

# **Board of Regents State of Iowa**

# Market Environment

# Bear markets and recoveries in perspective

## S&P 500 corrections dating back to 1950

Bear Start (Peak)	To -10%	To -20%	Bear End (Trough)	Recovery	Days to -20%	Days to Trough	Days to Recovery	Drawdown	6 Month Post-Bear	1 Year Post-Bear	2 Year Post-Bear
2/19/2020	2/27/2020	3/12/2020			16						
10/9/2007	11/26/2007	7/7/2008	3/9/2009	3/28/2013	186	355	1021	-56.8%	52.7%	68.6%	95.1%
3/24/2000	4/14/2000	3/12/2001	10/9/2002	5/30/2007	242	637	1166	-49.1%	11.5%	33.7%	44.5%
8/25/1987	10/15/1987	10/19/1987	12/4/1987	7/26/1989	38	71	414	-33.5%	19.0%	21.4%	56.9%
11/28/1980	8/24/1981	2/22/1982	8/12/1982	11/3/1982	310	430	58	-27.1%	44.1%	58.3%	61.5%
1/11/1973	4/27/1973	11/27/1973	10/3/1974	7/17/1980	221	436	1462	-48.2%	30.9%	38.0%	67.3%
11/29/1968	6/19/1969	1/29/1970	5/26/1970	3/6/1972	288	369	451	-36.1%	27.2%	43.7%	59.7%
2/9/1966	5/16/1966	8/29/1966	10/7/1966	5/4/1967	139	167	143	-22.2%	22.9%	32.9%	41.7%
12/12/1961	4/30/1962	5/28/1962	6/26/1962	9/3/1963	115	135	299	-28.0%	20.5%	32.7%	55.7%
8/2/1956	10/1/1956	10/21/1957	10/22/1957	9/24/1958	306	307	233	-21.6%	9.8%	31.0%	43.7%
			Average		186	323	583	-35.8%	26.5%	40.0%	58.4%

Source: Bloomberg as of March 31, 2020; post-bear returns are cumulative for each time period

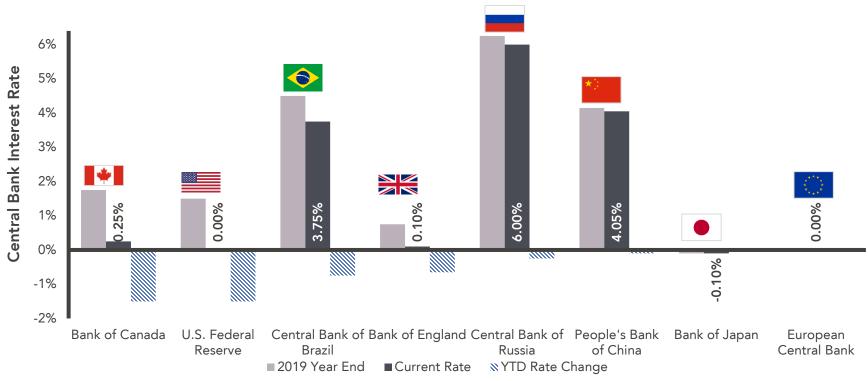


# U.S. economy overview

- 11-year bull market officially ends as the S&P 500 entered bear market territory in March, caused by COVID-19
- 1Q20 & 2Q20 GDP projected to be negative, indicating the U.S. is likely in a recession
- The unemployment report for the last two weeks of March totaled nearly 10 million initial claims, the largest amount on record
- Fed lowered rates to 0% and the government issued a \$2 trillion stimulus package to bolster the economy
- Oil prices plummet as Russia/Saudi Arabia price war gains steam
- COVID-19 infections rise above 1 million people worldwide

# Swift global rate cuts

#### Most central banks lowered their key rates in response to COVID-19

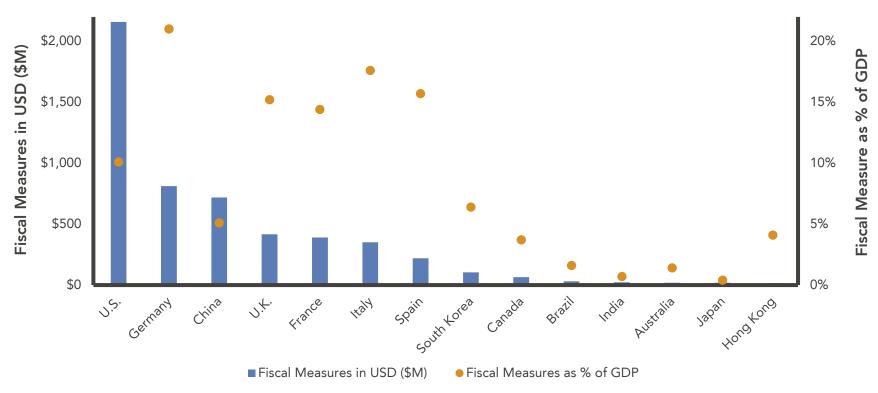


Sources: Bank of Canada, Bank of England, Bank of Japan, Central Bank of Brazil, Central Bank of Russia, European Central Bank, People's Bank of China, and U.S. Federal Reserve. Rates as of March 31, 2020.



# Fiscal stimulus spree

# Numerous stimulus packages were announced to offset COVID-19's economic effect



Sources: From Natixis COVID-19 Dashboard: Natixis PRCG, International Monetary Fund; as of March 30, 2020. Funds from IMF represent available loanable funds. Totals include loan guarantees. China totals revised to include only 2020 planned infrastructure projects.



# Fixed income: Cash dash introduces value in bonds

# Spiking new infections and economic fallout from shelter-in-place policies widened spreads, flight to cash steepened curve

		Month (%)	<b>Q</b> tr (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
<b>Broad Market Indices</b>	Blm BC Aggregate	-0.6	3.1	3.1	8.9	4.8	3.4	3.9
Intermediate Indices	Blm BC Int. Gov./Credit	-0.4	2.4	2.4	6.9	3.8	2.8	3.1
Government Only Indices	Blm BC Long Gov.	5.9	20.6	20.6	32.3	13.3	7.3	8.9
	Blm BC Int. Gov.	2.0	5.2	5.2	8.9	4.1	2.8	2.8
	Blm BC 1-3 Year Gov.	1.3	2.7	2.7	5.4	2.7	1.8	1.4
	Blm BC U.S. TIPS	-1.8	1.7	1.7	6.8	3.5	2.7	3.5
Credit Indices	Blm BC U.S. Long Credit	-10.2	-4.7	-4.7	9.0	6.6	4.7	7.3
	Blm BC High Yield	-11.5	-12.7	-12.7	-6.9	0.8	2.8	5.6
	CS Leveraged Loan Index	-12.5	-13.2	-13.2	-9.5	-0.7	1.2	3.3
Securitized Bond Indices	Blm BC MBS	1.1	2.8	2.8	7.0	4.0	2.9	3.3
	Blm BC ABS	-2.1	-0.2	-0.2	2.8	2.4	2.0	2.5
	Blm BC CMBS	-3.7	0.5	0.5	5.4	4.1	3.1	4.9
Non-U.S. Indices	Blm BC Global Aggregate Hedged	-1.6	1.4	1.4	6.6	4.6	3.5	4.1
	JPM EMBI Global Diversified	-13.8	-13.4	-13.4	-6.8	0.4	2.8	4.9
	JPM GBI-EM Global Diversified	-2.5	-1.1	-1.1	8.3	6.6	6.6	7.2
Municipal Indices	Blm BC Municipal 5 Year	-2.8	-1.0	-1.0	2.2	2.4	2.1	2.8
	Blm BC HY Municipal	-11.0	-6.9	-6.9	-0.7	4.4	4.2	6.0

Note: the local currency GBI index is unhedged and denominated in local currencies. Sources: Bloomberg Barclays, Credit Suisse, JPMorgan as of March 31, 2020



# Highest quality credits outperformed in 1Q

Due to escalating coronavirus concerns and investors tilting up in quality, the lowest quality credit segments fared the worst in the quarter

