

Board of Regents State of Iowa

Market Environment

U.S. economy overview

- 4Q GDP growth was revised down to 2.2% from 2.6% in previous estimates. Early forecasts for 1Q growth are at 2.3%
- The unemployment rate remained at 3.8% and 196K new jobs were added, rebounding from a disappointing February new jobs report
- CPI increased 1.5% over the trailing 12 months, with energy prices falling 5.0% during this time. Core CPI remains consistent at 2.1%
- U.S. and China tariff talks have reportedly made progress, though some issues remain

Fixed income: Safe haven assets rally

Curve inversion intensifies as global slowdown and trade spat drag on

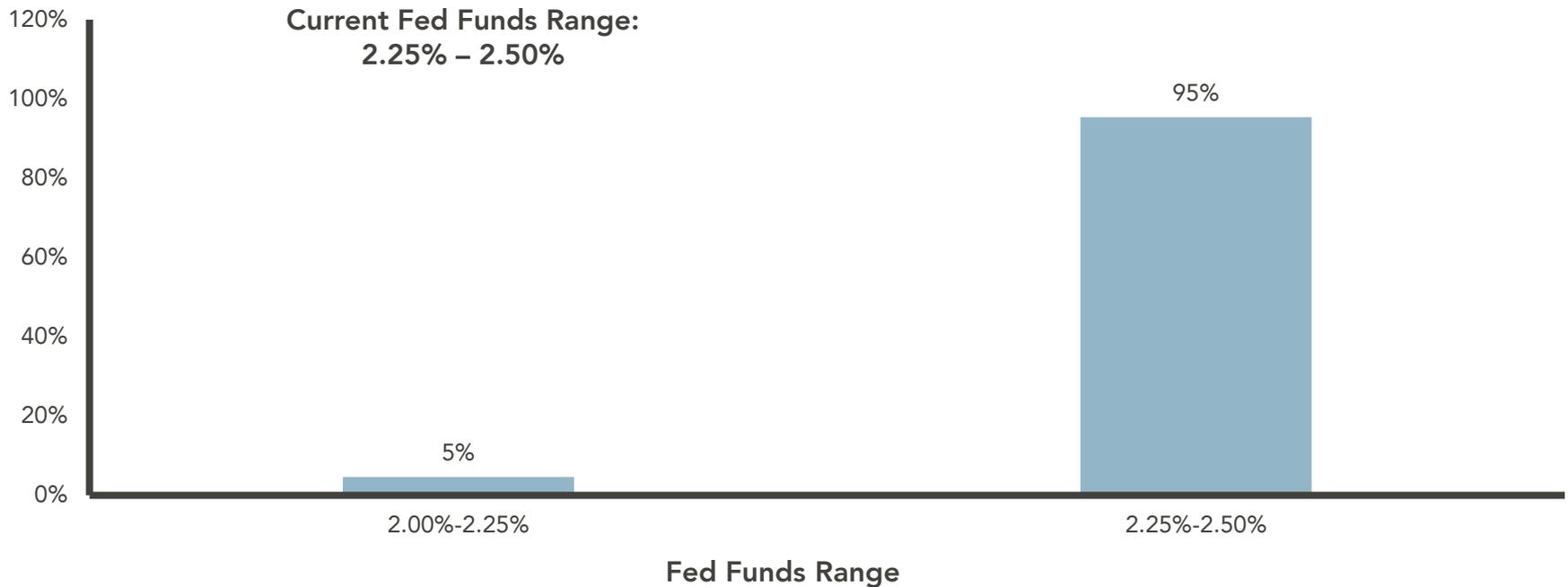
	Month (%)	Qtr (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Blm BC Aggregate	1.9	2.9	2.9	4.5	2.0	2.7	3.8
Intermediate Indices							
Blm BC Int. Gov./Credit	1.4	2.3	2.3	4.2	1.7	2.1	3.1
Government Only Indices							
Blm BC Long Gov.	5.2	4.6	4.6	6.2	1.5	5.4	5.2
Blm BC Int. Gov.	1.2	1.6	1.6	3.8	1.0	1.7	2.0
Blm BC 1-3 Year Gov.	0.6	1.0	1.0	2.7	1.0	1.0	1.1
Blm BC U.S. TIPS	1.8	3.2	3.2	2.7	1.7	1.9	3.4
Credit Indices							
Blm BC U.S. Long Credit	4.3	7.9	7.9	4.6	5.2	5.4	9.0
Blm BC High Yield	0.9	7.3	7.3	5.9	8.6	4.7	11.3
CS Leveraged Loan Index	-0.1	3.8	3.8	3.3	5.9	3.8	8.0
Securitized Bond Indices							
Blm BC MBS	1.5	2.2	2.2	4.4	1.8	2.6	3.1
Blm BC ABS	0.7	1.5	1.5	3.7	1.8	1.9	3.9
Blm BC CMBS	1.7	3.2	3.2	5.5	2.6	3.0	8.0
Non-U.S. Indices							
Blm BC Global Aggregate Hedged	1.8	3.0	3.0	4.9	2.8	3.6	4.1
JPM EMBI Global Diversified	1.4	7.0	7.0	4.2	5.8	5.4	8.5
JPM GBI-EM Global Diversified	0.6	2.7	2.7	3.5	6.3	6.7	7.8
Municipal Indices							
Blm BC Municipal 5 Year	1.6	2.9	2.9	5.4	2.7	3.7	4.7
Blm BC HY Municipal	2.6	3.8	3.8	8.1	6.1	6.1	8.7

Source: Bloomberg Barclays, Credit Suisse, JPMorgan as of March 31, 2019

Market expects zero Fed rate hikes in 2019

15% chance of June cut, 30% chance of September cut

▣ Probability of Fed Funds Rate at May 1, 2019 Fed Meeting

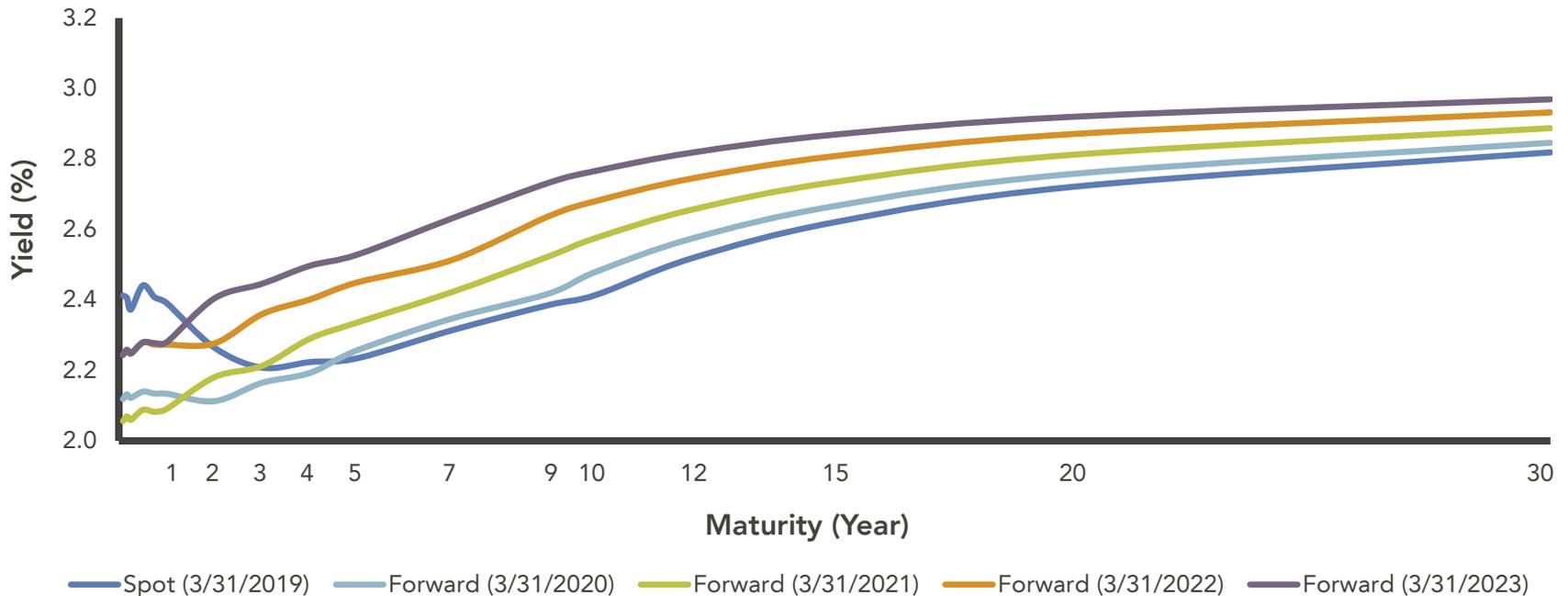


Source: Bloomberg; latest data as of April 1, 2019

How will the shape of the yield curve evolve?

