
Board of Regents State of Iowa

Market Environment

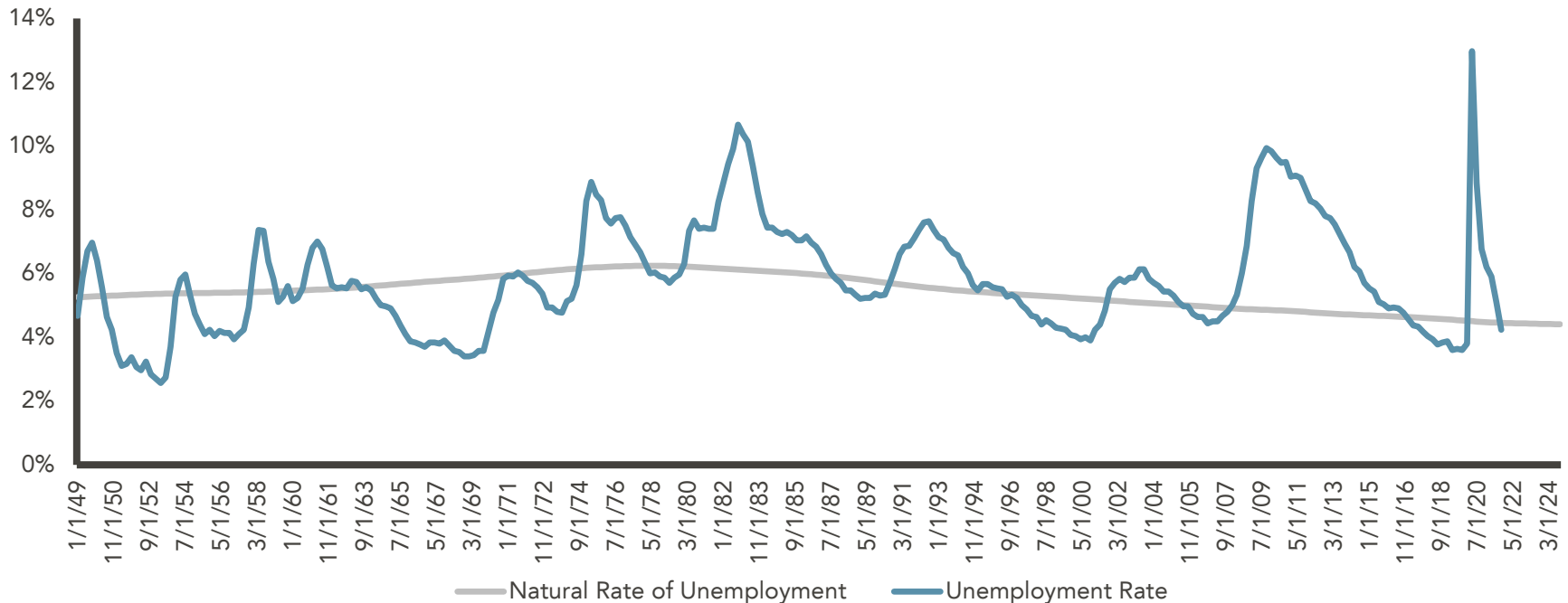
2022 Market Themes

- ↘ **Inflation, inflation, inflation:** Inflation is expected to remain elevated through at least the first half of the year and will likely stay above the Fed's target of 2.5% until late 2023.
- ↘ **Interest rates will rise:** The Fed along with other central banks are expected to raise rates in 2022 but must balance controlling inflation without stifling growth as countries have not fully recovered from the pandemic.
- ↘ **Supply chain pressures should ease but labor shortages are still a concern:** As economies are expected to fully re-open by the second half of 2022, consumption dynamics will revert to pre-pandemic patterns and feature a renewed demand for services rather than goods, which will alleviate supply chain pressures. However, until the labor force participation rate normalizes, wage inflation remains a headwind for growth.
- ↘ **Limited opportunities in fixed income:** Low yields and tight credit spreads coupled with higher expected rates limit the upside potential of fixed income going into 2022.
- ↘ **Volatility expected to rise, earnings growth to slow:** Higher interest rates, divergent central bank policies, COVID overhang, labor shortages, wage pressures, and geopolitical risk will contribute to higher volatility and lower earnings growth in 2022.
- ↘ **Lower overall equity returns; reflation trade to resume?:** As rates rise and consumers revert to pre-pandemic consumption patterns, value stocks could benefit at the expense of growth stocks. Overall equity returns will be muted compared to the last two years.
- ↘ **Alternatives can mitigate inflation:** Hedge funds, real estate, infrastructure, and private markets have all shown to perform well during inflationary environments.

Unemployment has crossed its natural rate

The Fed will likely raise short-term rates in the near-term future as inflation concerns remain and maximum employment is reached

Unemployment Rate Vs. the Natural Rate of Unemployment*

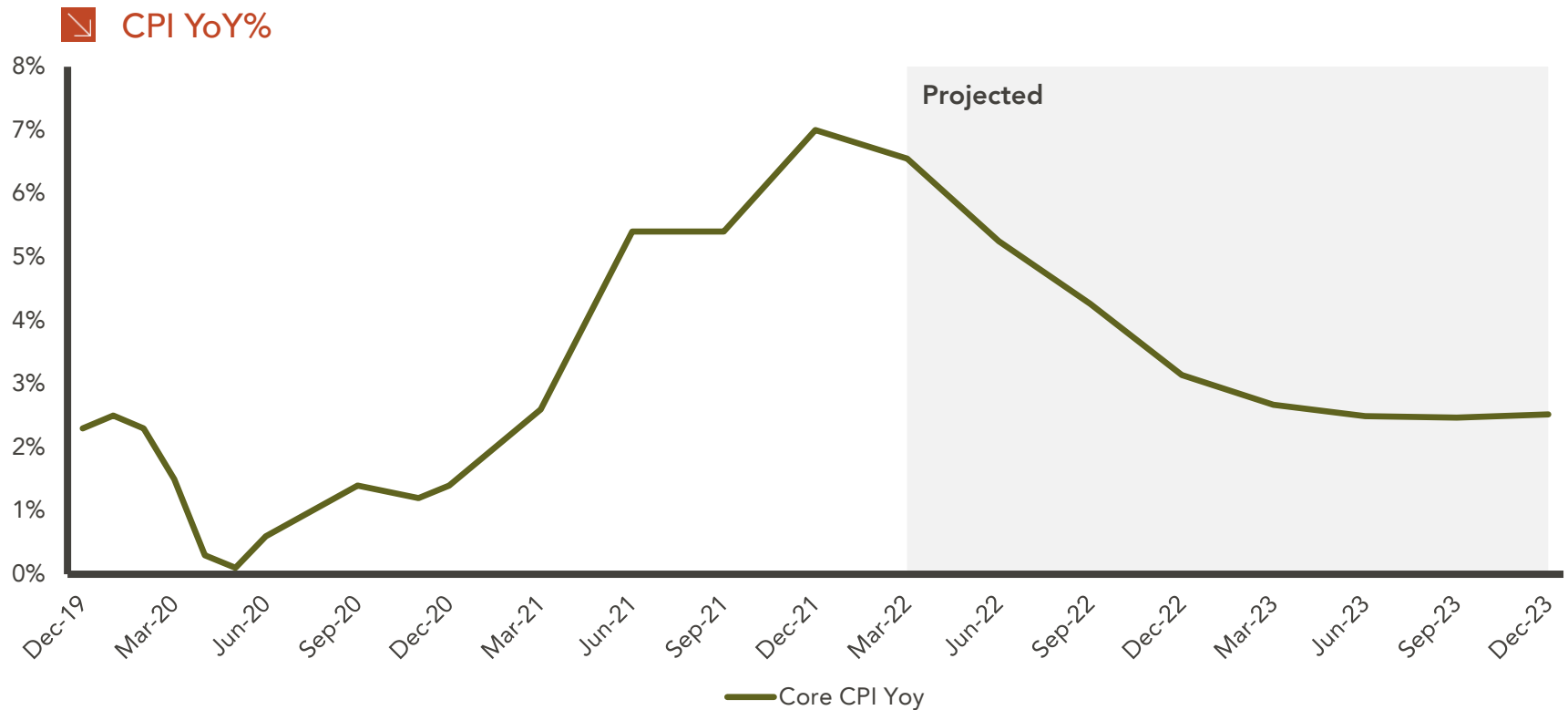


*The natural rate of unemployment is the unemployment rate that would exist in a growing and healthy economy. The natural rate of unemployment includes only frictional and structural unemployment, and not cyclical unemployment.

Source: St. Louis Federal Reserve as of December 31, 2021

Elevated inflation expected to persist

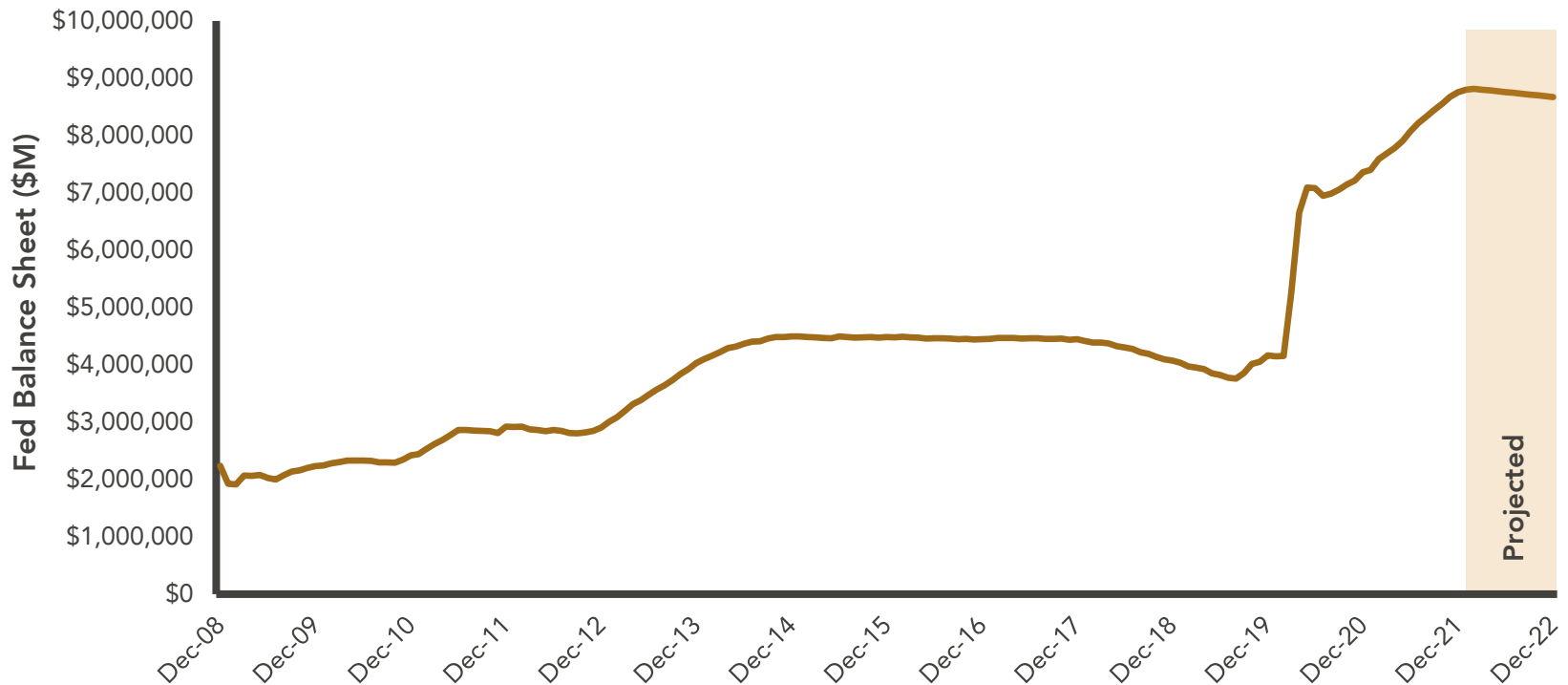
Inflation is projected to hit 6.6% in the first quarter of 2022, but should return to its historic average of 2% in late 2023