**■** Total return of quality segments

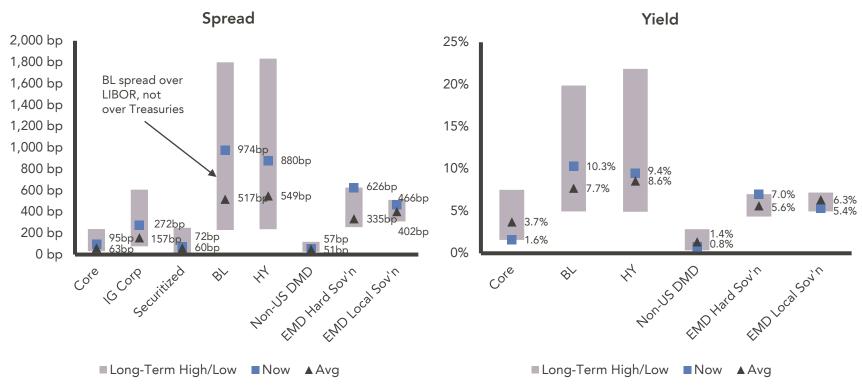
	Trailing						Calendar Year						
	Month	QTD	Last Q	YTD	1 Yr	3 Yr	5 Yr	10 Yr	2019	2018	2017	2016	2015
AAA	-1.30%	4.74%	-0.18%	4.74%	14.45%	8.03%	5.26%	5.54%	14.75%	-2.08%	8.03%	3.39%	0.43%
AA	-2.44%	1.38%	0.20%	1.38%	8.07%	4.94%	3.63%	4.26%	10.53%	-0.52%	4.63%	3.60%	0.92%
А	-4.54%	-0.67%	0.81%	-0.67%	7.38%	4.77%	3.65%	4.94%	13.18%	-2.50%	5.95%	4.65%	0.60%
BBB	-10.09%	-7.10%	1.68%	-7.10%	2.15%	3.45%	2.97%	5.09%	16.26%	-2.85%	7.09%	8.04%	-2.25%
ВВ	-9.27%	-10.15%	2.45%	-10.15%	-3.19%	2.12%	3.39%	6.07%	15.51%	-2.41%	7.32%	12.78%	-1.00%
В	-11.58%	-12.97%	2.61%	-12.97%	-6.81%	0.79%	2.45%	5.38%	14.80%	-1.31%	6.49%	15.81%	-4.72%
CCC	-18.37%	-20.55%	3.74%	-20.55%	-18.80%	-4.08%	0.90%	4.75%	9.51%	-3.84%	10.38%	31.46% -	-12.11%

Source: Bloomberg as of March 31, 2020



# Spreads at attractive levels

# Current spreads for plus sectors have proven to be historically profitable when allocating at these valuations



Note: Long-term high, low and average based on longest available data for each index Sources: Bloomberg Barclays, Credit Suisse, Deutsche, JPMorgan as of March 31, 2020



# U.S. equities: The longest bull market ever is over

## U.S. equity index returns

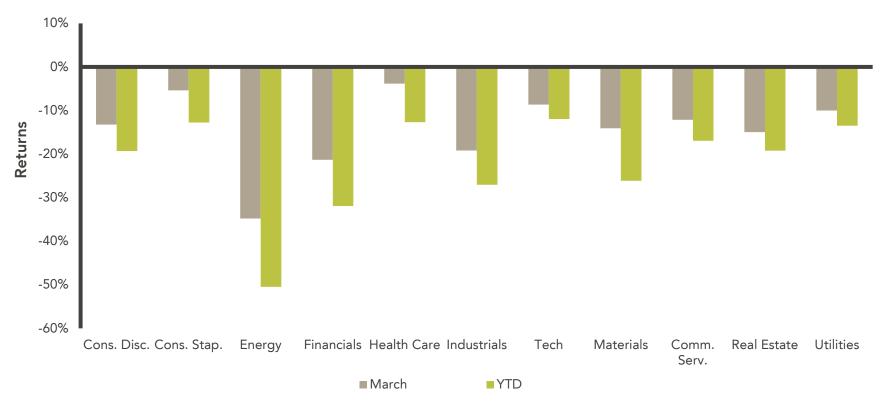
	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	-13.6	-22.7	-22.7	-13.4	4.4	6.9	10.0
Wilshire 5000	-13.6	-20.7	-20.7	-8.9	4.1	6.0	10.2
Russell 3000	-13.8	-20.9	-20.9	-9.1	4.0	5.8	10.1
Large-Cap Market Indices							
S&P 500	-12.4	-19.6	-19.6	-7.0	5.1	6.7	10.5
Russell 1000	-13.2	-20.2	-20.2	-8.0	4.6	6.2	10.4
Russell 1000 Value	-17.1	-26.7	-26.7	-17.2	-2.2	1.9	7.7
Russell 1000 Growth	-9.8	-14.1	-14.1	0.9	11.3	10.4	13.0
Mid-Cap Market Indices							
Russell MidCap	-19.5	-27.1	-27.1	-18.3	-0.8	1.8	8.8
Russell MidCap Value	-22.7	-31.7	-31.7	-24.1	-6.0	-0.8	7.2
Russell MidCap Growth	-14.9	-20.0	-20.0	-9.4	6.5	5.6	10.9
Small-Cap Market Indices							
Russell 2000	-21.7	-30.6	-30.6	-24.0	-4.6	-0.2	6.9
Russell 2000 Value	-24.7	-35.7	-35.7	-29.6	-9.5	-2.4	4.8
Russell 2000 Growth	-19.1	-25.8	-25.8	-18.6	0.1	1.7	8.9

Source: Morningstar Direct as of March 31, 2020



# A tale of two sectors: Technology vs. Energy

### **S&P 500 sector performance**



Source: Morningstar Direct as of March 31, 2020



# Non-U.S. equities: an infamous quarter

# Coronavirus leads to abrupt and acute declines

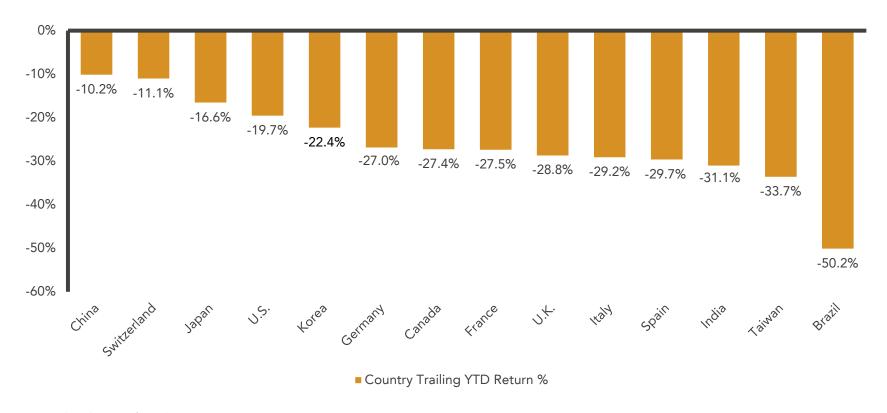
	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI	-13.5	-21.4	-21.4	-11.3	1.5	2.9	5.9
MSCI ACWI ex. U.S.	-14.5	-23.4	-23.4	-15.6	-2.0	-0.6	2.1
MSCI EAFE	-13.4	-22.8	-22.8	-14.4	-1.8	-0.6	2.7
MSCI EAFE Local	-12.5	-20.6	-20.6	-12.6	-1.8	-0.2	4.4
MSCI Emerging Markets	-15.4	-23.6	-23.6	-17.7	-1.6	-0.4	0.7
MSCI EM Local	-13.0	-19.1	-19.1	-13.0	1.4	2.0	3.8
MSCI EAFE Small-Cap	-17.2	-27.5	-27.5	-18.2	-2.9	1.0	4.8
MSCI EM Small-Cap	-23.1	-31.4	-31.4	-29.0	-9.6	-5.2	-1.3
MSCI Frontier	-22.0	-26.6	-26.6	-19.0	-4.3	-2.9	1.0