The market expects short end inversion to subside and rates to rise gradually over the next 5 years

Treasury Forward Curve

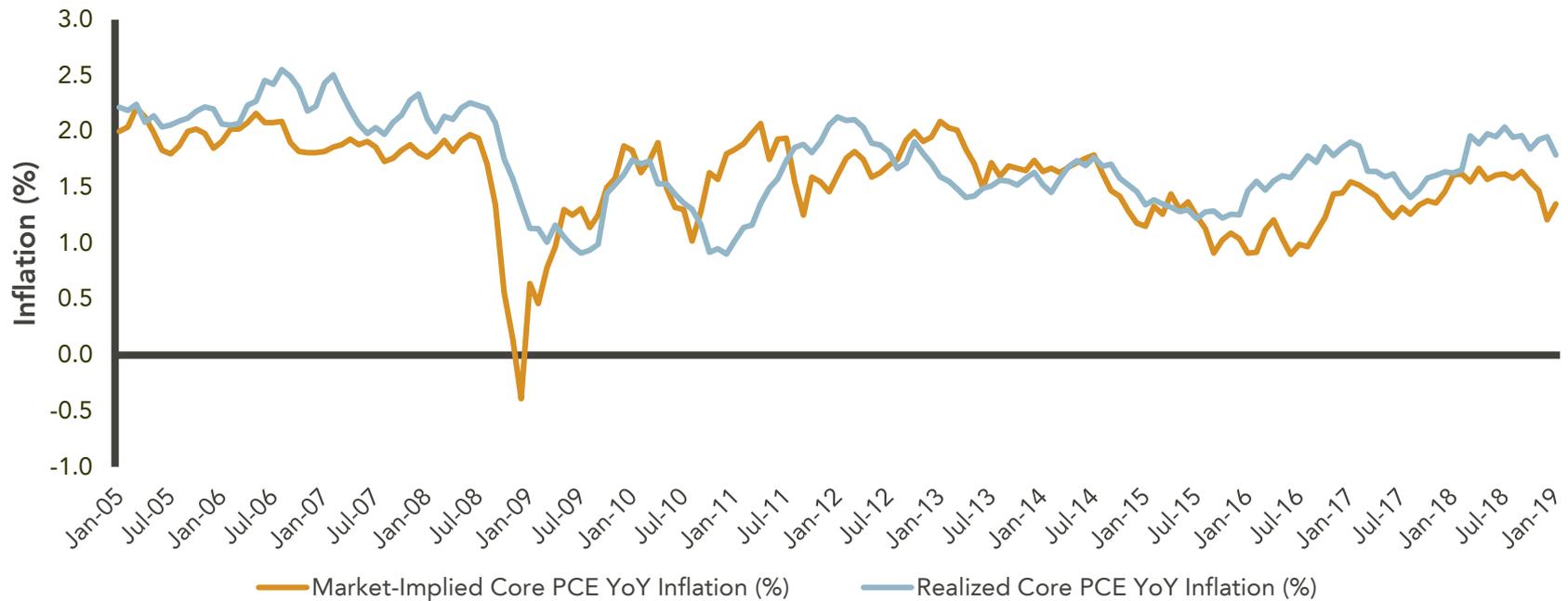


Source: Bloomberg as of March 31, 2019

Inflation still shy of Fed's targeted 2%

Market expects inflation to drop further

Market-Implied vs. Actual Inflation

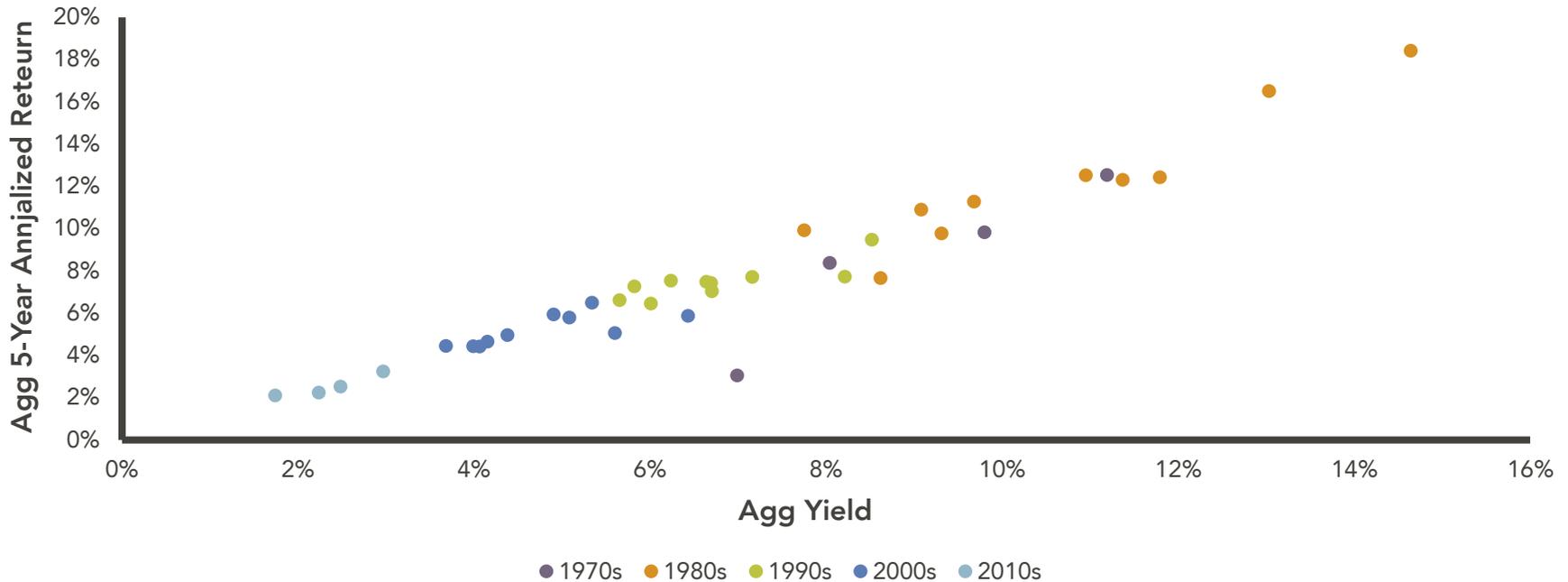


Note: Market-implied based on 10-year breakeven inflation rate minus 50bp, as Core PCE is typically 50bp lower than CPI, and the 10-year breakeven inflation is based on CPI
Source: Federal Reserve; latest data as of March 31, 2019

