



**YOUNGSTOWN
STATE
UNIVERSITY**

**BOARD OF TRUSTEES
INVESTMENT SUBCOMMITTEE**

**Allen L. Ryan, Jr., Chair
Charles T. George, Vice Chair
Joseph J. Kerola
Galatiani G. Lopuchovsky**

**Wednesday, March 2, 2022
10:00 a.m.**

**Presidents' Suites
Kilcawley Center**

AGENDA

- A. Disposition of Minutes for Meeting Held December 1, 2021**
- B. Old Business**
- C. Committee Items**

1. Discussion Items

- C.1.a. = Tab 1 a. Annual Disclosure of Trustee Relationships with University-Affiliated Financial Institutions**
Neal McNally, Vice President for Finance and Business Operations, will report.
- C.1.b. = Tab 2 b. March 2, 2022 Quarterly Portfolio Asset Allocation and Investment Performance Review**
Sarah Parker and John Colla, will report.

2. Action Items

- C.2.a. = Tab 3 a. Resolution to Approved Clearstead's Recommendation to Rebalance the Non-Endowment Long-Term Investment Pool**
Sarah Parker and John Colla, will report.
- C.2.b. = Tab 4 b. Resolution to Amend the Youngstown State University Non-Endowment Asset Allocation Guidelines**
Sarah Parker and John Colla, will report.

- D. New Business**
- E. Adjournment**



Disclosure of Relationships with University-Affiliated Financial Institutions
(Reviewed for updates February 2022)

In accordance with Youngstown State University policy 3356-3-10, Investment of the University’s Non-Endowment and Endowment Funds, members of the Board of Trustees are required to disclose relationships, beyond the ordinary customer relationships, with the financial institutions involved with the University’s non-endowment and endowment funds. Please disclose the nature of any relationships with the institutions listed below.

The financial institutions involved with the Non-Endowment Funds are as follows:

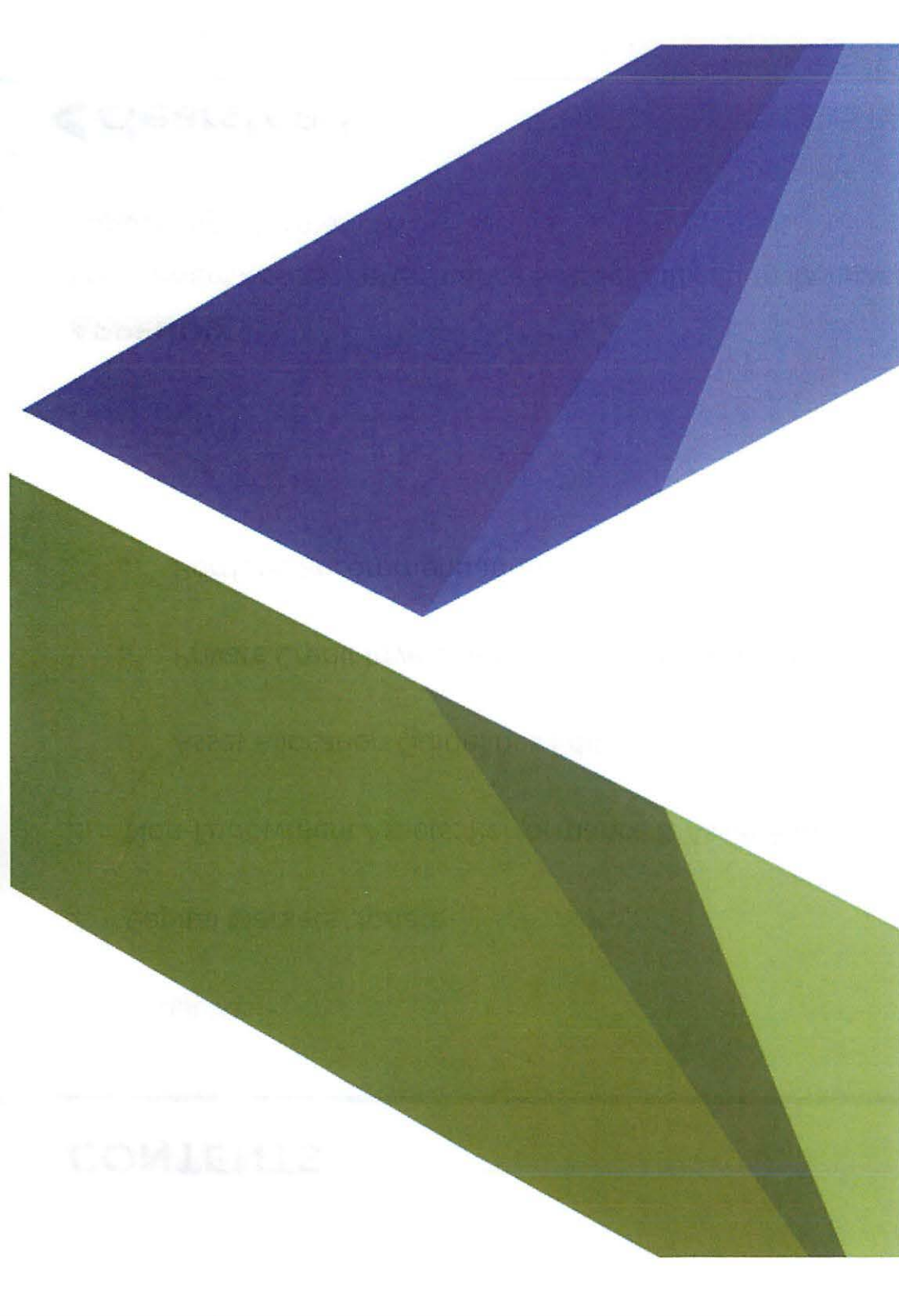
- Clearstead _____
- Diamond Hill _____
- Dimensional Fund Advisors (DFA) _____
- Dodge & Cox _____
- Evanston Capital _____
- J.P. Morgan _____
- Loomis Sayles _____
- Lord Abbett _____
- PNC _____
- Prudential _____
- State Treasury Asset Reserve of Ohio (STAR Ohio) _____
- Vanguard _____
- Victory _____
- Wells Fargo _____
- William Blair _____
- I have no business or familial relationship with the above institutions that require disclosure

The Financial Institutions involved with the Endowment Funds are as follows:

- Clearstead _____
- Huntington National Bank _____
- PNC _____
- Vanguard _____
- I have no business or familial relationship with the above institutions that require disclosure

SIGNED: _____ DATED: _____

For audit and compliance purposes, please return completed form to YSU, Tod Hall 223, Office of the Vice President for Finance & Business Operations by June 30, 2022.



March 2, 2022

**YOUNGSTOWN STATE
UNIVERSITY**



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Cleveland, Ohio 44114
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CONTENTS

1. Initiatives
2. Capital Markets Update
3. Non-Endowment Assets: Performance & Asset Allocation Review
 - Asset Allocation Guidelines Edit **(ACTION)**
 - Private Credit Investment Manager Recommendation: H.I.G. Principal Lending Fund
 - Portfolio Recommendations **(ACTION)**

APPENDIX

Endowment Assets: Performance & Asset Allocation Review
Supporting Information

CLEARSTEAD OVERVIEW

\$29+ BILLION*
ASSETS UNDER
ADVISEMENT

1989
YEAR COMPANY WAS
ESTABLISHED

110+
NUMBER OF
EMPLOYEES

5.5x**
INCREASE IN INSTITUTIONAL
OCIO ASSETS

INSTITUTIONAL INVESTMENT CONSULTING

Customized Services:
Investment Advisory
Fiduciary Services
Governance & Oversight
Retirement Plan Consulting

PRISM

INVESTMENT OFFICE

Thought Leadership:
Research Corner
ClearPoint
Market Minute
Clearstead Investment Forum Podcast

clearaccess.

PRIVATE WEALTH MANAGEMENT

Comprehensive Services:
Financial & Estate Planning
Tax Strategy & Compliance
Investment Advisory
Family Office Administration

clearsight

SUSTAINABLE CLEARSTEAD

EMPOWHER
clearstead



*Approximate as of 12/31/2021

**From 12/31/2016 - 9/30/2021; Includes non-discretionary with trade execution AUM



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 **clearstead** **INITIATIVES**

2022 OVERSIGHT DASHBOARD

		1Q	2Q	3Q	4Q	COMMENTS:
STRATEGIC / ADMINISTRATIVE	Investment Policy Review	✓				Asset Allocation Guidelines Edit
	Strategic Asset Allocation Review				<input type="checkbox"/>	
	Peer Review				<input type="checkbox"/>	
	2023 Oversight Dashboard				<input type="checkbox"/>	
	STAR Ohio/Plus Annual Review			<input type="checkbox"/>		
PORTFOLIO	Fixed Income Review		<input type="checkbox"/>			
	Alternative Investments Review	✓				Private Credit Asset Class
	Invt Manager Recommendation	✓				H.I.G. WhiteHorse Principal Lending Fund
PERFORMANCE	Capital Markets Review	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Quarterly Performance Review	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Endowed Account Review / Oversight	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER	Fee Review			<input type="checkbox"/>		
	ORC Compliance Review			<input type="checkbox"/>		
	Clearstead Firm Update	✓				

LAST REVIEWED	
Investment Policy:	09/01/2021
Strategic Asset Allocation:	09/01/2021
Fee Review:	09/01/2021

MEETING SCHEDULE	
1Q:	March 2, 2022
2Q:	June 22, 2022
3Q:	September 7, 2022
4Q:	December 7, 2022



CAPITAL MARKETS UPDATE

QUARTERLY THEMES

WHAT HAPPENED LAST QUARTER?

- After a volatile third quarter, U.S. equities rebounded in the fourth quarter, led by large caps
 - S&P 500 +11.0%, Russell 2000 +2.1%, MSCI EAFE -2.7%, MSCI Emerging Markets -1.3%
- Global economy shook off COVID-19 variant concerns and supply chain disruptions
 - Consumer spending remained robust during the quarter
 - Both services and manufacturing sectors softened, but remain strong
 - U.S. GDP growth forecasts for Q4-2021 are > 7%
- China economy slows due to COVID-19 lockdowns and property-sector deleveraging

WHAT WE ARE FOCUSING ON:

- COVID-19 cases and potential impact on global economy
- Core inflation and its trend in the months ahead
 - Long-term inflation expectations remain modest, while inflation in the short-run remains elevated vs. long-term averages
- Fiscal and monetary policy
 - Uncertainty in the passage of Build Back Better plan
 - Interest rates remain low but face the prospects of a global tightening cycle
- Earnings to support markets and expectations for CY 2022 – expected YoY growth is in the high single digits
- A potential rising interest rate environment and the challenges it may present to fixed income investments

Source: Clearstead, Bloomberg LP. As of 12/31/2021. Past performance is not an indicator of future results.

HISTORICAL ASSET CLASS RETURNS

2013	2014	2015	2016	2017	2018	2019	2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	2021
Sm/Mid 36.8%	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%	Sm/Mid 10.9%	Large Cap 8.6%	Hdg Fnds 1.3%	Large Cap 11.0%	Large Cap 28.7%
Large Cap 32.4%	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%	Large Cap 6.2%	Sm/Mid 5.4%	Hi Yld 0.9%	Sm/Mid 3.8%	Sm/Mid 18.2%
Dev Intl 22.8%	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 3.5%	Dev Intl 5.2%	Large Cap 0.6%	Dev Intl 2.7%	Dev Intl 11.3%
Hdg Fnds 9.0%	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 2.5%	Em Mkt 5.1%	US Bonds 0.1%	Hdg Fnds 0.8%	Hdg Fnds 6.5%
Hi Yld 7.4%	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%	Em Mkt 2.3%	Hi Yld 2.8%	Cash 0.0%	Hi Yld 0.7%	Hi Yld 5.4%
Cash 0.1%	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%	Hi Yld 0.9%	Hdg Fnds 2.7%	Dev Intl -0.5%	Cash 0.0%	Cash 0.1%
US Bonds -2.0%	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%	Cash 0.0%	US Bonds 1.8%	Glb Bond -1.6%	US Bonds 0.0%	US Bonds -1.5%
Em Mkt -2.6%	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%	US Bonds -3.4%	Glb Bond 0.6%	Sm/Mid -2.7%	Em Mkt -1.3%	Em Mkt -2.5%
Glb Bond -4.9%	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 -5.9%	Cash 0.0%	Em Mkt -8.1%	Glb Bond -1.5%	Glb Bond -8.2%

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; U.S. Bonds – Barclays Capital U.S. Aggregate; Glb Bond – Barclays Capital Global Treasury ex U.S.; REITs – NAREIT ALL REITs; Hdg Fnds – HFRI FOF: Diversified Index; Cash – Merrill Lynch 91-day Tbill. Data as of 12/31/2021. Source: Morningstar Direct.

U.S. ECONOMIC PROJECTIONS

FEDERAL RESERVE BOARD MEMBERS & BANK PRESIDENTS

		2021	2022	2023	2024	LONGER RUN*
GDP	December 2021	5.5%	4.0%	2.2%	2.0%	1.8%
	September 2021	5.5%	3.8%	2.5%	2.0%	1.8%
	June 2021	7.0%	3.3%	2.4%	-	1.8%
Unemployment Rate	December 2021	4.3%	3.5%	3.5%	3.5%	4.0%
	September 2021	4.8%	3.8%	3.5%	3.5%	4.0%
	June 2021	4.5%	3.8%	3.5%	-	4.0%
Core PCE Inflation	December 2021	4.4%	2.7%	2.3%	2.1%	
	September 2021	3.7%	2.3%	2.2%	2.1%	
	June 2021	3.0%	2.1%	2.1%	-	
Federal Funds Rate	December 2021	0.1%	0.9%	1.6%	2.1%	2.5%
	September 2021	0.1%	0.3%	1.0%	1.8%	2.5%
	June 2021	0.1%	0.1%	0.6%	-	2.5%
# of implied 25 bps rate changes year	December 2021	0	3	3	2	
	September 2021	0	1	3	3	
	June 2021	0	0	2	-	

*Longer-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: Federal Reserve.
Data as of 9/22/2021. Past performance is not an indicator of future results.

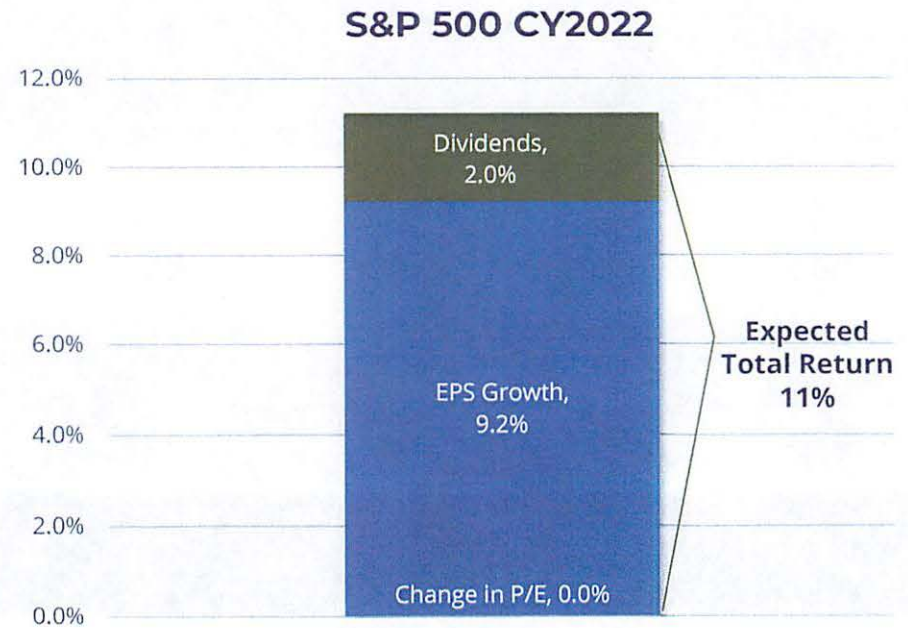
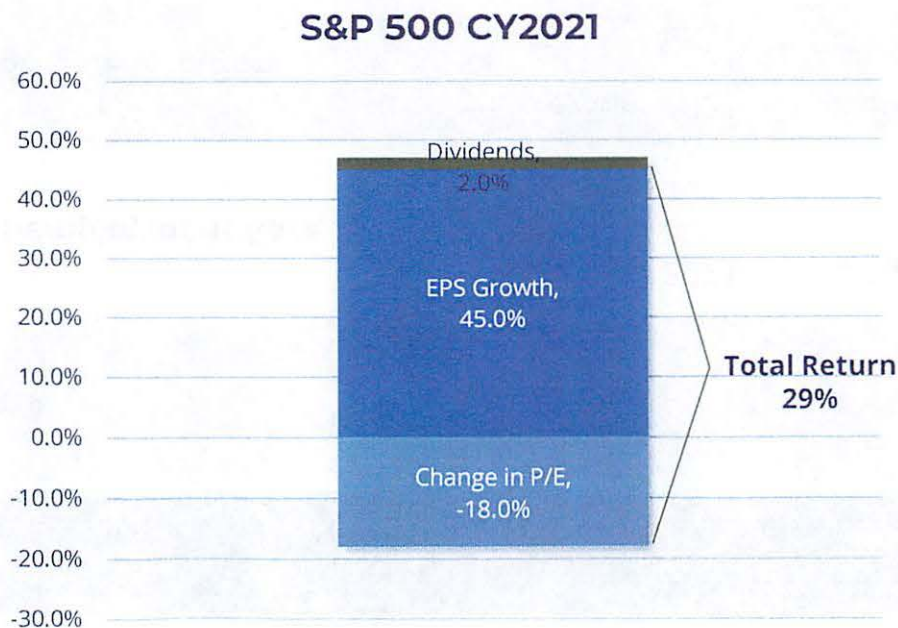


LOWER EXPECTED RETURNS FOR EQUITIES IN 2022

2021 market growth was mainly attributable to earnings growth. Valuations contracted over the course of the year, though they remain elevated by most valuation measures.