Sources: OECD, Bloomberg

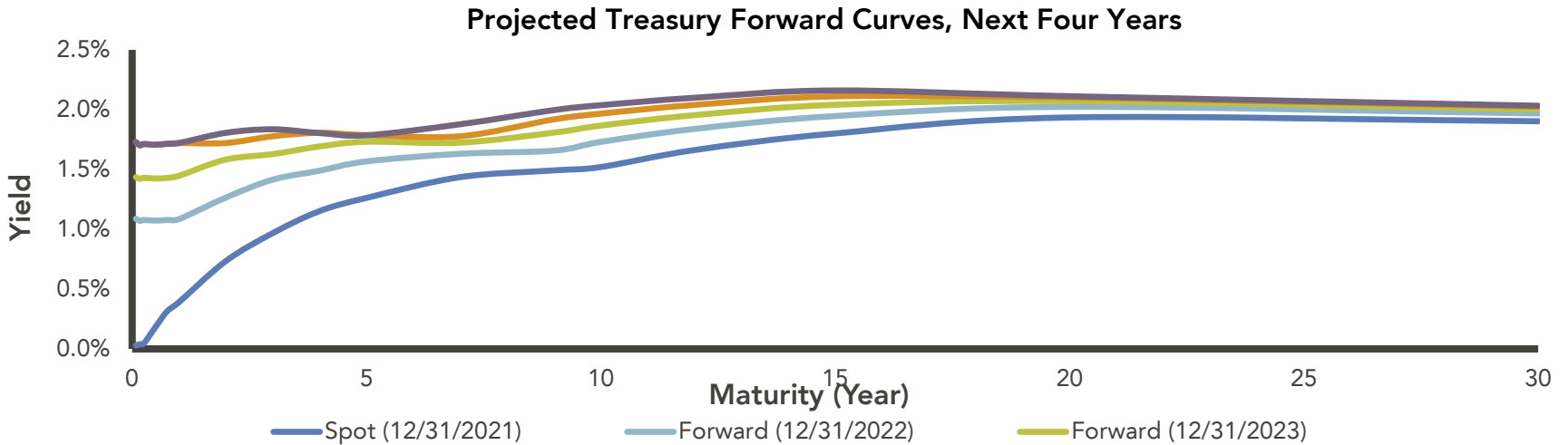
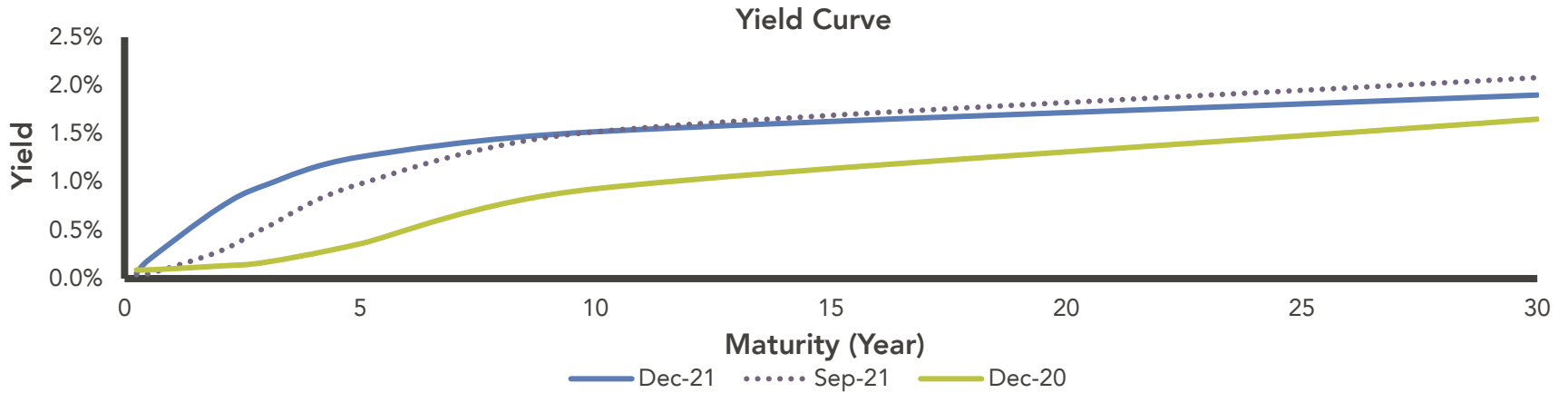
Fed will remove stimulus in 2022

The removal of stimulus is expected to drive rates higher and presents a significant variable for 2022 economic growth and capital market performance



Note: Fed's Dec 2021 \$90 billion per month purchase run rate will decline to \$60 billion, \$30 billion, and \$0 in January, February, and March, respectively, thus ending asset purchases by March. Source: Bloomberg

More curve flattening expected



Source: Federal Reserve as of December 31, 2021

Fixed income: Rates expected to rise as Fed tapers and hikes

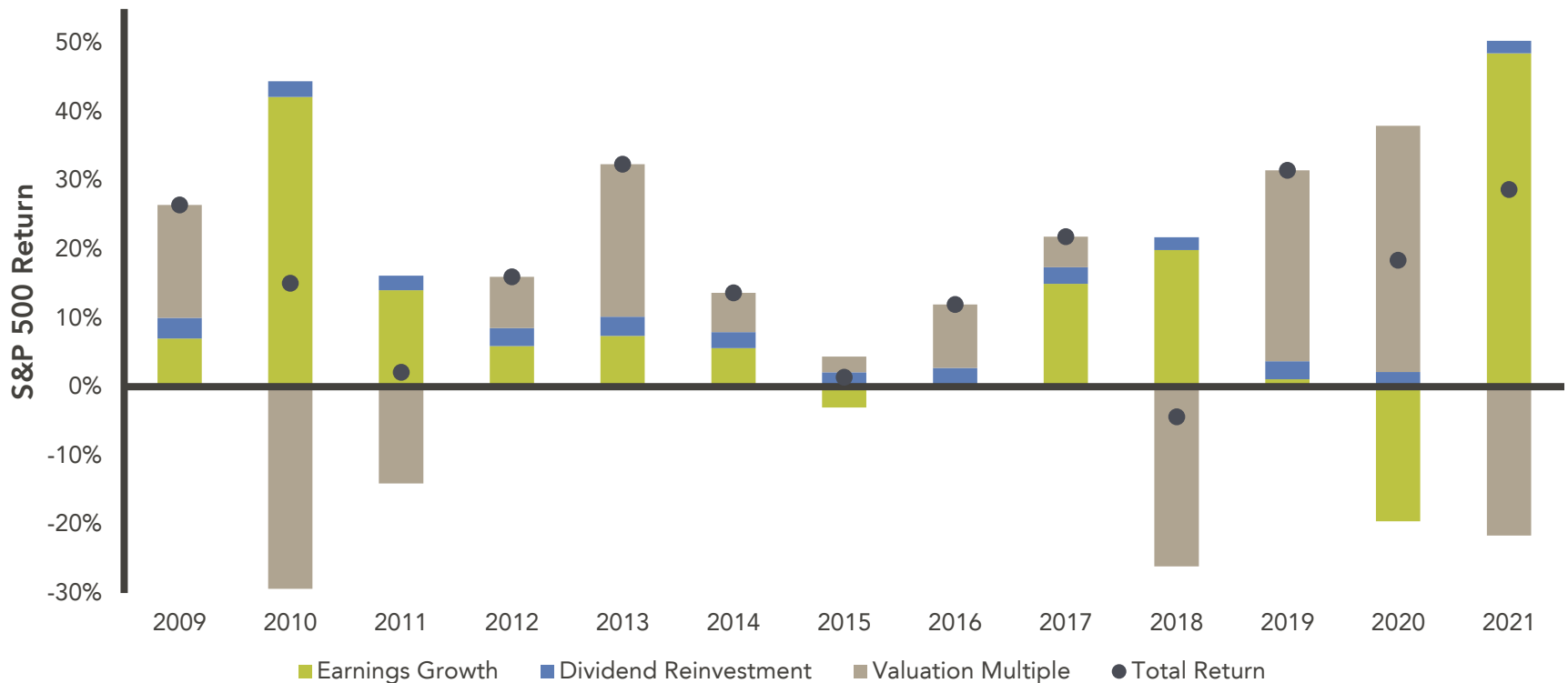
Elevated inflation and strong rebound from COVID will likely drive rates higher, but spreads expected to remain tight

		1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Broad Market Indices	Blm Aggregate	-0.26	0.01	-1.54	4.79	3.57	2.90
Intermediate Indices	Blm Int. Gov./Credit	-0.13	-0.57	-1.44	3.86	2.91	2.38
Government Only Indices	Blm Long Gov.	-1.42	3.05	-4.57	8.78	6.53	4.53
	Blm Int. Gov.	-0.26	-0.58	-1.69	3.02	2.32	1.68
	Blm 1-3 Year Gov.	-0.21	-0.58	-0.60	2.03	1.62	1.10
	Blm U.S. TIPS	0.32	2.36	5.96	8.44	5.34	3.09
Credit Indices	Blm U.S. Long Credit	-0.37	1.52	-1.18	11.37	7.64	6.42
	Blm High Yield	1.87	0.71	5.28	8.83	6.30	6.83
	CS Leveraged Loan Index	0.63	0.71	5.40	5.43	4.32	4.83
Securitized Bond Indices	Blm MBS	-0.09	-0.37	-1.04	3.01	2.50	2.28
	Blm ABS	-0.16	-0.57	-0.34	2.87	2.39	2.04
	Blm CMBS	-0.16	-0.64	-1.16	4.98	3.80	3.68
Non-U.S. Indices	Blm Global Aggregate Hedged	-0.41	0.04	-1.39	4.06	3.39	3.49
	JPM EMBI Global Diversified	1.40	-0.44	-1.80	5.94	4.65	5.28
	JPM GBI-EM Global Diversified	1.56	-2.53	-8.75	2.07	2.82	0.74

Note: The local currency GBI index is hedged and denominated in U.S. dollars. Sources: Bloomberg, Credit Suisse, JPMorgan, as of December 31, 2021

2021 equity gains driven entirely by earnings growth

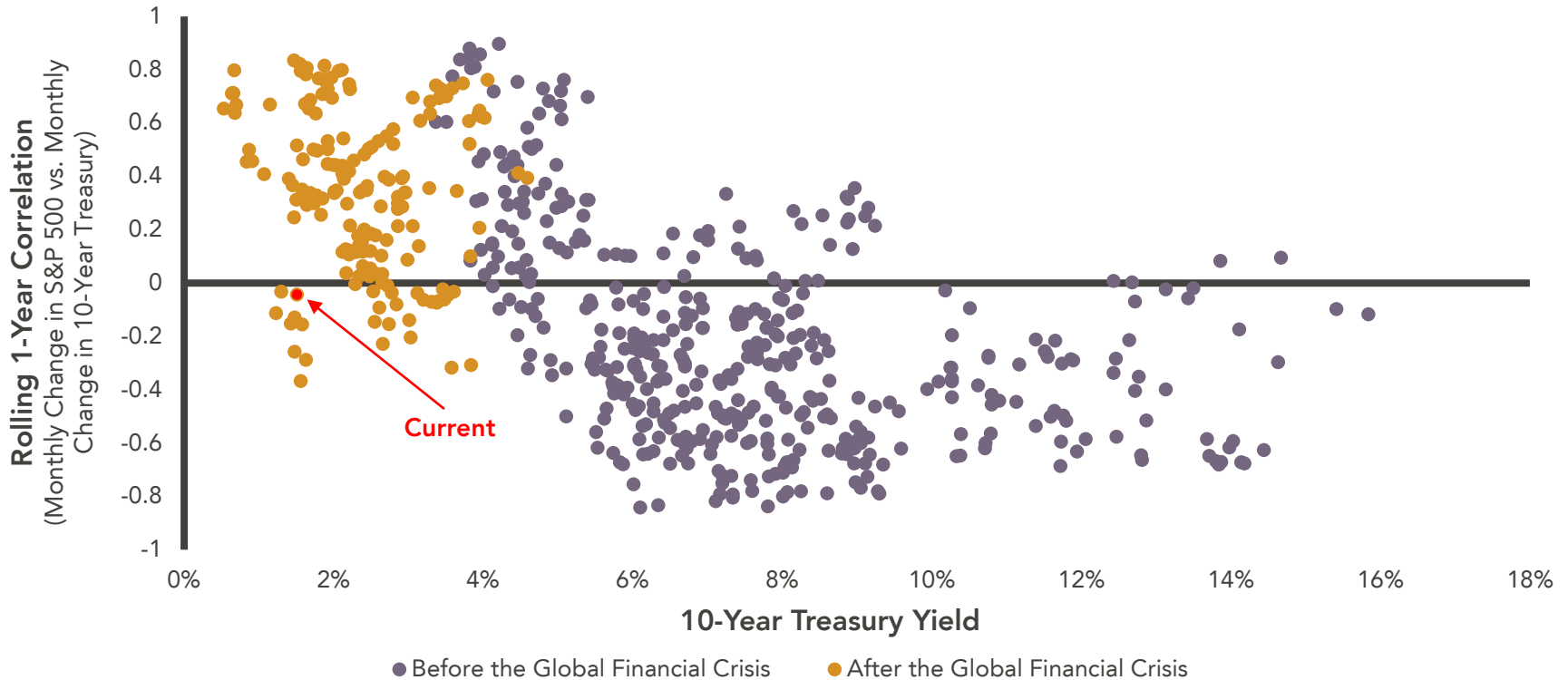
The S&P 500 posted a preliminary earnings growth figure of over 40% for the last calendar year, making 2021 the first year in the last several during which U.S. stock returns were driven primarily by earnings expansion



Source: Bloomberg as of December 31, 2021

A rise in rates may not spell doom for equities

In the last decade, increases in yields have largely not led to decreases in overall equity price levels, likely due to the fact that rates are still historically low on an absolute basis