Higher yields, higher returns

Higher Agg yields typically lead to higher future 5-year annualized returns

▣ Starting yields and forward 5-year annualized returns



Source: Bloomberg

U.S. equities: Best quarter in show since 1998

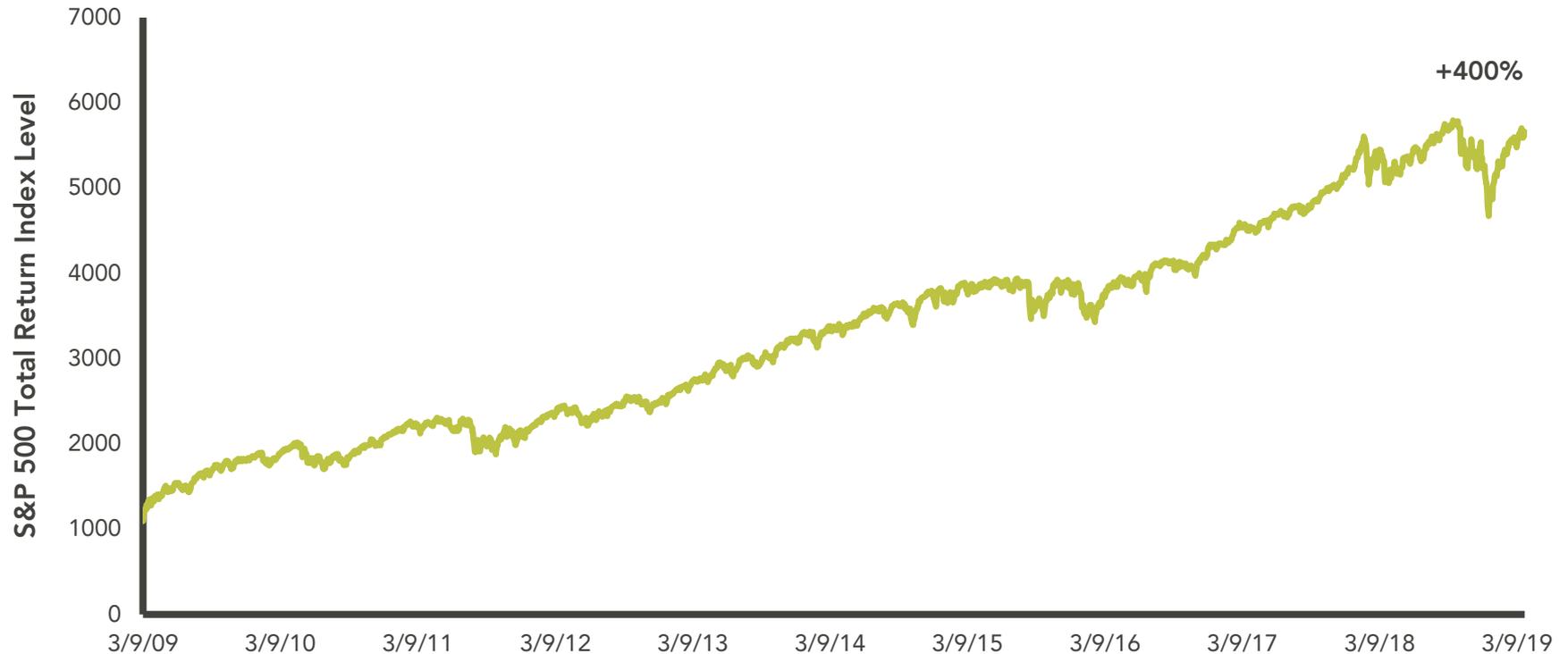
U.S. equity index returns

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	0.2	11.8	11.8	10.1	16.4	12.2	16.0
Wilshire 5000	1.5	14.1	14.1	8.9	13.6	10.5	16.0
Russell 3000	1.5	14.0	14.0	8.8	13.5	10.4	16.0
Large-Cap Market Indices							
S&P 500	1.9	13.6	13.6	9.5	13.5	10.9	15.9
Russell 1000	1.7	14.0	14.0	9.3	13.5	10.6	16.0
Russell 1000 Value	0.6	11.9	11.9	5.7	10.5	7.7	14.5
Russell 1000 Growth	2.8	16.1	16.1	12.7	16.5	13.5	17.5
Mid-Cap Market Indices							
Russell MidCap	0.9	16.5	16.5	6.5	11.8	8.8	16.9
Russell MidCap Value	0.5	14.4	14.4	2.9	9.5	7.2	16.4
Russell MidCap Growth	1.3	19.6	19.6	11.5	15.1	10.9	17.6
Small-Cap Market Indices							
Russell 2000	-2.1	14.6	14.6	2.0	12.9	7.1	15.4
Russell 2000 Value	-2.9	11.9	11.9	0.2	10.9	5.6	14.1
Russell 2000 Growth	-1.4	17.1	17.1	3.9	14.9	8.4	16.5

Source: Morningstar Direct as of March 31, 2019

Happy 10th birthday! And many more...

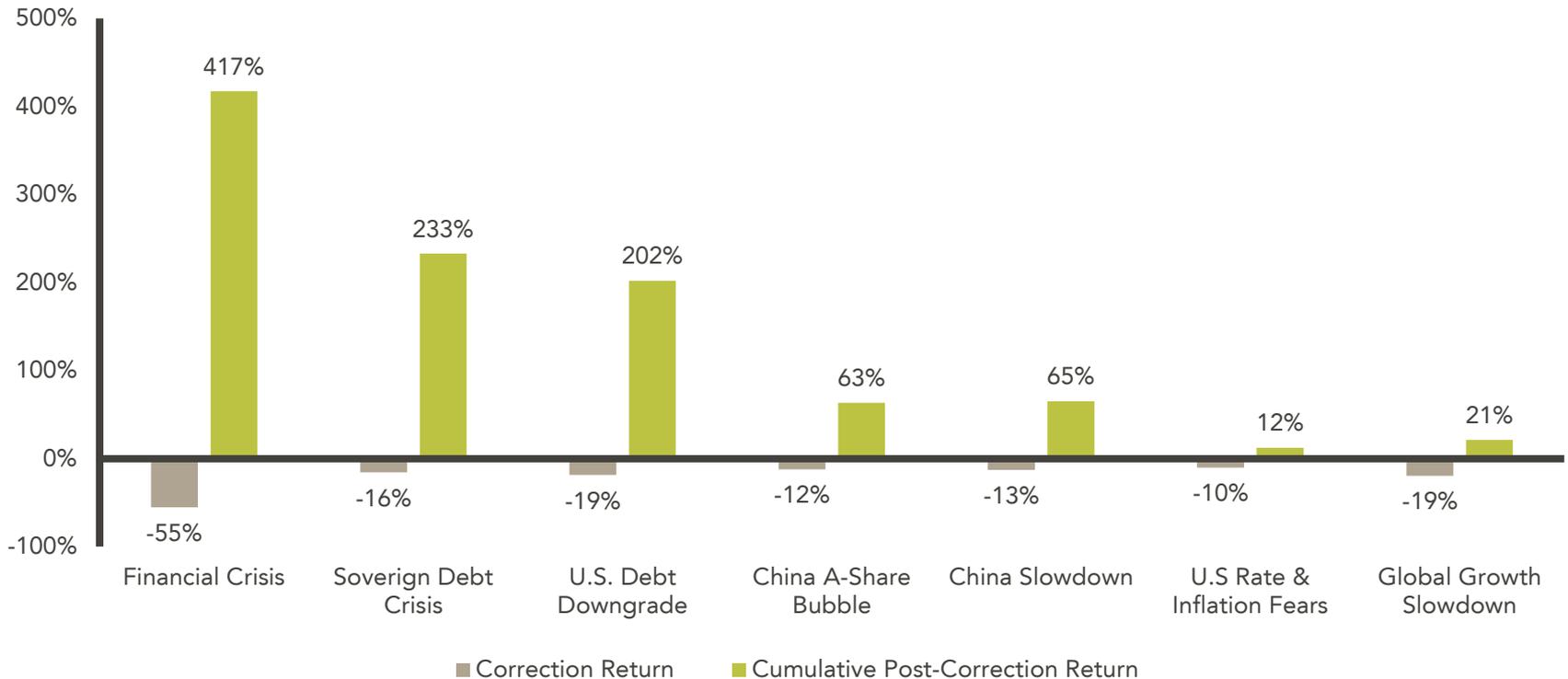
The post-GFC bull market turned 10 on March 9th



Source: Bloomberg; cumulative total return as of March 8, 2019

Equities continue their wild ride

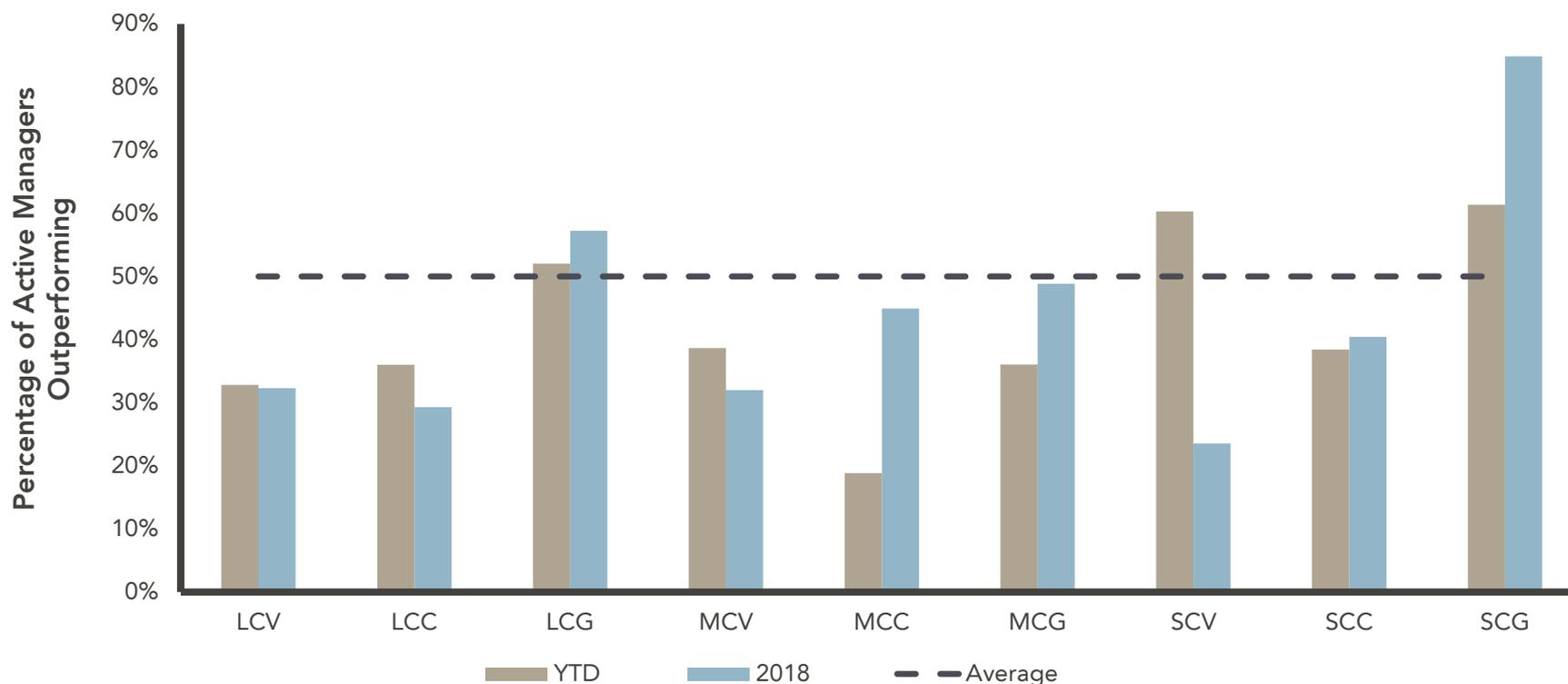
Market corrections are temporary movements with little impact over the long-term