Source: eVestment as of March 2020



# YTD all country returns

#### China is the top performer, while Brazil was hit the hardest

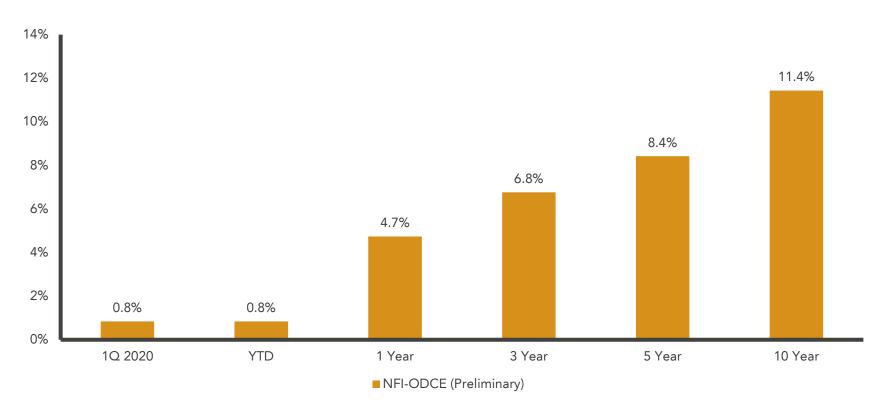


Source: Bloomberg as of March 31, 2020



# Real estate performance

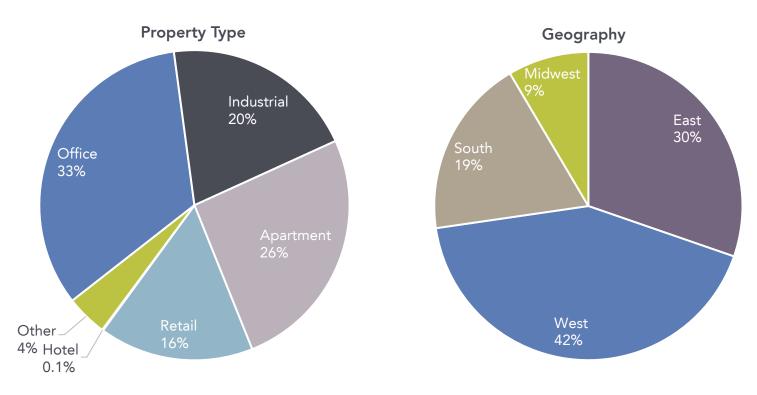
# Private core real estate expected to deliver positive return in 1Q 2020 despite market downturn



Source: Manager reported returns (preliminary) as of March 31, 2020

# Sector diversification

Exposure to sectors most impacted by COVID-19 (e.g. retail, hotels, seniors housing, and student housing) represent a relatively small portion within the NFI-ODCE Index



Source: NCREIF as of 4Q19



# Private equity outperformance

# Long-term private equity outperformance continues to provide compelling support for increasing investor allocations

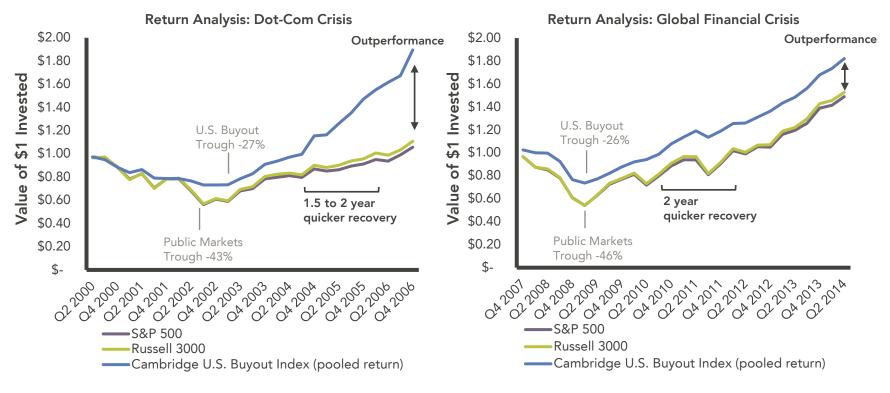
	QTR (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	15 Year (%)	20 Year (%)
Cambridge Associates U.S. PE Index	2.3	13.1	11.7	16.8	14.2	16.3	14.1	12.1
Global Buyout & Growth Equity Index	1.4	11.0	9.8	15.5	12.8	14.5	13.6	12.2
Ex-U.S. Developed PE and VC Index	-0.7	9.0	7.7	16.4	12.9	12.7	13.4	13.3
Cambridge Associates U.S. VC Index	-0.8	12.9	14.8	14.1	13.3	14.3	11.0	11.0
U.S. VC Early Stage Index	-2.0	13.9	16.5	14.8	14.6	15.4	11.0	14.2
U.S. VC Late & Expansion Stage Index	1.3	14.5	17.6	15.8	11.8	14.4	12.5	8.6
NASDAQ Composite Index	-0.1	20.6	-0.6	14.6	12.2	14.2	10.1	5.5
Russell 1000 Index	1.4	20.5	3.9	13.2	10.6	13.2	9.2	6.6
Russell 2000 Index	-2.4	14.2	-8.9	8.2	8.2	11.2	8.2	8.0
S&P 500 Index	1.7	20.6	4.3	13.4	10.8	13.2	9.0	6.3
Wilshire 5000 Total Market Index	1.2	20.1	3.0	12.9	10.6	13.1	9.2	6.8

Source: Cambridge Associates as of September 30, 2019



# Private equity has weathered market downturns

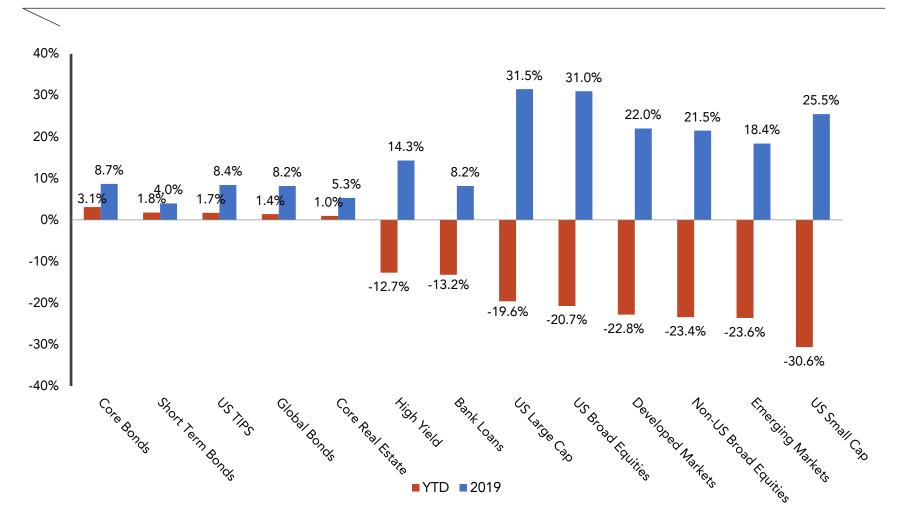
Private equity has experienced lagged and less significant pullbacks with quicker recoveries as compared to public markets over the most recent economic downturns