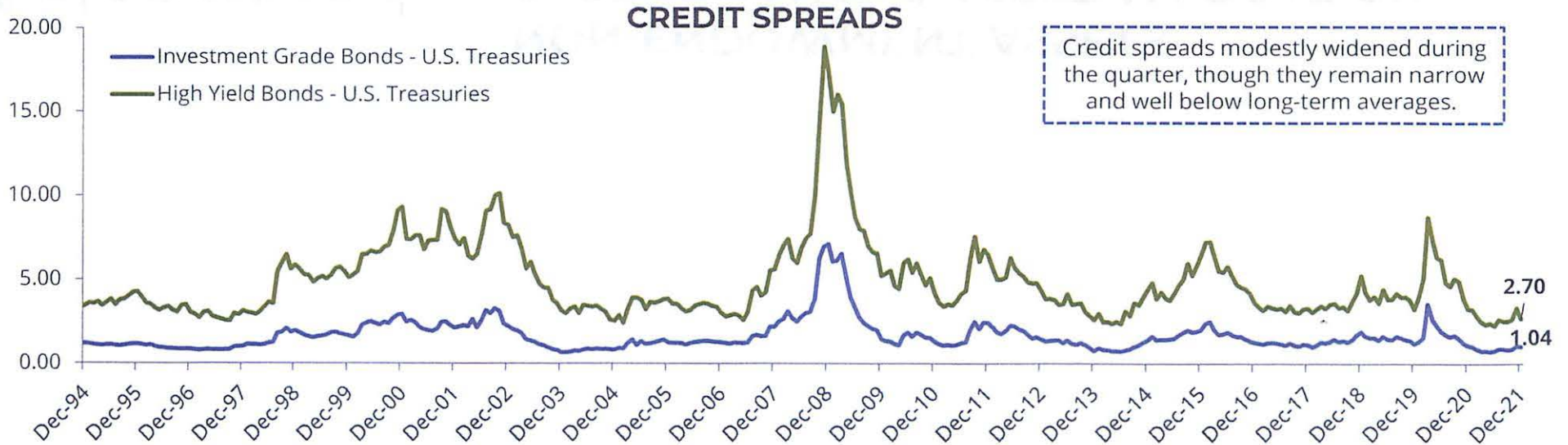
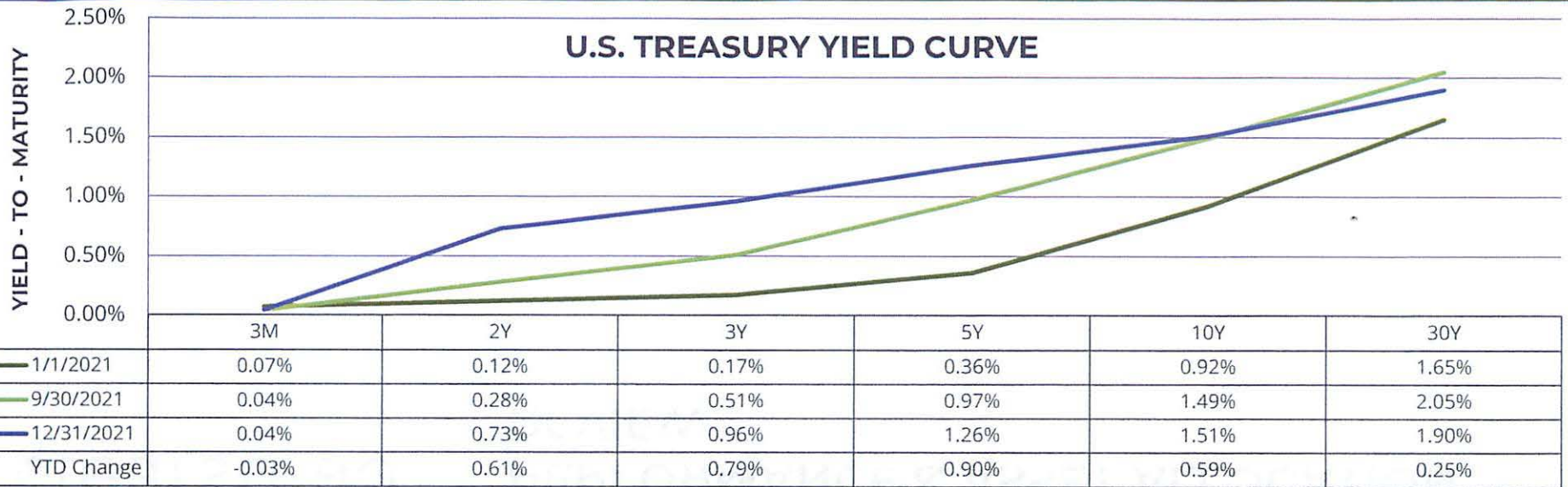
Our expectations for 2022 are lower returns compared to 2021, though still respectable; primary risks stem from a further contraction in the P/E multiple due to inflationary and profit margins.

Dividends accounted for only 7% of total return in 2021, and we expect they will account for a larger percentage of returns for 2022.



Source: Clearstead, Bloomberg LP, Factset Earnings Insight, 2022 Consensus EPS growth, forecasted dividend yield for S&P 500, Past performance is not an indicator of future results. Current performance data may be lower or higher than the performance data presented.

FIXED INCOME: LOW YIELD ENVIRONMENT PERSISTS



Source: Bloomberg. Data as of 12/31/2021. US Treasuries - BarCap US Gov't 10-Yr Treasury; Investment Grade Bonds - BarCap BAA Corp; High Yield Bonds - BarCap US High Yield. Past performance is not an indicator of future results.



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

NON-ENDOWMENT PERFORMANCE REVIEW (AS OF 12/31/2021)

NON-ENDOWMENT ASSETS	MARKET VALUE (\$MM)	QTD	YTD	1 YR	2 YR	3 YR	5 YR	7 YR	10 YR	2020	2019	2018	SINCE INCEPTION ⁴
Total Non-Endowment Assets	\$87.274	2.4%	7.8%	7.8%	8.7%	9.6%	6.9%	5.4%	5.0%	9.5%	11.5%	-1.5%	4.5%
<i>Benchmark¹</i>		1.4%	4.3%	4.3%	5.1%	6.3%	4.7%	3.8%	3.5%	5.9%	8.7%	-0.4%	3.4%
Operating & Short-Term Pool	\$20.231	0.1%	0.1%	0.1%	0.6%	1.2%	1.2%	0.9%	0.6%	1.1%	2.4%	1.7%	0.6%
<i>Benchmark²</i>		0.0%	0.0%	0.0%	0.4%	1.0%	1.2%	0.9%	0.6%	0.8%	2.3%	1.9%	0.6%
Long-Term Pool	\$67.043	2.9%	9.5%	9.5%	9.1%	11.1%	7.9%	6.3%	6.3%	8.8%	15.3%	-3.4%	6.0%
<i>Benchmark³</i>		2.5%	7.9%	7.9%	8.9%	10.7%	7.7%	6.2%	6.0%	10.0%	14.2%	-2.4%	5.6%

Strong absolute and relative calendar year results.

A majority of active managers outpaced their respective benchmarks or performed in-line.

U.S. equity was the best performing asset class within the pool, returning +26.9% (vs. Russell 3000 +25.7%) in CY21.

Fixed Income positioning protected against rising interest rates returning a modest positive result (+0.1%) while core fixed income (Bloomberg Aggregate Index) was down -1.5%.

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.

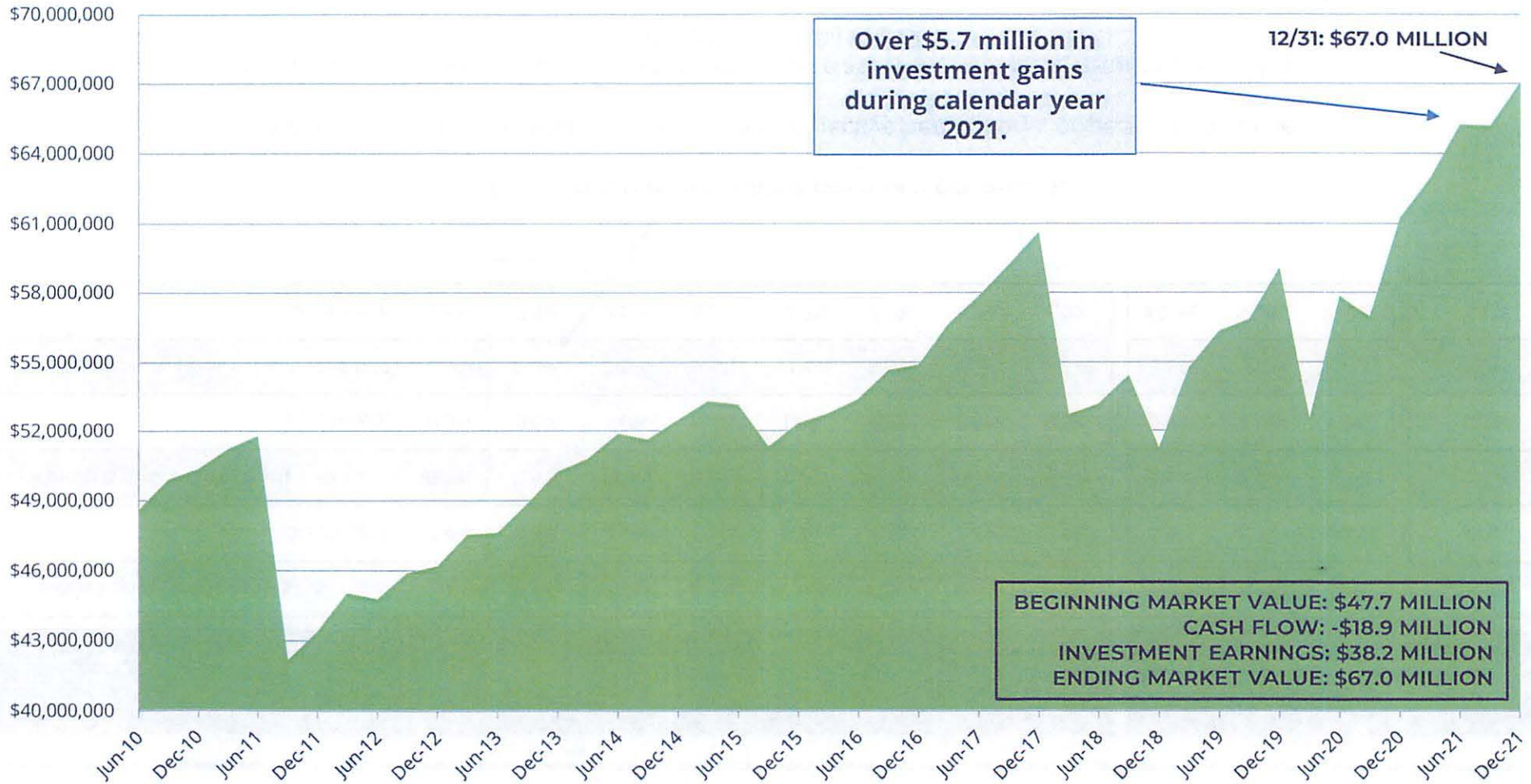
2) 95% BofA Merrill Lynch 91-Day T-Bill / 5% Barclays 1-3 Yr. Govt.

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.

ATTRIBUTION OF MARKET VALUE CHANGE: LONG-TERM POOL

**LONG-TERM POOL MARKET VALUE CHANGE
(07/01/2010 - 12/31/2021)**





ASSET ALLOCATION GUIDELINES EDIT

EXECUTIVE SUMMARY (ACTION)

YSU's Non-Endowment Asset Allocation Guidelines outlines the investment strategy for the operating/short-term pool and long-term / reserve pool funds.

With significant growth in long-term pool assets over the past decade coupled with today's capital markets environment, it is prudent to evolve the guidelines to today's investment strategy and opportunity set.

Below summarizes the changes to the guidelines that Clearstead recommends:

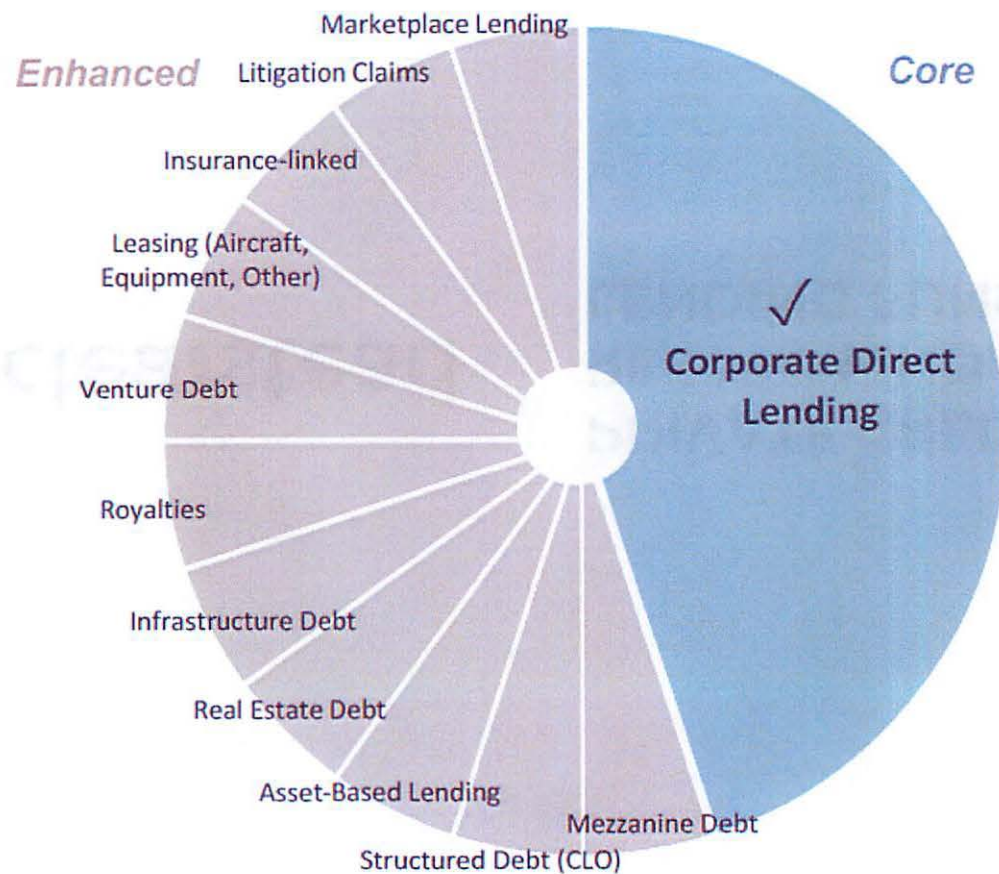
TOPIC	CHANGE / REASONING
Total asset ranges of operating / short-term pool vs. long-term pool	<p>Aligns with growth of long-term pool and its proportion of total Non-Endowed investment assets;</p> <p>Factors into account current operational cash flow quarter-over-quarter and its effects on total assets;</p> <p>ORC compliance of an average of 25% in cash / govt securities is monitored and has been maintained, though operational cash flows have led to pool allocations outside of ranges periodically</p>
Update equity / alternative guidelines for current investment opportunities	<p>Allow for consideration of different investment opportunities that fit the non-endowment investment strategy in today's world (e.g., floating rate private debt investment strategy)</p>
Update to benchmarking	<p>Updates benchmarking language to current indices that have been acquired or formally retitled</p>



**PRIVATE CREDIT INVESTMENT MANAGER
RECOMMENDATION: H.I.G. PRINCIPAL
LENDING FUND**

PRIVATE DEBT AS AN ASSET CLASS

Private Debt Opportunity Set¹



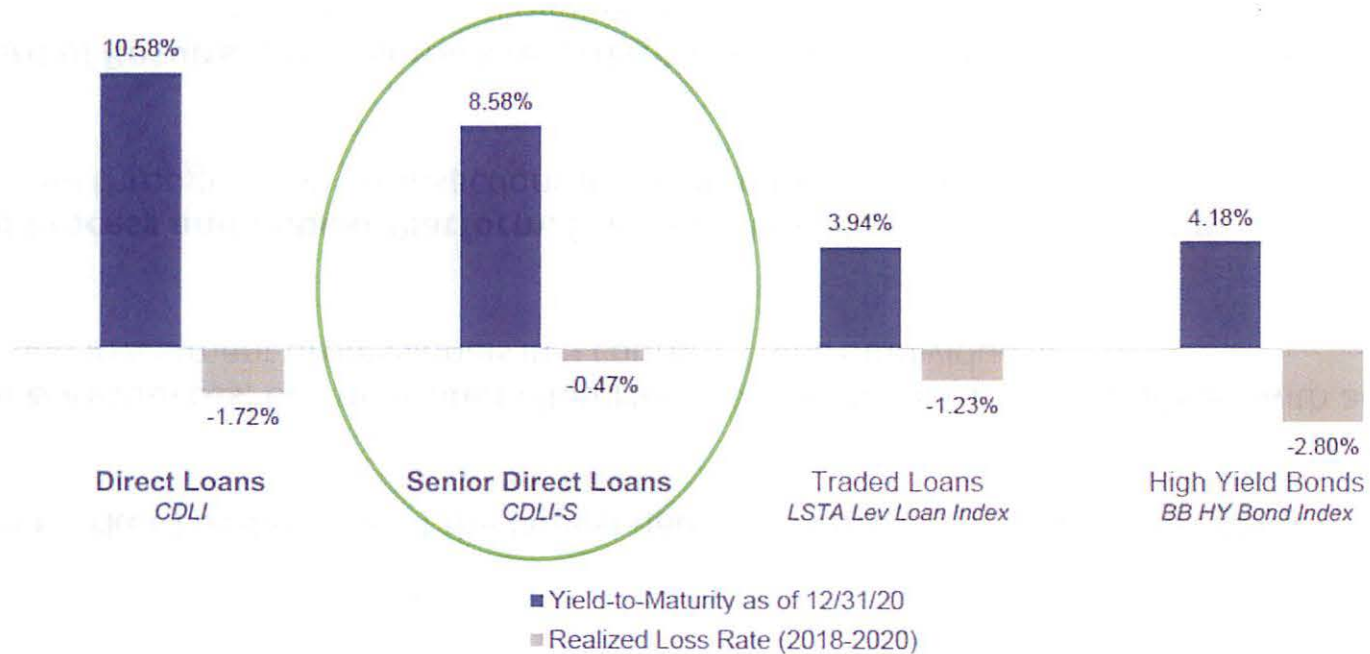
Corporate Direct Lending serves as a core allocation in institutional portfolios:

1. **Largest** sector (~\$800 billion)
2. **Broad diversification** across borrowers and industries
3. Floating rate loans help to **avoid interest rate risk**²
4. Principal security, with covenant protections, may **limit risk**³
5. Short effective loan life of three years offers **opportunity for liquidity** (33% of principal has been returned annually)⁴

Source: Cliffwater, March 2021

MORE YIELD/LESS RISK

Direct Lending has continued to provide attractive floating rate, loss adjusted yields for investors.



Provided for informational purposes only and should not be construed as a recommendation or advertisement. The Yield-to-Maturity and Realized Loss Rate is being provided by Cliffwater as an estimate and Clearstead is not representing that these results will or can be achieved. Actual results may be less or greater than information shown. Past performance is not an indicator of future results.

The Cliffwater Direct Lending Index ("CDLI") and the Cliffwater Direct Lending Index - Senior ("CDLI-S") seek to measure the unlevered, gross of fees performance of U.S. middle market corporate loans, as represented by the underlying assets of public and private Business Development Companies ("BDCs"), subject to certain eligibility requirements. Please see disclosures at the end of this presentation.

PRIVATE CREDIT RECOMMENDATION

RECOMMENDATION: Clearstead recommends a \$2.6 million investment in the H.I.G. WhiteHorse Principal Lending strategy for the University. This represents a 4% allocation of the University's Long-Term investment portfolio.

WHY INVEST IN H.I.G. WHITEHORSE?

- **Established Market Leader:** One of the largest dedicated lower to middle market platforms
- **Deep Team & Resources:** 60+ dedicated WhiteHorse professionals across 12 offices, with access to broader H.I.G. team and investment professionals in 9 countries (400+ individuals)
- **Disciplined Process and Robust Platform:** Extensive due diligence and monitoring process; Over \$31 billion deployed through 2,600+ transactions in credit markets since 2004
- **Track Record of Results:** 25+ year track record with lower to middle market companies and sponsors; Annualized, double digit net returns with minimal realized losses within their direct lending portfolio.

