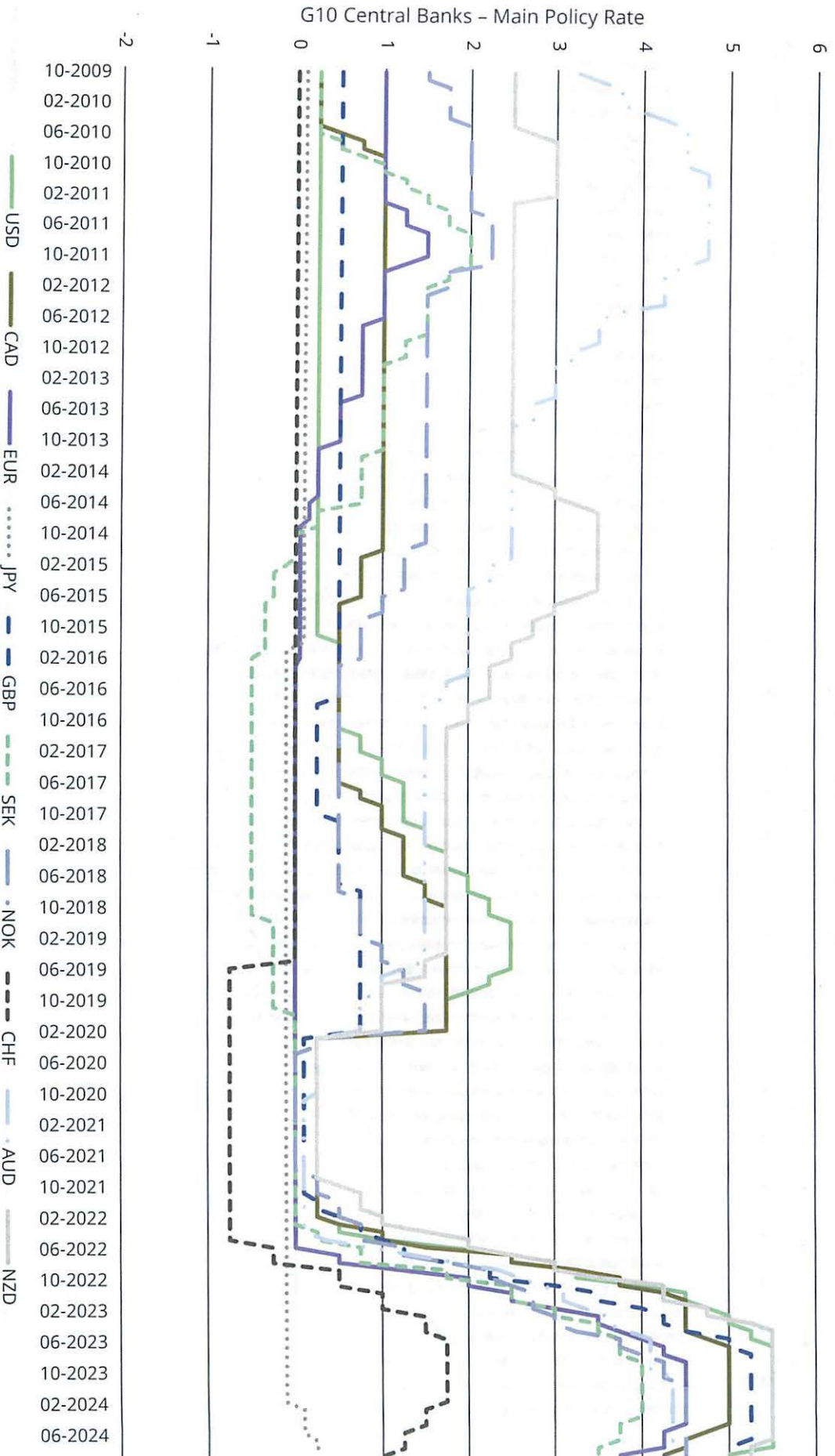


- Q2 performance driven by a handful of macro-independent stocks (e.g., insensitive to inflation and fed rate cuts), while the remaining stocks were generally directionless amidst evolving Fed policy