Sources: Bloomberg; Cambridge Associates; Neuberger Berman



# YTD asset class returns

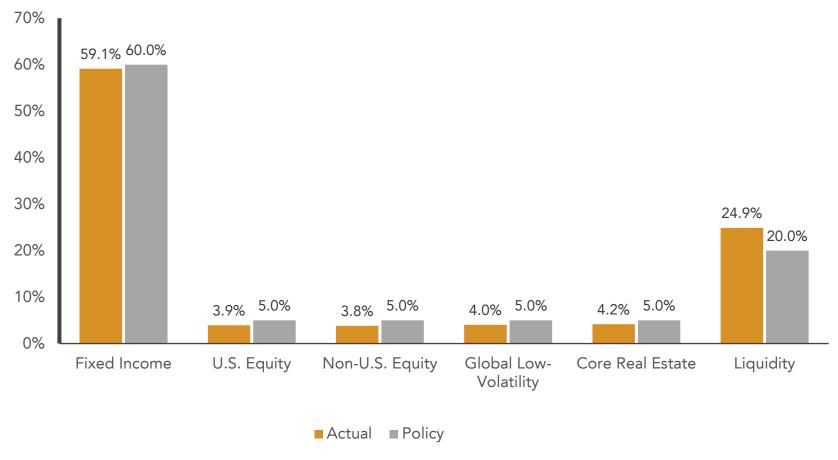


As of March 31, 2020



# Performance Review

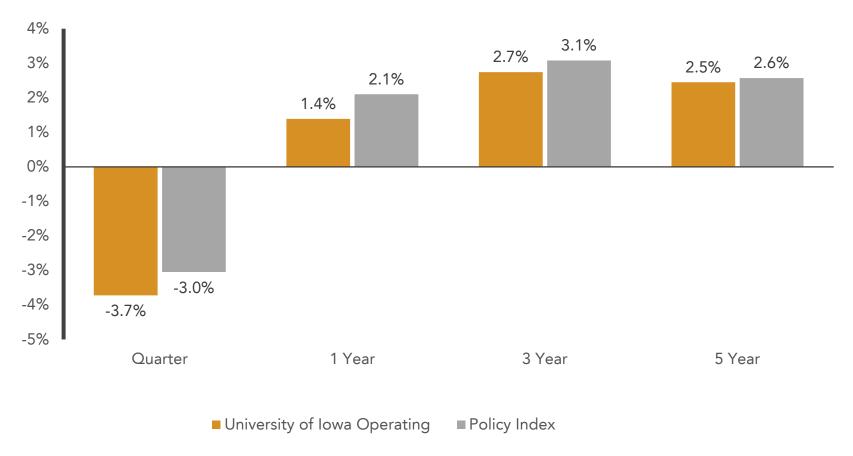
# University of Iowa Operating Portfolio – Asset Allocation\*







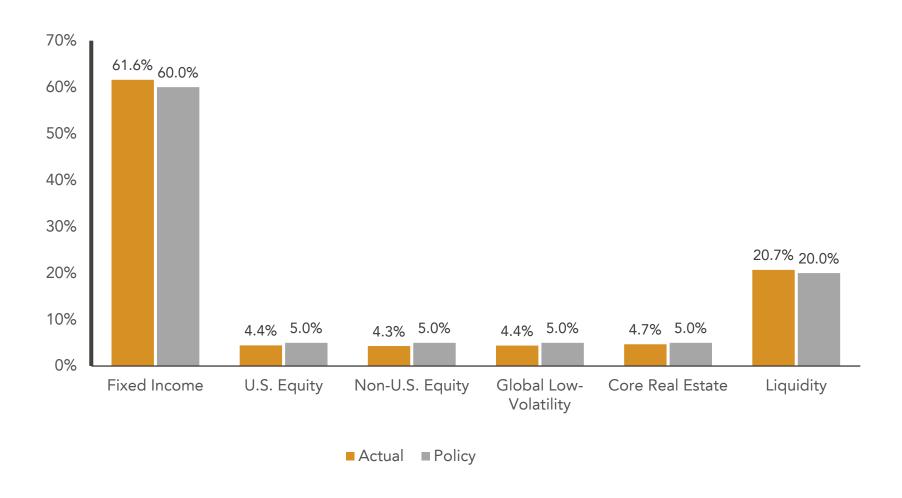
# **University of Iowa Operating Portfolio – Return Summary\***



\*Includes University of Northern Iowa. Note: See appendix for Policy Index definition.

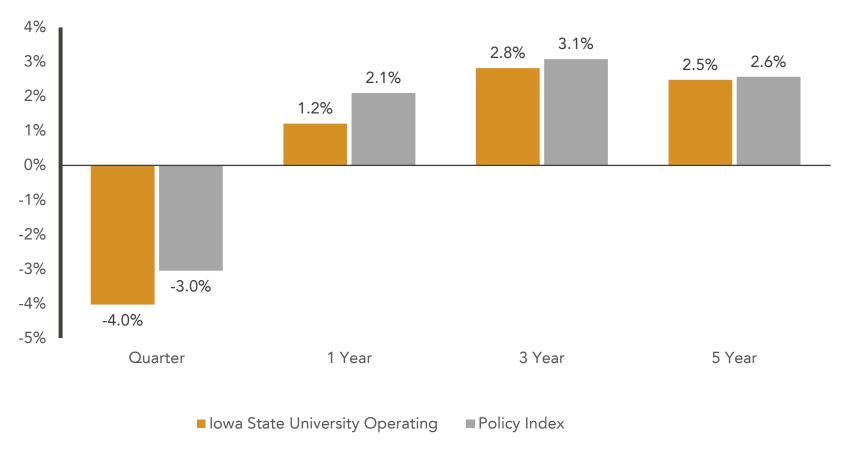


# Iowa State University Operating Portfolio - Asset Allocation





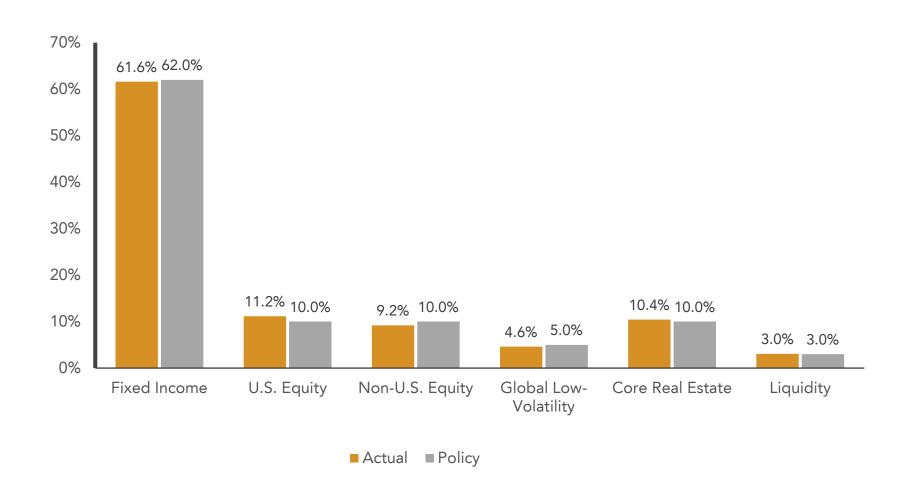
# **Iowa State University Operating Portfolio – Return Summary**



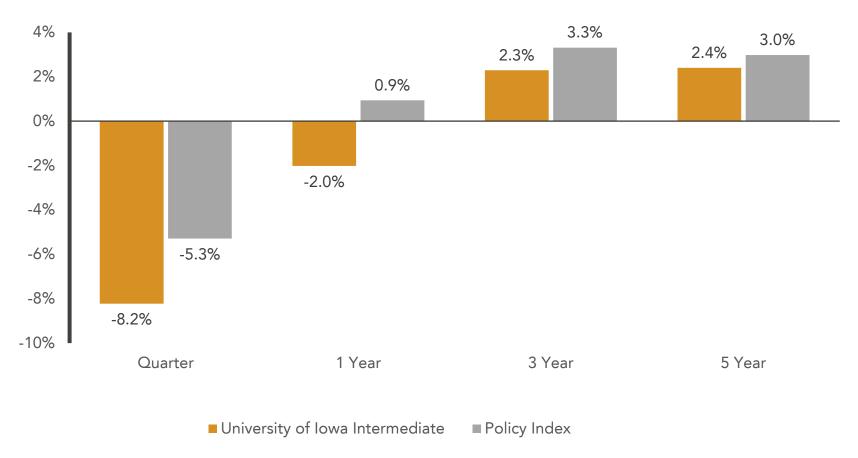
Note: See appendix for Policy Index definition.