Source: Bloomberg; cumulative returns calculated through March 31, 2019

Further headwinds for active managers

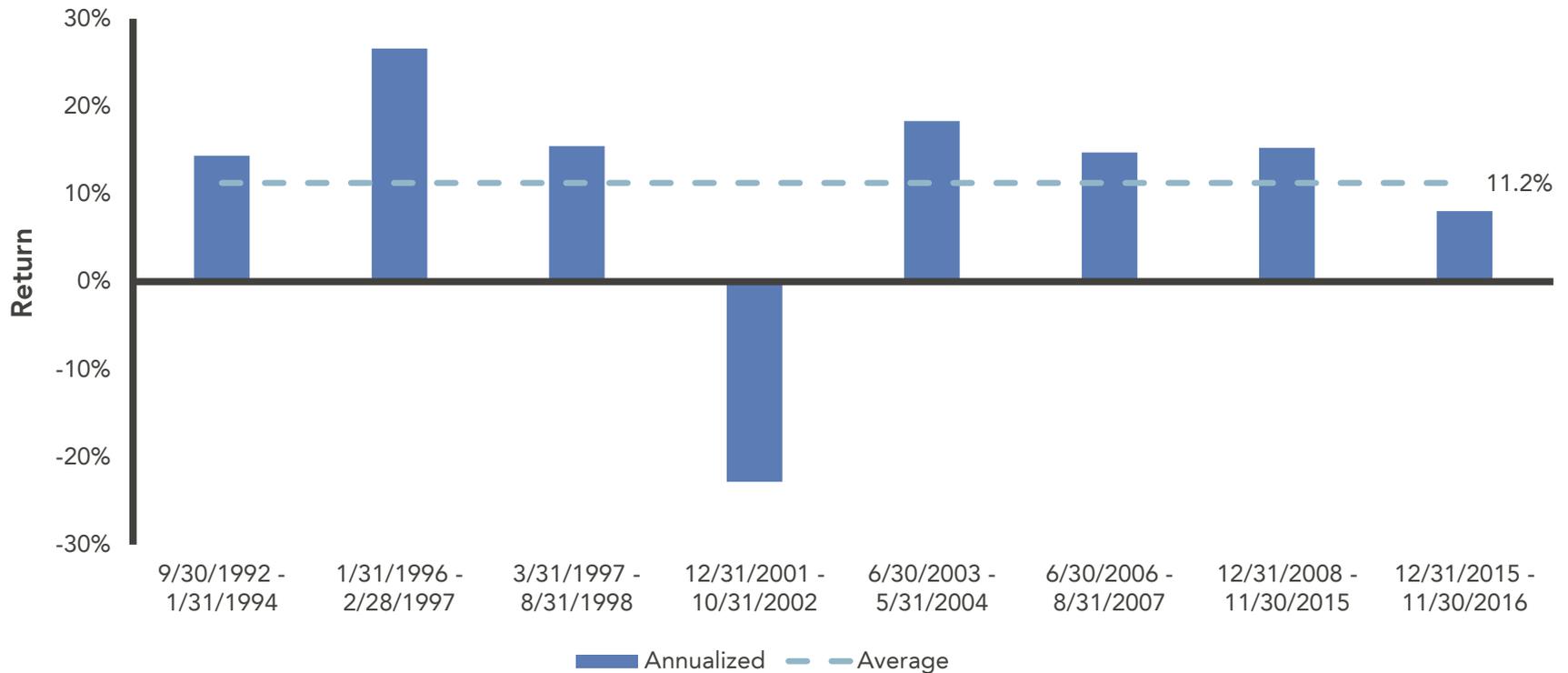
U.S. equity active manager performance



Source: Morningstar Direct as of March 31, 2019

Fed pause may save this bull

Periods of Fed restraint are mostly positive



Source: Bloomberg & Fred – St. Louis Fed; data as of March 31, 2019; Annualized returns during periods when the Federal Reserve did not change interest rates

Non-U.S. equities: Impressive start to 2019

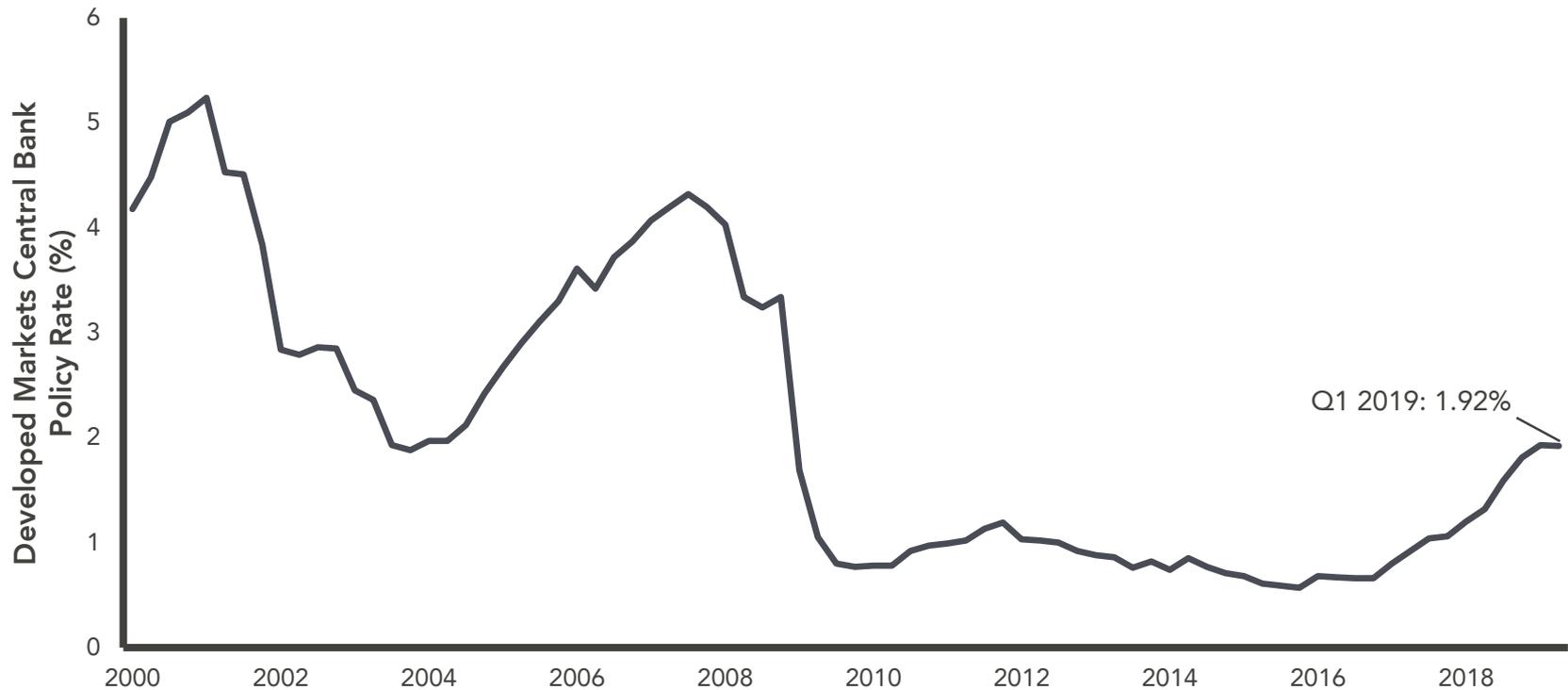
Non-U.S. equities deliver a strong quarter after struggling in 2018

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI ex. U.S.	0.6	10.3	10.3	-4.2	8.1	2.6	8.9
MSCI EAFE	0.6	10.0	10.0	-3.7	7.3	2.3	9.0
MSCI EAFE Local	1.3	10.6	10.6	2.8	8.5	6.0	9.8
MSCI Emerging Markets	0.8	9.9	9.9	-7.4	10.7	3.7	8.9
MSCI EM Local	1.4	9.8	9.8	-1.9	11.3	7.1	10.2
MSCI EAFE Small-Cap	0.2	10.7	10.7	-9.4	7.5	4.5	12.8
MSCI EM Small-Cap	0.9	7.8	7.8	-12.4	6.0	1.8	10.4
MSCI Frontier	1.2	6.9	6.9	-15.0	6.9	0.6	7.5