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

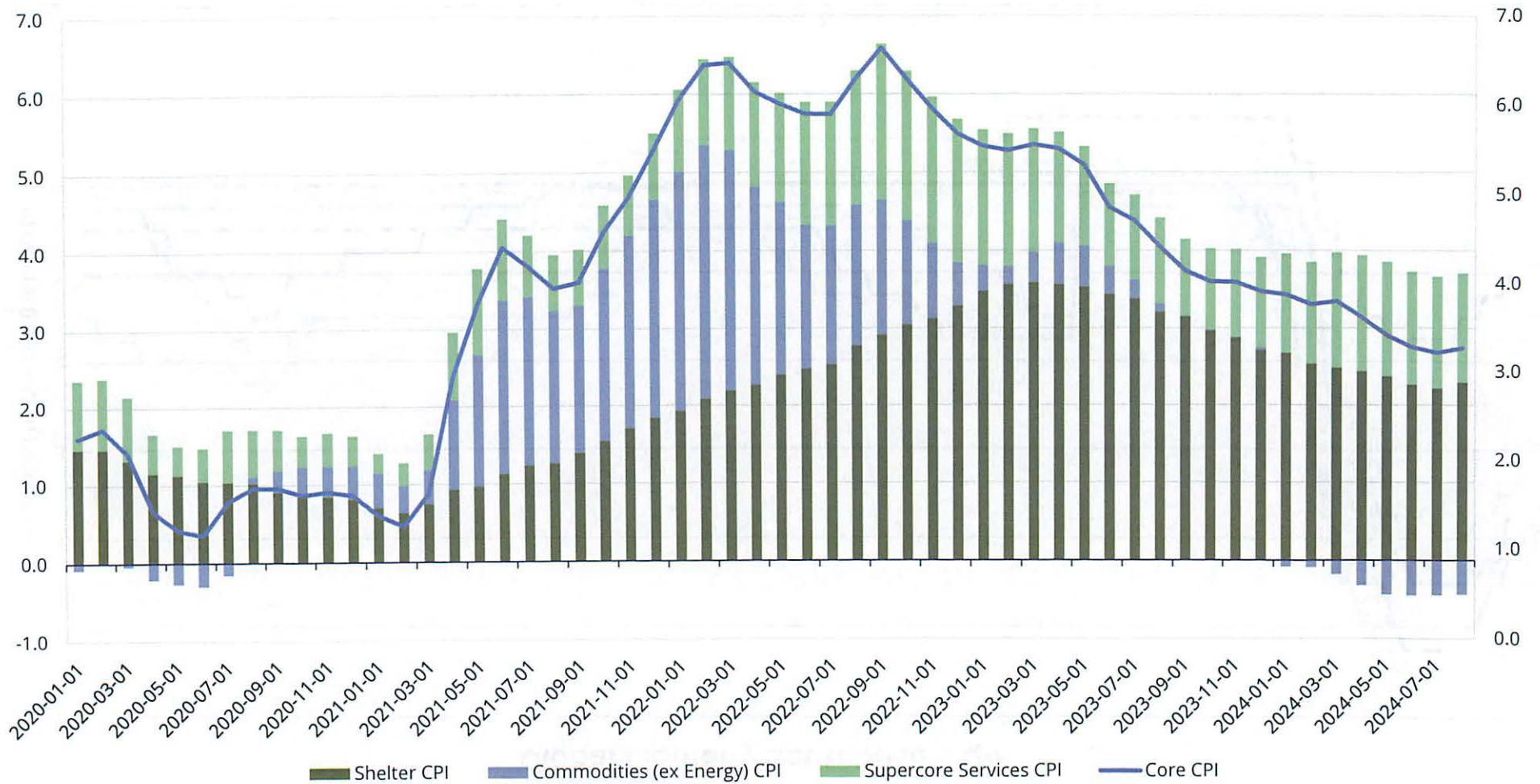
G-10 CENTRAL BANKS BEGIN EASING

Global Liquidity Set to Rise – Q4



SHELTER INFLATION REMAINS STICKY

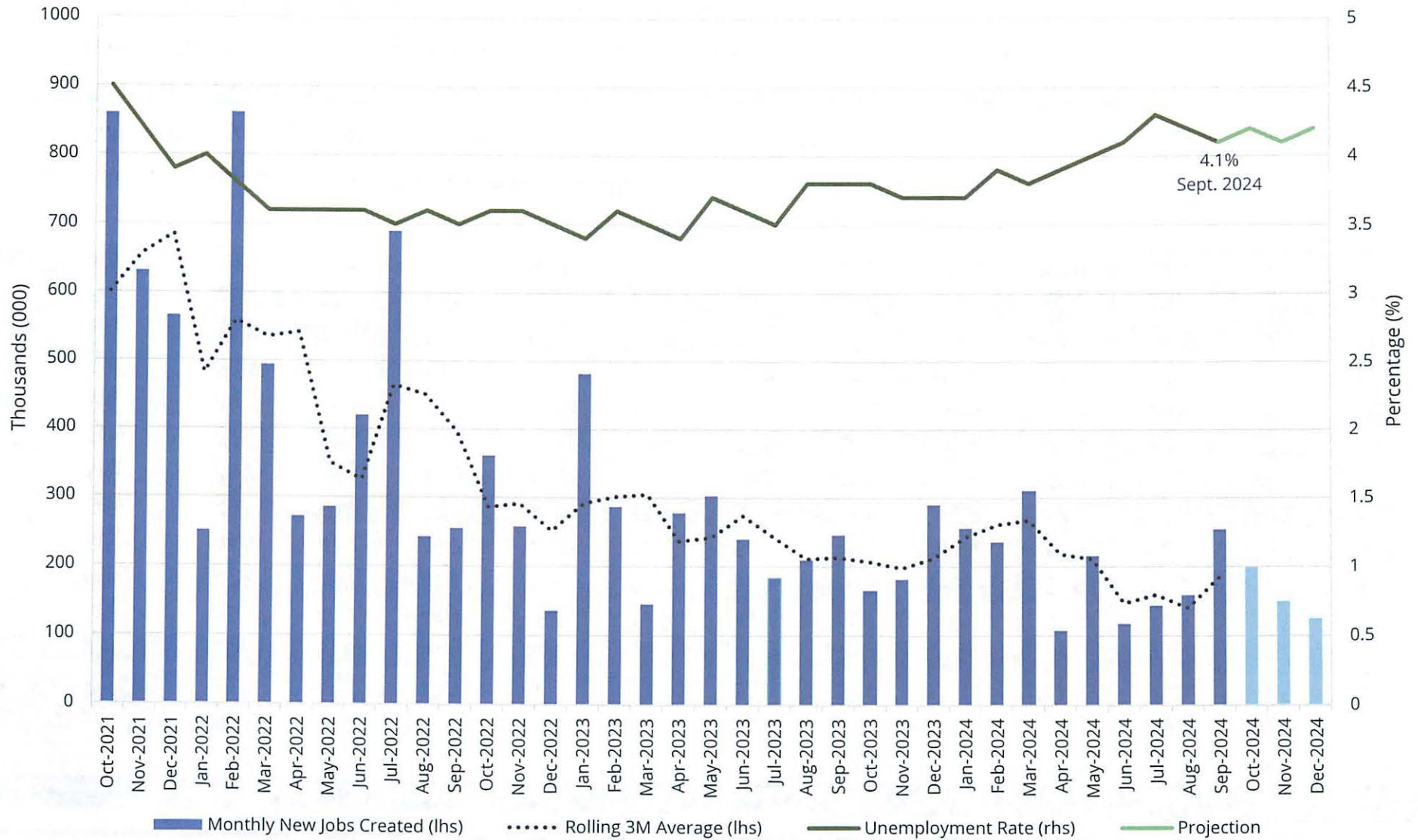
Shelter Inflation Spoiling the Disinflation Party



Source: Clearstead, BLS, Bloomberg, 9/30/2024



LABOR MARKET



Source: Clearstead; Bloomberg LP - 10/4/2024; Projection assumes an approximate decline of approximately -50k jobs per month before leveling off ≈125k level