# University of Iowa Diversified Intermediate Term Portfolio – Asset Allocation



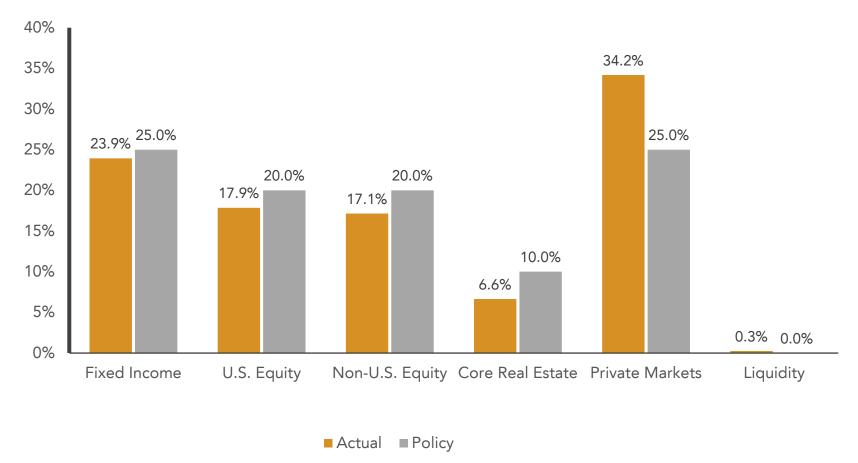
# University of Iowa Diversified Intermediate Term Portfolio – Return Summary



Note: See appendix for Policy Index definition.



# **University of Iowa Endowment – Asset Allocation\***

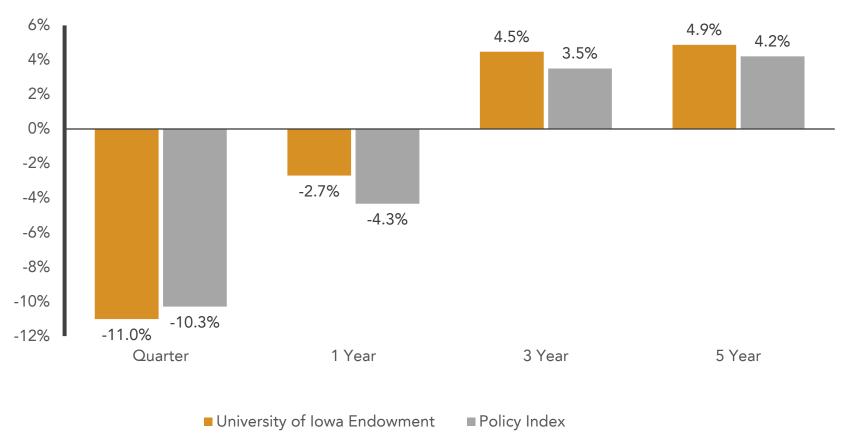


<sup>\*</sup>Includes University of Northern Iowa.

Note: Some private market valuations may be carried over from the previous quarter. Allocations are preliminary and subject to change.



# **University of Iowa Endowment – Return Summary\***

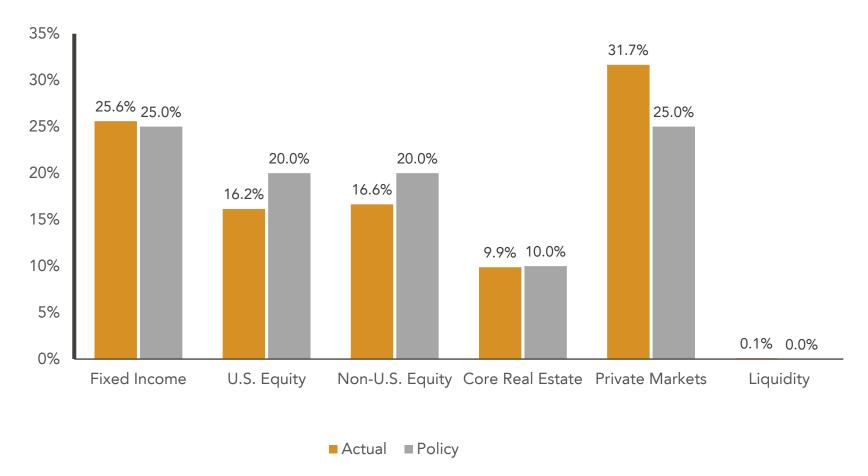


<sup>\*</sup>Includes University of Northern Iowa.

Note: See appendix for Policy Index definition. Some private market valuations may be carried over from the previous quarter. Returns are preliminary and subject to change.



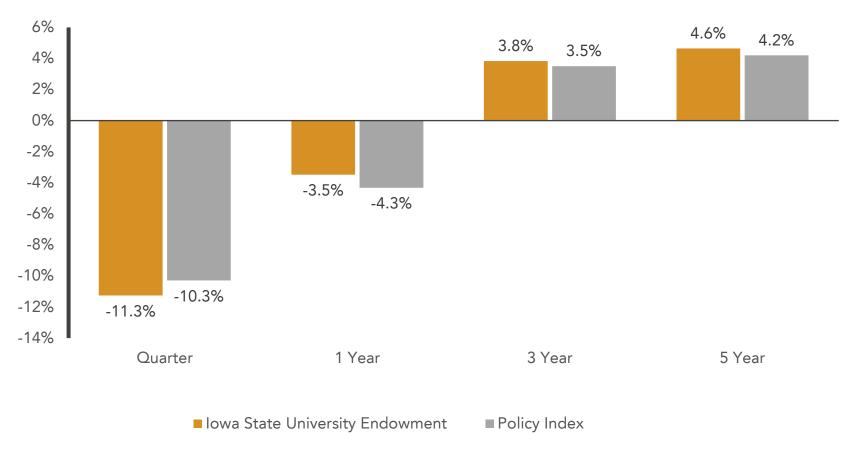
# **Iowa State University Endowment – Asset Allocation**



Note: Some private market valuations may be carried over from the previous quarter. Allocations are preliminary and subject to change.



# **Iowa State University Endowment – Return Summary**



Note: See appendix for Policy Index definition. Some private market valuations may be carried over from the previous quarter. Returns are preliminary and subject to change.



# Appendix

# **University of Iowa Operating Portfolio – Market Values\***

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Operating Pool		\$1,390,017,517	100.0%	100.0%
Total Fixed Income Composite		\$822,089,799	59.1%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$67,217,111	4.8%	5.0%
U.S. Fixed Income Composite		\$754,872,688	54.3%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$355,131,899	25.5%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$277,873,219	20.0%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$31,088,538	2.2%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$30,168,254	2.2%	2.5%
Voya Senior Loan	Senior Secured Loans	\$30,189,800	2.2%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$30,420,977	2.2%	2.5%
U.S. Equity Composite		\$54,378,786	3.9%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$54,378,786	3.9%	5.0%
Non-U.S. Equity Composite		\$53,009,617	3.8%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$53,009,617	3.8%	5.0%
Global Low Volatility Composite		\$55,855,563	4.0%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$55,855,563	4.0%	5.0%
Real Estate Composite		\$57,879,284	4.2%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$25,710,038	1.8%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$32,169,246	2.3%	2.5%
Liquidity Composite		\$346,804,469	24.9%	20.0%

<sup>\*</sup>Includes University of Northern Iowa



# **Iowa State University Operating Portfolio – Market Values**

	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Operating Pool		\$373,253,000	100.0%	100.0%
Total Fixed Income Composite		\$229,826,640	61.6%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$18,488,098	5.0%	5.0%
U.S. Fixed Income Composite		\$211,338,542	56.6%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$99,473,067	26.7%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$77,262,333	20.7%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$9,104,166	2.4%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$8,493,380	2.3%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$17,005,596	4.6%	5.0%
U.S. Equity Composite		\$16,530,949	4.4%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$16,530,949	4.4%	5.0%
Non-U.S. Equity Composite		\$15,965,374	4.3%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$15,965,374	4.3%	5.0%
Global Low Volatility Composite		\$16,389,496	4.4%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$16,389,496	4.4%	5.0%
Real Estate Composite		\$17,407,552	4.7%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$8,367,937	2.2%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$9,039,615	2.4%	2.5%
Liquidity Composite		\$77,132,990	20.7%	20.0%