Source: Bloomberg as of December 31, 2021

U.S. stocks end 2021 on high note after strong December

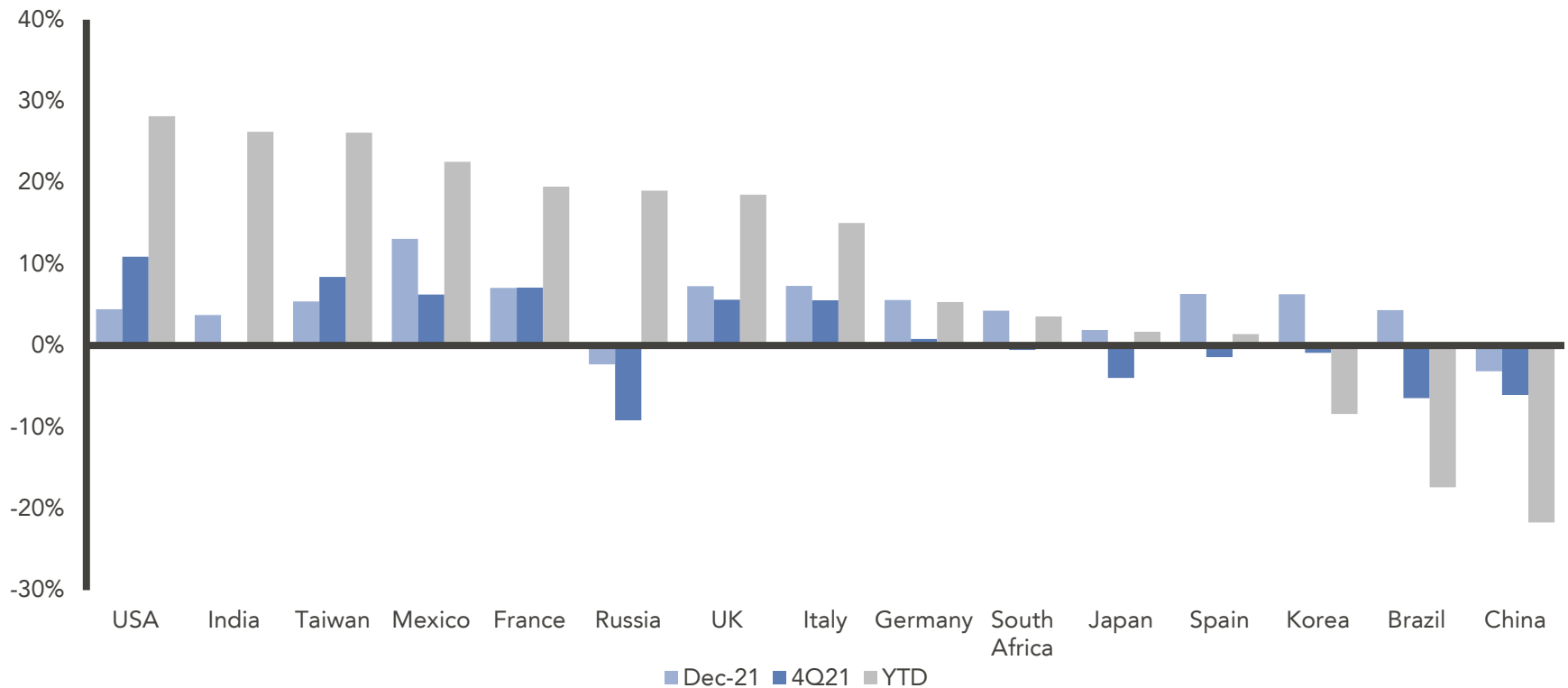
U.S. equity markets performed extremely well in 2021, as the S&P 500 finished the year up 28.7%; mid- and small-cap core indices also posted double-digit returns during the year after a robust fourth quarter

	Month (%)	3-Month (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices						
Dow Jones	5.5	7.9	20.9	18.5	15.5	14.2
Wilshire 5000	3.9	9.6	26.7	26.1	18.1	16.4
Russell 3000	3.9	9.3	25.7	25.8	18.0	16.3
Large-Cap Market Indices						
S&P 500	4.5	11.0	28.7	26.1	18.5	16.6
Russell 1000	4.1	9.8	26.5	26.2	18.4	16.5
Russell 1000 Value	6.3	7.8	25.2	17.6	11.2	13.0
Russell 1000 Growth	2.1	11.6	27.6	34.1	25.3	19.8
Mid-Cap Market Indices						
Russell Mid-Cap	4.1	6.4	22.6	23.3	15.1	14.9
Russell Mid-Cap Value	6.3	8.5	28.3	19.6	11.2	13.4
Russell Mid-Cap Growth	0.4	2.8	12.7	27.5	19.8	16.6
Small-Cap Market Indices						
Russell 2000	2.2	2.1	14.8	20.0	12.0	13.2
Russell 2000 Value	4.1	4.4	28.3	18.0	9.1	12.0
Russell 2000 Growth	0.4	0.0	2.8	21.2	14.5	14.1

Source: Morningstar Direct as of December 31, 2021

China struggled in 2021 amid drastic policy changes

Several other EM countries — India, Taiwan, Mexico — generated 20%+ returns



Source: Bloomberg as of December 31, 2021

A positive 2021 for global equities, except EM

Developed markets outperform EM as China faced a challenging year, losing 21.7%

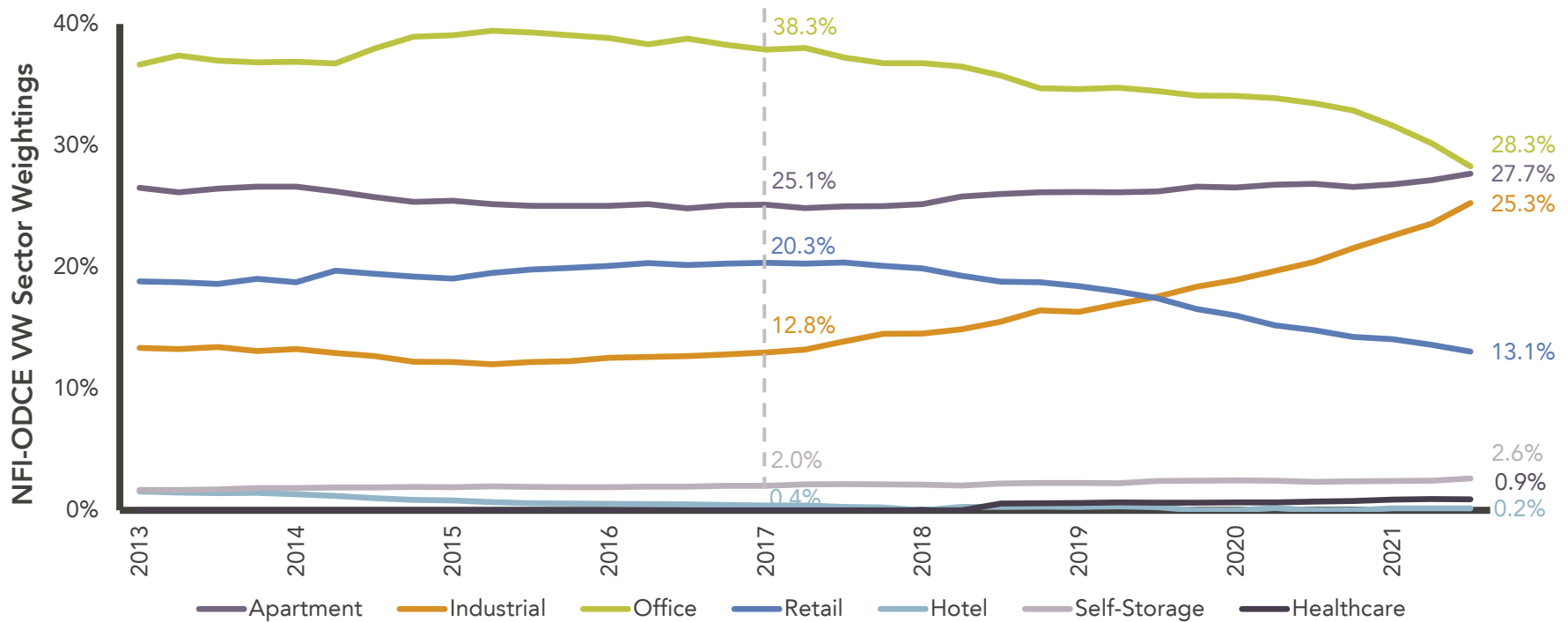
	Month (%)	3-Month (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI	4.0	6.7	18.5	20.4	14.4	11.9
MSCI ACWI ex. U.S.	4.1	1.8	7.8	13.2	9.6	7.3
MSCI EAFE	5.1	2.7	11.3	13.5	9.5	8.0
MSCI EAFE Local	4.3	3.9	18.7	13.4	8.4	10.1
MSCI Emerging Markets	1.9	-1.3	-2.5	10.9	9.9	5.5
MSCI EM Local	1.5	-0.9	-0.2	12	10.5	8.0
MSCI EAFE Small-Cap	4.4	0.1	10.1	15.6	11.0	10.8
MSCI EM Small-Cap	4.2	1.3	18.8	16.5	11.5	7.4
MSCI Frontier	1.5	0.7	19.7	12.7	9.6	7.3

Source: eVestment as of December 31, 2021

Evolving real estate landscape

Evolving investment themes are likely to drive capital allocations as an offset to reduced office and retail exposures

ODCE Sector Allocations, 2013 – 2021

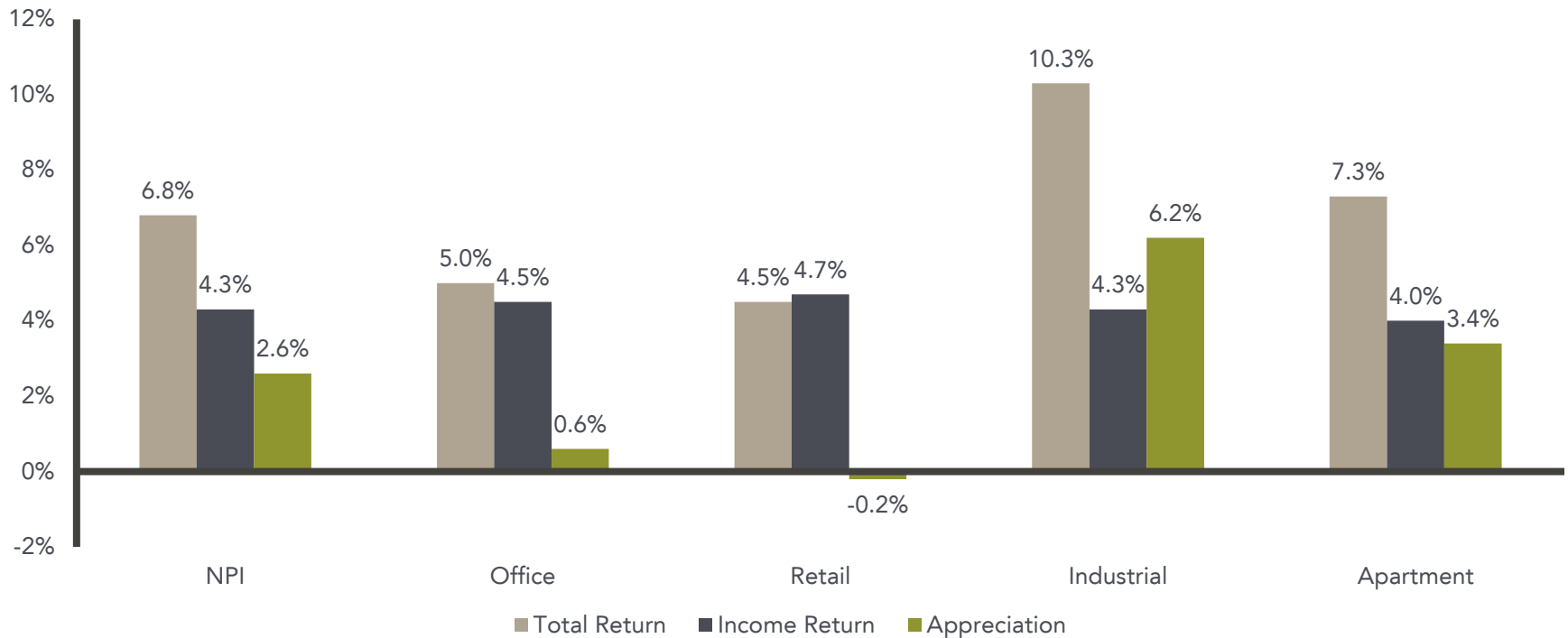


Sources: NCREIF, Clarion Partners Investment Research, Q3 2021

Real estate return expectations

Net operating income growth - rather than cap rate compression - is expected to be the main driver of return attribution across most core property sectors over the next five years