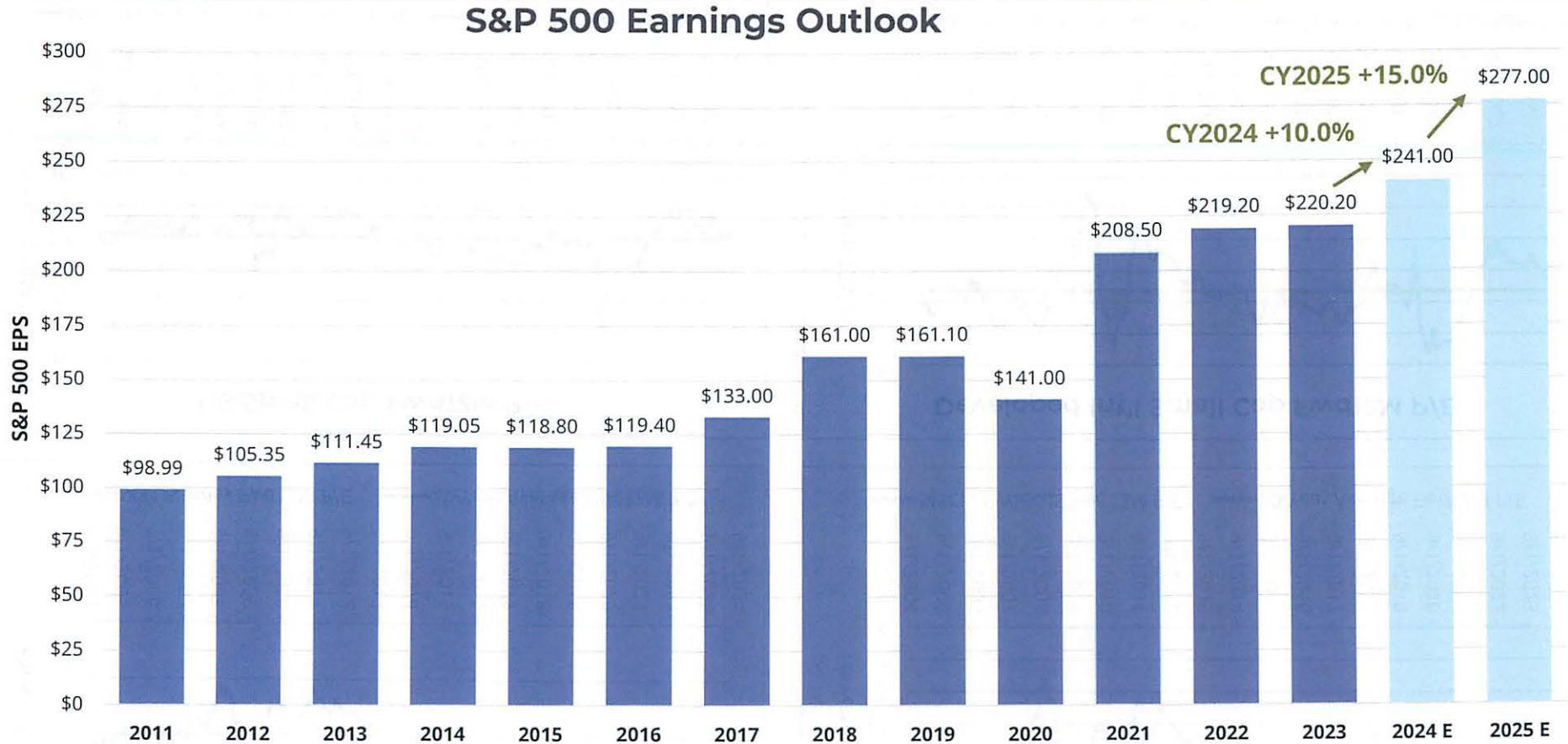


GLOBAL ECONOMY PMI

		Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Global	Mfg	48.8	49.3	49.0	50.0	50.3	50.6	50.3	51.0	50.8	49.7	49.6	48.8
	Serv	50.4	50.6	51.6	52.3	52.4	52.4	52.7	54.0	53.1	53.3	53.8	52.9
US	Mfg	50.0	49.4	47.9	50.7	52.2	51.9	50.0	51.3	51.6	49.6	47.9	47.3
	Serv	50.6	50.8	51.4	52.5	52.3	51.7	51.3	54.8	55.3	55.0	55.7	55.2
Eurozone	Mfg	43.1	44.2	44.4	46.6	46.5	46.1	45.7	47.3	45.8	45.8	45.8	45.0
	Serv	47.8	48.7	48.8	48.4	50.2	51.5	53.3	53.2	52.8	51.9	52.9	51.4
UK	Mfg	44.8	47.2	46.2	47.0	47.5	50.3	49.1	51.2	50.9	52.1	52.5	51.5
	Serv	49.5	50.9	53.4	54.3	53.8	53.1	55.0	52.9	52.1	52.5	53.7	52.4
Japan	Mfg	48.7	48.3	47.9	48.0	47.2	48.2	49.6	50.4	50.0	49.1	49.8	49.7
	Serv	51.6	50.8	51.5	53.1	52.9	54.1	54.3	53.8	49.4	53.7	53.7	53.1
China	Mfg	49.5	50.7	50.8	50.8	50.9	51.1	51.4	51.7	51.8	49.8	50.4	49.3
	Serv	50.4	51.5	52.9	52.7	52.5	52.7	52.5	54.0	51.2	52.1	51.6	50.3
India	Mfg	55.5	56.0	54.9	56.5	56.9	59.1	58.8	57.5	58.3	58.1	57.5	56.5
	Serv	58.4	56.9	59.0	61.8	60.6	61.2	60.8	60.2	60.5	60.3	60.9	57.7
S. Korea	Mfg	49.8	50.0	49.9	51.2	50.7	49.8	49.4	51.6	52.0	51.4	51.9	48.3

- Global manufacturing has stagnated, while services PMIs 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’s
 - 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 9/30/2024.