Source: Bloomberg as of March 31, 2019

Monetary tightening in developed economies

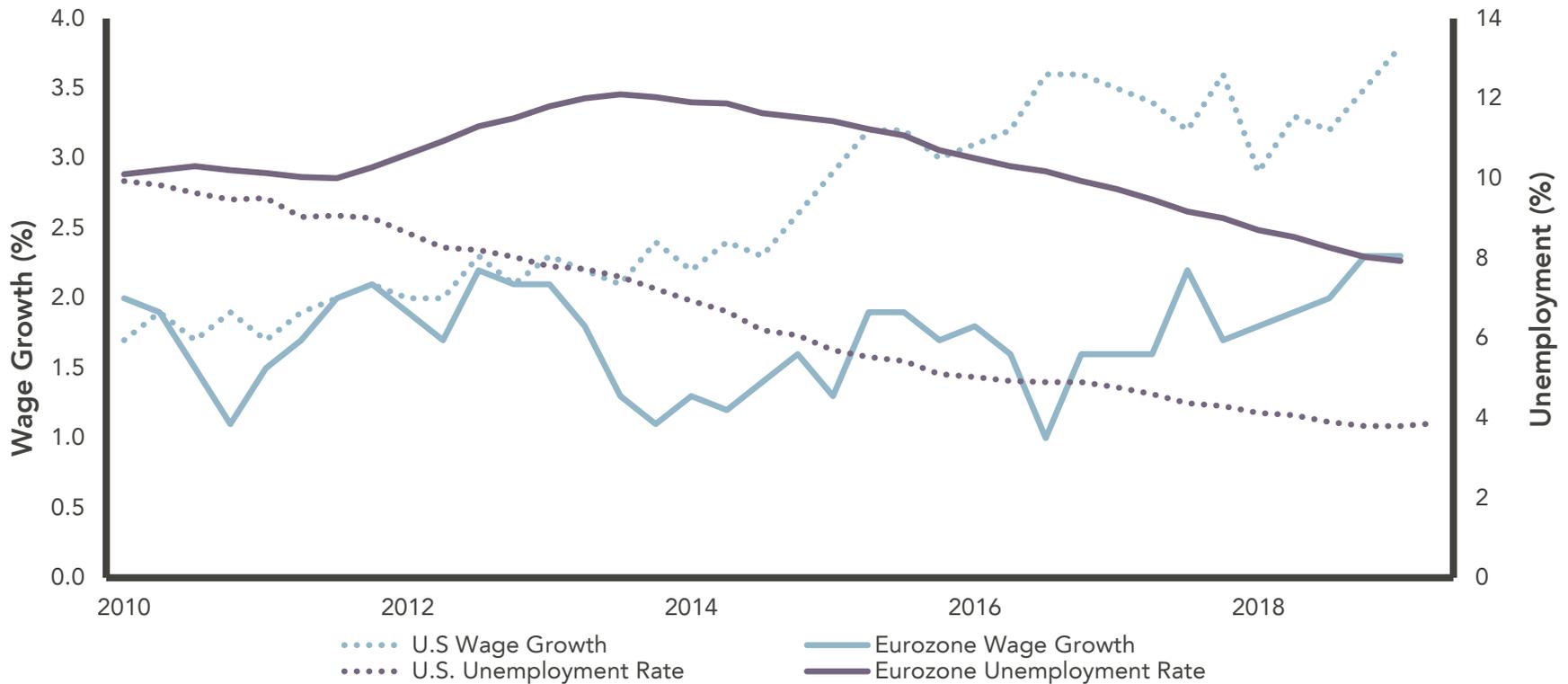
Central banks likely to hold off on further tightening



Sources: Bloomberg; Developed Economies (OECD) Central Bank Rate (%)

Wage growth rises while unemployment falls

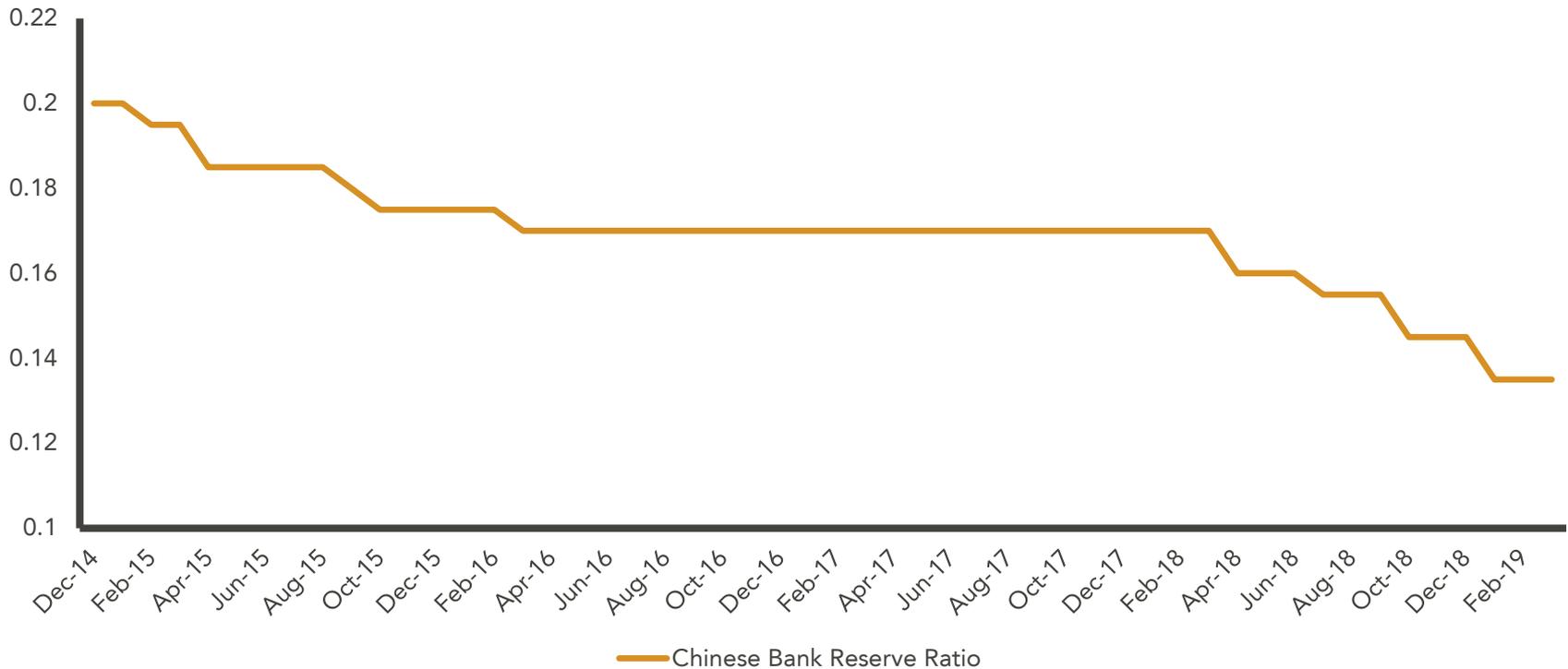
Labor markets remain resilient despite slowed economic momentum



Source: Bloomberg

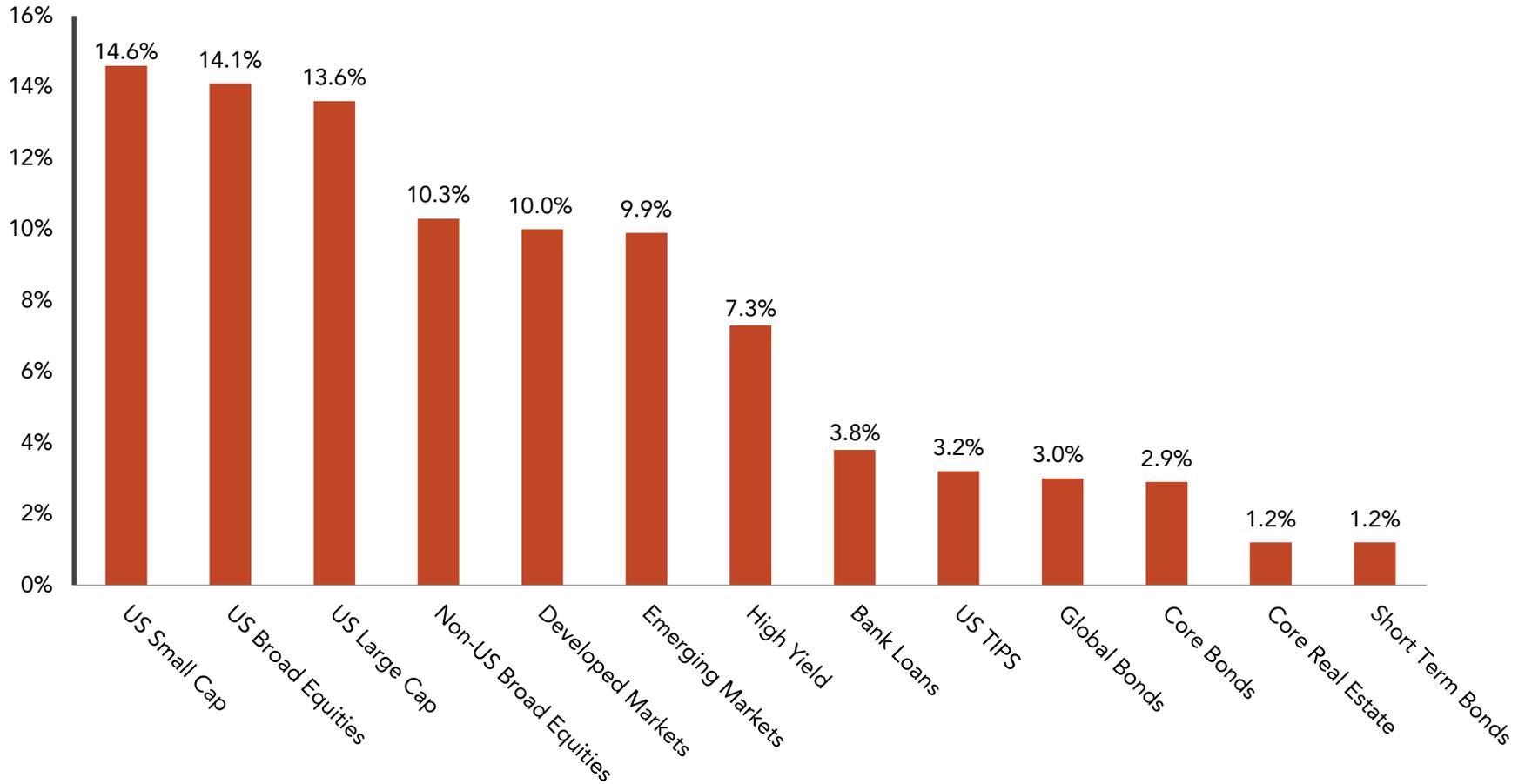
China takes steps to stimulate its economy