EXECUTIVE SUMMARY: H.I.G. WHITEHORSE PRINCIPAL LENDING FUND

Overview

- H.I.G. is reopening its Principal Lending Fund
- **Investors will buy into a pre-existing diversified pool of 58 unrealized loans, currently generating fund net IRR of 20.2%**

Investment Strategy

- H.I.G. WhiteHorse Principal Lending Fund seeks to provide senior secured loans to performing U.S. lower to middle market borrowers with \$8-\$40 million of EBITDA
- Provide customized credit solutions to larger non-sponsor and off-the-run / less prolific sponsor owned companies
- Structure strong downside protection to deliver consistent returns throughout credit cycles
- Originations team focused on sourcing both non-sponsor companies and private equity firms that are sub \$500 million in fund size (400+ smaller private equity firms)
- Fund anticipates using 1.5x leverage for direct lending deals
- **Investment Target: net return 11%–13%**

Attractive Track Record

- Leverage H.I.G. Capital's platform, scale, and established market presence with lower to middle market companies
- Invested \$31 billion in credit assets across direct lending, broadly syndicated loans, and stressed /distressed
- **H.I.G. WhiteHorse U.S. Portfolio low annual default rate of 1.44% with 0.0% realized loss ratio based on 119% recovery rate on defaulted loans**
 - Principal Lending Fund has invested in 69 transactions, including realized loans, generating a net IRR of 20.2%
 - Average leverage of 4.4x and loan-to-value (LTV) of 49.8%

Deep Team

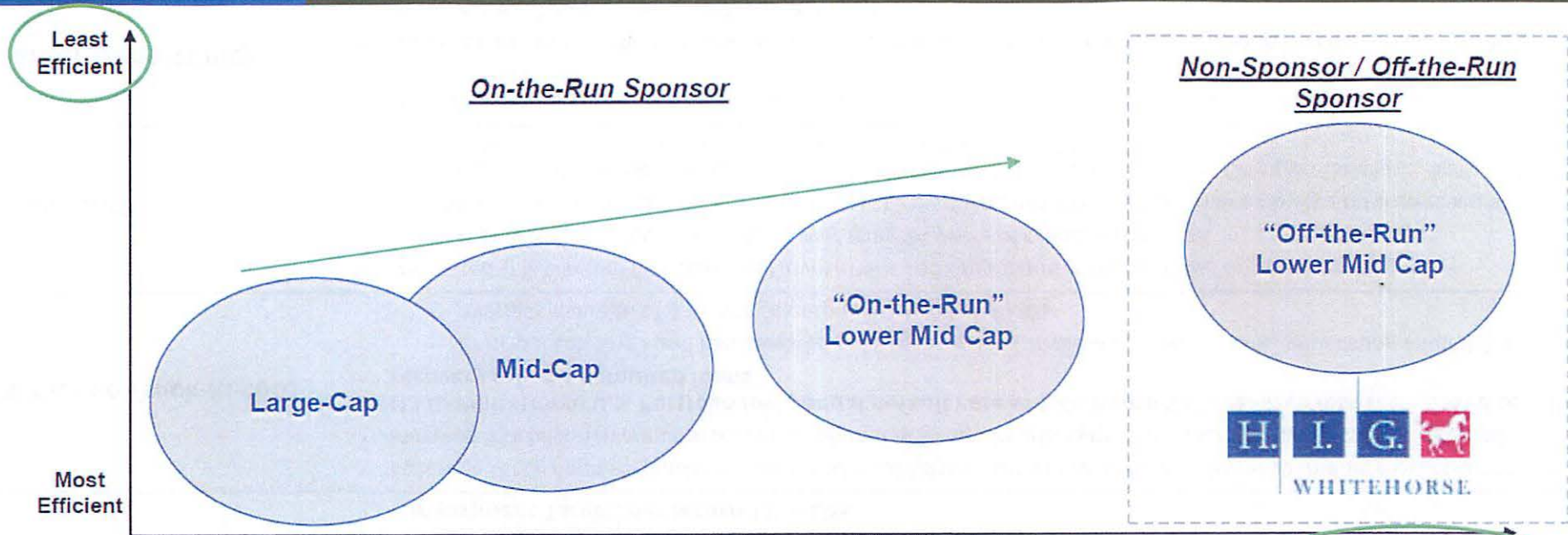
- Dedicated U.S. team of 60+ seasoned investment and origination professionals
 - Highly experienced senior team, averaging 24 years of credit experience
- Capitalize on resources and expertise of the H.I.G. platform, including global private equity and distressed teams
- Complete market coverage, with market professionals in Miami, Atlanta, Boston, Chicago, Cleveland, Dallas, New York, Los Angeles, San Francisco, Stamford, Toronto and Washington D.C.

Market Opportunity

- Supply/Demand imbalances and market/informational inefficiencies create consistent opportunity in lower to middle market direct lending
- Non-sponsor and off-the-run sponsor segments are relatively underserved, making them comparatively attractive
- Less covered than the overcrowded larger middle market issuers

Source: H.I.G. Capital.

H.I.G. WHITEHORSE: PRIVATE CREDIT MARKET SEGMENTATION



Most Competitive

Large Cap
<ul style="list-style-type: none"> EBITDA \$100mm or greater No covenants Weak documents Highly liquid / competitive LTV typically 60% - 75% \$2.5bn+ PE Fund Size

Mid Cap

Mid Cap
<ul style="list-style-type: none"> EBITDA \$40mm-\$100mm No covenants / covenant-"loose" Weak documents 10-30 competitors per deal LTV 50%-75% PE Fund Size > \$1.0bn

"On-the-Run"
Lower Mid Cap

"On-the-Run" Lower Mid Cap
<ul style="list-style-type: none"> EBITDA \$10-\$40mm Covenants for borrowers < \$40mm Moderate documents 10-30 competitors per deal LTV 50% - 65%

Least Competitive

"Off-the-Run"
Lower Mid Cap

"Off-the-Run" Lower Mid Cap
<ul style="list-style-type: none"> EBITDA \$8-\$40mm True financial covenants "Old fashioned" / tight documents 0-5 competitors per deal LTV 40%-60% Non-sponsor backed or PE Fund Size < \$1.0bn

Source: H.I.G. Capital.

H.I.G. WHITEHORSE: EXPERTISE IN PRIVATE LENDING

Access to the full spectrum of lower middle market lending opportunities provides compelling risk-adjusted returns.

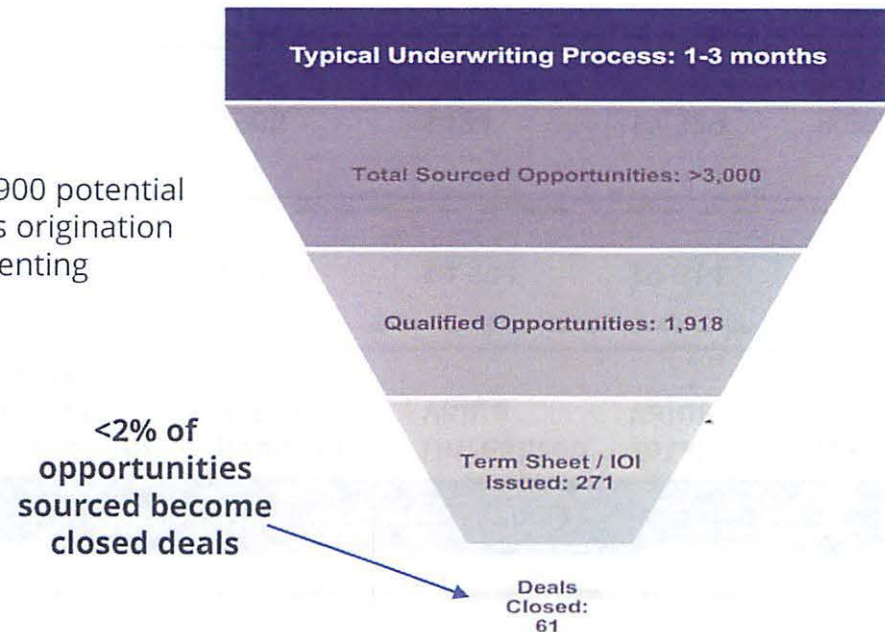
SIGNIFICANT TRACK RECORD IN MIDDLE MARKET DIRECT LENDING

# of Transactions	157
Levered Net IRR	12.8%
Secured Debt	99%
Loan-to-Value	49%

SIGNIFICANT SCALE IN SECURED LOANS (SINCE '04)

Capital Invested	\$31 billion
# of Transactions	2,600+
Dedicated Investment Professionals	60+
# of Offices	12 WhiteHorse Offices

Disciplined process: Identified over 3,000 and evaluated over 1,900 potential investment opportunities, demonstrating the strength of H.I.G.'s origination infrastructure. Underwriting discipline, with closed deals representing approximately 2% of opportunities sources



Source: H.I.G. Capital. As of 12/31/2020. Past performance is not a guarantee of future results.

H.I.G. WHITEHORSE: PERFORMANCE TRACK RECORD

H.I.G. WHITEHORSE U.S. PORTFOLIO / LENDING (AS OF 9/30/2021 – IN \$ MILLIONS)							
Fund	Vintage	Total Cmmt Amount	Permanent Capital Invested	Realized Value	Unrealized Value	Total Value	Net IRR
H.I.G. WhiteHorse U.S. Portfolio	2010-Present	\$6,154	\$8,175	\$6,020	\$4,594	\$9,614	12.5%
H.I.G. WhiteHorse Direct Lending Fund (Non-Sponsor – Unlevered)	2016	\$862	\$1,079	\$905	\$424	\$1,329	9.3%
H.I.G. WhiteHorse Principal Lending Fund (Sponsor – Levered)	2018	\$925	\$1,408	\$350	\$1,177	\$1,527	20.2%
H.I.G. WhiteHorse Direct Lending Fund (Non-Sponsor – Unlevered)	2020	\$1,656	\$238	\$56	\$201	\$257	n/a

Source: H.I.G. Capital.

Net returns shown for the H.I.G. WhiteHorse U.S. portfolio are pro forma to reflect the fee structure that is charged by H.I.G. WhiteHorse Principal Lending Fund. Please refer to Endnote 3 for additional information.

Net returns shown for H.I.G. WhiteHorse Lending reflect the actual fee structures charged. See Endnote 9 for additional information.

Principal lending commitment amount includes commitments to H.I.G. WhiteHorse Equity Side-Car, L.P., an H.I.G. WhiteHorse Principal Lending Fund Parallel Investment Entity established primarily to make equity and equity-related co-investments in middle market companies alongside other pooled investment vehicles controlled by H.I.G.

Direct lending fund total commitments includes affiliated SMAs.

Past performance is not a guarantee of future results.



KEY TERMS

REPRESENTATIVE TERMS FOR THE FUND

Fund	H.I.G. WhiteHorse Principal Lending Fund
Commitment Period	Evergreen structure with an initial three year commitment period
Harvest Period	Evergreen structure with a harvest period, if triggered, of three years after the end of the Commitment Period (subject to two one-year extensions at the GP's discretion)
Management Fee	1.25% per annum on invested capital in the Fund
Preferred Return	7% per annum (compounded quarterly)
Carried Interest	15% in the Fund
Distributions	Distribution of net cash proceeds quarterly (Fund only)
Catch Up	100% for credit fund
Fund Leverage	1.5x
GP Commitment	2.0%
Legal Counsel	McDermott, Will & Emery
Auditor	Deloitte & Touche



PORTFOLIO RECOMMENDATIONS

PORTFOLIO RECOMMENDATIONS (ACTION)

YOUNGSTOWN STATE UNIVERSITY

AS OF JANUARY 31, 2022

	TICKER	MARKET VALUE (CURRENT)	% OF PORTFOLIO	CHANGES	MARKET VALUE (POST CHANGES)	% OF PORTFOLIO	POLICY TARGET	POLICY RANGE	TACTICAL +/-
Total Operating & Short Term		\$20,212,390	100.0%	\$0	\$20,212,390	100.0%	100.0%		
Operating Assets		\$20,211,466	100.0%		\$20,211,466	100.0%		60-100%	
JPMorgan MM / Fed Hermes Gov Ob	JTSXX	\$20,120,278	99.5%		\$20,120,278	99.5%			
Star Plus*	-	\$0	0.0%		\$0	0.0%			
Star Ohio*	-	\$91,188	0.5%		\$91,188	0.5%			
Short-Term Assets		\$924	0.0%		\$924	0.0%		0-40%	
Vanguard Short-Term Federal Adm	VSGDX	\$924	0.0%		\$924	0.0%			
Total Long Term Reserves Pool		\$64,982,203	100.0%	\$0	\$64,982,203	100.0%	100.0%		
Domestic Equity		\$20,372,112	31.4%		\$20,372,112	31.4%	27.0%	20-35%	
Large Cap		\$13,637,463	21.0%		\$13,637,463	21.0%			
Vanguard Instl Index	VINIX	\$13,637,463	21.0%		\$13,637,463	21.0%			
Small/Mid Cap		\$6,734,649	10.4%		\$6,734,649	10.4%			
Vanguard Mid Cap Index Adm	VIMAX	\$3,431,234	5.3%		\$3,431,234	5.3%			
Loomis Sayles Small Growth N2	LSSNX	\$1,523,889	2.3%		\$1,523,889	2.3%			
Victory Integrity Small Cap Value Y	VSVIX	\$1,779,526	2.7%		\$1,779,526	2.7%			
International Equity		\$5,679,860	8.7%		\$5,679,860	8.7%	8.0%	0-15%	
William Blair International Growth I	BIGIX	\$2,647,761	4.1%		\$2,647,761	4.1%			
Dodge & Cox International Stock	DODFX	\$3,032,098	4.7%		\$3,032,098	4.7%			
Total Equity		\$26,051,972	40.1%		\$26,051,972	40.1%	35.0%	25-45%	
Alternatives		\$7,019,133	10.8%		\$7,511,500	11.6%	15.0%	0-20%	
JPMorgan Strategic Income Opps Fd	JSOSX	\$1,043,493	1.6%	-\$1,043,493	\$0	0.0%			
Allspring Adv Absolute Return	WABIX	\$1,064,140	1.6%	-\$1,064,140	\$0	0.0%			
H.I.G. Principal Lending Fund	-	\$0	0.0%	\$2,600,000	\$2,600,000	4.0%			
Weatherlow Fund*	-	\$4,911,500	7.6%		\$4,911,500	7.6%			
Fixed Income		\$31,892,504	49.1%		\$31,400,137	48.3%	50.0%	35-75%	
Short Term Fixed Income		\$18,616,092	28.6%		\$18,616,092	28.6%	30.0%	25-45%	
YSU Short Term Bond	-	\$12,066,972	18.6%		\$12,066,972	18.6%			
Lord Abbett Short Duration	LLDYX	\$4,632,488	7.1%		\$4,632,488	7.1%			
DFA Five-Year Global	DFGBX	\$1,916,632	2.9%		\$1,916,632	2.9%			
Intermediate Fixed Income		\$13,276,412	20.4%		\$12,784,045	19.7%	20.0%	10-30%	
JPMorgan Core Bond Fund R6**	JCBUX	\$5,545,828	8.5%	-\$492,367	\$5,053,461	7.8%			
YSU Intermediate Term Fixed	-	\$4,495,630	6.9%		\$4,495,630	6.9%			
Prudential High Yield Bond R6	PHYQX	\$3,234,954	5.0%		\$3,234,954	5.0%			
Cash & Cash Equivalents		\$18,593	0.0%		\$18,593	0.0%	0.0%	0-5%	
Equity Account Cash	-	\$18,593	0.0%		\$18,593	0.0%			
Total University Assets		\$85,194,593			\$85,194,593				

SUMMARY OF RECOMMENDATIONS

- Invest \$2.6 million in the H.I.G. Principal Lending Fund, which will be invested over the next 12-15 months
- Fund new investment strategy from current liquid alternatives and core fixed income

*As of 12/31/2021





APPENDIX



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

ENDOWMENT HOLDINGS

YSU ENDOWMENT (HUNTINGTON)

- **Equity Mutual Funds** – 14% (4-6 Mutual Funds & ETFs)
- **Stocks** – 62% (40-60 U.S. Large/Mid-Cap Stocks)
- **Alternatives** – 3% (Real Estate Mutual Fund)
- **Fixed Income Mutual Funds** – 5% (Federated Total High Yield, Invesco Preferred Portfolio, Vanguard Inflation Pro Sec)
- **Individual Bonds** – 13% (8-12 Individual Bonds: U.S. Corporate / Gov't / Asset Backed Debt)
- **Cash** – 3%

ENDOWMENT ASSETS: PERFORMANCE & ASSET ALLOCATION (AS OF 12/31/2021)

ENDOWMENT ASSETS	MARKET VALUE (\$MM)	ASSET ALLOCATION	COMPOSITION	QTD	YTD	1 YR	2 YR	3 YR	5 YR	7 YR	2020	2019	2018	SINCE INCEPTION ³
YSU Endowment Fund	\$15.852	76% Equity / 3% Alts / 21% Fixed Income & Cash	Stocks, Bonds, Mutual Funds	9.2%	20.9%	20.9%	18.6%	20.3%	13.6%	10.8%	16.3%	23.8%	-4.8%	11.1%
			Benchmark ¹	8.2%	20.6%	18.4%	20.7%	14.8%	12.1%	13.2%	16.2%	25.6%	-3.1%	12.8%
			Benchmark ²	6.6%	15.9%	15.9%	15.3%	17.5%	12.6%	10.3%	16.2%	22.2%	-2.3%	10.9%

COMPLIANCE

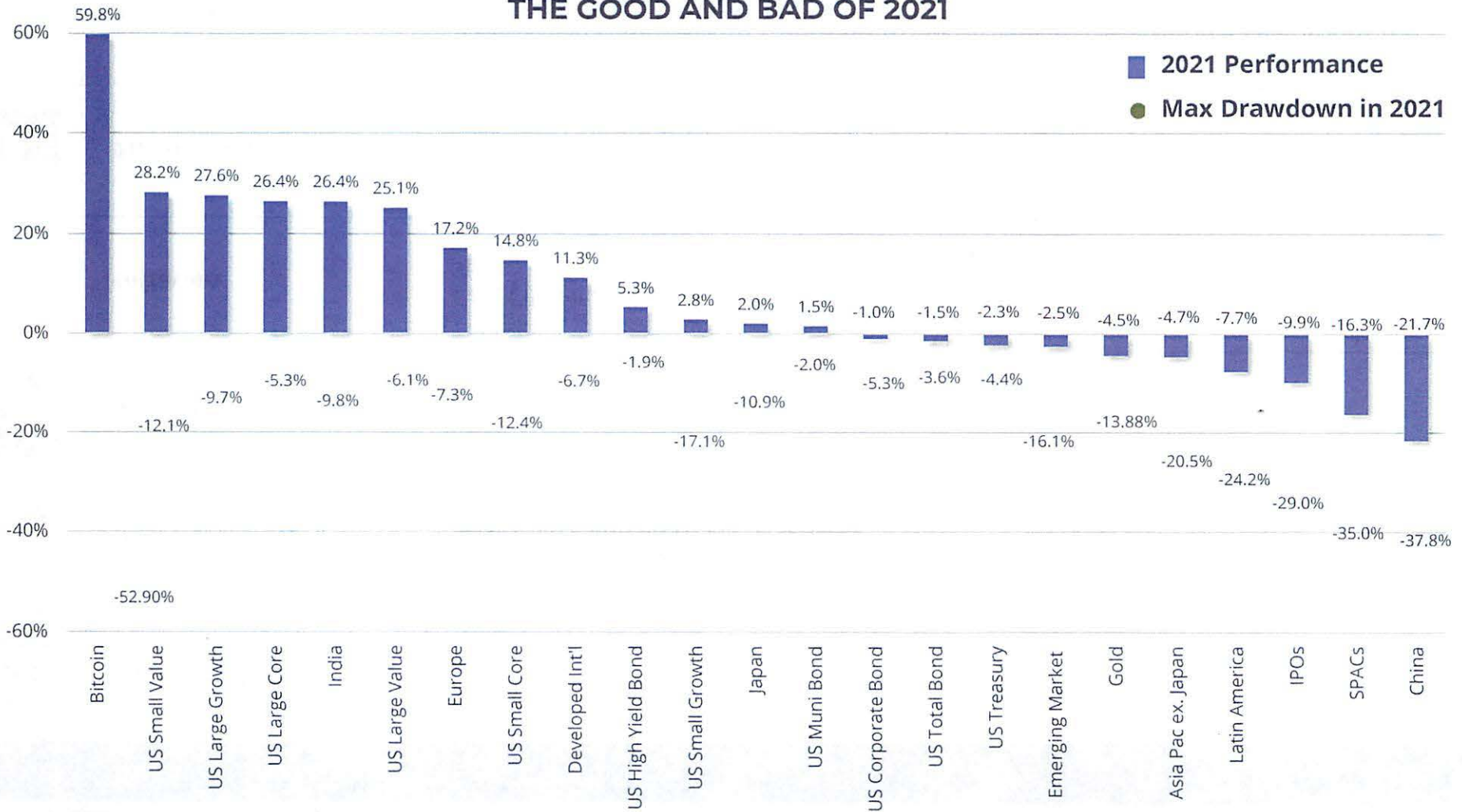
- Asset Allocation Guidelines: 70% Equities (60-80%) / 30% Cash & Fixed Income (20-40%)
 - YSU Endowment (In Compliance at Quarter End)

1) Benchmark: 70% S&P 500 / 25% BBg US Aggregate.
 2) Benchmark: 60% S&P 500 / 40% BBg US Aggregate.
 3) Inception date: 06/2013.

 **clearstead** **SUPPORTING INFORMATION**







2021 WINNERS AND LOSERS

THE GOOD AND BAD OF 2021



Source: Clearstead, Bloomberg LP, as of 12/31/2021, All returns in US Dollar terms. Past performance is not an indicator of future results. US Small Value= Russell 2000 Value, India=MSCI India, US Large Growth= Russell 1000 Growth, Europe=MSCI Europe, US Large Core= Russell 1000, US Large Value= Russell 1000 Value, US Small Core= Russell 2000, Japan=MSCI Japan, Developed Int'l=MSCI EAFE, US Small Growth= Russell 2000 Growth, US High Yield Bond= Bloomberg High Yield, Emerging Market=MSCI Emerging Market, US Muni Bond= Bloomberg Muni, Asia Pac ex. Japan=MSCI Asia Pacific ex. Japan, US Corporate Bond= Bloomberg Corporate, US Total Bond= Bloomberg Aggregate, US Treasury= Bloomberg US Treasury, Latin America= MSCI Latin America, China= MSCI China, Bitcoin= Spot Bitcoin Price, Gold= iShares Gold ETF (GLD).