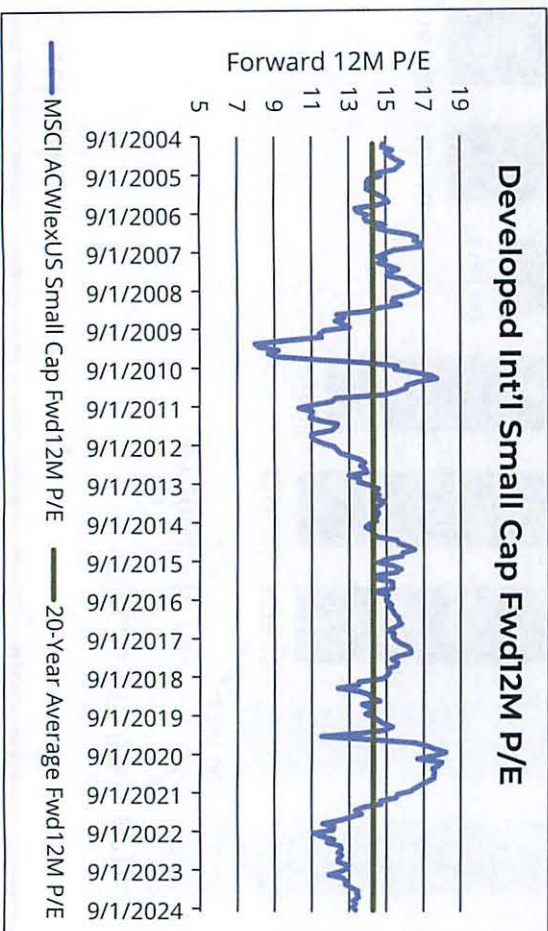
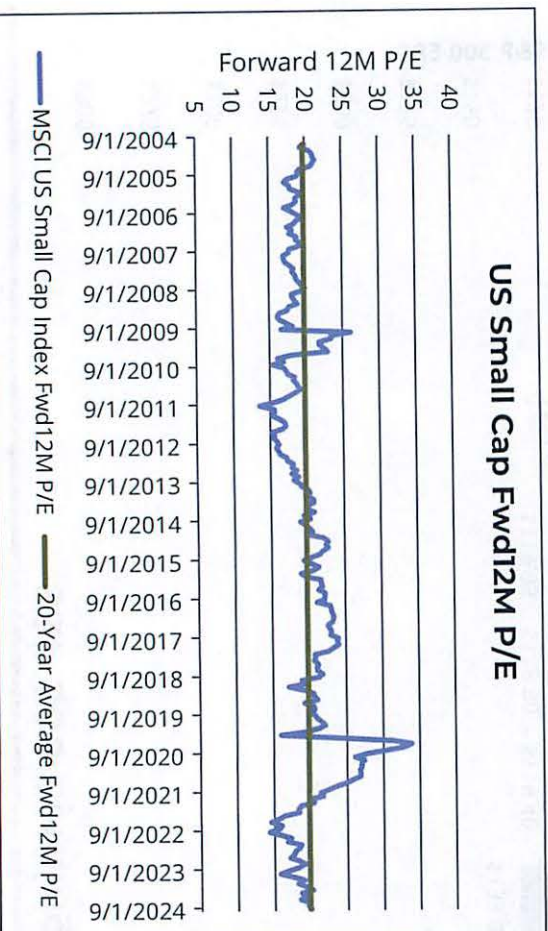
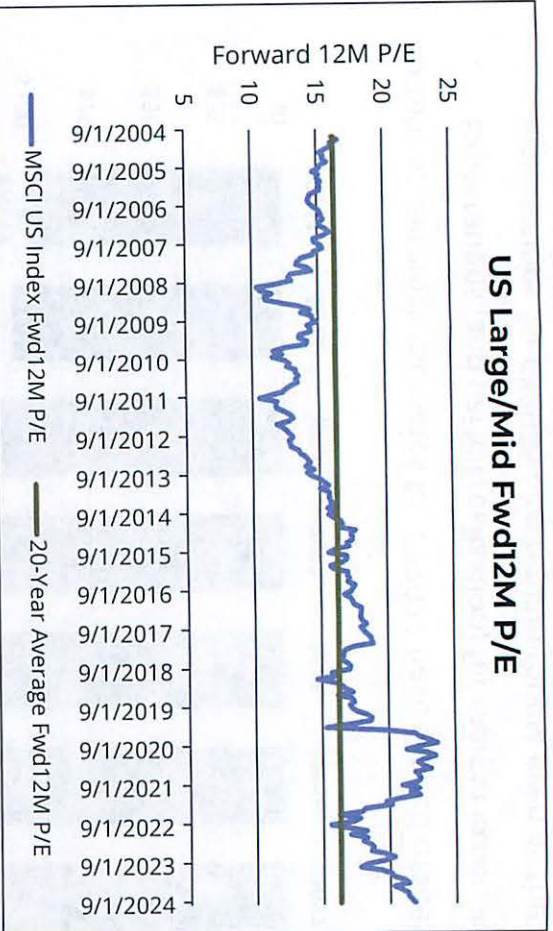


- Bottom-up earnings estimates for CY2024 have slipped modestly in Q3 but reflect a stable and positive US macro environment
 - Expectations (and partial realization) for margin expansion and positive sentiment have kept CY2024 EPS above \$240/share
 - Expectations for CY2025 also remain robust even as the US economy may slow marginally in 2025; evolving US trade policy (tariffs) and/or tax policy could spur analysts to reset earnings/margins expectations

Source: Clearstead, Factset
Data as of 9/30/2024. Past performance is not an indicator of future results.



GLOBAL EQUITY VALUATIONS









Source: Bloomberg.
Data as of 9/30/2024. Past performance is not an indicator of future results.



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ECONOMIC OUTLOOK

AREA	EXPECTATIONS
 Labor Markets	<ul style="list-style-type: none">• U.S. adds 100k-150k jobs per month• Unemployment rate to remain at 4% to 4.5%• Average hourly wages tracking below 4%
 Manufacturing	<ul style="list-style-type: none">• Manufacturing activity stable• Input prices lower• Select sectors may be disrupted by new tariff policy in 2025
 Services	<ul style="list-style-type: none">• Services industry remains positive amidst strong consumer spending• Select consumer segments softening
 Inflation	<ul style="list-style-type: none">• Core CPI remains at 3.5%• Headline CPI likely to remain at or above 3%• Services sector prices remain sticky given elevated wage costs and housing prices
 Equity Markets	<ul style="list-style-type: none">• Choppy market returns; Volatility may normalize• Some technical support at 5,500• Market's assumption for soft landing is fully priced in
 Fixed Income Markets	<ul style="list-style-type: none">• 10-Yr US Treasury remains rangebound between 3.5% - 4.5%• Less uncertainty around Fed policy

Source: Clearstead, as of 9/30/2024.
Expectations for 4th quarter of calendar year 2024.