China cuts the reserve requirements for banks



Source: Bloomberg as of March 31, 2019

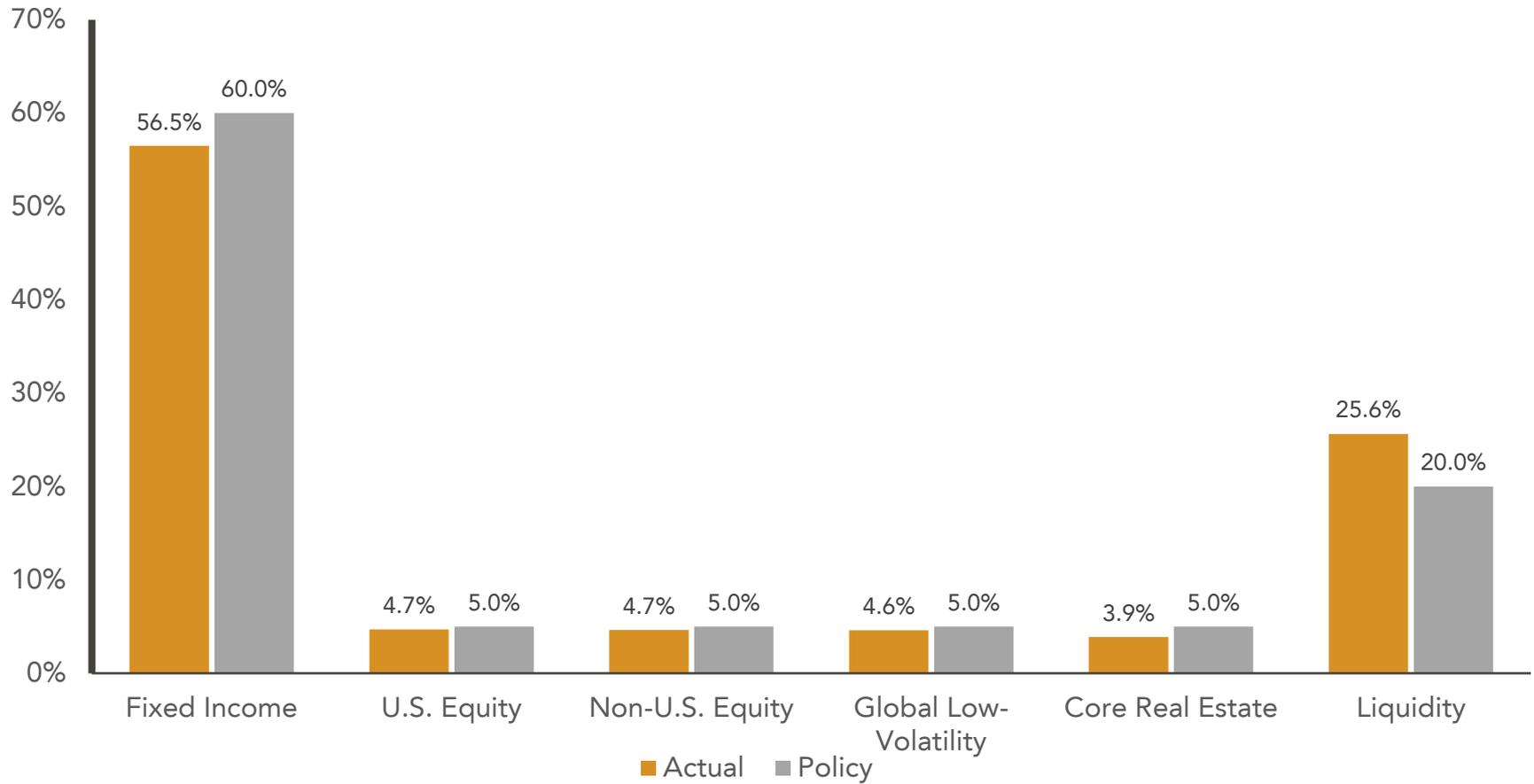
YTD asset class returns



Source: Morningstar as of March 31, 2019

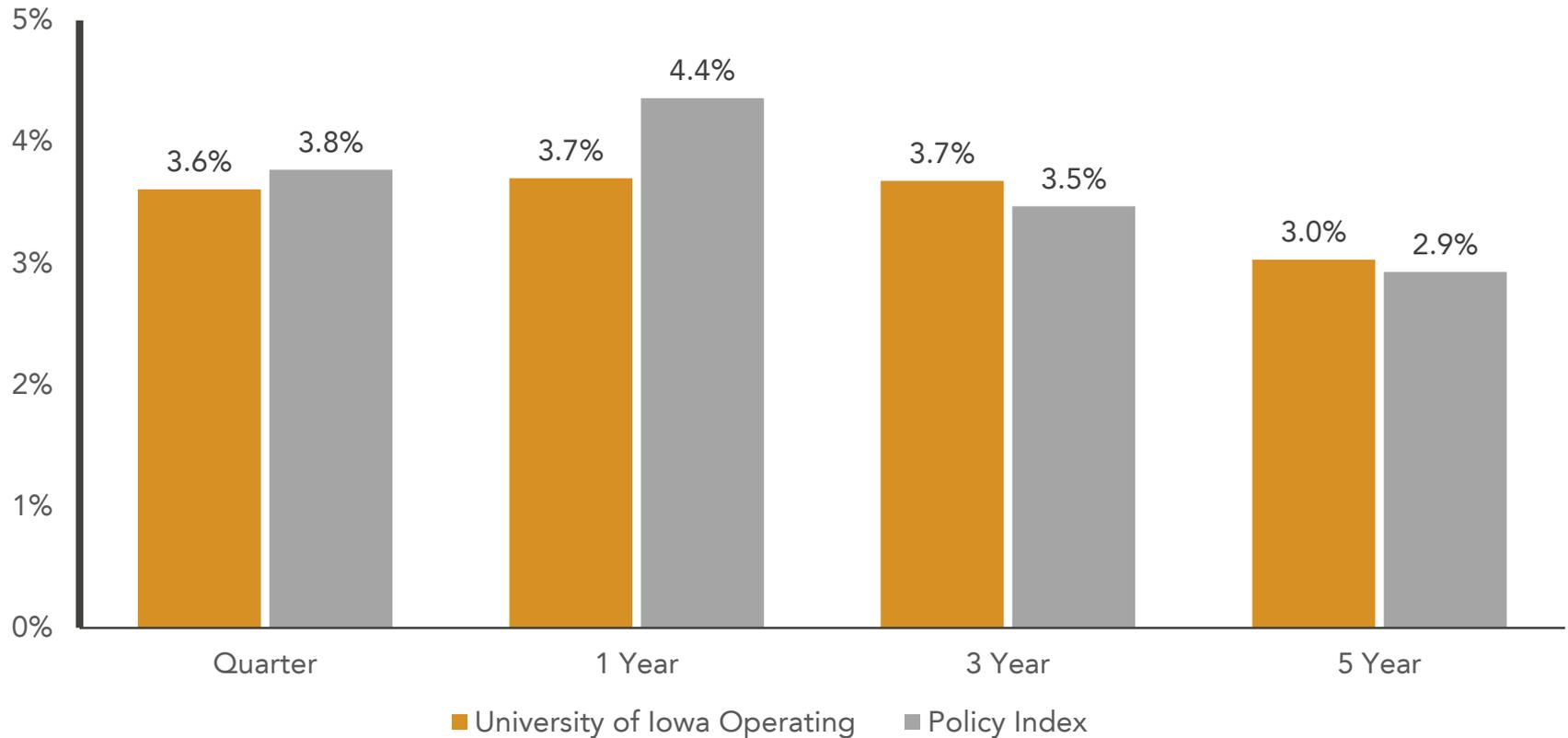
Performance Review

University of Iowa Operating Portfolio – Asset Allocation*