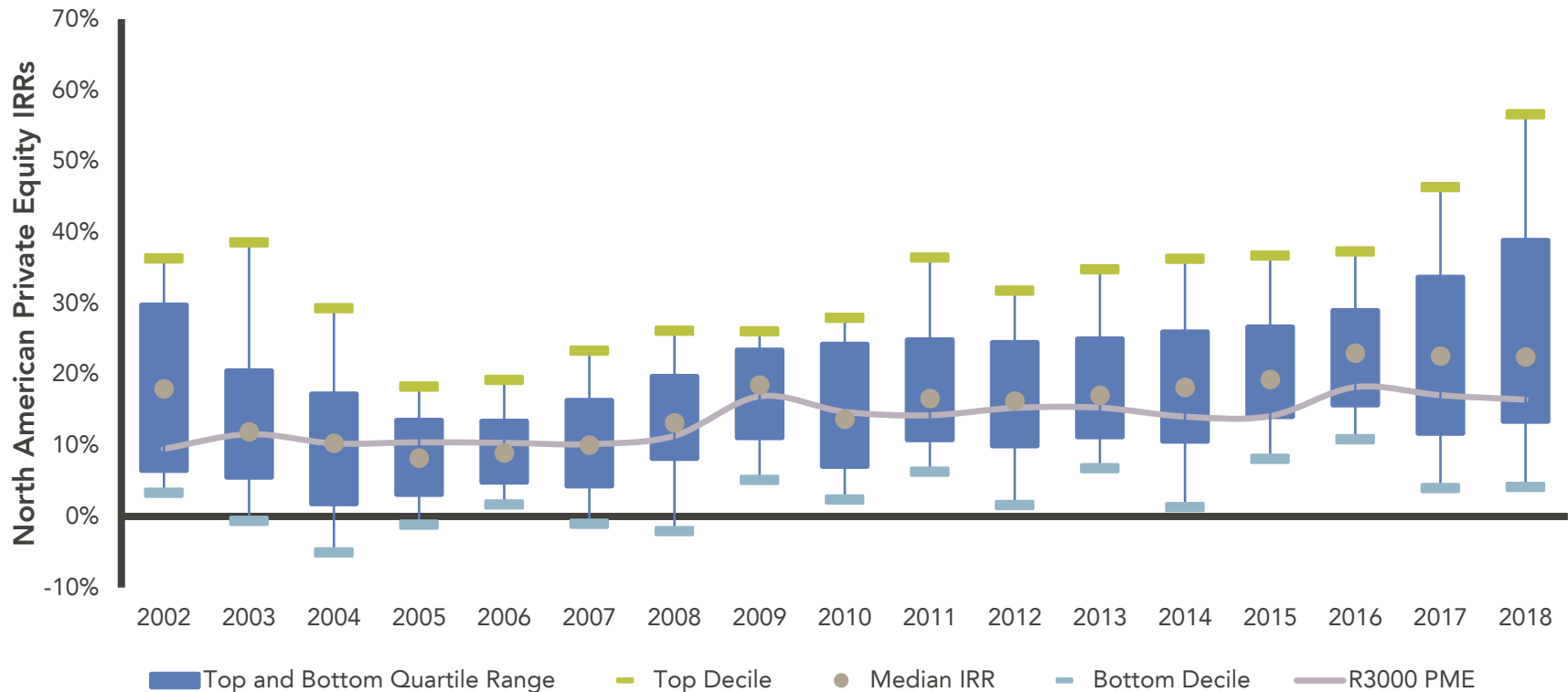
Expected annual returns by property type 2021-2025



Sources: PREA Consensus Survey 2021 Q3, AEW

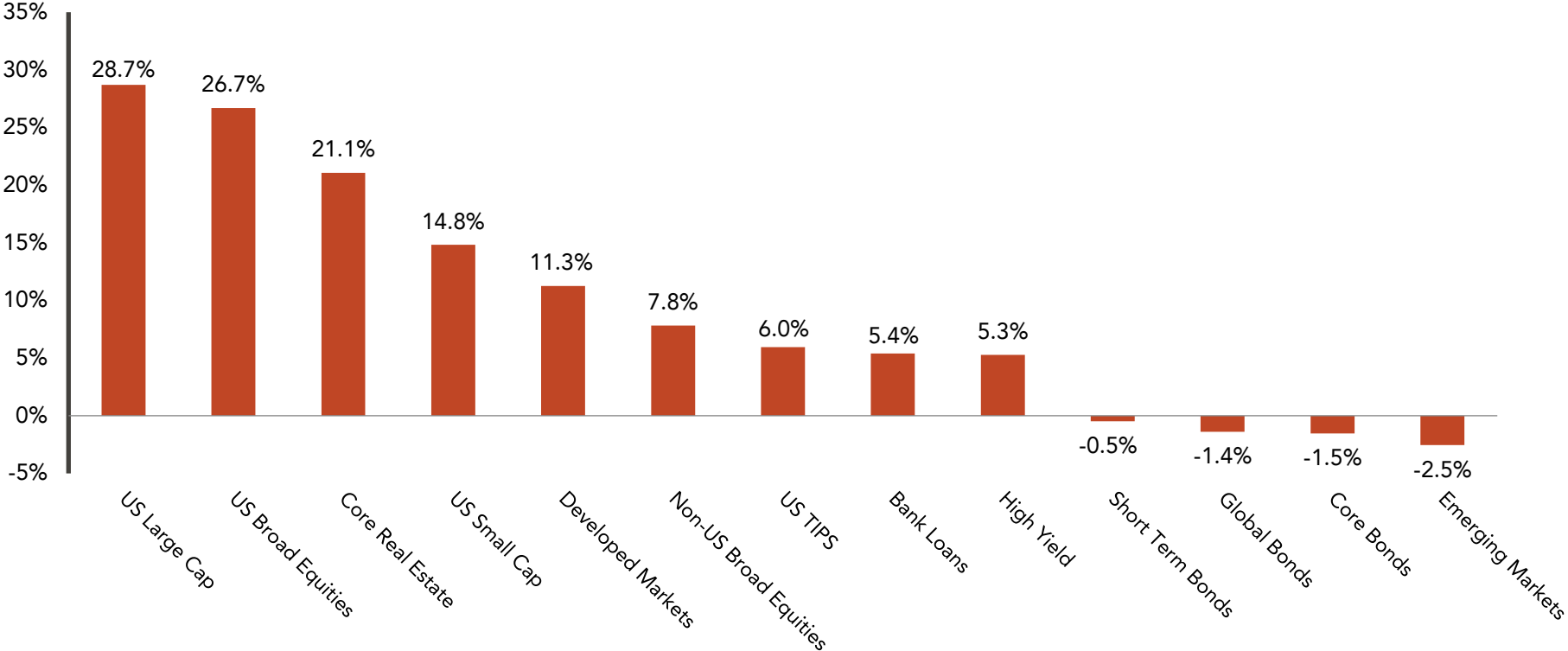
U.S. private equity vintage performance

Private equity has provided consistently strong performance over the last 2 decades with significant return potential provided by first quartile and top decile funds