GLOBAL HEADLINE INFLATION

Global Headline CPI - Year-over-Year % Change

	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	Jun-24	Jul-24	Aug-24
Dev. Markets																							
US	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	3.0	2.9	2.5
EU	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	2.5	2.6	2.2
Japan	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	2.8	2.8	3.0
UK	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	2.0	2.2	2.2
Canada	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	2.7	2.5	2.0
Australia	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	3.8	3.8	3.8
Switzerland	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	1.3	1.3	1.1
Norway	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	2.6	2.8	2.6
Sweden	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	2.6	2.6	1.9
Asia																							
China	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	0.2	0.5	0.6
India	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	3.7	2.2	2.4
Indonesia	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	2.5	2.1	2.1
Malaysia	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	2.0	2.0	1.9
S Koreas	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	2.4	2.6	2.0
Taiwan	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	2.4	2.5	2.4
Latin America																							
Brazil	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	4.2	4.5	4.2
Chile	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	4.2	4.6	4.7
Colombia	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	7.2	6.9	6.1
Mexico	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	5.0	5.6	5.0

- Inflation has eased in most countries; most central banks have expressed confidence that inflation is trending toward their targets over the next six-months
 - Only China and Taiwan saw negligible rises in inflation; China has been teetering on the edge of minor deflation for the past year
 - Headline inflation is generally <3% in most of developed/Western economies

Source: Clearstead, Bloomberg.
Data as of 9/30/2024.

GLOBAL OUTLOOK STABLE – OK 2024, SAME 2025

Real GDP Growth Forecasts

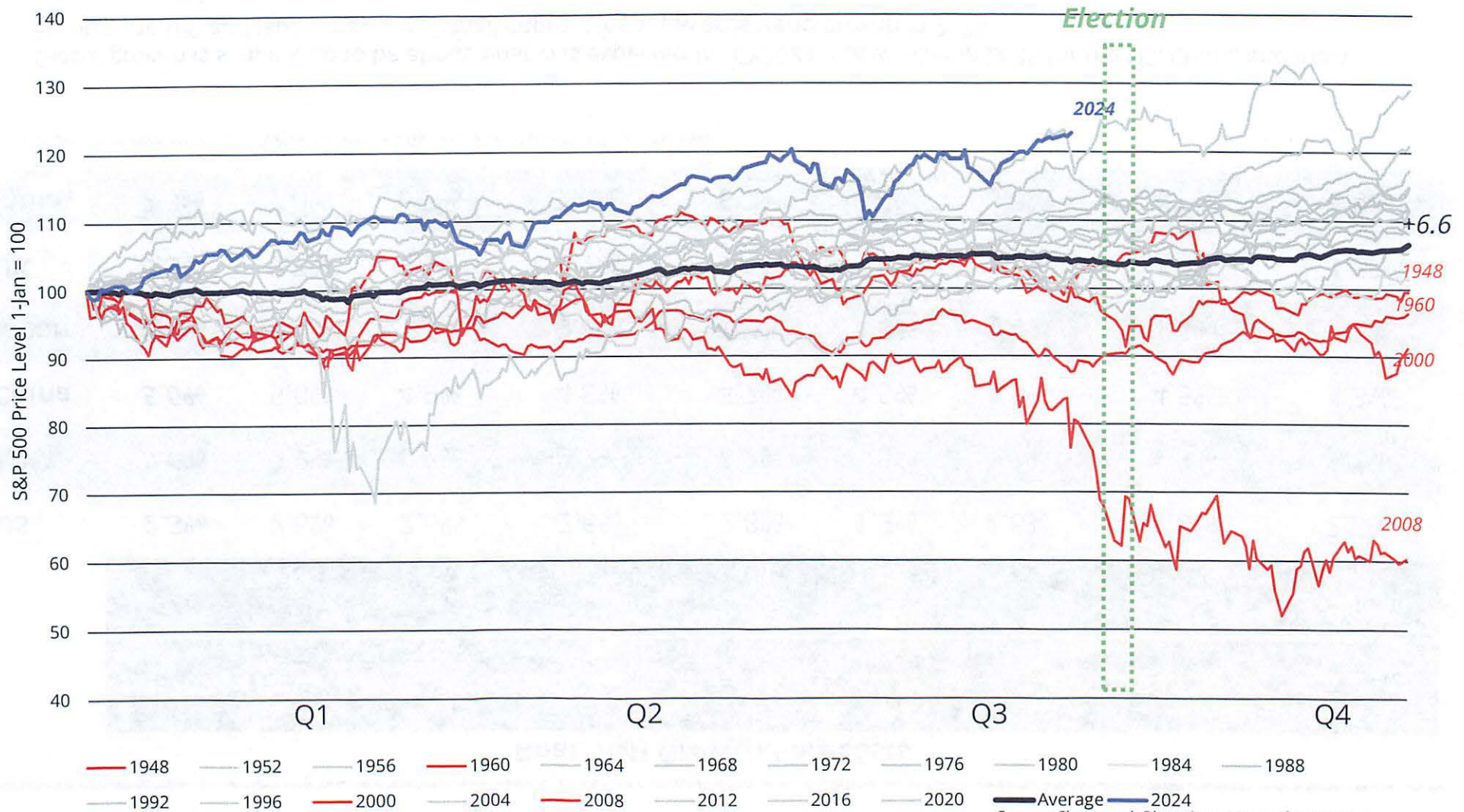
	H1-2024	CY2024				CY2025			
	Estimates	IMF	OECD	Bloomberg Consensus	Goldman Sachs	IMF	OECD	Bloomberg Consensus	Goldman Sachs
US	2.3%	2.6%	2.6%	2.6%	2.8%	1.9%	1.6%	1.8%	2.3%
EU*	0.6%	0.9%	0.7%	0.7%	0.7%	1.5%	1.3%	1.3%	1.1%
China	5.0%	5.0%	4.9%	4.8%	4.7%	4.5%	4.5%	4.5%	4.3%
Japan	0.3%	0.7%	-0.1%	0.0%	-0.1%	1.0%	1.4%	1.2%	1.2%
UK	0.5%	0.7%	1.1%	1.1%	1.1%	1.5%	1.2%	1.4%	1.5%
India	7.3%	7.0%	6.7%	7.0%	6.7%	6.5%	6.8%	6.9%	6.4%