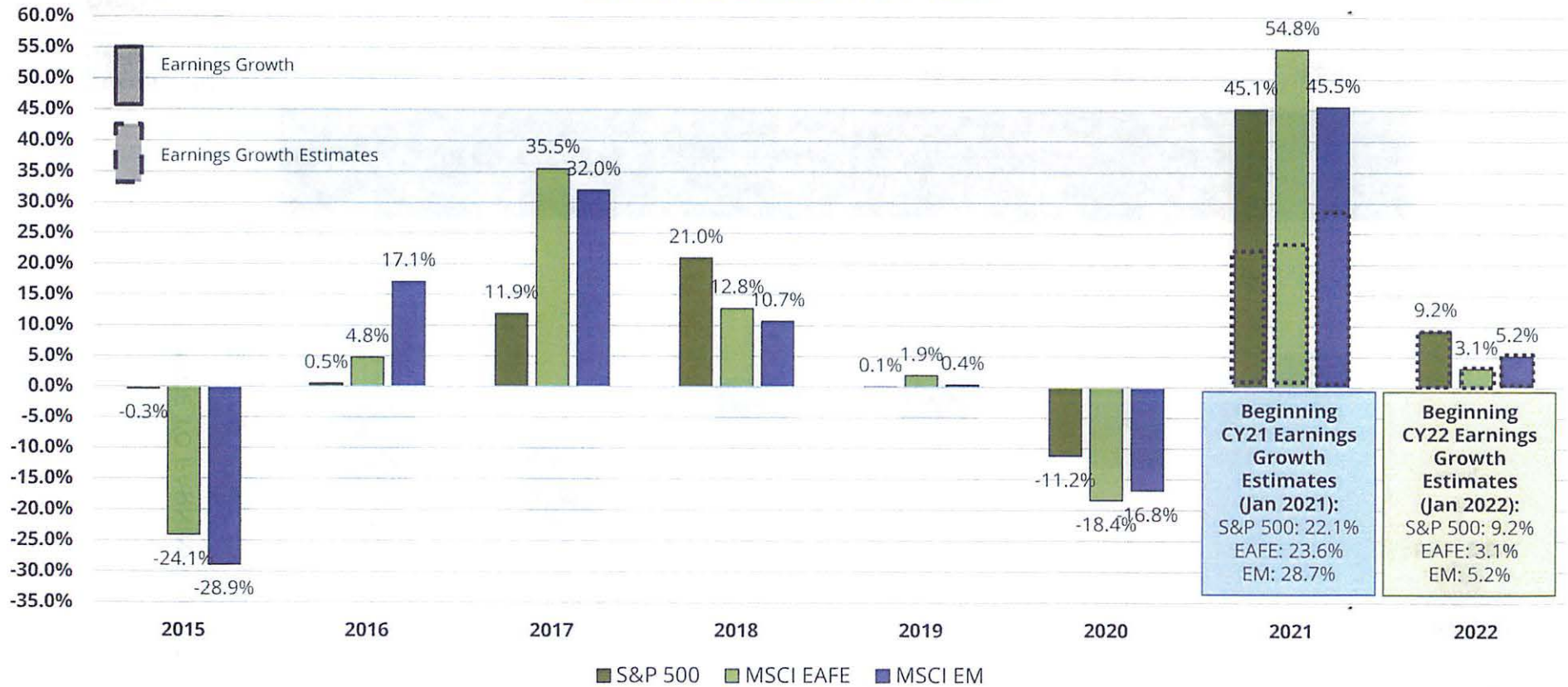
2022 ECONOMIC OUTLOOK

AREA	EXPECTATIONS
 Labor Markets	U.S. to average 250k-500k jobs per month in 2022; unemployment rate of 4.2% likely to be below 4% by year-end
 Manufacturing	Manufacturing remains in economic expansion; rate of change may slow as economy normalizes away from goods and towards services
 Services	Services industry remains solidly in economic expansion
 Inflation	Core CPI remains elevated in the first half of the year, but is likely to move lower throughout 2022
 Fixed Income Markets	Rates likely to move higher as Fed begins to unwind QE and start lifting Fed Funds rate
 Equity Markets	Positive momentum likely to carry forward though volatility should be more of a fixture in markets as compared to 2021

Source: Clearstead, as of 12/31/2021.

GLOBAL EARNINGS OUTLOOK

EARNINGS OUTLOOK BY YEAR

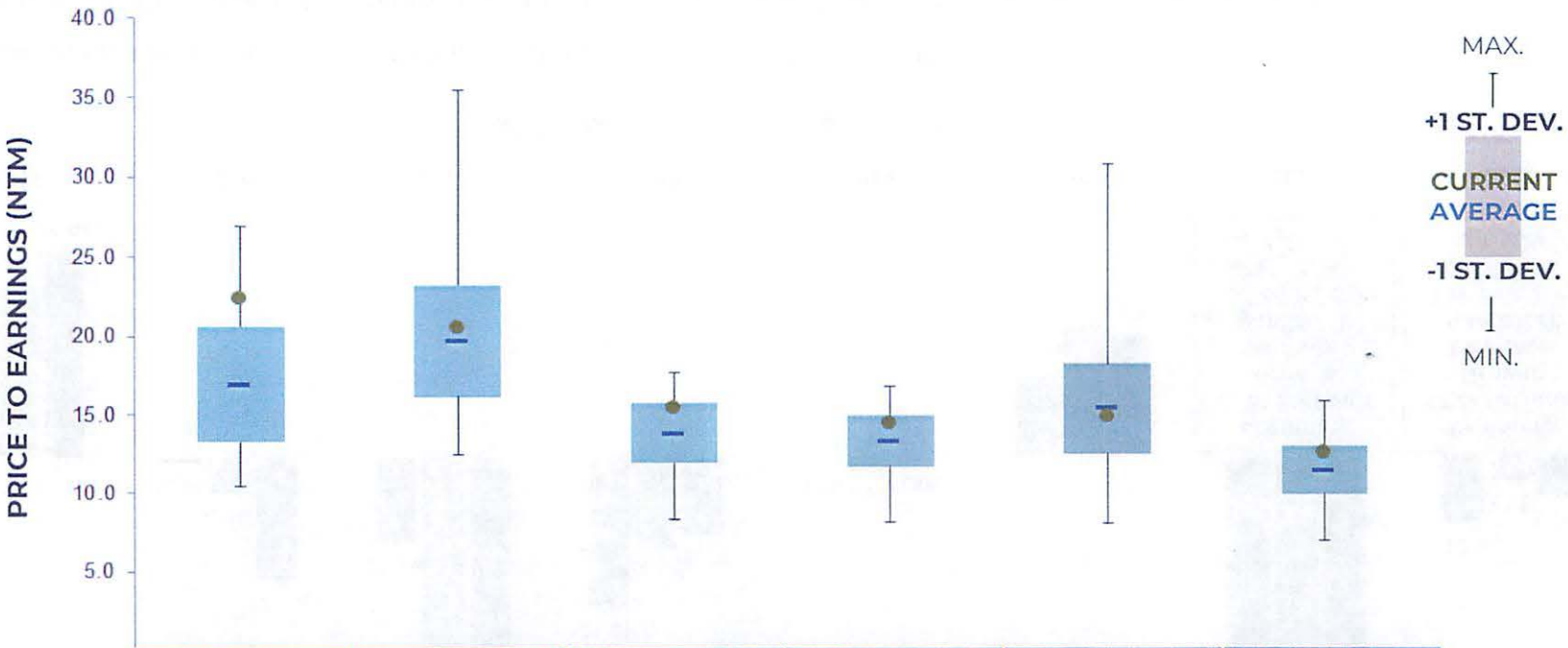


- Earnings expectations edged up in the final months of the calendar year for 2021 EPS
- Earnings for CY2022 are “in-line” with longer-run (pre-pandemic) trends and are largely predicated on above-trend global GDP growth, stable profit margins, and gradual normalization of activity despite the persistence of COVID-19

Source: Bloomberg, FactSet, Goldman Sachs.
Data as of 12/31/2021.



GLOBAL EQUITY VALUATIONS



	MSCI USA	MSCI USA SMALL	MSCI EAFE	MSCI ACWI EX USA	MSCI ACWI EX USA SMALL	MSCI EM
Current P/E (NTM)	22.3	20.5	15.3	13.8	14.7	12.4
Average P/E (NTM)	16.9	19.6	13.7	13.2	15.2	11.3

Source: Bloomberg as of 12/31/2021. Average taken over full index history. MSCI USA- 1994 - Current; MSCI USA Small- 1994 - Current; MSCI EAFE- 2003 - Current; MSCI ACWI ex USA- 2003 - Current; MSCI ACWI ex USA Small- 1994 - Current; MSCI EM- 2003 - Current.

GLOBAL ECONOMY OUTLOOK: 2022-2023 FORECASTS

	2021	2022 REAL GDP GROWTH ESTIMATES					2023 REAL GDP GROWTH ESTIMATES				
	BBG EST.	IMF	OECD	BBG	GOLDMAN	AVG.	IMF	OECD	BBG	GOLDMAN	AVG.
U.S.	5.6%	5.2%	3.7%	3.9%	3.5%	4.1%	2.2%	2.4%	2.5%	2.2%	2.3%
EU	5.4%	4.4%	4.3%	4.3%	4.3%	4.3%	2.0%	2.5%	2.5%	2.5%	2.4%
China	8.0%	5.6%	5.1%	5.1%	4.7%	5.1%	5.3%	5.1%	5.3%	4.6%	5.1%
Japan	1.8%	3.2%	3.4%	3.4%	2.7%	3.2%	1.4%	1.1%	1.4%	1.6%	1.4%
UK	6.9%	5.0%	4.7%	4.7%	4.7%	4.8%	1.9%	2.1%	2.2%	2.4%	2.2%
India	9.5%	8.5%	8.1%	9.3%	9.2%	8.8%	6.6%	5.5%	7.6%	6.4%	6.5%

The global economy saw a robust bounce-back in 2021 and is expected to continue that trend in 2022 in terms of real GDP growth.

Global GDP growth is expected to remain strong in 2022 and continue decelerating back to pre-pandemic levels.

- Average U.S. GDP growth estimates for 2022 and 2023 are 4.1% and 2.3%, respectively

Source: Clearstead, OECD, Goldman Sachs, Bloomberg. 2021 Projections are Bloomberg Consensus figures except India = IMF figure. Forecasts as of 12/2021.

GLOBAL ECONOMY: PMI LOWER OFF SUMMER PEAK

		Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	12M Trend
Global	Mfg	53.6	54	55.0	55.9	56.0	55.5	55.4	54.1	54.1	54.2	54.2	54.2	
	Serv	51.6	52.8	54.7	57.0	59.5	57.5	56.3	52.8	53.8	55.6	55.6	54.6	
US	Mfg	59.2	58.6	59.1	60.5	62.1	62.1	63.4	61.1	60.7	58.4	58.3	57.7	
	Serv	58.3	59.8	60.4	64.7	70.4	64.6	59.9	55.1	54.9	58.7	58.0	57.6	
Eurozone	Mfg	54.8	57.9	62.5	62.9	63.1	63.4	62.8	61.4	58.6	58.3	58.4	58.0	
	Serv	45.4	45.7	49.6	50.5	55.2	58.3	59.8	59.0	56.4	54.6	55.9	53.1	
UK	Mfg	54.1	55.1	58.9	60.9	65.6	63.9	60.4	60.3	57.1	57.8	58.1	57.9	
	Serv	39.5	49.5	56.3	61.0	62.9	62.4	59.6	55.0	55.4	59.1	58.5	53.6	
Japan	Mfg	49.8	51.4	52.7	53.6	53.0	52.4	53.0	52.7	51.5	53.2	54.5	54.3	
	Serv	46.1	46.3	48.3	49.5	46.5	48.0	47.4	42.9	47.8	50.7	53.0	52.1	
China	Mfg	51.5	50.9	50.6	51.9	52.0	51.3	50.3	49.2	50.0	50.6	49.9	50.9	
	Serv	52.0	51.5	54.3	56.3	55.1	50.3	54.9	46.7	53.4	53.8	52.1	53.1	
India	Mfg	57.7	57.5	55.4	55.5	50.8	48.1	55.3	52.3	53.7	55.9	57.6	55.5	
	Serv	52.8	55.3	54.6	54.0	46.4	41.2	45.4	56.7	55.2	58.5	58.1	55.5	
S. Korea	Mfg	53.2	55.3	55.3	54.6	53.7	53.9	53.0	51.2	52.4	50.2	50.9	51.9	

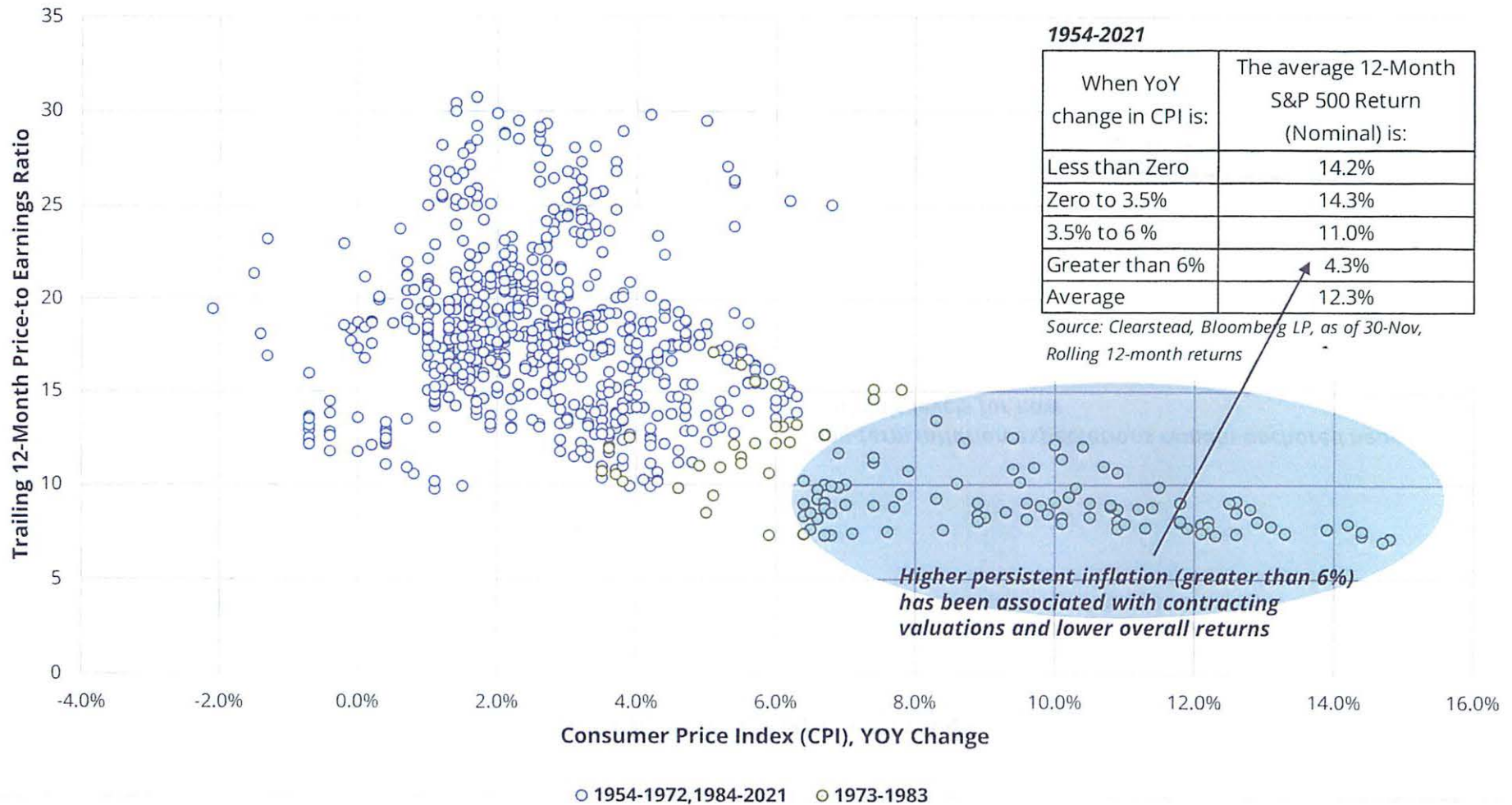
Global PMIs softened in Q4 as the Delta and Omicron COVID-19 variants surged and supply chain issues collectively weakened the global economy.

- Global manufacturing is being primarily impacted by supply-chain disruptions: shipping and trucking challenges or delays in raw or intermediate inputs.
- The service sector in most countries remains tied to dynamics related to COVID-19 and varying restrictions designed to curb outbreaks

Source: Bloomberg, Markit/HIS.
Data as of 12/31/2021.

INFLATION, VALUATIONS, AND EQUITY PERFORMANCE

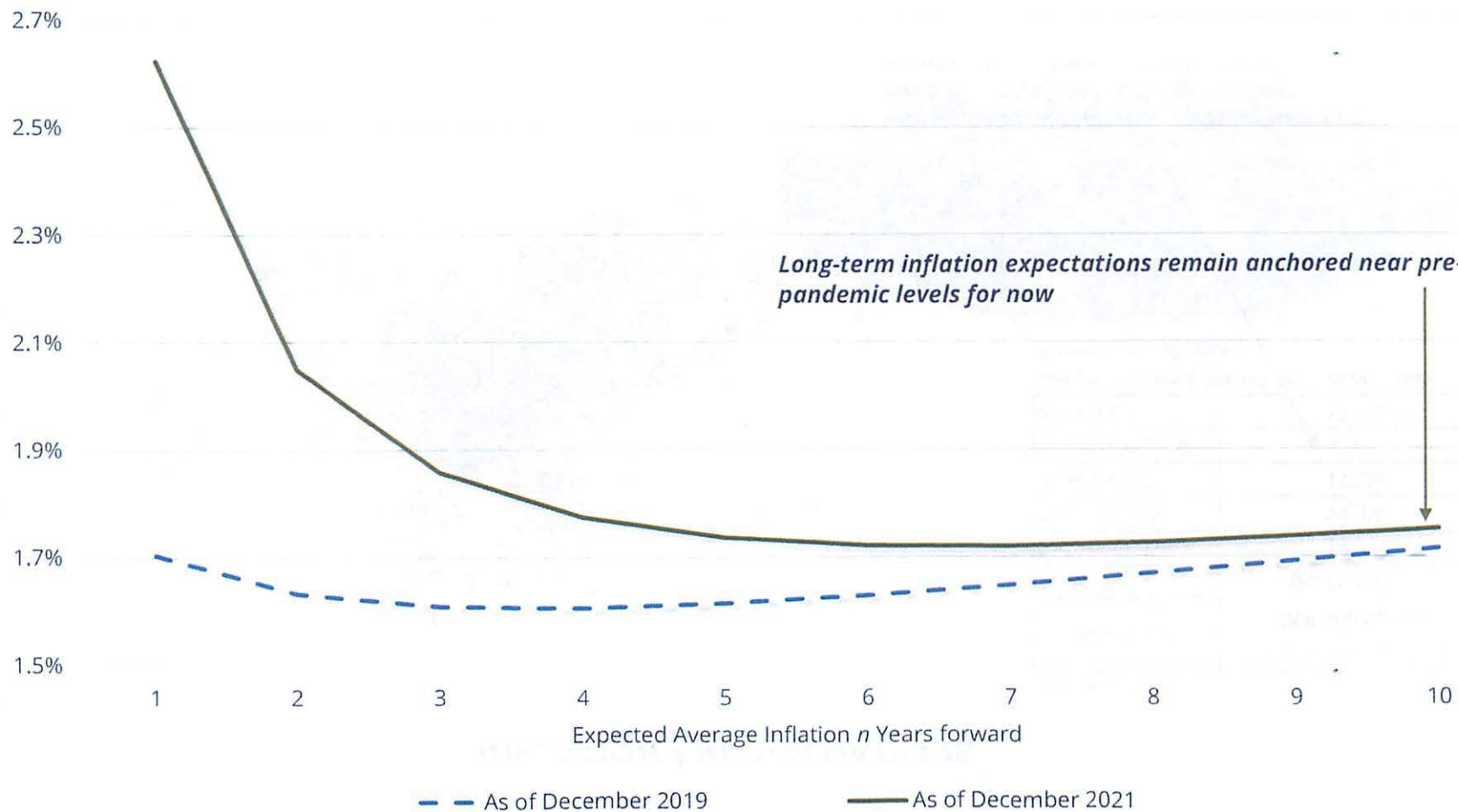
INFLATION AND VALUATIONS



Source: Clearstead, Bloomberg LP, as of 11/30/2021 Past performance is not an indicator of future results.