Source: Pitchbook as of June 30, 2021

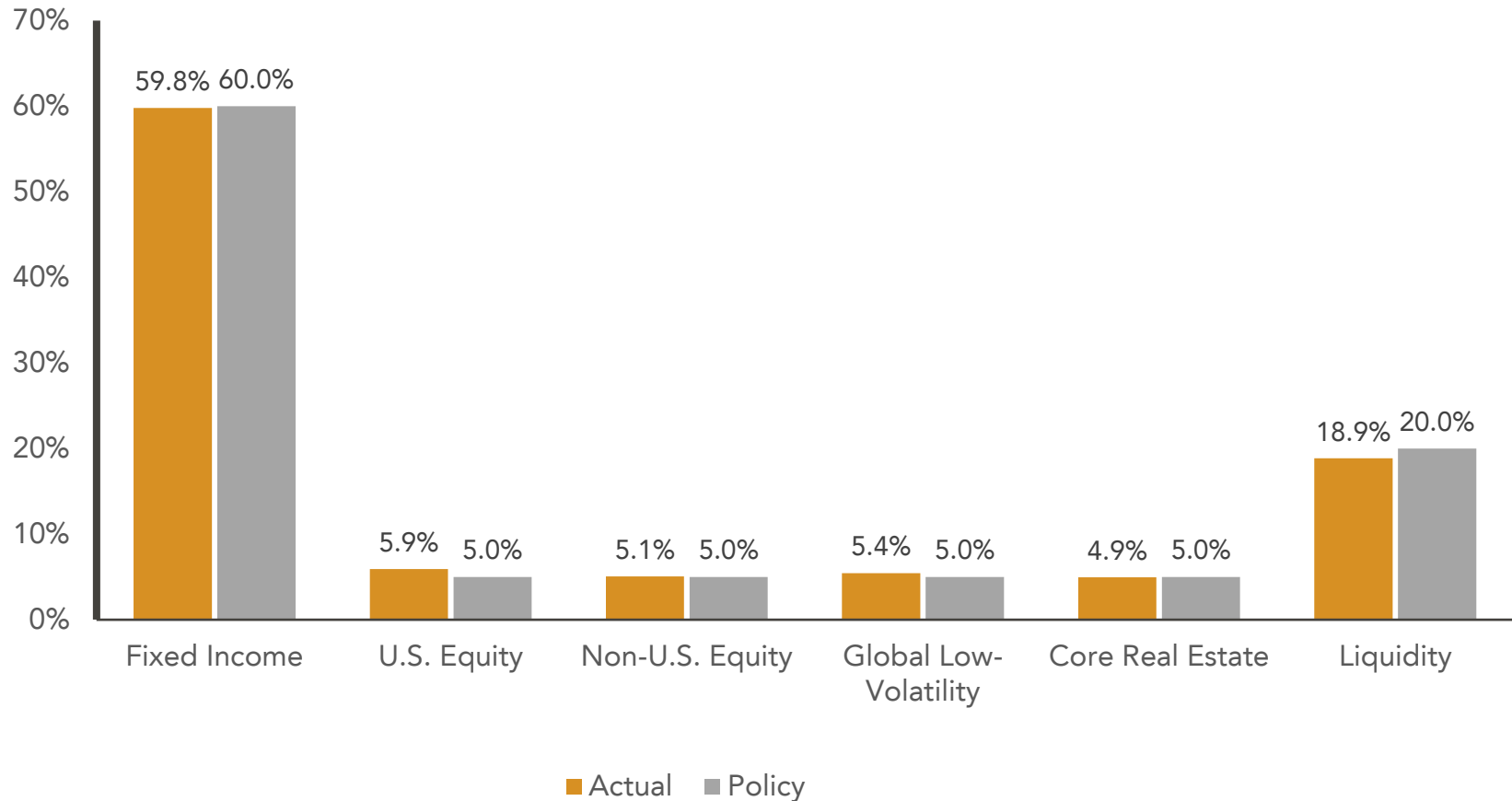
Year-to-date asset class returns



As of December 31, 2021

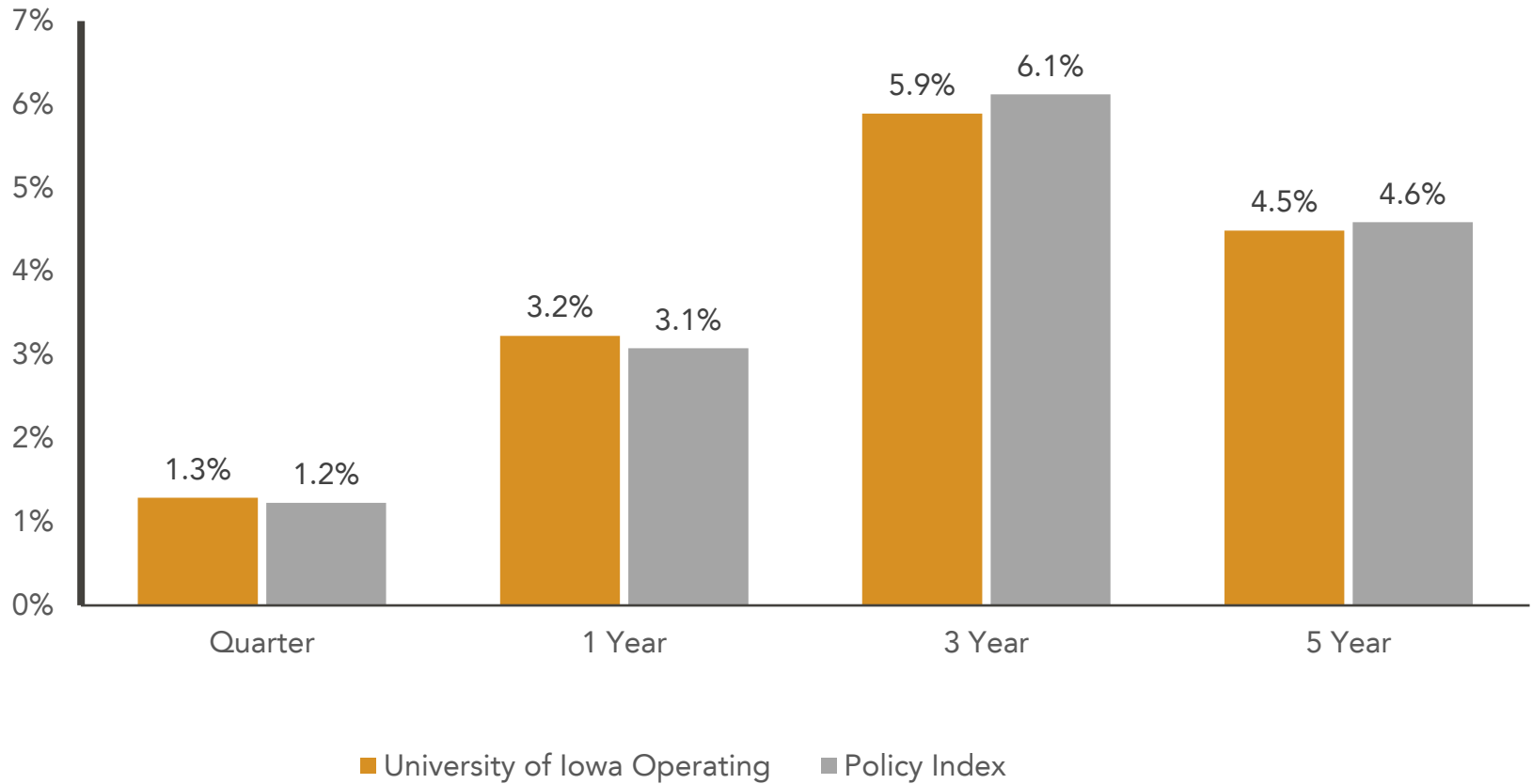
Performance Review

University of Iowa Operating Portfolio – Asset Allocation*



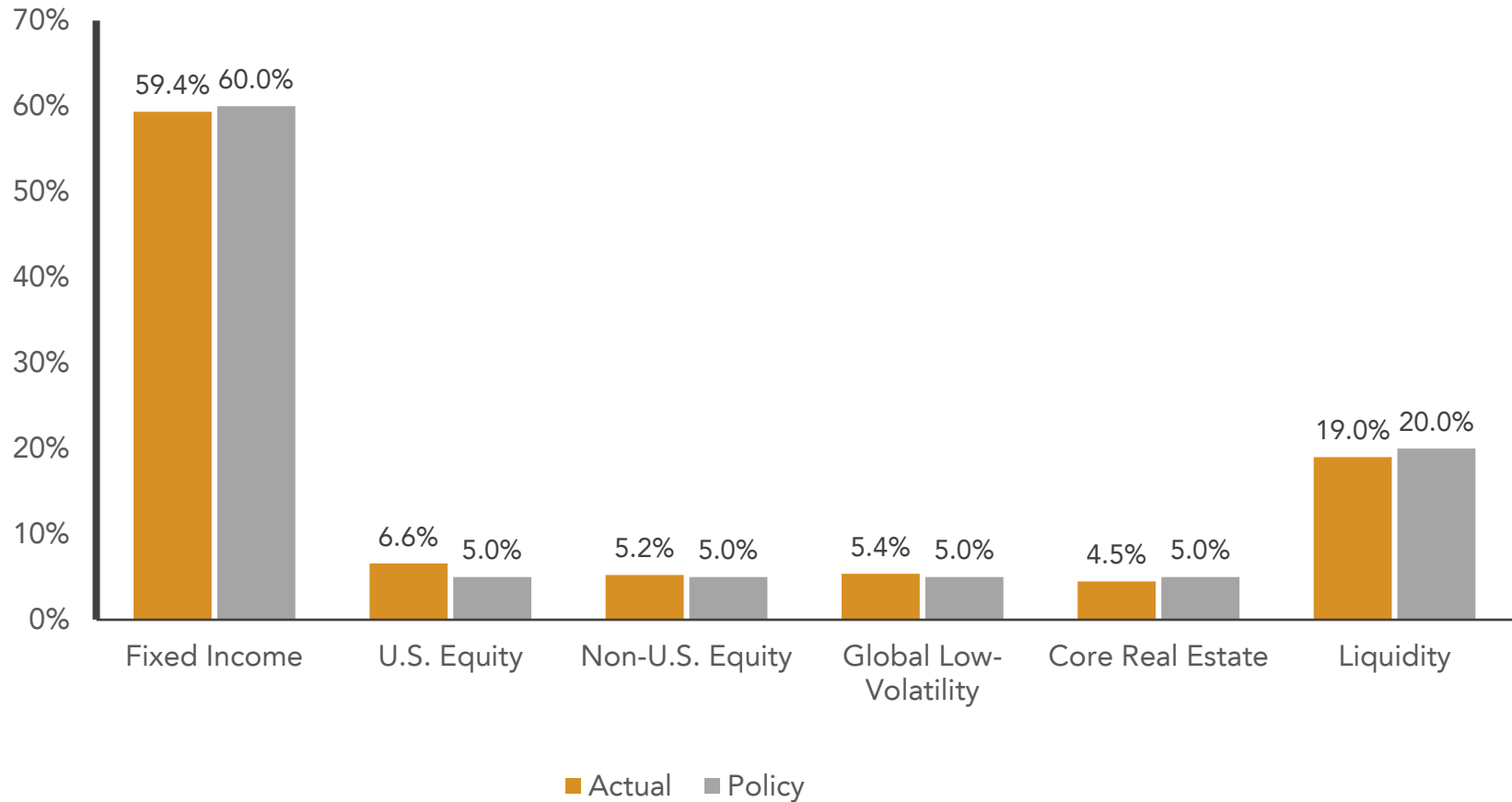
*Includes University of Northern Iowa

University of Iowa Operating Portfolio – Return Summary*

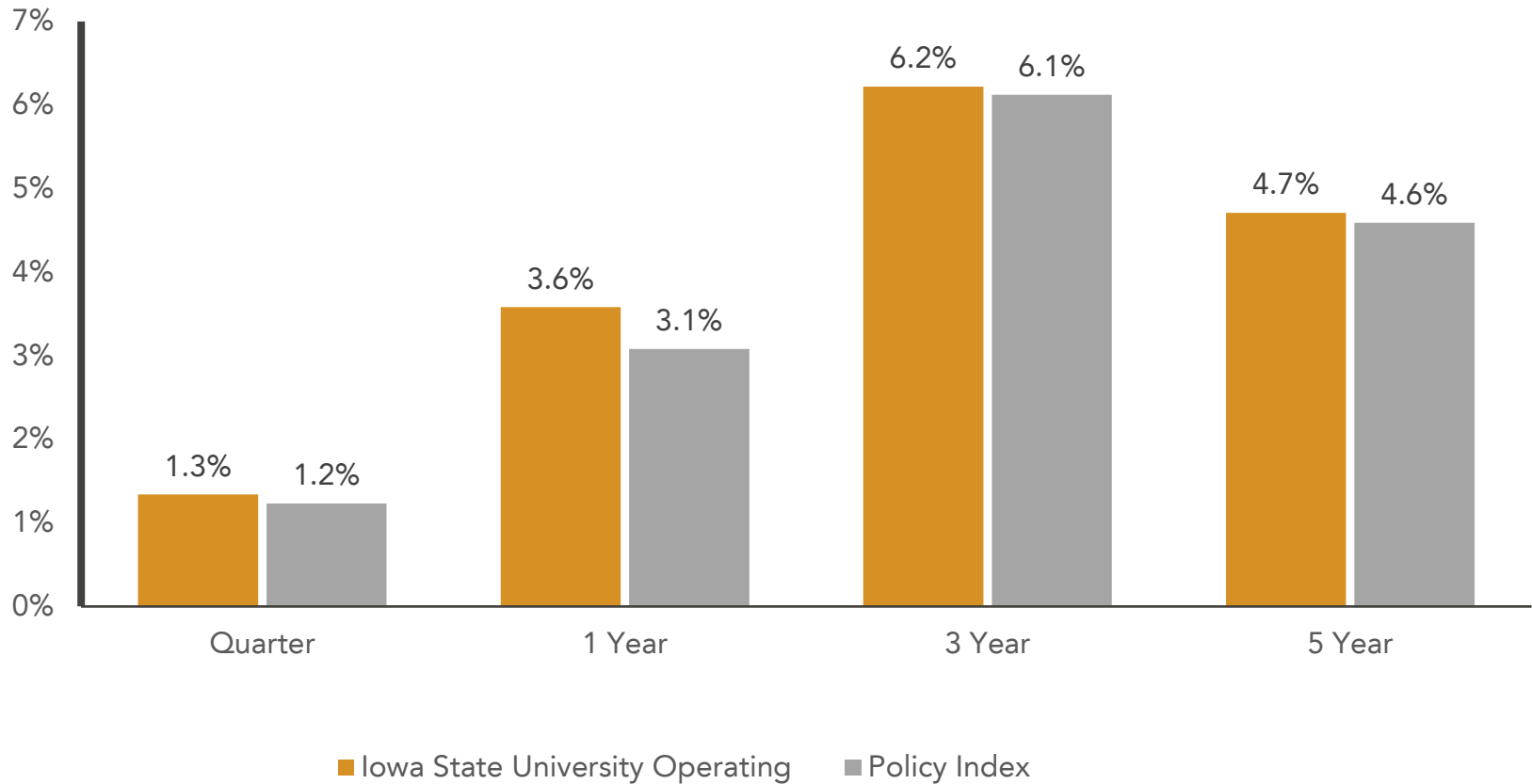


*Includes University of Northern Iowa. Note: See appendix for Policy Index definition.