# University of Iowa Diversified Intermediate Term Portfolio – Market Values

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Diversified Intermediate Term Portfolio		\$438,163,889	100.0%	100.0%
Fixed Income Composite		\$269,936,159	61.6%	62.0%
SSgA U.S. Aggregate Bond Index	Core Fixed Income	\$57,152,654	13.0%	14.0%
Dodge & Cox Core Fixed Income	Core Fixed Income	\$61,904,953	14.1%	14.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$77,460,204	17.7%	17.0%
SSgA US High Yield Bond	High Yield Fixed Income	\$15,264,483	3.5%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$11,180,065	2.6%	2.5%
Voya Senior Loan	Senior Secured Loans	\$10,229,625	2.3%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$10,047,838	2.3%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$26,696,337	6.1%	7.0%
U.S. Equity Composite		\$48,908,918	11.2%	10.0%
SSgA U.S. Total Market Index	All-Cap Core	\$48,908,918	11.2%	10.0%
Non-U.S. Equity Composite		\$40,265,618	9.2%	10.0%
SSgA MSCI ACWI ex US	Non-U.S. Large-Cap Core	\$40,265,618	9.2%	10.0%
Global Low Volatility Composite		\$20,121,410	4.6%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$20,121,410	4.6%	5.0%
Real Estate Composite		\$45,608,393	10.4%	10.0%
UBS Trumbull Property Fund	Core Real Estate	\$22,184,642	5.1%	5.0%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$23,423,751	5.3%	5.0%
Liquidity Composite		\$13,323,391	3.0%	3.0%



# **University of Iowa Endowment – Market Values\***

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Endowment Fixed Income Composite		\$412,544,924 \$98,737,092	100.0% 23.9%	100.0% 25.0%
MacKay Shields Core Fund	Core Fixed Income	\$44,542,486	10.8%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$17,202,108	4.2%	5.0%
Voya Senior Loan	Senior Secured Loans	\$9,810,786	2.4%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$9,377,982	2.3%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$17,803,731	4.3%	5.0%
U.S. Equity Composite		\$73,658,465	17.9%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$53,188,758	12.9%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$10,333,173	2.5%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$10,136,535	2.5%	3.0%
Non-U.S. Equity Composite		\$70,692,460	17.1%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$21,718,022	5.3%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$25,388,121	6.2%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$23,586,317	5.7%	6.7%
Core Real Estate Composite		\$27,389,294	6.6%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$22,014,921	5.3%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$2,585,800	0.6%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$2,788,574	0.7%	2.5%
Private Markets Composite		\$141,015,648	34.2%	25.0%
Liquidity Composite		\$1,051,965	0.3%	0.0%

<sup>\*</sup>Includes University of Northern Iowa.

Note: Some private market valuations may be carried over from the previous quarter. Allocations are preliminary and subject to change.



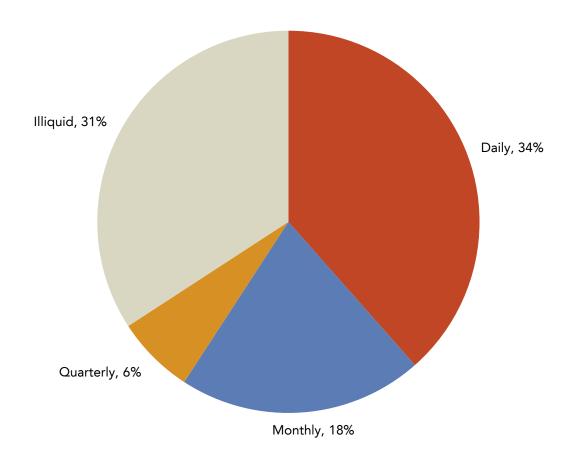
# **Iowa State University Endowment – Market Values**

	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Endowment		\$164,163,238	100.0%	100.0%
Fixed Income Composite		\$42,004,389	25.6%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$18,085,198	11.0%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$7,727,437	4.7%	5.0%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$8,516,739	5.2%	5.0%
Brandywine Global Opportunistic	Global Fixed Income	\$7,675,015	4.7%	5.0%
U.S. Equity Composite		\$26,512,934	16.2%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$17,420,789	10.6%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$4,368,311	2.7%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$4,723,834	2.9%	3.0%
Non-U.S. Equity Composite		\$27,328,427	16.6%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$8,981,872	5.5%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$9,380,735	5.7%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$8,965,819	5.5%	6.7%
Core Real Estate Composite		\$16,225,177	9.9%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$9,560,977	5.8%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$3,206,392	2.0%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$3,457,808	2.1%	2.5%
Private Markets Composite		\$51,966,632	31.7%	25.0%
Liquidity Composite		\$125,679	0.1%	0.0%

Note: Some private market valuations may be carried over from the previous quarter. Market values are preliminary and subject to change.



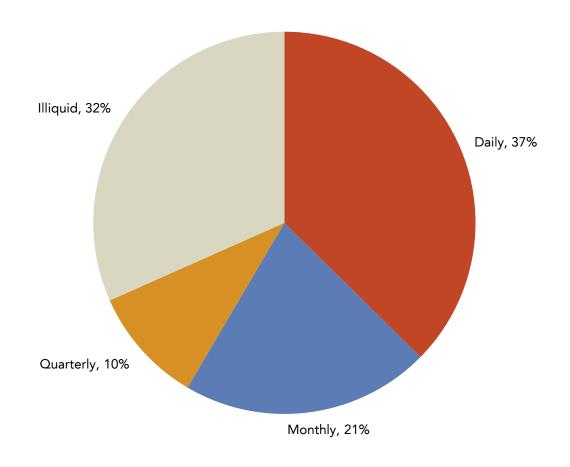
# **University of Iowa Endowment – Liquidity by Percent of Assets\***



\*Includes University of Northern Iowa



# **Iowa State University Endowment – Liquidity by Percent of Assets**





# **University of Iowa Endowment – Private Markets**

#### Since Inception Cash Flows Data as of December 31, 2019

Asset Class	Fund	Commitment	Capital Calls	Distributions	<b>Ending Value</b>	<sup>1</sup> Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$6,000,000	\$4,980,000	\$6,713,290	\$938,976	1.5
Fund of Funds	Commonfund Capital Venture Partners VIII	\$1,000,000	\$965,000	\$1,249,984	\$812,045	2.1
International Fund of Funds	Commonfund Capital International Partners VI	\$1,200,000	\$1,119,000	\$1,523,272	\$269,433	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$2,400,000	\$2,214,000	\$3,222,389	\$1,260,427	2.0
Value Added	Commonfund NR Partners VIII	\$6,000,000	\$5,790,000	\$2,989,019	\$2,405,403	0.9
Fund of Funds	Adams Street US Partnership 2010	\$2,440,000	\$2,149,640	\$1,879,133	\$2,083,674	1.8
International Fund of Funds	Adams Street Non-US Developed 2010	\$1,470,000	\$1,286,985	\$1,134,265	\$976,101	1.6
International Fund of Funds	Adams Street Non-US Emerging 2010	\$490,000	\$440,020	\$143,641	\$609,370	1.7
Secondary Fund of Funds	Landmark Equity Partners XIV	\$4,400,000	\$4,272,050	\$4,911,404	\$715,388	1.3
Opportunistic	MREP Global III	\$5,000,000	\$4,562,256	\$5,481,968	\$854,736	1.4
Fund of Funds	Adams Street US Partnership 2012	\$7,050,000	\$6,013,650	\$2,303,030	\$7,056,436	1.6
International Fund of Funds	Adams Street Non-US Developed 2012	\$4,240,000	\$3,385,640	\$2,097,247	\$3,009,854	1.5
International Fund of Funds	Adams Street Non-US Emerging 2012	\$1,410,000	\$1,309,890	\$340,746	\$2,000,316	1.8
Opportunistic	Commonfund NR Partners IX	\$11,000,000	\$9,531,501	\$2,301,372	\$8,818,895	1.2
Value Added	MREP Global VI	\$9,000,000	\$8,197,130	\$7,712,941	\$3,726,796	1.4
Fund of Funds	Adams Street US Partnership 2013	\$5,500,000	\$4,631,000	\$1,229,872	\$5,613,460	1.5
International Fund of Funds	Adams Street Non-US Developed 2013	\$2,800,000	\$2,154,600	\$951,550	\$2,250,103	1.5
International Fund of Funds	Adams Street Non-US Emerging 2013	\$1,700,000	\$1,518,100	\$178,583	\$2,704,462	1.9
Secondary Fund of Funds	Landmark Equity Partners XV	\$5,000,000	\$3,706,726	\$2,711,848	\$1,970,700	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$12,500,000	\$8,875,000	\$1,173,362	\$13,137,984	1.6
Value Added	Aberdeen Energy & Resources Partners III <sup>2</sup>	\$9,000,000	\$8,640,000	\$3,088,903	\$7,425,164	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$9,000,000	\$8,117,739	\$5,713,910	\$4,159,739	1.2
Separate Account	Neuberger Berman IPU Feeder Fund	\$93,000,000	\$48,531,198	\$691,358	\$66,848,768	1.4
Total Private Markets		\$201,600,000	\$142,391,125	\$59,743,087	\$139,648,230	1.4