LONG RUN INFLATION EXPECTATIONS REMAIN CONSISTENT

INFLATION EXPECTATIONS



Source: Clearstead, Cleveland Federal Reserve, as of 12/17/2021.

EXECUTIVE SUMMARY

	Market Value 10/01/2021	Market Value 12/31/2021	% of Portfolio	4th Quarter 2021 (%)	YTD (%)
Total University Assets	\$75,380,975	\$87,273,442	100.0	2.4	7.8
<i>Total Policy Benchmark¹</i>				1.4	4.3
Total Operating & Short Term	\$10,210,678	\$20,230,843	23.2	0.1	0.1
<i>Total Operating & Short Term Benchmark²</i>				0.0	0.0
Total Long Term/ Reserves Pool	\$65,170,297	\$67,042,600	76.8	2.9	9.5
<i>Total Long Term/ Reserves Fund Benchmark³</i>				2.5	7.9
Total Domestic Equity	\$20,319,021	\$21,708,578	24.9	9.8	26.9
<i>Russell 3000 Index</i>				9.3	25.7
Total International Equity	\$5,828,493	\$5,933,065	6.8	1.8	10.0
<i>MSCI EAFE (Net)</i>				2.7	11.3
Total Alternatives	\$7,135,833	\$6,992,345	8.0	-1.3	5.4
<i>Total Alternatives Benchmark</i>				0.3	6.0
Total Fixed Income	\$31,868,506	\$32,390,166	37.1	-0.3	0.1
<i>Total Fixed Income Benchmark⁴</i>				-0.6	-0.8
Total Cash & Cash Equivalents	\$18,444	\$18,445	0.0	0.0	0.0
<i>90 Day U.S. Treasury Bill</i>				0.0	0.0

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	25% - 50%	23%
Long Term/ Reserves Pool	50% - 75%	77%

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%	32%
International Equity	8%	0% - 15%	9%
Total Equity	35%	25% - 45%	41%
Alternatives	15%	0%-20%	10%
Short-Term Fixed Income	30%	25% - 45%	28%
Intermediate Fixed Income	20%	10% - 30%	20%
Cash & Cash Equivalents	0%	0% - 5%	0%

In Line Within Tolerance Review

SCHEDULE OF ASSETS

	Ticker	Account Type	Begin Market Value \$	Market Value 12/31/2021	% of Portfolio
Total University Assets			\$75,380,975	\$87,273,442	100.0
Total Operating & Short Term			\$10,210,678	\$20,230,843	23.2
Federated Hermes Government Obligations Fund		Cash	-	\$20,056,925	23.0
JPMorgan 100% U.S. Tr Sec MM Inst	JTSXX	Cash	\$10,094,323	\$81,798	0.1
Vanguard Short-Term Federal Adm	VSGDX	US Fixed Income Short Term	\$25,186	\$932	0.0
STAR Ohio		Cash	\$91,169	\$91,188	0.1
Total Long Term/ Reserves Pool			\$65,170,297	\$67,042,600	76.8
Total Domestic Equity			\$20,319,021	\$21,708,578	24.9
Vanguard Institutional Index	VINIX	US Stock Large Cap Core	\$13,482,450	\$14,382,478	16.5
Vanguard Mid Cap Index Adm	VIMAX	US Stock Mid Cap Core	\$3,449,057	\$3,723,998	4.3
Loomis Sayles Sm Growth N	LSSNX	US Stock Small Cap Growth	\$1,666,281	\$1,755,632	2.0
Victory Integrity Small Value Y	VSVIX	US Stock Small Cap Value	\$1,721,232	\$1,846,470	2.1
Total International Equity			\$5,828,493	\$5,933,065	6.8
William Blair International Growth I	BIGIX	International	\$2,953,858	\$2,989,358	3.4
Dodge & Cox Internat'l Stock	DODFX	International	\$2,874,635	\$2,943,706	3.4
Total Alternatives			\$7,135,833	\$6,992,345	8.0
JPMorgan Strategic Income Opps Sel	JSOSX	Absolute Return	\$1,595,931	\$1,043,408	1.2
Allspring Adv Absolute Return Instl	WABIX	All Assets	\$1,547,826	\$1,037,437	1.2
Weatherlow Fund Offshore Fund I Ltd		Hedge Fund	\$3,992,075	\$4,911,500	5.6
Total Fixed Income			\$31,868,506	\$32,390,166	37.1
JPMorgan Core Bond	WOBDX	US Fixed Income Core	\$5,651,052	\$5,646,341	6.5
YSU Intermediate Term Bond		US Fixed Income Core	\$4,616,206	\$4,587,827	5.3
PGIM High Yield R6	PHYQX	US Fixed Income High Yield	\$3,085,711	\$3,332,105	3.8
YSU Short Term Bond		US Fixed Income Short Term	\$12,278,748	\$12,211,944	14.0
Lord Abbett Short Duration Income I	LLDYX	US Fixed Income Short Term	\$4,270,851	\$4,666,220	5.3
DFA Five-Yr Global Fxd-Inc I	DFGBX	Global Fixed Income	\$1,965,939	\$1,945,729	2.2
Total Cash & Cash Equivalents			\$18,444	\$18,445	0.0
PNC Govt MMkt	PKIXX	Cash	\$18,444	\$18,445	0.0

ATTRIBUTION OF MARKET VALUE

TOTAL UNIVERSITY ASSETS

	Q1-2021	Q2-2021	Q3-2021	Q4-2021	One Year
Total University Assets					
Beginning Market Value	\$66,471,553	\$73,087,043	\$75,443,318	\$75,380,975	\$66,471,553
Contributions	\$18,009,372	\$54,212	-	\$30,000,000	\$48,063,584
Distributions	-\$13,063,584	-	-	-\$20,000,000	-\$33,063,584
Net Cash Flows	\$4,945,788	\$54,212	-	\$10,000,000	\$15,000,000
Net Investment Change	\$1,669,702	\$2,302,063	-\$62,342	\$1,892,467	\$5,801,890
Ending Market Value	\$73,087,043	\$75,443,318	\$75,380,975	\$87,273,442	\$87,273,442
Change \$	\$6,615,490	\$2,356,275	-\$62,342	\$11,892,467	\$20,801,890

LONG-TERM POOL

	Q1-2021	Q2-2021	Q3-2021	Q4-2021	One Year
Total Long Term/ Reserves Pool					
Beginning Market Value	\$61,263,903	\$62,931,975	\$65,233,293	\$65,170,297	\$61,263,903
Contributions	\$9,163	-	-	-	\$9,163
Distributions	-\$9,163	-	-	-	-\$9,163
Net Cash Flows	-	-	-	-	-
Net Investment Change	\$1,668,072	\$2,301,319	-\$62,996	\$1,872,302	\$5,778,697
Ending Market Value	\$62,931,975	\$65,233,293	\$65,170,297	\$67,042,600	\$67,042,600
Change \$	\$1,668,072	\$2,301,319	-\$62,996	\$1,872,302	\$5,778,697

PERFORMANCE SUMMARY

	QTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2020 (%)	2019 (%)	2018 (%)	Inception (%)	Inception Date
Total University Assets	2.4	7.8	8.7	9.6	6.9	5.4	5.0	9.5	11.5	-1.5	4.5	Apr- 04
<i>Total Policy Benchmark¹</i>	1.4	4.3	5.1	6.3	4.7	3.8	3.5	5.9	8.7	-0.4	3.4	
Total Operating & Short Term	0.1	0.1	0.6	1.2	1.2	0.9	0.6	1.1	2.4	1.7	0.6	Jul- 10
<i>Total Operating & Short Term Benchmark²</i>	0.0	0.0	0.4	1.0	1.2	0.9	0.6	0.8	2.3	1.9	0.6	
Total Long Term/ Reserves Pool	2.9	9.5	9.1	11.1	7.9	6.3	6.3	8.8	15.3	-3.4	6.0	Jul- 10
<i>Total Long Term/ Reserves Fund Benchmark³</i>	2.5	7.9	8.9	10.7	7.7	6.2	6.0	10.0	14.2	-2.4	5.6	
Total Domestic Equity	9.8	26.9	22.6	25.2	17.6	14.2	16.0	18.5	30.4	-5.7	16.1	Jul- 10
<i>Russell 3000 Index</i>	9.3	25.7	23.3	25.8	18.0	14.5	16.3	20.9	31.0	-5.2	16.3	
Total International Equity	1.8	10.0	13.3	17.6	11.1	7.3	9.1	16.7	26.7	-17.8	6.7	Oct- 10
<i>MSCI EAFE (Net)</i>	2.7	11.3	9.5	13.5	9.5	6.8	8.0	7.8	22.0	-13.8	6.5	
Total Alternatives	-1.3	5.4	0.7	5.1	3.3	-	-	-3.7	14.3	-6.0	2.1	Mar- 15
<i>Total Alternatives Benchmark⁴</i>	0.3	6.0	5.7	7.7	5.3	-	-	5.4	11.7	-4.3	3.6	
Total Fixed Income	-0.3	0.1	2.6	3.9	3.0	2.5	2.3	5.2	6.6	0.9	2.4	Jul- 10
<i>Total Fixed Income Benchmark⁵</i>	-0.6	-0.8	1.8	2.9	2.3	2.0	1.8	4.5	5.0	1.4	1.9	
Total Cash & Cash Equivalents	0.0	0.0	0.2	0.6	-	-	-	0.4	1.5	-	0.7	Apr- 18
<i>90 Day U.S. Treasury Bill</i>	0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	1.2	

1) Total Policy Benchmark: 45% ICE BofA 91 Days T-Bills / 17% ICE BofA 1-3 Yr US Corp & Govt / 11% BBgBarc US Govt/Credit Int / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.

2) Total Operating & Short-Term Benchmark: 95% ICE BofA 91 Days T-Bills / 5% BBgBarc US Govt 1-3 Yr.

3) Total Long-Term / Reserves Fund Benchmark: 27% Russell 3000 / 8% MSCI EAFE / 15% Total Alternatives Benchmark / 30% ICE BofA 1-3 Yr US Corp & Govt / 20% BBgBarc US Govt/Credit Int.

4) Total Alternatives Benchmark: 100% HFRI Fund of Funds Composite.

5) Total Fixed Income Benchmark: 64% ICE BofA 1-3 Yr US Corp & Govt / 36% BBgBarc US Govt/Credit Int.

PERFORMANCE REPORT CARD

	% of Portfolio	QTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2020 (%)	2019 (%)	2018 (%)	Inception (%)	Inception Date
Total University Assets	100.0	2.4	7.8	8.7	9.6	6.9	5.4	5.0	9.5	11.5	-1.5	4.5	Apr-04
<i>Total Policy Benchmark</i>		1.4	4.3	5.1	6.3	4.7	3.8	3.5	5.9	8.7	-0.4	3.4	
Total Operating & Short Term	23.2	0.1	0.1	0.6	1.2	1.2	0.9	0.6	1.1	2.4	1.7	0.6	Jul-10
<i>Total Operating & Short Term Benchmark</i>		0.0	0.0	0.4	1.0	1.2	0.9	0.6	0.8	2.3	1.9	0.6	
Federated Hermes Government Obligations Fund	23.0	0.0	0.0	0.1	0.7	0.8	0.6	0.4	0.3	1.8	1.5	0.0	Nov-21
<i>90 Day U.S. Treasury Bill</i>		0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	0.0	
JPMorgan 100% U.S. Tr Sec MM Inst	0.1	0.0	0.0	0.2	0.8	0.9	0.7	0.5	0.3	2.0	1.7	0.5	Oct-11
<i>90 Day U.S. Treasury Bill</i>		0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	0.6	
Vanguard Short-Term Federal Adm	0.0	-0.6	-0.5	2.0	2.7	2.0	1.8	1.5	4.5	4.2	1.4	1.5	Oct-10
<i>Bloomberg, 1-5 Year Government</i>		-0.7	-1.2	1.5	2.4	1.9	1.6	1.3	4.3	4.2	1.5	1.4	
STAR Ohio	0.1	0.0	0.1	0.4	1.0	-	-	-	0.7	2.3	-	1.2	Jul-18
<i>90 Day U.S. Treasury Bill</i>		0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	1.2	
Total Long Term/ Reserves Pool	76.8	2.9	9.5	9.1	11.1	7.9	6.3	6.3	8.8	15.3	-3.4	6.0	Jul-10
<i>Total Long Term/ Reserves Fund Benchmark</i>		2.5	7.9	8.9	10.7	7.7	6.2	6.0	10.0	14.2	-2.4	5.6	
Total Domestic Equity	24.9	9.8	26.9	22.6	25.2	17.6	14.2	16.0	18.5	30.4	-5.7	16.1	Jul-10
<i>Russell 3000 Index</i>		9.3	25.7	23.3	25.8	18.0	14.5	16.3	20.9	31.0	-5.2	16.3	
Vanguard Institutional Index	16.5	11.0	28.7	23.4	26.0	18.4	14.9	16.5	18.4	31.5	-4.4	16.5	Jul-10
<i>S&P 500 Index</i>		11.0	28.7	23.4	26.1	18.5	14.9	16.6	18.4	31.5	-4.4	16.5	
Vanguard Mid Cap Index Adm	4.3	8.0	24.5	21.3	24.5	15.9	12.6	15.1	18.2	31.0	-9.2	14.4	Oct-10
<i>Vanguard Mid Cap Index Benchmark</i>		8.0	24.5	21.3	24.5	15.9	12.6	15.2	18.2	31.1	-9.2	14.5	
Loomis Sayles Sm Growth N	2.0	5.4	10.2	21.6	23.3	19.1	14.4	15.5	34.3	26.7	0.6	21.1	Sep-19
<i>Russell 2000 Growth Index</i>		0.0	2.8	17.7	21.2	14.5	11.7	14.1	34.6	28.5	-9.3	19.9	
Victory Integrity Small Value Y	2.1	7.3	33.6	16.3	18.5	8.8	8.5	11.8	1.2	23.1	-18.6	11.7	Oct-10
<i>Russell 2000 Value Index</i>		4.4	28.3	15.9	18.0	9.1	9.5	12.0	4.6	22.4	-12.9	11.5	
Total International Equity	6.8	1.8	10.0	13.3	17.6	11.1	7.3	9.1	16.7	26.7	-17.8	6.7	Oct-10
<i>MSCI EAFE (Net)</i>		2.7	11.3	9.5	13.5	9.5	6.8	8.0	7.8	22.0	-13.8	6.5	
<i>MSCI AC World ex USA (Net)</i>		1.8	7.8	9.2	13.2	9.6	6.6	7.3	10.7	21.5	-14.2	5.7	
William Blair International Growth I	3.4	1.2	9.0	20.0	23.4	14.9	10.0	10.8	32.0	30.7	-17.7	10.5	Jul-12
<i>MSCI AC World ex USA (Net)</i>		1.8	7.8	9.2	13.2	9.6	6.6	7.3	10.7	21.5	-14.2	7.4	
Dodge & Cox Internat'l Stock	3.4	2.4	11.0	6.5	11.6	7.2	4.5	7.6	2.1	22.8	-18.0	5.8	Oct-10
<i>MSCI EAFE (Net)</i>		2.7	11.3	9.5	13.5	9.5	6.8	8.0	7.8	22.0	-13.8	6.5	

PERFORMANCE REPORT CARD

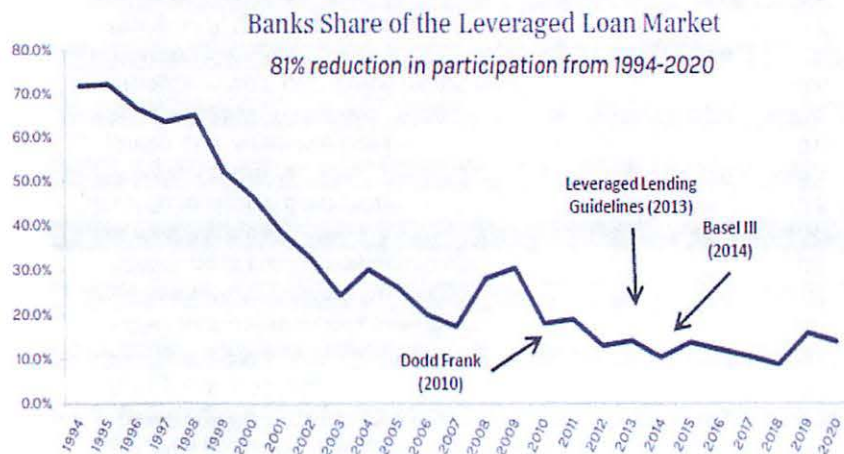
	% of Portfolio	QTD (%)	1 Yr (%)	2 Yr (%)	3 Yr (%)	5 Yr (%)	7 Yr (%)	10 Yr (%)	2020 (%)	2019 (%)	2018 (%)	Inception (%)	Inception Date
Total Alternatives	8.0	-1.4	5.3	0.7	5.0	3.3	-	-	-3.7	14.3	-6.0	2.1	Mar-15
<i>Total Alternatives Benchmark</i>		0.3	6.0	5.7	7.7	5.3	-	-	5.4	11.7	-4.3	3.6	
JPMorgan Strategic Income Opps Sel	1.2	-0.2	0.6	1.1	2.0	2.0	2.4	2.8	1.6	4.0	0.8	1.5	Oct-18
<i>Blmbg. U.S. Universal Index</i>		0.0	-1.1	3.1	5.2	3.8	3.4	3.3	7.6	9.3	-0.3	5.1	
Alspring Adv Absolute Return Instl	1.2	-0.5	2.6	-0.2	3.5	3.3	2.1	3.5	-2.9	11.2	-5.6	1.6	Mar-15
<i>HFRI Fund of Funds Composite Index</i>		0.3	6.0	8.4	8.4	5.7	4.1	4.5	10.9	8.4	-4.0	3.9	
Weatherlow Fund Offshore Fund I Ltd	5.6	-1.7	5.7	14.8	14.4	8.9	6.7	7.3	24.7	13.6	-3.1	-1.7	Jul-21
<i>HFRI Fund of Funds Composite Index</i>		0.3	6.0	8.4	8.4	5.7	4.1	4.5	10.9	8.4	-4.0	1.0	
Total Fixed Income	37.1	-0.3	0.1	2.6	3.9	3.0	2.5	2.3	5.2	6.6	0.9	2.4	Jul-10
<i>Total Fixed Income Benchmark</i>		-0.6	-0.8	1.8	2.9	2.3	2.0	1.8	4.5	5.0	1.4	1.9	
JPMorgan Core Bond	6.5	-0.1	-1.1	3.4	5.0	3.8	3.1	3.0	8.1	8.3	0.2	3.5	Sep-17
<i>Blmbg. U.S. Aggregate Index</i>		0.0	-1.5	2.9	4.8	3.6	3.0	2.9	7.5	8.7	0.0	3.3	
YSU Intermediate Term Bond	5.3	-0.6	-1.3	3.0	4.4	3.3	2.7	2.6	7.5	7.2	0.8	3.6	Apr-04
<i>Blmbg. Intermed. U.S. Government/Credit</i>		-0.6	-1.4	2.4	3.9	2.9	2.5	2.4	6.4	6.8	0.9	3.3	
PGIM High Yield R6	3.8	0.6	6.5	6.1	9.4	6.9	6.6	7.1	5.7	16.3	-1.2	6.9	Jan-17
<i>Blmbg. U.S. Corp: High Yield Index</i>		0.7	5.3	6.2	8.8	6.3	6.1	6.8	7.1	14.3	-2.1	6.3	
YSU Short Term Bond	14.0	-0.5	-0.4	1.6	2.5	2.0	1.7	1.5	3.7	4.3	1.6	2.4	Apr-04
<i>ICE BofA 1-3 Yr. Gov/Corp</i>		-0.5	-0.4	1.4	2.3	1.9	1.6	1.4	3.3	4.1	1.6	2.3	
Lord Abnett Short Duration Income I	5.3	-0.1	1.1	2.1	3.3	2.8	2.7	2.9	3.2	5.6	1.4	3.1	Apr-18
<i>ICE BofA 1-3 Yr. Gov/Corp</i>		-0.5	-0.4	1.4	2.3	1.9	1.6	1.4	3.3	4.1	1.6	2.3	
DFA Five-Yr Global Fxd-Inc I	2.2	-1.0	-1.0	0.2	1.5	1.6	1.6	1.9	1.5	4.0	1.7	1.8	Jul-13
<i>FTSE World Government Bond Index 1-5 (Hedged)</i>		-0.5	-0.8	1.2	2.1	1.9	1.7	1.7	3.2	3.9	2.1	1.7	
Total Cash & Cash Equivalents	0.0	0.0	0.0	0.2	0.6	-	-	-	0.4	1.5	-	0.7	Apr-18
<i>90 Day U.S. Treasury Bill</i>		0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	1.2	
PNC Govt MMkt	0.0	0.0	0.0	0.2	0.8	-	-	-	0.4	2.0	-	-	Apr-18
<i>90 Day U.S. Treasury Bill</i>		0.0	0.0	0.4	1.0	1.1	0.9	0.6	0.7	2.3	1.9	1.2	

- 1) Total Policy Benchmark: 45% ICE BofA 91 Days T-Bills / 17% ICE BofA 1-3 Yr US Corp & Govt / 11% BBgBarc US Govt/Credit Int / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE.
2) Total Operating & Short-Term Benchmark: 95% ICE BofA 91 Days T-Bills / 5% BBgBarc US Govt 1-3 Yr.
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5) Total Fixed Income Benchmark: 64% ICE BofA 1-3 Yr US Corp & Govt / 36% BBgBarc US Govt/Credit Int.