Iowa State University Operating Portfolio – Asset Allocation

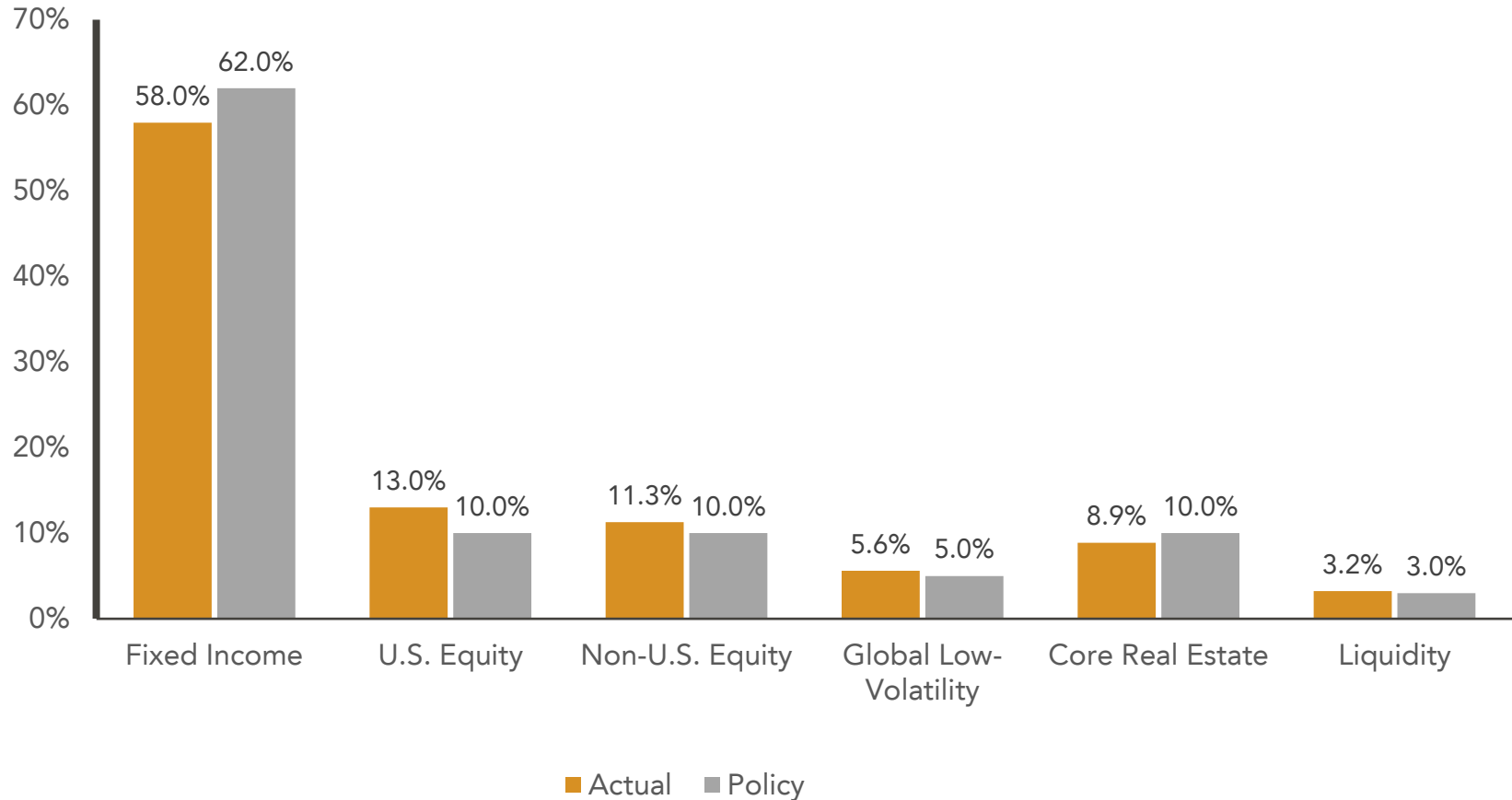


Iowa State University Operating Portfolio – Return Summary



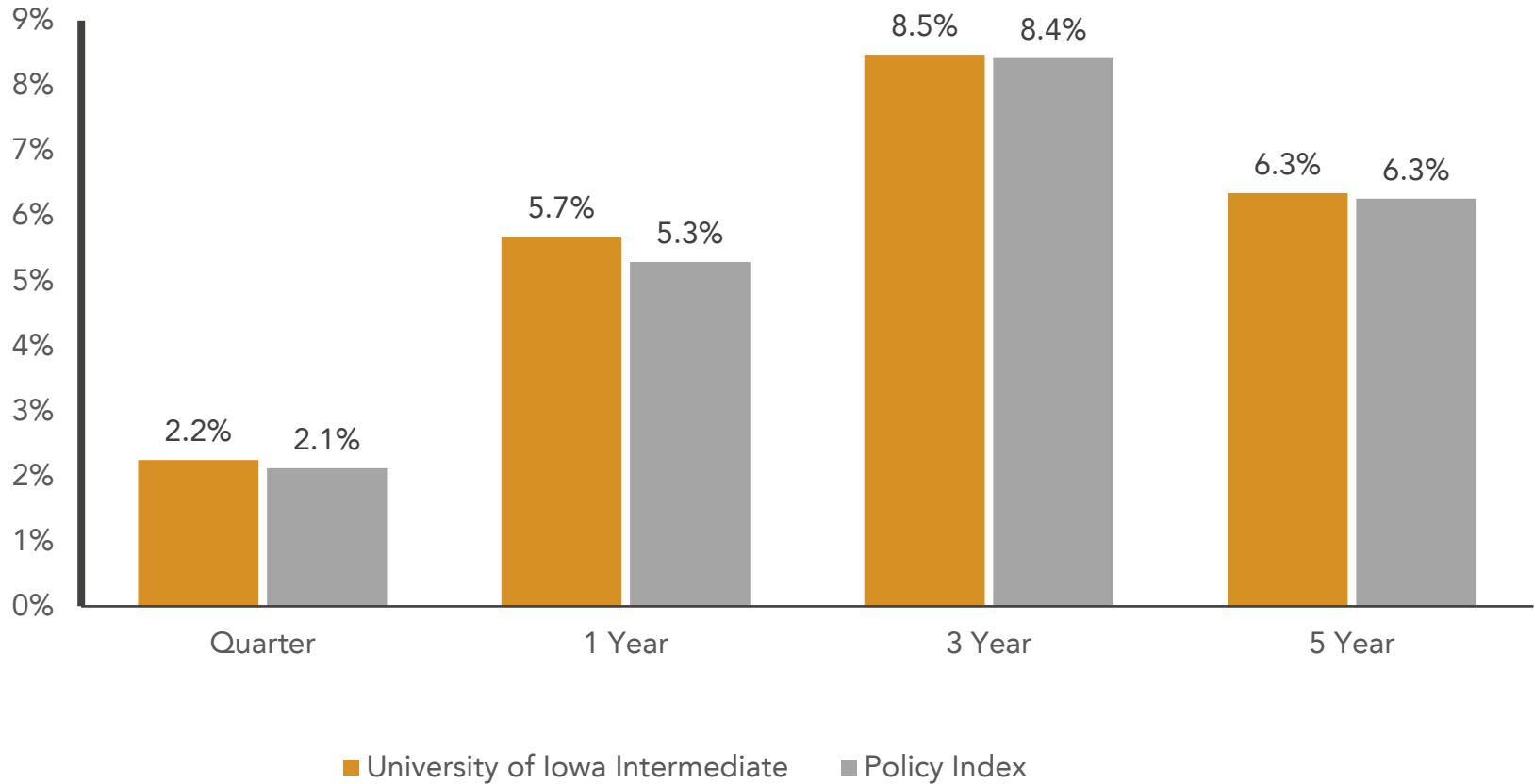
Note: See appendix for Policy Index definition.

University of Iowa Diversified Intermediate Term Portfolio – Asset Allocation



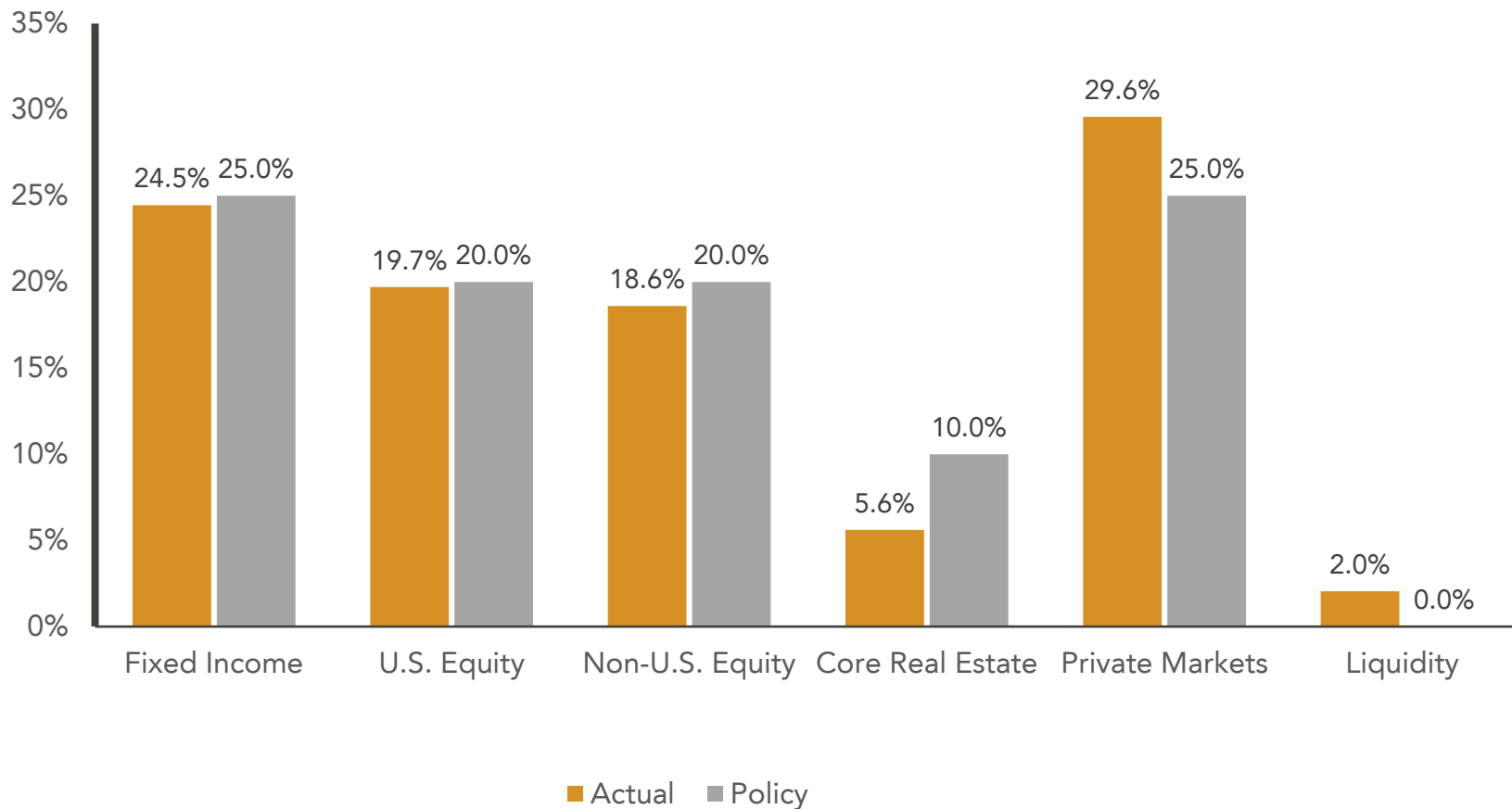
*Includes University of Northern Iowa

University of Iowa Diversified Intermediate Term Portfolio – Return Summary



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

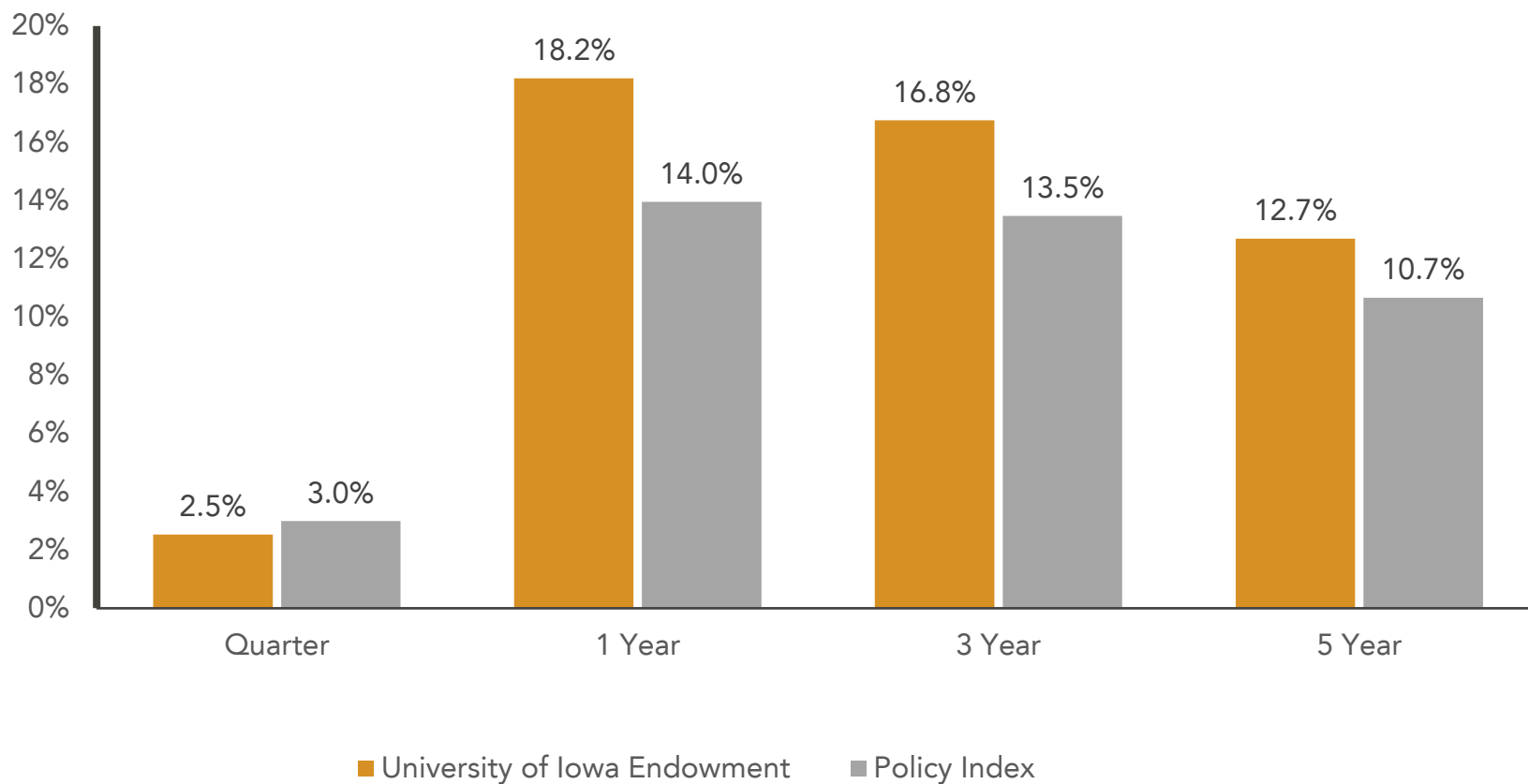
University of Iowa Endowment – Asset Allocation*



*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.

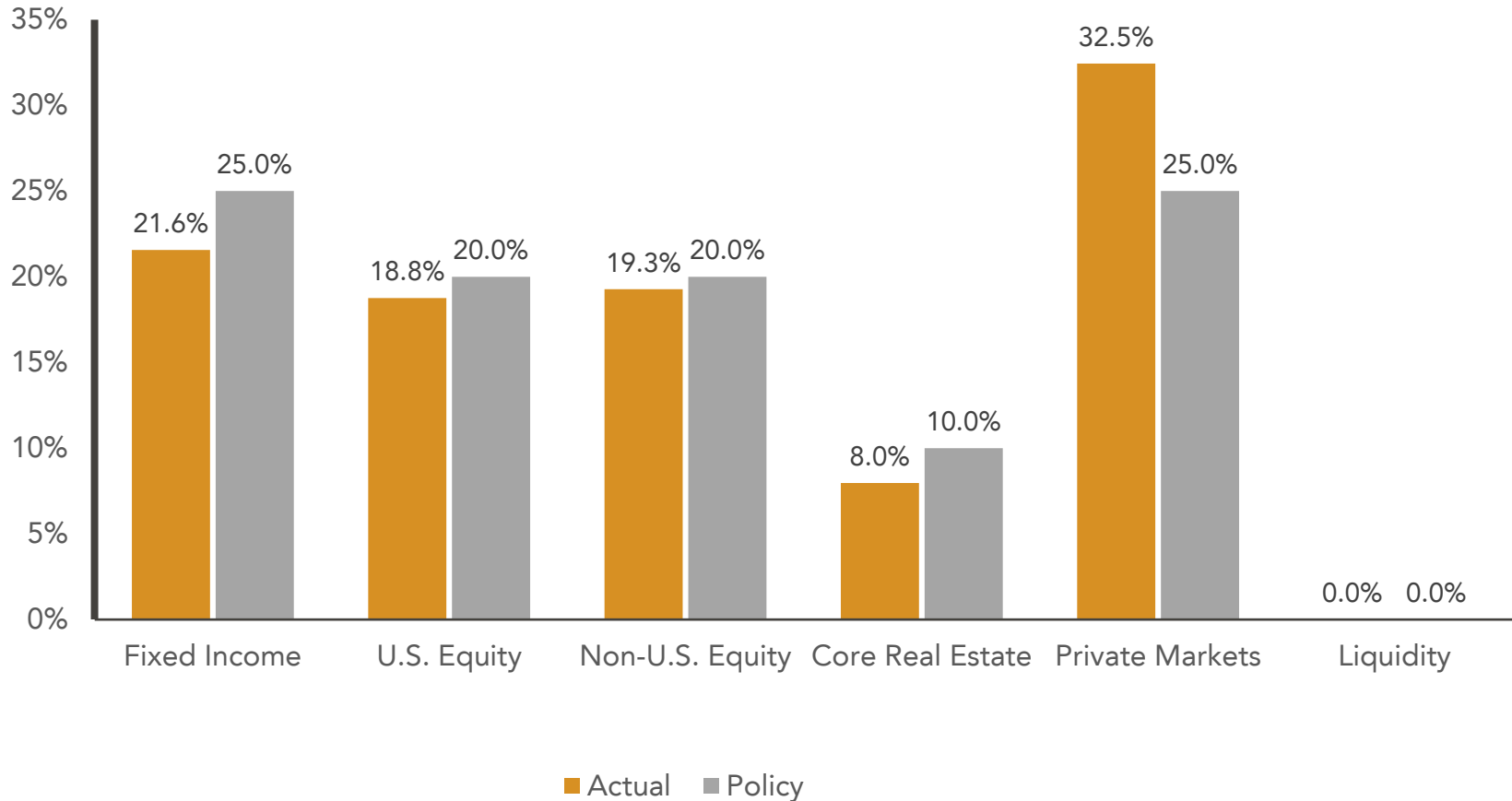
University of Iowa Endowment – Return Summary*