Source: Clearstead, Forecasts as of 10/2/2024 Bloomberg & GS; Jul-2024 IMF, Sep-2024 OECD; *Eurozone

- Global growth is shaping up to be about what was expected for CY2024, but weaker in 2025 for the US, China, and India. Europe, the UK, and Japan may see a small improvement towards trend growth in 2025
 - World real GDP growth of ≈3.0% for CY2024 continues to be below-trend (pre-Covid) global growth
 - Expectations for CY2025 are slightly better for some countries (EU/Japan/UK), but 2025 still represents below-trend growth, particularly because the Chinese economy is expected to slow closer to <5.0%

PRESIDENTIAL ELECTION CYCLES (1948 TO 2024)

S&P Returns - Presidential Election Years



Source: Clearstead, Bloomberg LP, as of 9/30/2024
 Past performance is not an indicator of future results

U.S. ELECTIONS

Presidential Cycle	S&P 500 Average Returns (1993-2015)	Trump Presidential Cycle (2017 to 2020)	Biden Presidential Cycle (2021 to 2024)
Year 1 (Inauguration)	+6.7%	+21.8%	+28.7%
Year 2 (mid-terms)	+5.8%	-4.4%	-18.1%
Year 3 (off-year)	+16.3%	+31.5%	+26.3%
Year 4 (presidential election)	+6.7%	+18.4%	TBD

Party Elected	Average 10-Yr Annualized Return	Election Outcome	Average Return (S&P 500)	Election Years
Democrat	+11.2%	Democrat to Democrat	+10.9%	1948, 1964, 1996, 2012
Republican	+10.5%	Democrat to Republican	+10.4%	1952, 1968, 1980, 2000, 2016
		Republican to Democrat	-1.1% (+8.5% w/o 08')	1960, 1976, 1992, 2008*, 2020
		Republican to Republican	+7.4%	1956, 1972, 1984, 1988, 2004

Source: Clearstead, Bloomberg, Capital Group, Schwab Center for Financial Research, 1/22/2024

Historical returns suggest little, if any, long-run impact to returns regardless of the election outcome