<sup>&</sup>lt;sup>1</sup> Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

<sup>&</sup>lt;sup>2</sup> The Aberdeen Energy & Resources Partners III ending value is unavailable as of 12/31/2019. Market values are final as of 9/30/2019 and adjusted for subsequent cash flows.



# **University of Iowa Endowment – Private Markets**

#### **Annualized Performance**

Asset Class	Fund	Vintage Yr.	Perf. as of:	Net IRR
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	12/31/2019	6.1%
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	12/31/2019	12.1%
International Fund of Funds	Commonfund Capital International Partners VI	2007	12/31/2019	9.2%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	12/31/2019	13.7%
Value Added	Commonfund NR Partners VIII	2008	12/31/2019	-1.4%
Fund of Funds	Adams Street US Partnership 2010	2010	12/31/2019	14.1%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	12/31/2019	12.4%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	12/31/2019	11.3%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	12/31/2019	9.9%
Opportunistic	MREP Global III	2010	12/31/2019	9.0%
Fund of Funds	Adams Street US Partnership 2012	2012	12/31/2019	11.9%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	12/31/2019	12.6%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	12/31/2019	16.0%
Opportunistic	Commonfund NR Partners IX	2012	12/31/2019	4.2%
Value Added	MREP Global VI	2012	12/31/2019	11.2%
Fund of Funds	Adams Street US Partnership 2013	2013	12/31/2019	11.8%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	12/31/2019	13.2%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	12/31/2019	19.8%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	12/31/2019	11.4%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	12/31/2019	11.5%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2019	5.5%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	12/31/2019	10.0%
Separate Account	Neuberger Berman IPU Feeder Fund	2015	12/31/2019	16.1%
Total Private Markets			12/31/2019	10.4%

 $<sup>^{\</sup>star}$  The 12/31/2019 IRR for the Aberdeen Energy & Resources Partners III is unavailable.



# **Iowa State University Endowment – Private Markets**

#### Since Inception Cash Flows Data as of December 31, 2019

Asset Class	Fund	Commitment	Capital Calls	Distributions	Ending Value	<sup>1</sup> Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$3,750,000	\$3,112,500	\$4,195,806	\$586,857	1.5
Fund of Funds	Commonfund Capital Venture Partners VIII	\$600,000	\$579,000	\$749,990	\$487,225	2.1
International Fund of Funds	Commonfund Capital International Partners VI	\$800,000	\$746,000	\$1,015,514	\$179,628	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$1,600,000	\$1,476,000	\$2,148,262	\$840,275	2.0
Value Added	Commonfund NR Partners VIII	\$4,000,000	\$3,860,000	\$1,992,680	\$1,603,597	0.9
Fund of Funds	Adams Street US Partnership 2010	\$1,442,000	\$1,270,402	\$1,110,537	\$1,231,419	1.8
International Fund of Funds	Adams Street Non-US Developed 2010	\$869,000	\$760,813	\$670,529	\$577,030	1.6
International Fund of Funds	Adams Street Non-US Emerging 2010	\$289,000	\$259,522	\$84,719	\$359,404	1.7
Secondary Fund of Funds	Landmark Equity Partners XIV	\$2,600,000	\$2,524,399	\$2,902,193	\$422,764	1.3
Opportunistic	MREP Global III	\$3,000,000	\$2,737,353	\$3,289,181	\$512,841	1.4
Fund of Funds	Adams Street US Partnership 2012	\$3,100,000	\$2,644,300	\$1,012,680	\$3,102,831	1.6
International Fund of Funds	Adams Street Non-US Developed 2012	\$1,870,000	\$1,493,195	\$924,965	\$1,327,457	1.5
International Fund of Funds	Adams Street Non-US Emerging 2012	\$630,000	\$585,270	\$152,248	\$893,758	1.8
Opportunistic	Commonfund NR Partners IX	\$4,000,000	\$3,466,000	\$836,864	\$3,206,875	1.2
Value Added	MREP Global VI	\$4,000,000	\$3,643,169	\$3,427,974	\$1,656,352	1.4
Fund of Funds	Adams Street US Partnership 2013	\$2,080,000	\$1,751,360	\$465,115	\$2,122,907	1.5
International Fund of Funds	Adams Street Non-US Developed 2013	\$1,040,000	\$800,280	\$353,432	\$835,750	1.5
International Fund of Funds	Adams Street Non-US Emerging 2013	\$630,000	\$562,590	\$66,181	\$1,002,245	1.9
Secondary Fund of Funds	Landmark Equity Partners XV	\$1,875,000	\$1,390,028	\$1,016,940	\$739,015	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$1,875,000	\$1,331,250	\$181,414	\$1,970,698	1.6
Value Added	Aberdeen Energy & Resources Partners III	\$3,000,000	\$2,880,000	\$1,029,635	\$2,475,055	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$3,000,000	\$2,705,913	\$1,904,636	\$1,386,582	1.2
Separate Account	Neuberger Berman IPU Feeder	\$38,000,000	\$17,726,470	\$310,974	\$24,127,083	1.4
Total Private Markets		\$84,050,000	\$58,305,814	\$29,842,469	\$51,647,648	1.4

<sup>&</sup>lt;sup>1</sup> Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

<sup>&</sup>lt;sup>2</sup> The Aberdeen Energy & Resources Partners III ending value is unavailable as of 12/31/2019. Market values are final as of 9/30/2019 and adjusted for subsequent cash flows.



# **Iowa State University Endowment – Private Markets**

#### **Annualized Performance**

Asset Class	Fund	Vintage Yr.	Perf. as of:	Net IRR
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	12/31/2019	6.1%
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	12/31/2019	12.1%
International Fund of Funds	Commonfund Capital International Partners VI	2007	12/31/2019	9.2%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	12/31/2019	13.7%
Value Added	Commonfund NR Partners VIII	2008	12/31/2019	-1.4%
Fund of Funds	Adams Street US Partnership 2010	2010	12/31/2019	14.4%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	12/31/2019	12.4%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	12/31/2019	11.3%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	12/31/2019	9.6%
Opportunistic	MREP Global III	2010	12/31/2019	9.0%
Fund of Funds	Adams Street US Partnership 2012	2012	12/31/2019	11.9%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	12/31/2019	12.6%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	12/31/2019	16.0%
Opportunistic	Commonfund NR Partners IX	2012	12/31/2019	4.2%
Value Added	MREP Global VI	2012	12/31/2019	11.2%
Fund of Funds	Adams Street US Partnership 2013	2013	12/31/2019	11.8%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	12/31/2019	13.2%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	12/31/2019	19.8%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	12/31/2019	11.4%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	12/31/2019	11.5%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2019	5.9%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	12/31/2019	9.2%
Separate Account	Neuberger Berman IPU Feeder Fund	2015	12/31/2019	15.3%
Total Private Markets			12/31/2019	9.7%

<sup>\*</sup> The 12/31/2019 IRR for the Aberdeen Energy & Resources Partners III is unavailable.