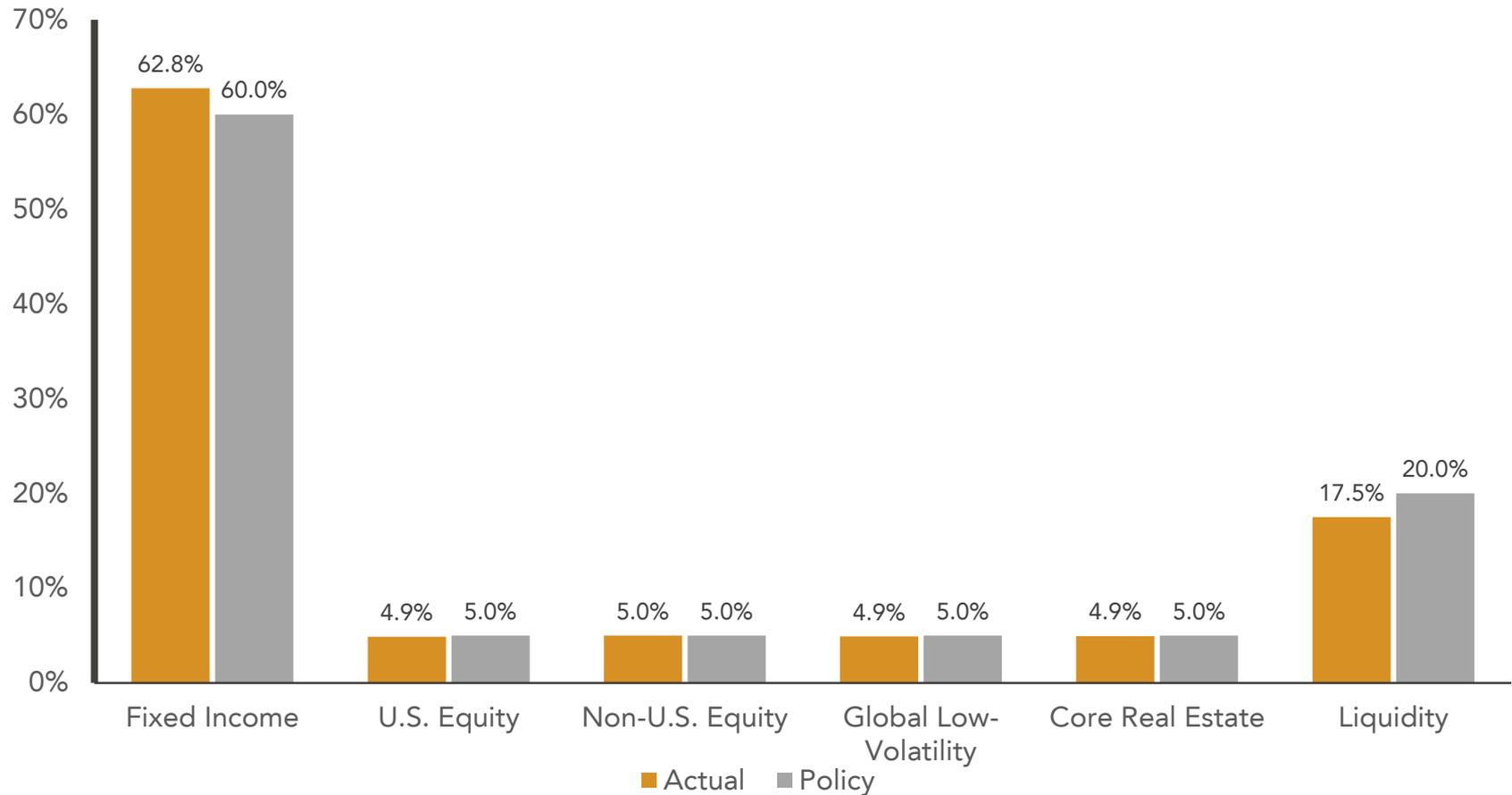
*Includes University of Northern Iowa

University of Iowa Operating Portfolio – Return Summary*

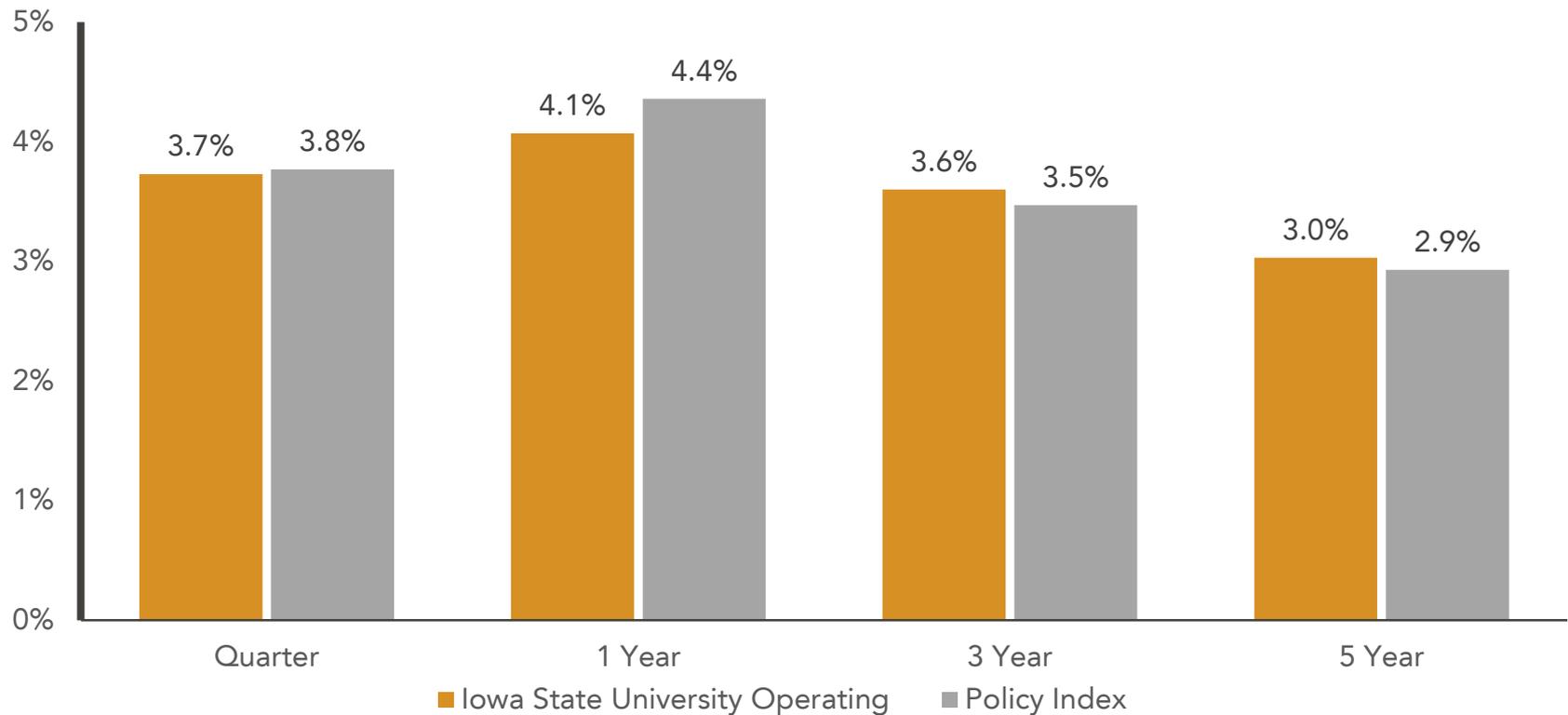


*Includes University of Northern Iowa. Note: See appendix for Policy Index definition.