GEOPOLITICAL TENSION

Geopolitical Risk

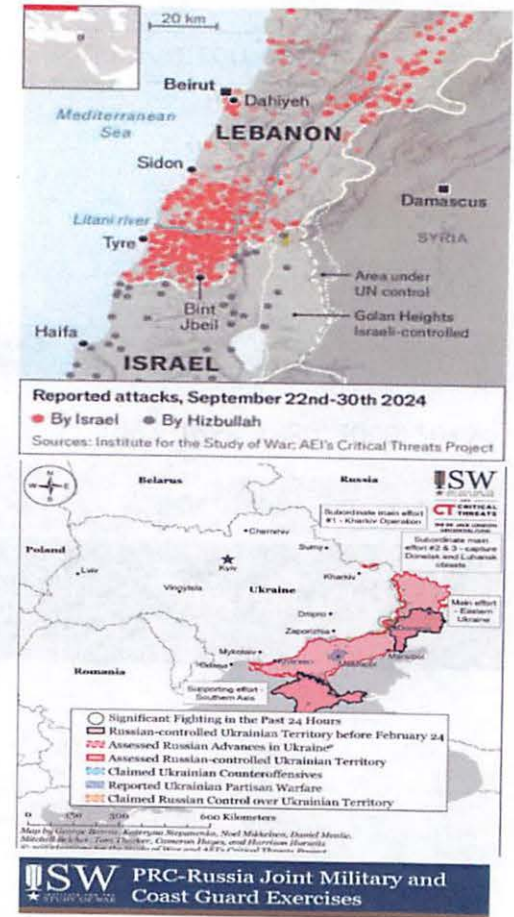
- Gaza war grinds on but at slower pace; Israel is at war w/ Hezbollah—three front war developing:
 - US gradually being brought into direct conflict w/ Iran—Iran likely to move to secure nuclear status.
 - Israel is seeking a “security zone” that has means, at minimum, a limited invasion of southern Lebanon.
- Ukrainian war largely a stalemate, but Russia is still making incremental gains—Ukrainian lines could collapse in select areas.
 - Western aid to Ukraine has been slow and generally insufficient to shift the momentum.
 - Exhaustion/lack of reserves are real constraint on the Ukrainian army in H1-2025.
- China amping up the pressure on Taiwan.
 - China has seized several Taiwanese fishing vessels; increasing number of incursions into Taiwanese airspace.
 - Russia-Iran-N.Korea-China axis has deepened in scope and frequency of collaboration.

Potential Market Impact

Energy price volatility; increased shipping costs to Europe; disrupted supply chains.

Commodity price volatility—oil, gas, grains, and select metals.

Increased US-China tension; more negative sentiment on select Chinese assets (equities)





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 in light of whether it is consistent with the 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:

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. 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, Australia, 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-US 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 Asia Pacific countries excluding Japan.

The **U.S. 10-Year Treasury Yield** is generally considered to be a barometer for long-term interest rates. **Merill Lynch 91 Day T-bill Index** includes U.S. Treasury bills with a remaining maturity from 1 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/Baa1-Baa1 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 ARM) issued by Fannie Mae (FHLMC), the U.S. Government National Mortgage Association (GNMA), and the U.S. Federal Home Loan Mortgage Corporation (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-regulated bonds), and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices: the U.S. Aggregate Index, the 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, publicly traded corporate debt issues. The **BC US Corporate High Yield Index** is an unmanaged index representing public obligations of 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 (CMBS) and fixed rate mortgage-backed securities. The **BC Quality Distribution AAA, B, and C-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 European Index, the Emerging Markets Index, and the non-EMBS portion of the CMBS Index. The **BC 1-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-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 US 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 **HFRF Funds of Funds Index (HFRF 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 its 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 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.

HFRF Emerging Markets: Asia ex-Japan, Global Index, Latin America, Russia/Eastern Europe Index: The constituents of the HFRF 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. **HFRF 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. **HFRF 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. **HFRF 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. **HFRF EH: Technology/Healthcare** strategies 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 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.

HFRF 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. **HFRF 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. **HFRF ED: Private Issuer/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 liquid in nature. **HFRF 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. **HFRF 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 corporate fixed income instrument. **HFRF 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 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 US 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**, **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 400 MidCap 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. growth 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 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 **Wishire 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 **Wishire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wishire 5000 Index below the 2501st rank. The **Wishire 4500 Index** is comprised of all stocks in the Wishire 5000 Index minus the stocks in the S&P 500. The **Wishire Real Estate Securities Index (RESI)** is comprised of publicly 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 developed 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 the U.S. 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 (BBB-/BBB+) or above using MBSys, 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 ARM) 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 (TIL) 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, auto, home equity loans, structured credit (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 investments grade fixed rate debt on a global scale. The **BC US Corporate Long An 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 (CMBS), and fixed rate mortgage-backed securities. The **BC Quality Distribution AAA, B, and CD-0 Index** measures 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 Eurostoxx Index, the Emerging Markets Index, and the non-REBSA 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 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. Treasury, 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 issues 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 credit securities 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 144As are also included. The **BC Intermediate Government 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 with a remaining 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, sponsored debt and special situation managers from 1986 to December 2007. Returns are calculated based on the posted 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 II & 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 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 market 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-empt 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 managed foreign currency denominated fixed income) in the emerging markets. The **JPMorgan GBI Global ex-US Index** represents the total return performance of major non-US, bond markets.

The **HFRF Funds of Funds Index (HFRF 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 **HFR Relative Value Index** tracks investment managers who maintain positions in which the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction. **HFRF 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. **HFRF 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 US 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 US. 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 Ltd. 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) US 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 price data. The **DJ U.S. Completion Total Stock Market Index** is a subset of the DJ U.S. Total Stock Market Index that excludes commodities 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 (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 indices (Income, 2000, 2005, 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 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.

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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.

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