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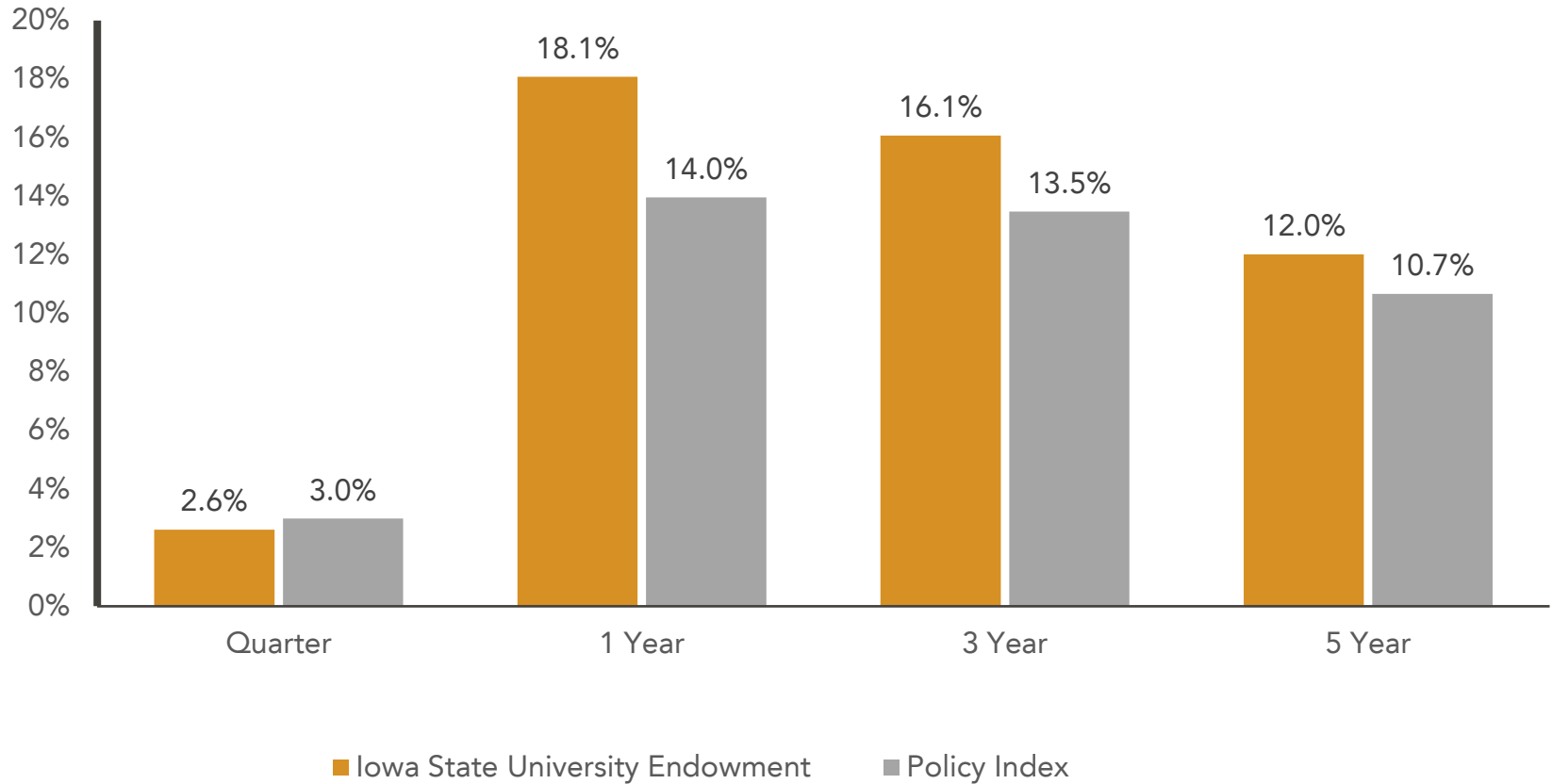
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Iowa State University Endowment – Asset Allocation



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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		\$1,673,494,980	100.0%	100.0%
Total Fixed Income Composite		\$1,000,170,709	59.8%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$82,990,733	5.0%	5.0%
U.S. Fixed Income Composite		\$917,179,977	54.8%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$414,737,579	24.8%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$332,496,685	19.9%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$42,157,339	2.5%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$42,186,983	2.5%	2.5%
Voya Senior Loan	Senior Secured Loans	\$42,686,523	2.6%	2.5%
Nuveen Senior Loan Fund	Senior Secured Loans	\$42,914,868	2.6%	2.5%
U.S. Equity Composite		\$99,157,228	5.9%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$99,157,228	5.9%	5.0%
Non-U.S. Equity Composite		\$84,787,261	5.1%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$84,787,261	5.1%	5.0%
Global Low Volatility Composite		\$90,982,704	5.4%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$90,982,704	5.4%	5.0%
Real Estate Composite		\$82,592,797	4.9%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$26,794,413	1.6%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$55,798,383	3.3%	2.5%
Liquidity Composite		\$315,804,280	18.9%	20.0%

*Includes University of Northern Iowa

Iowa State University Operating Portfolio – Market Values

	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Operating Pool		\$482,904,035	100.0%	100.0%
Total Fixed Income Composite		\$286,630,444	59.4%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$23,923,594	5.0%	5.0%
U.S. Fixed Income Composite		\$262,706,851	54.4%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$119,064,926	24.7%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$95,168,483	19.7%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$12,146,965	2.5%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$11,719,932	2.4%	2.5%
Nuveen Senior Loan Fund	Senior Secured Loans	\$24,606,544	5.1%	5.0%
U.S. Equity Composite		\$31,786,199	6.6%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$31,786,199	6.6%	5.0%
Non-U.S. Equity Composite		\$25,207,562	5.2%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$25,207,562	5.2%	5.0%
Global Low Volatility Composite		\$25,861,650	5.4%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$25,861,650	5.4%	5.0%
Real Estate Composite		\$21,642,972	4.5%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$8,720,873	1.8%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$12,922,100	2.7%	2.5%
Liquidity Composite		\$91,775,207	19.0%	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		\$541,467,652	100.0%	100.0%
Fixed Income Composite		\$313,953,477	58.0%	62.0%
SSgA U.S. Aggregate Bond Index	Core Fixed Income	\$69,731,828	12.9%	14.0%
Dodge & Cox Core Fixed Income	Core Fixed Income	\$70,654,348	13.0%	14.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$83,915,082	15.5%	17.0%
SSgA US High Yield Bond	High Yield Fixed Income	\$15,435,831	2.9%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$14,105,259	2.6%	2.5%
Voya Senior Loan	Senior Secured Loans	\$12,361,723	2.3%	2.5%
Nuveen Senior Loan Fund	Senior Secured Loans	\$12,767,064	2.4%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$34,982,343	6.5%	7.0%
U.S. Equity Composite		\$70,466,279	13.0%	10.0%
SSgA U.S. Total Market Index	All-Cap Core	\$70,466,279	13.0%	10.0%
Non-U.S. Equity Composite		\$61,057,442	11.3%	10.0%
SSgA MSCI ACWI ex US	Non-U.S. Large-Cap Core	\$61,057,442	11.3%	10.0%
Global Low Volatility Composite		\$30,364,780	5.6%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$30,364,780	5.6%	5.0%
Real Estate Composite		\$48,144,003	8.9%	10.0%
UBS Trumbull Property Fund	Core Real Estate	\$21,994,021	4.1%	5.0%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$26,149,982	4.8%	5.0%
Liquidity Composite		\$17,481,670	3.2%	3.0%

*Includes University of Northern Iowa

University of Iowa Endowment – Market Values*

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Endowment		\$679,916,584	100.0%	100.0%
Fixed Income Composite		\$166,245,066	24.5%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$66,337,295	9.8%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$33,412,774	4.9%	5.0%
Voya Senior Loan	Senior Secured Loans	\$16,426,545	2.4%	2.5%
Nuveen Senior Loan Fund	Senior Secured Loans	\$16,526,071	2.4%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$33,542,381	4.9%	5.0%
U.S. Equity Composite		\$133,965,792	19.7%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$93,699,596	13.8%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$20,483,424	3.0%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$19,782,772	2.9%	3.0%
Non-U.S. Equity Composite		\$126,505,863	18.6%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$42,913,760	6.3%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$41,705,593	6.1%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$41,886,510	6.2%	6.7%
Core Real Estate Composite		\$38,133,631	5.6%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$29,629,009	4.4%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$2,694,862	0.4%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$5,809,760	0.9%	2.5%
Private Markets Composite		\$201,171,175	29.6%	25.0%
Liquidity Composite		\$13,895,058	2.0%	0.0%

*Includes University of Northern Iowa.

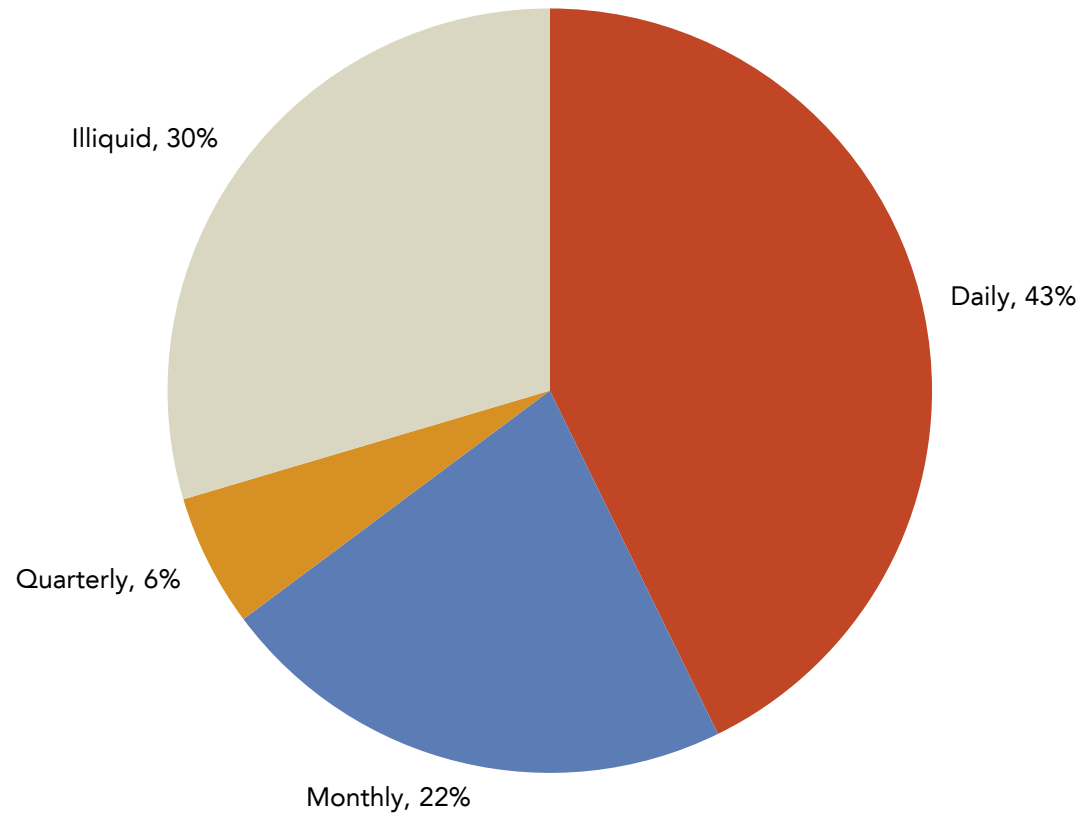
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Iowa State University Endowment – Market Values