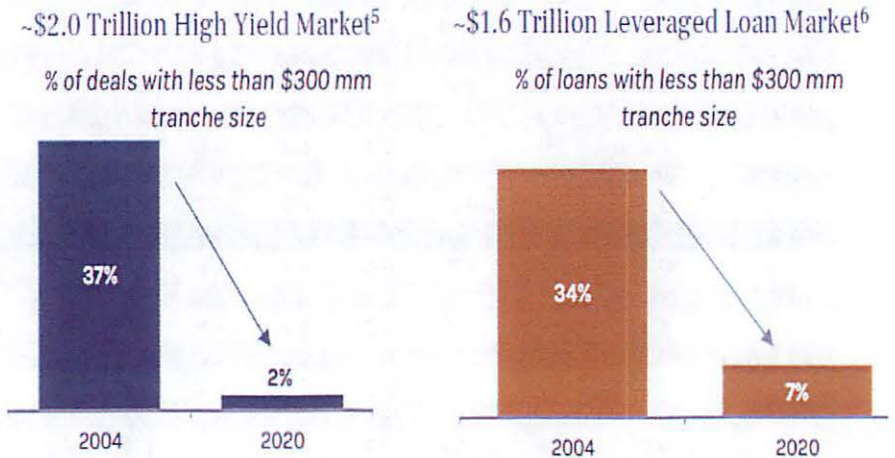
WHY MIDDLE MARKET DIRECT LENDING

MARKET OPPORTUNITY AND INDUSTRY SHIFT HAS DRIVEN THE DEMAND AND GROWTH OF MIDDLE MARKET LENDING

BANKS HAVE RETRENCHED FROM MIDDLE MARKET LENDING



LIQUID MARKETS HAVE SHIFTED TO MEGADEALS



Source: Ares Investor Presentation May 2021

H.I.G. WHITEHORSE BACKGROUND

H.I.G. is an established lower middle market alternative investment manager with roughly \$46 billion (as of 9/30/2021) in assets under management. The firm has 500+ investment professionals, including 105 focused on credit. H.I.G.'s WhiteHorse Lending Funds – 2020 seeks to generate attractive risk-adjusted returns from the lower middle market credit spaces it focuses on by lending to well-established, performing companies with proven cash flow generating capabilities and experienced management teams that lack access to traditional sources of financing. Clearstead believes H.I.G.'s deal sourcing platform and experience in the lower middle market are competitive advantages in the space. The fund's process emphasizes downside protection and Clearstead believes H.I.G. can add value through quarterly income generation and creation of attractive risk-adjusted returns in a low interest rate environment.

Parent

Sami Mnaymneh and Tony Tamer founded H.I.G. in 1993. Mnaymneh and Tamer were former managing directors at Blackstone and Bain, respectively. H.I.G. launched its first fund in 1993 with a focus on small to midsize investments and a strong emphasis on in-house operating expertise. The firm now offers multiple strategies across credit, private equity, growth equity, and real estate strategies, all with a focus on the lower middle market. The firm has approximately 800 employees, ~500 of them investment professionals spread across 18 offices in 9 different countries and on 3 different continents. As of September 2021, H.I.G. manages roughly \$46B across 3 asset pools. Its credit platform is ~\$31B in size, while it also has private equity and real estate platforms.

People

The firm currently employs 800+ individuals, including over 500 investment professionals that work across the private market spectrum. The global credit platform includes 105 individuals in 14 offices globally. More specifically, the direct lending strategy team includes both co-CEOs, 9 managing directors, 41 other investment professionals, 25 business development professionals, and robust back-office support.

PRINCIPAL LENDING FUND: PERFORMANCE SUMMARY

RETURN SUMMARY

Permanent Capital Invested: \$1,408 million

Net IRR %: 20.2%

PORTFOLIO STATISTICS SUMMARY

Number of Investments: 69

Average EBITDA*: \$35 million

Net Debt / EBITDA: 4.4x

Loan-to-Value (LTV): 50%

% First Lien: 96%

Source: H.I.G. Capital
*Excludes syndicated loans.
Past performance is not a guarantee of future results.





DEFINITIONS & DISCLOSURES

DEFINITIONS & DISCLOSURES

Information provided is general in nature, is provided for informational purposes only, and should not be construed as investment advice. Any views expressed are based upon the data available at the time the information was produced and are subject to change at any time based on market or other conditions. Clearstead disclaims any liability for any direct or incidental loss incurred by applying any of the information in this presentation. All investment decisions must be evaluated as to whether it is consistent with their investment objectives, risk tolerance, and financial situation.

Past performance is no guarantee of future results. Investing involves risk, including risk of loss. Diversification does not ensure a profit or guarantee against loss.

All indices are unmanaged and performance of the indices includes reinvestment of dividends and interest income, unless otherwise noted. An investment cannot be made in any index.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, bonds and short-term investments entail greater inflation risk, or the risk that the return of an investment will not keep up with increases in the prices of goods and services, than stocks.

Lower-quality debt securities generally offer higher yields, but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.

The municipal market is volatile and can be significantly affected by adverse tax, legislative, or political changes and by the financial condition of the issuers of municipal securities. Interest rate increases can cause the price of a debt security to decrease. A portion of the dividends you receive may be subject to federal, state, or local income tax or may be subject to the federal alternative minimum tax. Generally, tax exempt municipal securities are not appropriate holdings for tax advantaged accounts such as IRAs and 401(k)s.

Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest-rate, currency-exchange rate, economic, and political risks, all of which are magnified in emerging markets. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Growth stocks can perform differently.

The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

Changes in real estate values or economic conditions can have a positive or negative effect on issuers in the real estate industry, which may affect your investment.

Index Definitions:

The **S&P 500 Index** is a broad-based market index, comprised of 500 large-cap companies, generally considered representative of the stock market as a whole. The **S&P 400 Index** is an unmanaged index considered representative of mid-sized U.S. companies. The **S&P 600 Index** is a market-value weighted index that consists of 600 small cap U.S. stocks chosen for market size, liquidity and industry group representation.

The **Russell 1000 Value Index**, **Russell 1000 Index** and **Russell 1000 Growth Index** are indices that measure the performance of large capitalization value stocks, large capitalization stocks and large capitalization growth stocks, respectively. The **Russell 2000 Value Index**, **Russell 2000 Index** and **Russell 2000 Growth Index** are indices that measure the performance of small-capitalization value stocks, small-capitalization stocks and small-capitalization growth stocks, respectively. The **Russell Midcap Value Index**, **Russell Midcap Index** and **Russell Midcap Growth Index** are indices that measure the performance of mid-capitalization value stocks, mid-capitalization stocks and mid-capitalization growth stocks, respectively. The **Russell 2500 Value Index**, **Russell 2500 Index** and **Russell 2500 Growth Index** measure the performance of small to mid-cap value stocks, small to mid-cap stocks and small to mid-cap growth stocks, respectively, commonly referred to as "small" cap. The **Russell 3000 Value Index**, **Russell 3000 Index** and **Russell 3000 Growth Index** measure the performance of the 3000 largest U.S. value stocks, 3000 largest U.S. stocks and 3000 largest U.S. growth stocks, respectively, based on total market capitalization.

The **Wilshire 5000 Index** represents the broadest index for the U.S. equity market, measuring the performance of all U.S. equity securities with readily available price data. The **Wilshire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wilshire 5000 Index below the 2,501st rank. The **MSCI EAFE (Europe, Australasia, Far East) Index** is designed to measure developed market equity performance, excluding the U.S. and Canada. The **MSCI Emerging Markets (EM) Index** is designed to measure global emerging market equity performance. The **MSCI World Index** measures global developed market equity performance. The **MSCI World Index Ex-U.S. Index** is designed to measure the equity market performance of developed markets and excludes the U.S. The **MSCI Europe Index** is an unmanaged index considered representative of developed European countries. The **MSCI Japan Index** is an unmanaged index considered representative of stocks of Japan. The **MSCI Pacific ex-Japan Index** is an unmanaged index considered representative of stocks of Asia Pacific, countries excluding Japan.

The **U.S. 10-Year Treasury Yield** is generally considered to be a barometer for long-term interest rates. **Merrill Lynch 91-day T-Bill Index** measures U.S. Treasury bills with a remaining maturity from 1 day to 3 months.

The **Barclays Capillary (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 (AAA/BBB+/-BBB- or above) using Moody's, S&P, and Fitch respectively, with maturity of at least one year. The **BC MBS Index** covers agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARMs) issued by Ginnie Mae (GNMA), Fannie Mae (FHLM), and Freddie Mac (FHLMC). The **BC U.S. Municipal Bond Index** covers the U.S. dollar-denominated, long-term tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The **BC TIPS Index** is an unmanaged market index made up of U.S. Treasury Inflation Protected 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 debt, the index covers the following collateral types: credit cards, autos, home equity loans, stranded cost utility (rate reduction bonds), and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices: the U.S. Aggregate Index, the Asian Pacific Aggregate Index, and the European 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 U.S. 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 U.S. dollar-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, 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 tracks 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 CC-D Indices** measure the respective credit quality 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 AAA Index, the Eurozone Index, the Emerging Markets Index, and the non-EMBA portion of the EMBS Index. The **BC 1-3 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to three years. The **BC Long-term Government Index** is an unmanaged index reflecting performance of the long-term government bond market. The **BC Intermediate Aggregate Index** measures the performance of intermediate-term investment-grade bonds. The **BC Intermediate 1-3 Year Government/Credit Index** measures the performance of U.S. dollar-denominated U.S. Treasury, government-related and investment-grade U.S. corporate securities that have a remaining maturity of greater than one year and less than 10 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 **Fidelity Funds of Funds Index (FFFI)** 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 **FSE HAREIT All REITS Index** is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified Real Estate Investment Trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange, or the NASDAQ National Market List.

The **Dow Jones U.S. Select Real Estate Securities Index** is a float-adjusted market capitalization-weighted index of publicly traded real estate securities such as real estate investment trusts (REITs) and real estate operating companies (REOCs).

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

The **University of Michigan Consumer Sentiment Index** is a consumer confidence index published monthly by the University of Michigan and Thomson Reuters. The index is normalized to have a value of 100 in December 1964.

VIX - The CBOE Volatility Index (VIX) is based on the prices of the 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.

HFR Emerging Markets: Asia ex-Japan, Global Index, Latin America Index, Russia/Eastern Europe Index. The constituents of the HFR Emerging Markets Index 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. **HFR EH: Energy/Basic Materials** strategies when 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. **HFR 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. **HFR EH: Short-Biased** strategies employ analytical techniques in which the investment thesis is predicated on an assessment of the valuation mispricings in the underlying companies with the goal of identifying overvalued companies. **HFR 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.

HFR ED: Distressed Restructuring strategies when 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.

HFR 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. **HFR ED: Private Issue/Regulation D** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are primarily private and illiquid in nature. **HFR Macro: Systematic Diversified** strategies have investment processes typically an function of mathematical, algorithmic, and technical models, with little or no influence of individual views over the portfolio positioning. **HFR 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 convertible fixed income instrument. **HFR RV: Fixed Income - Corporate** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread of a corporate fixed income instrument. **HFR RV: Multi-Strategies** employ an investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. **HFR RV: Yield Alternatives** Index strategies employ an investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread contains a derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk-adjusted spread between these instruments represents an attractive opportunity for the investment manager.

The **Consumer Price Index (CPI)** is an inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The CPI is published monthly. Unless otherwise noted, the CPI figure is as of the date this report is created.

The **Consumer Suisse Leveraged Loan Index** is a market value-weighted index designed to represent the investable universe of the U.S. dollar-denominated leveraged loan market.

The **Dow Jones-UBS Commodity Index** measures the performance of the commodities market. It consists of exchange-traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.

The **S&P 500 Value Index**, **Index S&P 500 Index** and **S&P 500 Growth Index** are a broad-based market index that measure the performance of large capitalization value companies, large capitalization stocks and large capitalization 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 "small" cap. The **Russell 3000 Value Index**, **Russell 3000 Index** and **Russell 3000 Growth Index** measure the performance of the 3000 largest U.S. value stocks, 3000 largest U.S. stocks and 3000 largest U.S. growth stocks, respectively, based on total market capitalization. The **Russell Microcap Index** measures the performance of the microcap segment of the U.S. equity market. The **Russell Top 200 Value Index** measures the performance of the especially large cap segment of the U.S. equity universe represented by stocks in the largest 20th market cap that exhibit value characteristics. The **Russell Developed ex-US Large Cap Index** measures the performance of the largest investable securities in developed countries globally, excluding companies assigned to the United States.



DEFINITIONS & DISCLOSURES

The **Wilshire 5000 Index** represents the broadest index for the U.S. equity market, measuring the performance of all U.S. equity securities with readily available price data. The **Wilshire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wilshire 5000 Index below the 2,501st rank. The **Wilshire 4500 Index** is comprised of all stocks in the Wilshire 5000 Index with the 5000th rank. The **Wilshire 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 emerging market equity performance. The **MSCI World Index Ex-U.S. Gross Index** is designed to measure the performance of developed market equities, excluding the U.S. The **MSCI Europe Gross Index** is an unmanaged index considered representative of developed equities. 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 ACWI (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, excluding the U.S. The **MSCI ACWI ex USA 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 MBSs. The **BC CMBS Index** is designed to cover residential mortgage backed securities of investment grade quality (BBB/BBB+ or above) using Moody's, S&P, and Fitch respectively, with maturity of at least one year. The **BC MBS Index** covers agency mortgage backed pass-through securities (both fixed-rate and hybrid 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 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, stranded cost utility rate-reduction bonds, and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices: the U.S. Aggregate Index, Pan-European Aggregate Index, and the Asian-Pacific Aggregate Index. In aggregate the index is created to be a broad-based measure of the performance of investment grade fixed-rate debt on a global basis. The **BC US Corporate Long AA Index** is an unmanaged index representing public obligations of U.S. corporate and specified foreign debentures and secured notes with a remaining maturity of 10 years or more. The **BC U.S. Corporate High Yield Index** measures the market of USD denominated, non-investment grade, fixed-rate, taxable corporate bonds. The **BC Intermediate Corporate Index** includes dollar-denominated debt from U.S. and non-U.S. industrial, utility, and financial institutions issued 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 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 Eurodollar Index, the Emerging Markets Index, and the non-BEPS portion of the CMBS Index. The **BC 1-3 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to three years. The **BC Long Term Government Index** is an unmanaged index reflecting performance of the long-term government bond market. The **BC Intermediate Aggregate Index** measures the performance of intermediate-term investment-grade bonds. The **BC Intermediate 1-3 Year Government Credit Index** measures the performance of U.S. dollar-denominated U.S. 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 and agency bond indices that have maturities of one to three years. The **BC U.S. 1-5 Year Government Bond Index** is composed of treasury bond and agency bond indices that have maturities of one to five years. The **BC 1-3 Year US Treasury Index** measures the performance of U.S. Treasury securities that have a maturity between 1 to 3 years. The **BC Government Credit Index** measures the performance of U.S. Government and corporate bonds rated investment grade or better, with maturities of at least one year.

The **BC High Yield Index** covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and callable securities are included. 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 that meet the specified maturity, liquidity, and quality requirements; bonds must be SEC-registered to qualify. 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** consists of investment grade and high yield credit securities from the Multiverse represented in US Dollars as a hedged basis. The **BC Long AA - U.S. Credit Index** measures the performance of investment grade corporate debt and agency bonds that are dollar denominated and have a maturity of greater than 10 years. The **BC U.S. Gov/Credit 5-10 Year Index** includes all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities between 5 and 10 years and are publicly issued.

The **Cambridge U.S. Private Equity Index** is a representation of returns for over 70% of the total dollars raised by U.S. leveraged buyout, subordinated debt and special situation managers from 1986 to December 2007. Returns are calculated based on the pooled time weighted return and are net of all fees. These pooled means represent the end benefit 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 to 3 months. The **BoFA ML U.S. High Yield Master Index I & 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 structure and minimum outstanding of \$10 million. The **BoFA ML All US Convertibles Index** consists of convertible bonds traded in the U.S. domestic bond market with at least 1 year and less than 3 years remaining to maturity, including U.S. Treasury, U.S. agency, foreign government, supranational and corporate securities. The **BoFA ML U.S. High Yield BB+ Constrained Index** is a modified market capitalization-weighted index of U.S. dollar-denominated, below-investment-grade corporate debt publicly issued in the U.S. domestic market. The **BoFA Merrill Lynch US Year Treasury 1-3 Year Index** tracks the performance of the direct sovereign debt of the U.S. Government having a maturity of at least one year. 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 Treasuries 1 Year Index** tracks the performance of the direct sovereign debt of the U.S. Government having a maturity of at least one year. The **BoFA ML U.S. Dollar 3-Month LIBOR Index** represents the London interbank offered rate (LIBOR) with a constant 3-month average maturity. The **Rate CMBS Index** tracks the performance of U.S. dollar-denominated, price return index, comprised of the common units of up to 10 of the most liquid master limited partnerships in the Energy Sector. The **Citigroup World Government Bond Index (WGBI) 1-5 Year Hedged USD Index** is a comprehensive measure of the total return performance of the government bond markets of approximately 22 countries with maturities ranging from one to five years. The **Citigroup WGBI Index** is a market capitalization weighted bond index consisting of the government bond markets of the multiple countries. The **Citigroup WGBI ex US Index** is a market capitalization weighted bond index consisting of the government bond markets of the multiple countries, excluding the U.S. The **Citigroup 3-Month U.S. Treasury Bill Index** performance is an average of the last 3-Month Treasury Bill issues.

The **NCREIF Property Index (NPI)** represents quarterly time series composite total rate of return measure of a very large pool of individual commercial real estate properties acquired in the private market. The index represents apartments, hotels, industrial properties, office buildings, and retail properties which are at least 60% occupied and owned or controlled, at least in part by tax-exempt institutional investors or its designated agent. In addition these properties that are included must be investment grade, non-accrual and income producing, and all development projects are excluded. Constituents included in the NPI are 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 **JP Morgan Emerging Markets Bond Index Plus (EMBI+)** Index tracks total returns for traded external debt instruments (external meaning foreign currency denominated fixed income) in the emerging markets. The **JP Morgan GBI Global ex US Index** represents the total return performance of major non-U.S. bond markets.