# **Policy Index Definitions**

The University of Iowa Operating Portfolio Policy Index is currently 5% BBgBarc Global Aggregate (Hedged), 25% BBgBarc Aggregate, 20% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 5% Wilshire 5000, 5% MSCI ACWI ex USA, 5% MSCI ACWI Min Vol Index, 5% NFI, 20% 91 Day T-Bill. Prior to July 1, 2018, 5% BBgBarc Global Aggregate (Hedged), 25% BBgBarc Aggregate, 20% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 5% Wilshire 5000, 5% MSCI ACWI ex USA, 5% MSCI ACWI Min Vol Index, 2.5% NFI, 2.5% FTSE Developed Property, 20% 91 Day T-Bill. Prior to October 1, 2017, 25% BBgBarc Aggregate, 5% BBgBarc High Yield, 5% S&P/LSTA Leveraged Loan, 7.5% BBgBarc US TIPS, 5% MSCI US Broad Market, 5% FTSE All World ex US, 7.5% FTSE Developed Property, 40% 91 Day T-Bill. Prior to January 1, 2014, 30% BBgBarc Aggregate, 5% BBgBarc High Yield, 10% BBgBarc US TIPS, 8% MSCI US Broad Market, 2% FTSE All World ex US, 5% MSCI US REIT, 40% 91 Day T-Bill.

The Iowa State University Operating Portfolio Policy Index is currently 5% BBgBarc Global Aggregate (Hedged), 25% BBgBarc Aggregate, 20% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 5% Wilshire 5000, 5% MSCI ACWI ex USA, 5% MSCI ACWI Min Vol Index, 5% NFI, 20% 91 Day T-Bill. Prior to July 1, 2018, 5% BBgBarc Global Aggregate (Hedged), 25% BBgBarc Aggregate, 20% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 5% Wilshire 5000, 5% MSCI ACWI ex USA, 5% MSCI ACWI Min Vol Index, 2.5% NFI, 2.5% FTSE Developed Property, 20% 91 Day T-Bill. Prior to October 1, 2017, 25% BBgBarc Aggregate, 5% BBgBarc High Yield, 5% S&P/LSTA Leveraged Loan, 7.5% BBgBarc US TIPS, 5% MSCI US Broad Market, 5% FTSE All World ex US, 7.5% FTSE Developed Property, 40% 91 Day T-Bill. Prior to January 1, 2014, 30% BBgBarc Aggregate, 5% BBgBarc High Yield, 10% BBgBarc US TIPS, 8% MSCI US Broad Market, 2% FTSE All World ex US, 5% MSCI US REIT, 40% 91 Day T-Bill.

The University of Iowa Diversified Intermediate Term Portfolio Policy Index is currently 7% CITI WGBI, 28% BBgBarc Aggregate, 17% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 10% Wilshire 5000, 10% MSCI ACWI ex US, 5% MSCI ACWI Min Vol Index, 10% NFI, 3% 91 Day T-Bill. Prior to July 1, 2018, 7% CITI WGBI, 28% BBgBarc Aggregate, 17% BBgBarc Intermediate Gov't/Credit, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 10% Wilshire 5000, 10% MSCI ACWI ex US, 5% MSCI ACWI Min Vol Index, 5% NFI, 5% FTSE Developed Property, 3% 91 Day T-Bill. Prior to October 1, 2017, 35% BBgBarc Aggregate, 10% BBgBarc US TIPS, 5% BBgBarc High Yield 2% Capped, 5% S&P/LSTA Leveraged Loan, 10% Wilshire 5000, 10% MSCI ACWI ex US, 10% FTSE Developed Property, 15% 91 Day T-Bill. Prior to January 1, 2014, 40% BBgBarc Aggregate, 10% BBgBarc US TIPS, 5% BBgBarc High Yield 2% Capped, 10% Wilshire 5000, 10% Wilshire REIT, and 15% 91 Day T-Bill. Prior to July 1, 2011, 100% BBgBarc Aggregate. Prior to July 1, 2001, BBgBarc Government Credit.

The University of Iowa Endowment Policy Index is currently 5% CITI WGBI, 10% BBgBarc Aggregate, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 14% S&P 500, 3% Russell 2000, 3% CRSP US Mid Cap, 20% MSCI ACWI ex US, 10% NFI, 15% Cambridge All PE, 10% Cambridge Natural Resources. Prior to October 1, 2017, 15% Merrill Lynch US Corp & Gov 1-3 Years, 5% Merrill Lynch High Yield Master II Constrained, 5% S&P/LSTA Leveraged Loan, 35% Wilshire 5000, 25% MSCI ACWI ex US, 15% CPI+5%. Prior to January 1, 2014, 25% Merrill Lynch US Corp & Gov 1-3 Years, 5% Merrill Lynch High Yield Master II Constrained, 35% Wilshire 5000, 25% MSCI ACWI ex US, 10% CPI+5%. Prior to July 1, 2013, 25% BBgBarc Aggregate, 5% Merrill Lynch High Yield Master II Constrained, 35% Wilshire 5000, 25% MSCI EAFE, 10% CPI+5%. Prior to July 1, 2009, 30% BBgBarc Aggregate, 50% Wilshire 5000, 15% MSCI EAFE, 5% NCREIF. Prior to April 1, 2006, 30% BBgBarc Aggregate, 63% Wilshire 5000, 7% MSCI EAFE. Prior to April 1, 2002, 30% BBgBarc Aggregate, 63% S&P 500, 7% MSCI EAFE. Prior to July 1, 1999, 30% BBgBarc Govt/Credit, 60% S&P 500, 10% MSCI EAFE.

The Iowa State University Endowment Policy Index is currently 5% CITI WGBI, 10% BBgBarc Aggregate, 5% BBgBarc High Yield, 5% Credit Suisse Leveraged Loans, 14% S&P 500, 3% Russell 2000, 3% CRSP US Mid Cap, 20% MSCI ACWI ex US, 10% NFI, 15% Cambridge All PE, 10% Cambridge Natural Resources. Prior to October 1, 2017, 15% Merrill Lynch US Corp & Gov 1-3 Years, 5% Merrill Lynch High Yield Master II Constrained, 5% S&P/LSTA Leveraged Loan, 35% Wilshire 5000, 25% MSCI ACWI ex US, 15% CPI+5%. Prior to January 1, 2014, 25% Merrill Lynch US Corp & Gov 1-3 Years, 5% Merrill Lynch High Yield Master II Constrained, 35% Wilshire 5000, 25% MSCI ACWI ex US, 10% CPI+5%. Prior to July 1, 2013, 25% BBgBarc Aggregate, 5% Merrill Lynch High Yield Master II Constrained, 35% Wilshire 5000, 25% MSCI EAFE, 10% CPI+5%. Prior to July 1, 2009, 30% BBgBarc Aggregate, 50% Wilshire 5000, 15% MSCI EAFE, 5% NCREIF. Prior to April 1, 2006, 30% BBgBarc Aggregate, 63% Wilshire 5000, 7% MSCI EAFE. Prior to July 1, 2001, 30% BBgBarc Govt/Credit, 63% S&P 500, 7% MSCI EAFE. Prior to July 1, 1999, 30% BBgBarc Govt/Credit, 60% S&P 500, 10% MSCI EAFE.



Purpose:

# Guide institutional investment programs

#### **Mission**

Enable institutions to become more effective investment stewards

#### **Vision**

Leading investment consultant of risk-adjusted returns & client services

#### **Principles**

- ✓ Real-world pragmatism
- ✓ Independent expertise
- √ Focused client service
- ✓ Careful research

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