	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Endowment		\$228,472,180	100.0%	100.0%
Fixed Income Composite		\$49,249,646	21.6%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$19,533,884	8.5%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$9,743,783	4.3%	5.0%
Nuveen Senior Loan Fund	Senior Secured Loans	\$10,821,631	4.7%	5.0%
Brandywine Global Opportunistic	Global Fixed Income	\$9,150,349	4.0%	5.0%
U.S. Equity Composite		\$42,853,557	18.8%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$26,882,828	11.8%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$8,659,293	3.8%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$7,311,436	3.2%	3.0%
Non-U.S. Equity Composite		\$44,027,094	19.3%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$14,348,785	6.3%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$14,748,031	6.5%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$14,930,277	6.5%	6.7%
Core Real Estate Composite		\$18,194,238	8.0%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$10,624,516	4.7%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$3,341,628	1.5%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$4,228,094	1.9%	2.5%
Private Markets Composite		\$74,147,645	32.5%	25.0%
Liquidity Composite		\$0	0.0%	0.0%

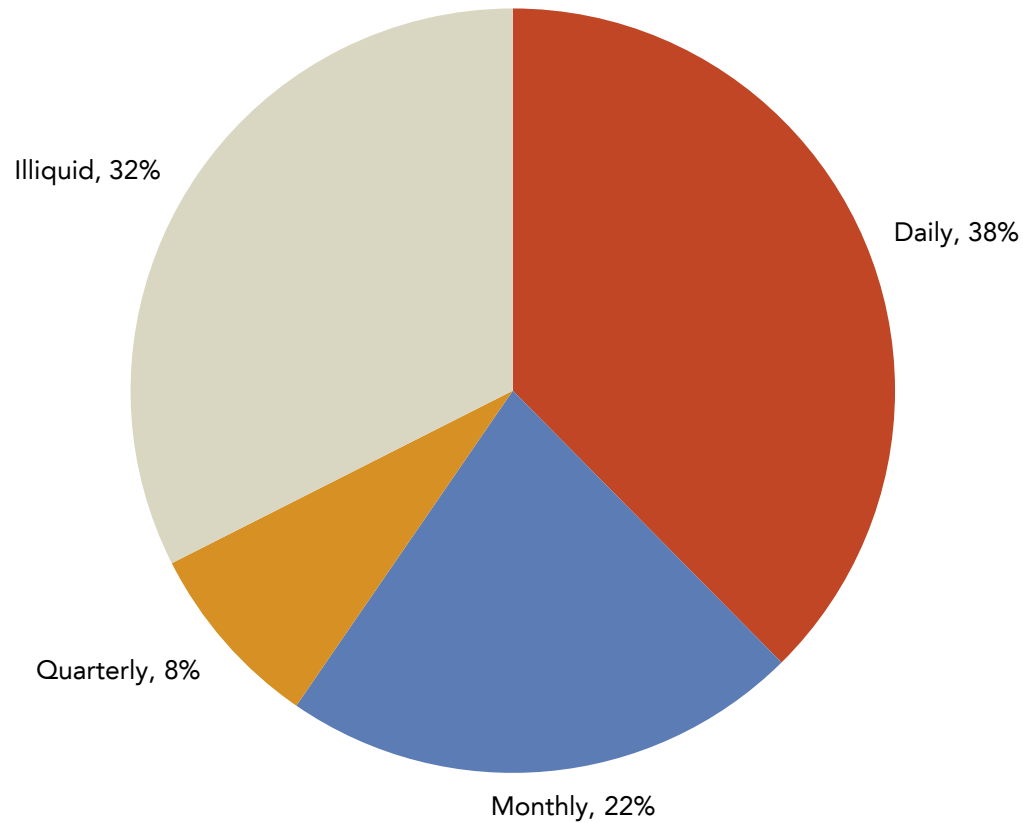
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University of Iowa Endowment – Liquidity by Percent of Assets*



*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 September 30, 2021

Asset Class	Fund	Commitment	Capital Calls	Distributions	Ending Value	¹ Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$6,000,000	\$4,980,000	\$7,634,792	\$0	1.5
Fund of Funds	Commonfund Capital Venture Partners VIII	\$1,000,000	\$970,000	\$1,705,391	\$812,405	2.6
International Fund of Funds	Commonfund Capital International Partners VI	\$1,200,000	\$1,122,600	\$1,637,880	\$222,314	1.7
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$2,400,000	\$2,232,000	\$3,784,348	\$1,273,020	2.3
Value Added	Commonfund NR Partners VIII	\$6,000,000	\$5,877,000	\$3,154,434	\$2,436,738	1.0
Fund of Funds	Adams Street US Partnership 2010	\$2,440,000	\$2,149,640	\$3,221,416	\$2,501,941	2.7
International Fund of Funds	Adams Street Non-US Developed 2010	\$1,470,000	\$1,323,735	\$1,518,678	\$1,090,588	2.0
International Fund of Funds	Adams Street Non-US Emerging 2010	\$490,000	\$440,020	\$306,247	\$711,419	2.3
Secondary Fund of Funds	Landmark Equity Partners XIV	\$4,400,000	\$4,281,171	\$5,157,247	\$633,384	1.4
Opportunistic	MREP Global III	\$5,000,000	\$4,562,256	\$5,633,319	\$633,859	1.4
Fund of Funds	Adams Street US Partnership 2012	\$7,050,000	\$6,013,650	\$5,006,563	\$10,992,292	2.7
International Fund of Funds	Adams Street Non-US Developed 2012	\$4,240,000	\$3,512,840	\$3,163,498	\$3,753,833	2.0
International Fund of Funds	Adams Street Non-US Emerging 2012	\$1,410,000	\$1,309,890	\$904,335	\$2,440,938	2.6
Opportunistic	Commonfund NR Partners IX	\$11,000,000	\$10,098,001	\$3,378,136	\$8,766,059	1.2
Value Added	MREP Global VI	\$9,000,000	\$8,256,002	\$8,337,534	\$3,168,398	1.4
Fund of Funds	Adams Street US Partnership 2013	\$5,500,000	\$5,005,000	\$2,978,028	\$9,180,252	2.4
International Fund of Funds	Adams Street Non-US Developed 2013	\$2,800,000	\$2,272,200	\$2,026,615	\$3,410,939	2.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$1,700,000	\$1,577,600	\$800,864	\$3,409,694	2.7
Secondary Fund of Funds	Landmark Equity Partners XV	\$5,000,000	\$4,013,672	\$3,318,294	\$2,563,319	1.5
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$12,500,000	\$8,875,000	\$5,298,362	\$15,798,735	2.4
Value Added	Aberdeen Energy & Resources Partners III	\$9,000,000	\$8,820,000	\$3,401,472	\$7,444,637	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$9,000,000	\$8,298,619	\$7,487,537	\$2,399,107	1.2
Separate Account	Neuberger Berman IPU Feeder Fund - A	\$93,000,000	\$60,436,175	\$14,679,986	\$112,700,987	2.1
Separate Account	Neuberger Berman IPU Feeder Fund - B	\$120,000,000	\$10,641,177	\$0	\$13,016,642	1.2
Total Private Markets		\$321,600,000	\$167,068,248	\$94,534,976	\$209,361,500	1.8

¹ Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

University of Iowa Endowment – Private Markets

Annualized Performance

Asset Class	Fund	Vintage Yr.	Perf. as of:	Net IRR
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	9/30/2021	13.5%
International Fund of Funds	Commonfund Capital International Partners VI	2007	9/30/2021	9.3%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	9/30/2021	14.4%
Value Added	Commonfund NR Partners VIII	2008	9/30/2021	-0.9%
Fund of Funds	Adams Street US Partnership 2010	2010	9/30/2021	18.5%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	9/30/2021	14.3%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	9/30/2021	13.9%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	9/30/2021	10.1%
Opportunistic	MREP Global III	2010	9/30/2021	8.4%
Fund of Funds	Adams Street US Partnership 2012	2012	9/30/2021	19.6%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	9/30/2021	16.2%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	9/30/2021	19.0%
Opportunistic	Commonfund NR Partners IX	2012	9/30/2021	4.0%
Value Added	MREP Global VI	2012	9/30/2021	9.8%
Fund of Funds	Adams Street US Partnership 2013	2013	9/30/2021	20.0%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	9/30/2021	21.3%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	9/30/2021	21.6%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	9/30/2021	14.1%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	9/30/2021	15.8%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2021	3.9%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	9/30/2021	7.3%
Separate Account	Neuberger Berman IPU Feeder Fund - A	2015	9/30/2021	24.0%
Separate Account	Neuberger Berman IPU Feeder Fund - B	2020	9/30/2021	--
Total Private Markets			9/30/2021	14.5%

Iowa State University Endowment – Private Markets

Since Inception Cash Flows
Data as of September 30, 2021

Asset Class	Fund	Commitment	Capital Calls	Distributions	Ending Value	¹ Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$3,750,000	\$3,112,500	\$4,771,745	\$0	1.5
Fund of Funds	Commonfund Capital Venture Partners VIII	\$600,000	\$582,000	\$1,023,233	\$487,445	2.6
International Fund of Funds	Commonfund Capital International Partners VI	\$800,000	\$748,400	\$1,091,920	\$148,217	1.7
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$1,600,000	\$1,488,000	\$2,522,902	\$848,672	2.3
Value Added	Commonfund NR Partners VIII	\$4,000,000	\$3,918,000	\$2,102,957	\$1,624,489	1.0
Fund of Funds	Adams Street US Partnership 2010	\$1,442,000	\$1,270,402	\$1,903,806	\$1,478,605	2.7
International Fund of Funds	Adams Street Non-US Developed 2010	\$869,000	\$782,538	\$897,779	\$644,710	2.0
International Fund of Funds	Adams Street Non-US Emerging 2010	\$289,000	\$259,522	\$180,623	\$419,594	2.3
Secondary Fund of Funds	Landmark Equity Partners XIV	\$2,600,000	\$2,529,785	\$3,047,487	\$374,264	1.4
Opportunistic	MREP Global III	\$3,000,000	\$2,737,353	\$3,379,991	\$380,315	1.4
Fund of Funds	Adams Street US Partnership 2012	\$3,100,000	\$2,644,300	\$2,201,468	\$4,833,492	2.7
International Fund of Funds	Adams Street Non-US Developed 2012	\$1,870,000	\$1,549,295	\$1,395,221	\$1,655,579	2.0
International Fund of Funds	Adams Street Non-US Emerging 2012	\$630,000	\$585,270	\$404,064	\$1,090,630	2.6
Opportunistic	Commonfund NR Partners IX	\$4,000,000	\$3,672,000	\$1,228,416	\$3,187,661	1.2
Value Added	MREP Global VI	\$4,000,000	\$3,669,334	\$3,705,571	\$1,408,176	1.4
Fund of Funds	Adams Street US Partnership 2013	\$2,080,000	\$1,892,800	\$1,126,236	\$3,471,804	2.4
International Fund of Funds	Adams Street Non-US Developed 2013	\$1,040,000	\$843,960	\$752,741	\$1,266,920	2.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$630,000	\$584,640	\$296,793	\$1,263,595	2.7
Secondary Fund of Funds	Landmark Equity Partners XV	\$1,875,000	\$1,505,131	\$1,244,360	\$961,241	1.5
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$1,875,000	\$1,331,250	\$800,164	\$2,369,813	2.4
Value Added	Aberdeen Energy & Resources Partners III	\$3,000,000	\$2,940,000	\$1,133,824	\$2,481,545	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$3,000,000	\$2,766,206	\$2,495,845	\$799,703	1.2
Separate Account	Neuberger Berman IPU Feeder Fund - A	\$38,000,000	\$21,923,825	\$5,270,461	\$40,071,981	2.1
Separate Account	Neuberger Berman IPU Feeder Fund - B	\$50,000,000	\$4,433,823	\$0	\$5,413,818	1.2
Total Private Markets		\$134,050,000	\$67,770,334	\$42,977,607	\$76,682,269	1.8

¹ Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

Iowa State University Endowment – Private Markets

Annualized Performance

Asset Class	Fund	Vintage Yr.	Perf. as of:	Net IRR
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	9/30/2021	13.5%
International Fund of Funds	Commonfund Capital International Partners VI	2007	9/30/2021	9.3%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	9/30/2021	14.4%
Value Added	Commonfund NR Partners VIII	2008	9/30/2021	-0.9%
Fund of Funds	Adams Street US Partnership 2010	2010	9/30/2021	18.5%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	9/30/2021	14.3%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	9/30/2021	13.9%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	9/30/2021	9.7%
Opportunistic	MREP Global III	2010	9/30/2021	8.4%
Fund of Funds	Adams Street US Partnership 2012	2012	9/30/2021	19.6%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	9/30/2021	15.2%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	9/30/2021	19.0%
Opportunistic	Commonfund NR Partners IX	2012	9/30/2021	3.9%
Value Added	MREP Global VI	2012	9/30/2021	9.8%
Fund of Funds	Adams Street US Partnership 2013	2013	9/30/2021	20.0%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	9/30/2021	21.3%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	9/30/2021	21.6%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	9/30/2021	14.1%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	9/30/2021	15.8%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2021	4.2%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	9/30/2021	6.7%
Separate Account	Neuberger Berman IPU Feeder Fund - A	2015	9/30/2021	23.1%
Separate Account	Neuberger Berman IPU Feeder Fund - B	2020	9/30/2021	--
Total Private Markets			9/30/2021	13.3%

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, 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.

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 April 1, 2002, 30% BBgBarc Aggregate, 63% S&P 500, 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

Disclosures

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