The **HFRI Funds of Funds Index (HFRI FOF)** is an equal weighted index designed to measure the performance of hedge fund of fund managers. The more than 400 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. **HFRI Relative Value Index** tracks investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to FE exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities as opposed to the outcome of the corporate transaction. **HFRI Fund of Funds Conservative Index** is an equal weighted index representing funds or funds that invest with multiple managers for consistent performance and lower volatility via absolute strategies. **HFRI ED-Merger Arbitrage Index** employs 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 U.S. The **FTSE High Dividend Yield Index** comprises stocks that are characterized by higher than average dividend yields, and is based on the US component of the FTSE Global Equity Index Series (GIES). The **FTSE NAREIT All REITS Index** is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified Real Estate Investment Trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange, or the NASDAQ National Market List. The **FTSE NAREIT Equity REIT Index** is an unmanaged index reflecting performance of the U.S. real estate investment trust market.

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

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

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

The **Morningstar Lifetime Allocation Index** series consists of 13 indexes (Income, 2000, 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 who are comfortable with below-average exposure to equity market volatility, investors who are comfortable with average exposure to equity market volatility and well-funded investors who are comfortable with above average exposure to equity market volatility, respectively.

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

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

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

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

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

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

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





**YOUNGSTOWN
STATE
UNIVERSITY**

**RESOLUTION TO APPROVE
CLEARSTEAD'S RECOMMENDATION TO REBALANCE THE
NON-ENDOWMENT LONG-TERM INVESTMENT POOL**

WHEREAS, the Investment Subcommittee of the Board of Trustees of Youngstown State University is responsible for identification of asset classes, strategic asset allocation, acceptable asset ranges above and below the strategic asset allocation, and selecting investment managers, pursuant to University policy 3356-3-10; and

WHEREAS, the Investment Subcommittee has consulted with the University's investment advisors and recommends rebalancing the Non-Endowment Long-Term Investment Pool.

NOW, THEREFORE, BE IT RESOLVED, that the Investment Subcommittee of the Board of Trustees of Youngstown State University does hereby approve the rebalance, attached hereto.

**Board of Trustees Meeting
March 3, 2022
YR 2022-**

PORTFOLIO RECOMMENDATIONS (ACTION)

YOUNGSTOWN STATE UNIVERSITY

AS OF JANUARY 31, 2022

	TICKER	MARKET VALUE (CURRENT)	% OF PORTFOLIO	CHANGES	MARKET VALUE (POST CHANGES)	% OF PORTFOLIO	POLICY TARGET	POLICY RANGE	TACTICAL +/-
Total Operating & Short Term		\$20,212,390	100.0%	\$0	\$20,212,390	100.0%	100.0%		
Operating Assets		\$20,211,466	100.0%		\$20,211,466	100.0%		60-100%	
JPMorgan MM / Fed Hermes Gov Ob	JTSXX	\$20,120,278	99.5%		\$20,120,278	99.5%			
Star Plus*	-	\$0	0.0%		\$0	0.0%			
Star Ohio*	-	\$91,188	0.5%		\$91,188	0.5%			
Short-Term Assets		\$924	0.0%		\$924	0.0%		0-40%	
Vanguard Short-Term Federal Adm	VSGDX	\$924	0.0%		\$924	0.0%			
Total Long Term Reserves Pool		\$64,982,203	100.0%	\$0	\$64,982,203	100.0%	100.0%		
Domestic Equity		\$20,372,112	31.4%		\$20,372,112	31.4%	27.0%	20-35%	
Large Cap		\$13,637,463	21.0%		\$13,637,463	21.0%			
Vanguard Instl Index	VINIX	\$13,637,463	21.0%		\$13,637,463	21.0%			
Small/Mid Cap		\$6,734,649	10.4%		\$6,734,649	10.4%			
Vanguard Mid Cap Index Adm	VIMAX	\$3,431,234	5.3%		\$3,431,234	5.3%			
Loomis Sayles Small Growth N2	LSSNX	\$1,523,889	2.3%		\$1,523,889	2.3%			
Victory Integrity Small Cap Value Y	VSVIX	\$1,779,526	2.7%		\$1,779,526	2.7%			
International Equity		\$5,679,860	8.7%		\$5,679,860	8.7%	8.0%	0-15%	
William Blair International Growth I	BIGIX	\$2,647,761	4.1%		\$2,647,761	4.1%			
Dodge & Cox International Stock	DODFX	\$3,032,098	4.7%		\$3,032,098	4.7%			
Total Equity		\$26,051,972	40.1%		\$26,051,972	40.1%	35.0%	25-45%	
Alternatives		\$7,019,133	10.8%		\$7,511,500	11.6%	15.0%	0-20%	
JPMorgan Strategic Income Opps Fd	JSOSX	\$1,043,493	1.6%	-\$1,043,493	\$0	0.0%			
Allspring Adv Absolute Return	WABIX	\$1,064,140	1.6%	-\$1,064,140	\$0	0.0%			
H.I.G. Principal Lending Fund	-	\$0	0.0%	\$2,600,000	\$2,600,000	4.0%			
Weatherlow Fund*	-	\$4,911,500	7.6%		\$4,911,500	7.6%			
Fixed Income		\$31,892,504	49.1%		\$31,400,137	48.3%	50.0%	35-75%	
Short Term Fixed Income		\$18,616,092	28.6%		\$18,616,092	28.6%	30.0%	25-45%	
YSU Short Term Bond	-	\$12,066,972	18.6%		\$12,066,972	18.6%			
Lord Abbett Short Duration	LLDYX	\$4,632,488	7.1%		\$4,632,488	7.1%			
DFA Five-Year Global	DFGBX	\$1,916,632	2.9%		\$1,916,632	2.9%			
Intermediate Fixed Income		\$13,276,412	20.4%		\$12,784,045	19.7%	20.0%	10-30%	
JPMorgan Core Bond Fund R6**	JCBUX	\$5,545,828	8.5%	-\$492,367	\$5,053,461	7.8%			
YSU Intermediate Term Fixed	-	\$4,495,630	6.9%		\$4,495,630	6.9%			
Prudential High Yield Bond R6	PHYQX	\$3,234,954	5.0%		\$3,234,954	5.0%			
Cash & Cash Equivalents		\$18,593	0.0%		\$18,593	0.0%	0.0%	0-5%	
Equity Account Cash	-	\$18,593	0.0%		\$18,593	0.0%			
Total University Assets		\$85,194,593			\$85,194,593				

SUMMARY OF RECOMMENDATIONS

- Invest \$2.6 million in the H.I.G. Principal Lending Fund, which will be invested over the next 12-15 months
- Fund new investment strategy from current liquid alternatives and core fixed income

*As of 12/31/2021



**YOUNGSTOWN
STATE
UNIVERSITY**

**RESOLUTION TO AMEND THE
YOUNGSTOWN STATE UNIVERSITY
NON-ENDOWMENT ASSET ALLOCATION GUIDELINES**

WHEREAS, the Investment Subcommittee of the Board of Trustees of Youngstown State University is responsible for developing sound and consistent asset allocation guidelines and setting forth an investment structure for managing the University's assets pursuant to University policy 3356-3-10; and

WHEREAS, the Investment Subcommittee has consulted with the University's Investment advisors and recommends edits to the Non-Endowment Asset Allocation Guidelines.

NOW, THEREFORE, BE IT RESOLVED, that the Investment Subcommittee of the Board of Trustees of Youngstown State University does hereby approve the changes to the Non-Endowment Asset Allocation Guidelines, attached hereto.

**Board of Trustees Meeting
March 3, 2022
YR 2022-**

YOUNGSTOWN STATE UNIVERSITY
Asset Allocation and Other Investment Guidelines
Investment of Non-Endowment University Funds

ASSET ALLOCATION GUIDELINES

The Assets of the University are to be allocated between short-term assets and long-term assets. The Asset Allocation section of the Policy is specifically intended to address short-term assets and long-term assets as two distinct asset pools of the University's balance sheet assets.

The objectives that the University has established in conjunction with a comprehensive review of the current and projected financial requirements are as follows:

1. The strict adherence to the Ohio Revised Code and the authority granted under Ohio Revised Code §3345.05. Specifically:
 - a. ORC 3345.05 (C)(1): A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of this state or any political subdivision of this state, certificates of deposit of any national bank located in this state, written repurchase agreements with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve.
 - b. ORC 3345.05 (C)(2): Eligible funds above those that meet the conditions described in ORC 3345.05 (C)(1) may be pooled with other institutional funds and invested in accordance with section 1715.52 of the Revised Code.

The Operating and Short-Term Pool will be comprised of cash and short-term assets required for working capital, liquidity purposes, and other short-term needs. It is understood that assets classified as short-term are to be maintained primarily in cash and cash equivalents, and may also invest partially in short term fixed income (guidelines defined within), in order to meet the daily liquidity needs of the University. The asset allocation guidelines of the Operating and Short-Term Pool are outlined in the table below.

The Long-Term / Reserves Pool are investments with a time horizon in excess of one year. It is assumed that financial needs of the University ranging from one to five years will be maintained in fixed income investments. It is further assumed that any equity or alternative investments will have a time horizon greater than five years. As shown in the

table below, short-term and intermediate-term fixed income, alternative investments, and equity are classified as long-term assets.

Based on the investment objectives and risk tolerances stated in these guidelines, the following asset allocation strategy is considered appropriate for the University's investment Assets:

Operating & Short Term Pool		Allocation	
Asset Class/Investment Strategy	Pool Target	Pool Range	Total Range
Total Cash/Operating Assets	n/a	60-100%	
Total Short-Term Fixed Income	n.a	0-40%	
			0-50%
Long Term/Reserves Pool			
Total Domestic Equity	27%	20-35%	
Total International Equity	8%	0-15%	
Total Equity	35%	25-45%	
Total Alternatives	15%	0-20%	
Total Short-Term Fixed Income	30%	25-45%	
Total Intermediate-Term Fixed Income	20%	10-30%	
Cash	0%	0-5%	
	100%		50-100%

According to the University's Policy, the operating and short-term funds of the non-endowment funds are allocated to the Operating and Short-Term Pool of the asset allocation guidelines. Adequate balance of 60 to 100% of the pool will be invested in cash and cash equivalents in order to provide the University with liquidity to meet its operational needs. The Pool may also invest 0-40% in 1-3 year average maturity U.S. Government fixed income investments. The Operating and Short Term Pool should represent 0-50% of the total market value of the Investments. Although the actual percentage will fluctuate with market conditions, levels in excess of 50% will result in rebalancing the Investments to target levels. The Subcommittee will review the pool level allocations on a quarterly basis.

According to the University's Policy, funds with a longer time horizon are allocated to the Long-Term / Reserves Pool. This Pool will be comprised of short-term fixed income, intermediate-term fixed income, alternative investments, and equity.

Short-term fixed income should normally represent 30% of the total market value of the Pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of 45% or below 25% will result in rebalancing the short-term fixed income component of the pool to its target level. The Subcommittee will review the short-term fixed income allocation on a quarterly basis.

Intermediate-term fixed income should normally represent 20% of the total market value of the pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of 30% or below 10% will result in rebalancing the intermediate-term fixed income component of the pool to its fixed income target level. The Subcommittee will review the intermediate-term fixed income allocation on a

quarterly basis. Up to 10% of the fixed income investments in the Long Term Pool may be made in below investment grade debt (high yield).

The equity component should normally represent 35% of the total market value of the long-term pool. Although the actual percentage of equities will vary with market conditions, equity levels in excess of 45% or below 25% will result in rebalancing the equity component of the fund to its equity target level. The Subcommittee will review the equity allocation on a quarterly basis.

The alternative investments component should normally represent 15% of the total market value of the long-term pool. Although the actual percentage will vary with market conditions, levels in excess of 20% will result in rebalancing the alternatives component of the fund to its target level. The Subcommittee will review the alternative allocation on a quarterly basis.

Depending upon market conditions, the percentage allocation to each asset class may fluctuate within the above policy ranges. Such strategic allocations should be reviewed and approved by the Investment Subcommittee on an ongoing basis. In the event that the allocation to a certain investment Pool and asset class falls above or below the above established ranges, the Consultant should make a recommendation to the Investment Subcommittee to rebalance the portfolio.

Investment objectives and guidelines will be established for each separate account investment manager. Mutual funds are not subject to the Guidelines set forth below. As it relates to the selection and retention decisions regarding mutual funds, the stated Guidelines should be used as references.

CASH AND CASH EQUIVALENTS GUIDELINES

Such investments should be prudently diversified and would include:

- any instrument issued by, guaranteed by, or insured by the U.S. Government, agencies, or other full faith instruments;
- commercial paper issued by domestic corporations which is rated both "P-1" and "A-1" by Moody's and Standard & Poor's, respectively;
- certificates of deposit, bankers acceptances, or other such irrevocable primary obligations from a list of approved banks provided by the managers; and
- commingled, short-term cash reserve funds managed generally in accordance with the principles set forth above.

FIXED INCOME GUIDELINES

The objective of the fixed-income portion of the Assets shall be both to provide a secure, above-average stream of income (i.e., income in excess of U.S. Treasury Bill rates) and

to provide a relatively stable market value base. The following directions are intended to apply to all fixed-income investment managers:

- Within the Operating and Short Term Pool, non-cash investments are limited to U.S. government only fixed income securities with a 1 to 3 year average maturity and duration +/- 20% of the stated benchmark.
- Fixed-income investments may include U.S. and Non-U.S. issues of Government and Agency obligations, marketable corporate bonds, mortgage or asset-backed bonds, and preferred stocks with sinking funds as deemed prudent by the investment managers.
- Fixed income investments are to be prudently diversified by security type, with an emphasis toward avoiding concentrated positions in any one fixed income sector or security type.
- Fixed-income portfolio maturity, as measured by portfolio duration, should be in the range of 80% to 120% of the applicable benchmark.
- Below investment grade fixed income investments are permissible up to 10% of the total fixed income allocation; however, the total portfolio will seek an average weighted credit quality of "A" or better by Standard & Poor's
- No more than 5% of the fixed income investments, at market, shall be invested in securities of any one issuer, except Government and Agency obligations, without the Subcommittee's prior approval.
- Cash equivalent investments (maturities less than one year) are permitted, up to 10% of the total market value of the account, when the managers' investment policies discourage longer-term commitments. However, the Subcommittee must be consulted in the event that the manager chooses to increase its cash equivalent position beyond 10% of the assets under its supervision.
- Investment assets allocated to fixed income investment management firms and institutions shall be properly diversified so as to avoid over concentration with any one investment manager or institution.

EQUITY GUIDELINES

The objective of the equity portion of the Assets shall be to provide for potential growth of principal with a long-term time horizon. The use of both passively managed equity index strategies and actively managed mutual funds, collective trusts, separate accounts, and comingled funds are permitted. The following acceptable sub asset classes will serve as a guideline for equity investments:

- A. Large Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily

marketable with market capitalization generally exceeding \$5 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$5 billion” means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$5 billion.

- B. Small/Mid Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily marketable with market capitalization generally exceeding \$500 million. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$500 million” means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$500 million.
- C. International - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ, FTSE, NIKKEI, DAX) and readily marketable with market capitalization generally exceeding \$1 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$1 billion” means that greater than 50% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$1 billion.

Equity Diversification

Each investment manager should diversify the portfolio in an attempt to minimize the impact of substantial losses in any specific industry or issue. Therefore, each equity account:

- May not invest more than approximately 5% of the account valued at cost in a given issuer, unless its prospective benchmark / index has greater than a 5% allocation to a specific issuer; In this case, the manager must not exceed an allocation 5% of the account higher than the index weighting
- May not invest more than approximately 10% of the account valued at market in a given issuer
- Large Cap, Mid Cap and Small Cap Domestic - Shall be broadly diversified by industry or sector groups and not represent over concentration relative to the mandate’s relevant benchmark. Additionally, domestic equity managers shall limit international-domiciled securities to 10% of their portfolio value, absent Subcommittee approval.
- International – Shall be broadly diversified by country, industry or sector groups and not represent over concentration relative to the mandate’s relevant benchmark; and limit emerging market exposure to 25% of total international exposure.
- Global – Shall be diversified between domestic and international equities and follow an investment strategy consistent with its mandate’s benchmark

that it is seeking to outperform; global equity managers may invest in both developed and developing markets and must ensure ample diversification across industry and sector groups.

ALTERNATIVE INVESTMENT GUIDELINES

Alternative investments are investments that are not included in the traditional assets of cash, equities, and fixed income. Alternative investments include categories such as hedge funds, private equity, private debt, real estate, commodities, tactical asset allocation strategies, etc.

The objective of the alternative investments shall be to promote diversification and provide risk-limiting characteristics with the goal of long-term return potential and lower overall portfolio volatility.

With the assistance of its investment consultant, it is the responsibility of the Subcommittee to conduct acceptable levels of due diligence on any investment categorized as an alternative investment. The due diligence process will include obtaining proper education on the risks and rewards of the alternative asset class, as well as the underlying risks and characteristics of the alternative investment vehicle. This due diligence process must be properly documented and retained.

Investments in private strategies, hedge funds and fund-of-funds, real estate, real assets, and commodities, among other types of alternative strategies, are permissible to the extent that they are established within the asset allocation guidelines. Alternative investments may be accessed through mutual funds, comingled funds, and partnerships, among other types of institutional investment vehicles that offer proper diversification and prudent risk levels.

PROHIBITED INVESTMENTS

The following categories of securities and strategies are not considered appropriate at the present time:

- Private Placements
- Unregistered or Restricted Stock
- Margin Trading/Short Sales
- Commodities, Commodity Contracts, Precious Metals, or Gems (excluding liquid mutual funds)
- Real Estate Property (excluding REITs and other comingled Real Estate strategies)
- Guaranteed Insurance Contracts
- Securities Lending; pledging or hypothecating securities

VOTING OF PROXIES AND TRADE EXECUTION

The investment manager shall vote proxies for separately managed accounts on behalf of the University. The Investment Subcommittee will vote all mutual fund proxies.

The Subcommittee expects the purchase and sale of its securities to be made in a manner designed to receive the combination of best price and execution.

RESPONSIBILITIES OF THE INVESTMENT MANAGERS FOR SEPARATELY MANAGED ACCOUNTS

The guidelines below are applicable to all investment managers that manage money for the University on a separate account basis. However, any mutual or commingled fund retained by the University will not be expected to adhere to these responsibilities.

Adherence to Policy Guidelines

The Assets are to be managed in accordance with the Policy guidelines herein or expressed by separate written instructions when deviation is deemed prudent and desirable. Written instructions amending this Policy document must be authorized by the Subcommittee and will be communicated through the University's Vice President for Finance and Administration or the investment consultant.

Discretionary Authority

The investment managers are expected to exercise complete investment discretion within the boundaries of the restrictions outlined in these guidelines. Such discretion includes decisions to buy, hold, or sell equity or fixed-income securities (including cash equivalents) in amounts and proportions reflective of each manager's current investment strategy.

Communication

The Subcommittee encourages, and the investment managers are responsible for, frequent and open communication with the Subcommittee and the investment consultant on all significant matters pertaining to the investment of the Assets. These communications would generally be addressed to the University's Vice President for Finance and Administration or investment consultant. In this manner, the Subcommittee expects to be advised of any major changes in investment outlook, investment strategy, asset allocation, portfolio structure, market value of the Assets, and other substantive matters affecting the Assets. The Subcommittee also expects to be informed of any significant changes in ownership, organizational structure, financial condition, and/or senior personnel staffing of the investment management organizations.

All investment managers will be required to meet with the University's Investment Subcommittee at the discretion of the Subcommittee.

The Subcommittee recognizes that the Policy requires periodic re-examination and, perhaps, revision if it is to continue to serve as a working document to encourage effective investment management. Whenever an investment manager believes that the Policy should be altered, it is the responsibility of the manager to initiate written communication with the Subcommittee.

Reporting

The Subcommittee expects each investment manager to forward, on a timely basis, quarterly reports containing portfolio activity, valuations at market, and quarterly strategy updates.

Compliance with Prudency and Diversification Measures

As fiduciaries, the investment managers are expected to diversify the portfolio to minimize the risk of large losses. The managers are expected to invest the Assets with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with such aims. Furthermore, the investment managers are expected to acknowledge in writing their intentions to comply with the Policy as it currently exists or as modified by the Subcommittee from time to time.

RESPONSIBILITIES OF THE INVESTMENT CONSULTANT

The investment consultant is responsible for providing information and analysis to assist the University with the following:

- reviewing asset allocation and investment strategy on an annual basis to determine if the current strategy meets the cash flow needs of the University and is maximizing the long-term total return of the Assets;
- reviewing all separately managed accounts to ensure that each investment manager is adhering to the issued Policy guidelines;
- communicating with all investment management organizations on a quarterly basis to determine portfolio composition and to ascertain information concerning organizational change. (Each portfolio is to be reviewed for style drift through portfolio holdings and returns-based style analysis. Additionally, each portfolio is to be reviewed for prohibited investments on an ongoing basis);
- providing a quarterly performance evaluation report and assessment of the University's Assets;
- monitoring the equity holdings of the total portfolio to determine if any one holding represents a percentage weighting that exceeds 10% of the total portfolio and alerting the Subcommittee when the portfolio violates this Policy;
- reviewing asset allocation on a quarterly basis to determine if the current levels are consistent with the asset allocation guidelines stated in this document;
- monitoring the performance of each investment manager retained by the University to determine if the investment product is out-performing the appropriate benchmark over rolling 3 and 5-year time periods; and

monitoring the performance of the total portfolio to determine if the collective investment strategy is outperforming the appropriate benchmarks over rolling 3 and 5-year time periods.

EVALUATION AND REVIEW

The objective of the evaluation and review process is to monitor the progress of the Assets in achieving the overall investment objectives. Performance will be measured and reviewed periodically by the Subcommittee and their consultants. Particular attention will be directed toward:

- determining whether the total funds are achieving their stated objectives;
- determining whether the investment managers are performing satisfactorily in relation to both the objectives set forth in this Policy, as a primary consideration, and to other investment organizations managing similar pools of capital and the recognized market indices;
- determining whether the investment managers are adhering to the guidelines set forth herein;
- the relative total portfolio return and volatility versus established benchmarks and peers;
- any issue involving the management of the investment assets;
- asset allocation structure in light of evolving markets, strategies, and fund requirements;
- reviewing benchmarks at least annually to determine appropriateness;
- determining whether the investment managers are adhering to their stated philosophy and style; and
- determining whether the overall policies and objectives continue to be appropriate, reasonable, and achievable.

REVIEW OF INVESTMENT RESULTS

On a regular basis, but not less than once annually, the Subcommittee will review actual progress of the funds versus the investment environment. The regular review will include:

- absolute market and total portfolio returns;
- relative total portfolio return and volatility versus established benchmarks and peers;

YOUNGSTOWN STATE UNIVERSITY
Asset Allocation and Other Investment Guidelines
Investment of Non-Endowment University Funds

ASSET ALLOCATION GUIDELINES

The Assets of the University are to be allocated between short-term assets and long-term assets. The Asset Allocation section of the Policy is specifically intended to address short-term assets and long-term assets as two distinct asset pools of the University's balance sheet assets.

The objectives that the University has established in conjunction with a comprehensive review of the current and projected financial requirements are as follows:

1. The strict adherence to the Ohio Revised Code and the authority granted under Ohio Revised Code §3345.05. Specifically:
 - a. ORC 3345.05 (C)(1): A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of this state or any political subdivision of this state, certificates of deposit of any national bank located in this state, written repurchase agreements with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve.
 - b. ORC 3345.05 (C)(2): Eligible funds above those that meet the conditions described in ORC 3345.05 (C)(1) may be pooled with other institutional funds and invested in accordance with section 1715.52 of the Revised Code.

The Operating and Short-Term Pool will be comprised of cash and short-term assets required for working capital, liquidity purposes, and other short-term needs. It is understood that assets classified as short-term are to be maintained primarily in cash and cash equivalents, and may also invest partially in short term fixed income (guidelines defined within), in order to meet the daily liquidity needs of the University. The asset allocation guidelines of the Operating and Short-Term Pool are outlined in the table below.

The Long-Term / Reserves Pool are investments with a time horizon in excess of one year. It is assumed that financial needs of the University ranging from one to five years will be maintained in fixed income investments. It is further assumed that any equity or alternative investments will have a time horizon greater than five years. As shown in the table below, short-term and intermediate-term fixed income, alternative investments, and equity are classified as long-term assets.

Based on the investment objectives and risk tolerances stated in these guidelines, the following asset allocation strategy is considered appropriate for the University's investment Assets:

Operating & Short Term Pool		Allocation	
Asset Class/Investment Strategy	Pool Target	Pool Range	Total Range
Total Cash/Operating Assets	n/a	60-100%	
Total Short-Term Fixed Income	n.a	0-40%	
			0-50% 25-50%
Long Term/Reserves Pool			
Total Domestic Equity	27%	20-35%	
Total International Equity	8%	0-15%	
Total Equity	35%	25-45%	
Total Alternatives	15%	0-20%	
Total Short-Term Fixed Income	30%	25-45%	
Total Intermediate-Term Fixed Income	20%	10-30%	
Cash	0%	0-5%	
	100%		50-100% 50-75%

According to the University's Policy, the operating and short term funds of the non-endowment funds are allocated to the Operating and Short-Term Pool of the asset allocation guidelines. Adequate balance of 60 to 100% of the pool will be invested in cash and cash equivalents in order to provide the University with liquidity to meet its operational needs. The Pool may also invest 0-40% in 1-3 year average maturity U.S. Government fixed income investments. The Operating and Short Term Pool should represent ~~0-50%~~ ~~no less than 25%~~ of the total market value of the Investments. Although the actual percentage will fluctuate with market conditions, levels in excess of 50% ~~or below 25%~~ will result in rebalancing the Investments to target levels. The Subcommittee will review the pool level allocations on a quarterly basis.

According to the University's Policy, funds with a longer time horizon are allocated to the Long-Term / Reserves Pool. This Pool will be comprised of short-term fixed income, intermediate-term fixed income, alternative investments, and equity.

Short-term fixed income should normally represent 30% of the total market value of the Pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of 45% or below 25% will result in rebalancing the short-term fixed income component of the pool to its target level. The Subcommittee will review the short-term fixed income allocation on a quarterly basis.

Intermediate-term fixed income should normally represent 20% of the total market value of the pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of 30% or below 10% will result in rebalancing the intermediate-term fixed income component of the pool to its fixed income target level. The Subcommittee will review the intermediate-term fixed income allocation on a quarterly basis. Up to 10% of the fixed income investments in the Long Term Pool may be made in below investment grade debt (high yield).

The equity component should normally represent 35% of the total market value of the long-term pool. Although the actual percentage of equities will vary with market conditions, equity levels in excess of 45% or below 25% will result in rebalancing the equity component of the fund to its equity target level. The Subcommittee will review the equity allocation on a quarterly basis.

The alternative investments component should normally represent 15% of the total market value of the long-term pool. Although the actual percentage will vary with market conditions, levels in excess of 20% will result in rebalancing the alternatives component of the fund to its target level. The Subcommittee will review the alternative allocation on a quarterly basis.

Depending upon market conditions, the percentage allocation to each asset class may fluctuate within the above policy ranges. Such strategic allocations should be reviewed and approved by the Investment Subcommittee on an ongoing basis. In the event that the allocation to a certain investment Pool and asset class falls above or below the above established ranges, the Consultant should make a recommendation to the Investment Subcommittee to rebalance the portfolio.

Investment objectives and guidelines will be established for each separate account investment manager. Mutual funds are not subject to the Guidelines set forth below. As it relates to the selection and retention decisions regarding mutual funds, the stated Guidelines should be used as references.

CASH AND CASH EQUIVALENTS GUIDELINES

Such investments should be prudently diversified and would include:

- any instrument issued by, guaranteed by, or insured by the U.S. Government, agencies, or other full faith instruments;
- commercial paper issued by domestic corporations which is rated both "P-1" and "A-1" by Moody's and Standard & Poor's, respectively;
- certificates of deposit, bankers acceptances, or other such irrevocable primary obligations from a list of approved banks provided by the managers; and
- commingled, short-term cash reserve funds managed generally in accordance with the principles set forth above.

FIXED INCOME GUIDELINES

The objective of the fixed-income portion of the Assets shall be both to provide a secure, above-average stream of income (i.e., income in excess of U.S. Treasury Bill rates) and to provide a relatively stable market value base. The following directions are intended to apply to all fixed-income investment managers:

- Within the Operating and Short Term Pool, non-cash investments are limited to U.S. government only fixed income securities with a 1 to 3 year average maturity and duration +/- 20% of the stated benchmark.
- Fixed-income investments may include U.S. and Non-U.S. issues of Government and Agency obligations, marketable corporate bonds, mortgage or asset-backed bonds, and preferred stocks with sinking funds as deemed prudent by the investment managers.
- Fixed income investments are to be prudently diversified by security type, with an emphasis toward avoiding concentrated positions in any one fixed income sector or security type.
- Fixed-income portfolio maturity, as measured by portfolio duration, should be in the range of 80% to 120% of the applicable benchmark.
- Below investment grade fixed income investments are permissible up to 10% of the total fixed income allocation; however, the total portfolio will seek an average weighted credit quality of "AA" or better by Standard & Poor's
- No more than 5% of the fixed income investments, at market, shall be invested in securities of any one issuer, except Government and Agency obligations, without the Subcommittee's prior approval.
- Cash equivalent investments (maturities less than one year) are permitted, up to 10% of the total market value of the account, when the managers' investment policies discourage longer-term commitments. However, the Subcommittee must be consulted in the event that the manager chooses to increase its cash equivalent position beyond 10% of the assets under its supervision.
- Investment assets allocated to fixed income investment management firms and institutions shall be properly diversified so as to avoid over concentration with any one investment manager or institution.

EQUITY GUIDELINES

The objective of the equity portion of the Assets shall be to provide for potential growth of principal with a long term time horizon. The use of both passively managed equity index strategies and actively managed mutual funds, collective trusts, separate accounts, and comingled funds are is-permitted. The following acceptable sub asset classes will serve as a guideline for equity investments:

- A. Large Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily marketable with market capitalization generally exceeding \$5 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, "generally exceeding \$5 billion" means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$5 billion.
- B. Small/Mid Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily marketable with market capitalization generally exceeding \$500 million. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, "generally exceeding \$500 million" means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$500 million.
- C. International - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ, FTSE, NIKKEI, DAX) and readily marketable with market capitalization generally exceeding \$1 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, "generally exceeding \$1 billion" means that greater than 50% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$1 billion.

Equity Diversification

Each investment manager should diversify the portfolio in an attempt to minimize the impact of substantial losses in any specific industry or issue. Therefore, each equity account:

- May not invest more than approximately 5% of the account valued at cost in a given issuer, unless its prospective benchmark / index has greater than a 5% allocation to a specific issuer: In this case, the manager must not exceed an allocation 5% of the account higher than the index weighting
- May not invest more than approximately 10% of the account valued at market in a given issuer
- Large Cap, Mid Cap and Small Cap Domestic - Shall be broadly diversified by industry or sector groups and not represent over concentration relative to the mandate's relevant benchmark. Additionally, domestic equity managers shall limit international-domiciled securities to 10% of their portfolio value, absent Subcommittee approval.

- International – Shall be broadly diversified by country, industry or sector groups and not represent over concentration relative to the mandate's relevant benchmark; and limit emerging market exposure to 25% of total international exposure.
- Global – Shall be diversified between domestic and international equities and follow an investment strategy consistent with its mandate's benchmark that it is seeking to outperform; global equity managers may invest in both developed and developing markets and must ensure ample diversification across industry and sector groups.

ALTERNATIVE INVESTMENT GUIDELINES

Alternative investments are investments that are not included in the traditional assets of cash, equities, and fixed income. Alternative investments include categories such as hedge funds, private equity, private debt, real estate, commodities, tactical asset allocation strategies, etc.

The objective of the alternative investments shall be to promote diversification and provide risk-limiting characteristics with the goal of long-term return potential and lower overall portfolio volatility.

With the assistance of its investment consultant, it is the responsibility of the Subcommittee to conduct acceptable levels of due diligence on any investment categorized as an alternative investment. The due diligence process will include obtaining proper education on the risks and rewards of the alternative asset class, as well as the underlying risks and characteristics of the alternative investment vehicle. This due diligence process must be properly documented and retained.

Investments in private strategies, hedge funds and fund-of-funds, real estate, real assets, and commodities, ~~tactical asset allocation, equity long/shorts, and absolute return among other types of alternative strategies,~~ are permissible to the extent that they are established within the asset allocation guidelines. Alternative and are investments may be accessed through mutual funds, comingled funds, and partnerships, among other types of institutional investment vehicles that offer proper diversification and prudent risk levels, as part of the underlying investment strategy of a well-diversified, highly liquid mutual fund, whose shares are publicly traded on major U.S. exchanges.

~~Other alternative investment asset classes including but not limited to individual hedge funds and private strategies, such as private equity, venture capital and levered buyouts, are not permitted at this time.~~

PROHIBITED INVESTMENTS

The following categories of securities and strategies are not considered appropriate at the present time:

- Private Placements
- Unregistered or Restricted Stock
- Margin Trading/Short Sales
- Commodities, Commodity Contracts, Precious Metals, or Gems (excluding liquid mutual funds)
- Real Estate Property (excluding REITs and other comingled Real Estate strategies)
- Guaranteed Insurance Contracts
- Securities Lending; pledging or hypothecating securities

VOTING OF PROXIES AND TRADE EXECUTION

The investment manager shall vote proxies for separately managed accounts on behalf of the University. The Investment Subcommittee will vote all mutual fund proxies.

The Subcommittee expects the purchase and sale of its securities to be made in a manner designed to receive the combination of best price and execution.

RESPONSIBILITIES OF THE INVESTMENT MANAGERS FOR SEPARATELY MANAGED ACCOUNTS

The guidelines below are applicable to all investment managers that manage money for the University on a separate account basis. However, any mutual or commingled fund retained by the University will not be expected to adhere to these responsibilities.

Adherence to Policy Guidelines

The Assets are to be managed in accordance with the Policy guidelines herein or expressed by separate written instructions when deviation is deemed prudent and desirable. Written instructions amending this Policy document must be authorized by the Subcommittee and will be communicated through the University's Vice President for Finance and Administration or the investment consultant.

Discretionary Authority

The investment managers are expected to exercise complete investment discretion within the boundaries of the restrictions outlined in these guidelines. Such discretion includes decisions to buy, hold, or sell equity or fixed-income securities (including cash equivalents) in amounts and proportions reflective of each manager's current investment strategy.

Communication

The Subcommittee encourages, and the investment managers are responsible for, frequent and open communication with the Subcommittee and the investment consultant on all significant matters pertaining to the investment of the Assets. These communications would generally be addressed to the University's Vice President for Finance and Administration or investment consultant. In this manner, the Subcommittee expects to be advised of any major changes in investment outlook, investment strategy, asset allocation, portfolio structure, market value of the Assets, and other substantive matters affecting the Assets. The Subcommittee also expects to be informed of any significant changes in

ownership, organizational structure, financial condition, and/or senior personnel staffing of the investment management organizations.

All investment managers will be required to meet with the University's Investment Subcommittee at the discretion of the Subcommittee.

The Subcommittee recognizes that the Policy requires periodic re-examination and, perhaps, revision if it is to continue to serve as a working document to encourage effective investment management. Whenever an investment manager believes that the Policy should be altered, it is the responsibility of the manager to initiate written communication with the Subcommittee.

Reporting

The Subcommittee expects each investment manager to forward, on a timely basis, quarterly reports containing portfolio activity, valuations at market, and quarterly strategy updates.

Compliance with Prudence and Diversification Measures

As fiduciaries, the investment managers are expected to diversify the portfolio to minimize the risk of large losses. The managers are expected to invest the Assets with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with such aims. Furthermore, the investment managers are expected to acknowledge in writing their intentions to comply with the Policy as it currently exists or as modified by the Subcommittee from time to time.

RESPONSIBILITIES OF THE INVESTMENT CONSULTANT

The investment consultant is responsible for providing information and analysis to assist the University with the following:

- reviewing asset allocation and investment strategy on an annual basis to determine if the current strategy meets the cash flow needs of the University and is maximizing the long-term total return of the Assets;
- reviewing all separately managed accounts to ensure that each investment manager is adhering to the issued Policy guidelines;
- communicating with all investment management organizations on a quarterly basis to determine portfolio composition and to ascertain information concerning organizational change. (Each portfolio is to be reviewed for style drift through portfolio holdings and returns-based style analysis. Additionally, each portfolio is to be reviewed for prohibited investments on an ongoing basis);
- providing a quarterly performance evaluation report and assessment of the University's Assets;

- monitoring the equity holdings of the total portfolio to determine if any one holding represents a percentage weighting that exceeds 10% of the total portfolio and alerting the Subcommittee when the portfolio violates this Policy;
- reviewing asset allocation on a quarterly basis to determine if the current levels are consistent with the asset allocation guidelines stated in this document;
- monitoring the performance of each investment manager retained by the University to determine if the investment product is out-performing the appropriate benchmark over rolling 3 and 5-year time periods; and

monitoring the performance of the total portfolio to determine if the collective investment strategy is outperforming the appropriate benchmarks over rolling 3 and 5-year time periods.

EVALUATION AND REVIEW

The objective of the evaluation and review process is to monitor the progress of the Assets in achieving the overall investment objectives. Performance will be measured and reviewed periodically by the Subcommittee and their consultants. Particular attention will be directed toward:

- determining whether the total funds are achieving their stated objectives;
- determining whether the investment managers are performing satisfactorily in relation to both the objectives set forth in this Policy, as a primary consideration, and to other investment organizations managing similar pools of capital and the recognized market indices;
- determining whether the investment managers are adhering to the guidelines set forth herein;
- the relative total portfolio return and volatility versus established benchmarks and peers;
- any issue involving the management of the investment assets;
- asset allocation structure in light of evolving markets, strategies, and fund requirements;
- reviewing benchmarks at least annually to determine appropriateness;
- determining whether the investment managers are adhering to their stated philosophy and style; and

- determining whether the overall policies and objectives continue to be appropriate, reasonable, and achievable.

REVIEW OF INVESTMENT RESULTS

On a regular basis, but not less than once annually, the Subcommittee will review actual progress of the funds versus the investment environment. The regular review will include:

- absolute market and total portfolio returns;
- relative total portfolio return and volatility versus established benchmarks and peers;
- asset allocation structure in light of evolving markets, strategies, and fund requirements;
- adherence to guidelines;
- individual manager performance versus established benchmarks and peers;
- the continuing appropriateness of this Policy; and
- any issue involving the management of the funds' assets.

The performance of each individual investment manager will be reviewed on a quarterly basis with appropriate benchmarks as agreed upon from time to time by the Investment Subcommittee.

Total Fund, Pool level, and asset class returns will be measured as follows:

Total Fund: Weighted average benchmark based on the asset allocation targets identified with these guidelines using the below referenced market indices.

Pool level: Weighted average benchmark based on the asset allocation targets identified with these guidelines using the below referenced market indices.

<u>Asset Class</u>	<u>Benchmark</u>
Operating / Short Term Pool	
Cash	91 Day T-Bill
Short Term Fixed Income	Barelay's Capital 1-3 Year Government Index
Long Term / Reserves Pool	
Domestic Equity	Russell 3000 Index
International Equity	MSCI EAFE Index
Intermediate Fixed Income	Barelay's Capital Intermediate Govt. / Credit Index
Short Term Fixed Income	Barelay's Capital 1-5 Year Govt. / Credit Index and Merrill Lynch 1-3 Year Govt. / Credit Index

Alternative Investments	CPI + 3%
	HFRI Fund-of-Funds Index
	HFRI Equity Hedge Index
	FTSE NAREIT Developed Index

<u>Operating / Short Term Pool</u>	
Cash	90-Day U.S. T-Bill
Short Term Fixed Income	Bloomberg 1-3 Year Government Index / Bloomberg 1-5 Year Government Index
<u>Long Term / Reserves Pool</u>	
Domestic Equity	Russell 3000 Index
International Equity	MSCI EAFE Index, MSCI ACWI ex US Index
Global Equity	MSCI ACWI Index
Intermediate Fixed Income	Bloomberg Aggregate Index, Bloomberg Intermediate Govt./Credit Index
Short Term Fixed Income	ICE BofA 1-3 Year US Corp & Govt Index, Bloomberg 1-5 Year US Corp & Govt Index
Alternative Investments	CPI+3%, HFRI Fund-of-Funds Index, HFRI Equity Hedge Index, Other Applicable Alternative Benchmarks, FTSE NAREIT Developed Index
Cash	90-Day U.S. T-Bill