Iowa State University Operating Portfolio – Asset Allocation

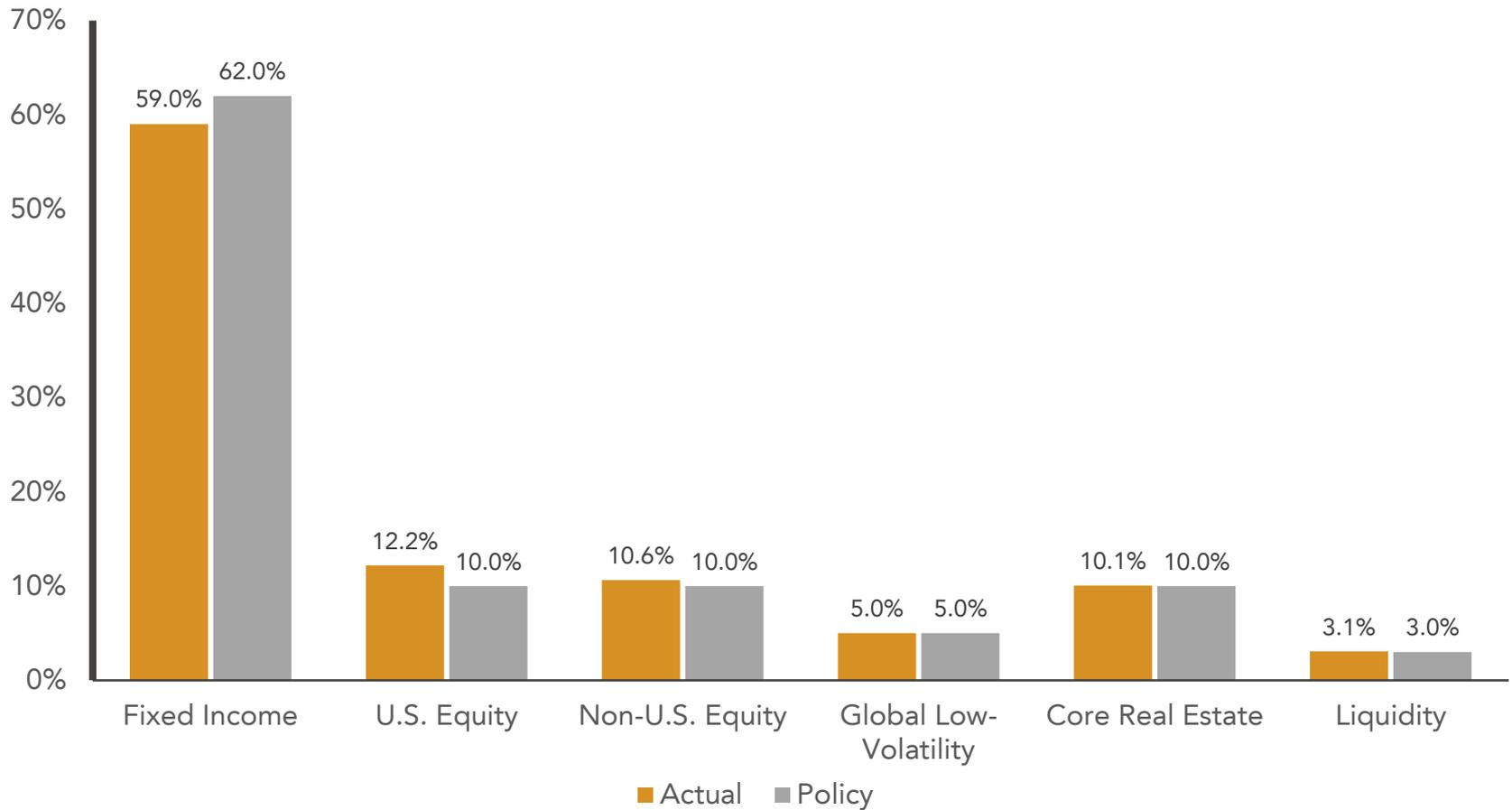


Iowa State University Operating Portfolio – Return Summary

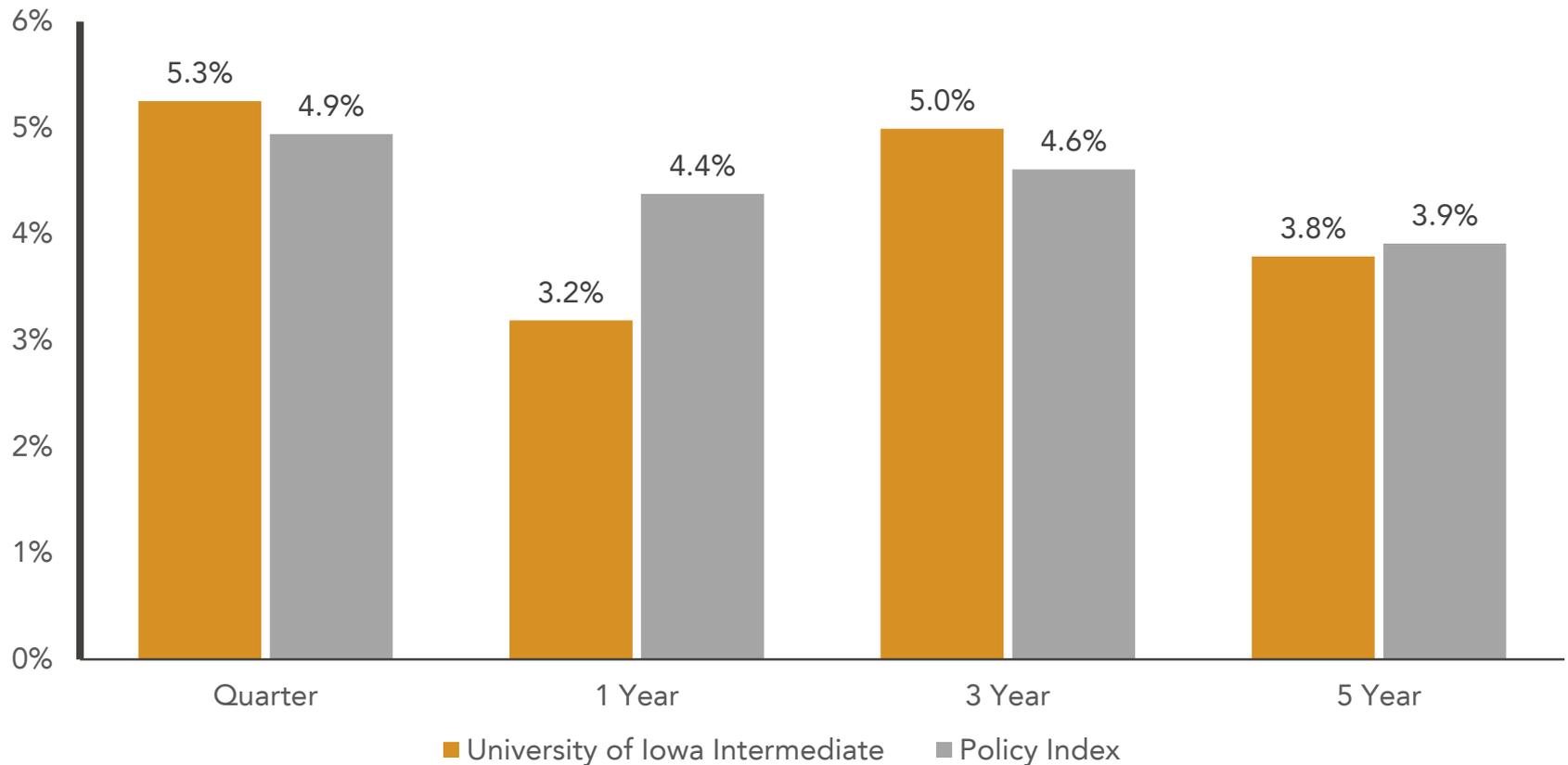


Note: See appendix for Policy Index definition.

University of Iowa Diversified Intermediate Term Portfolio – Asset Allocation

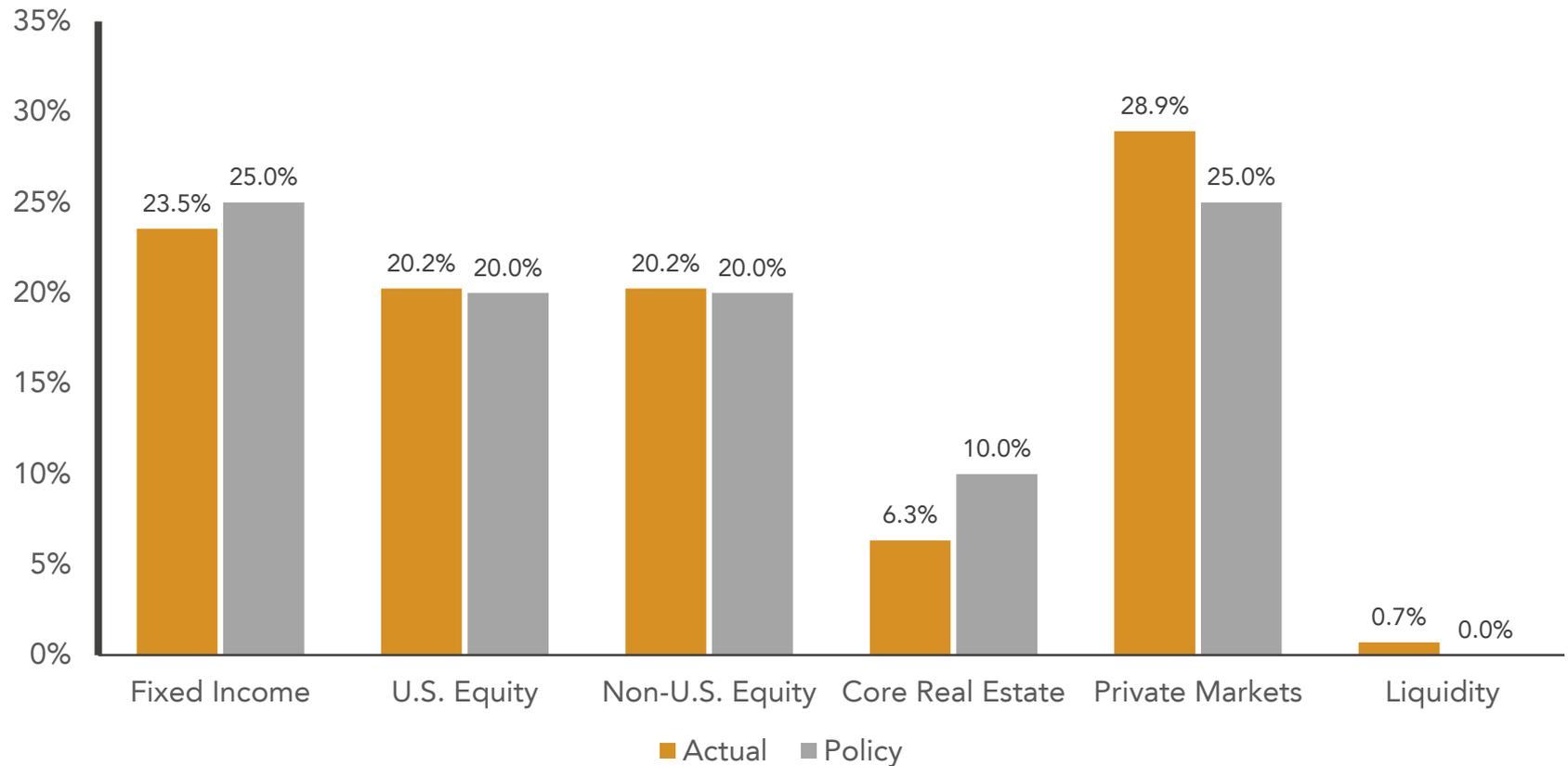


University of Iowa Diversified Intermediate Term Portfolio – Return Summary



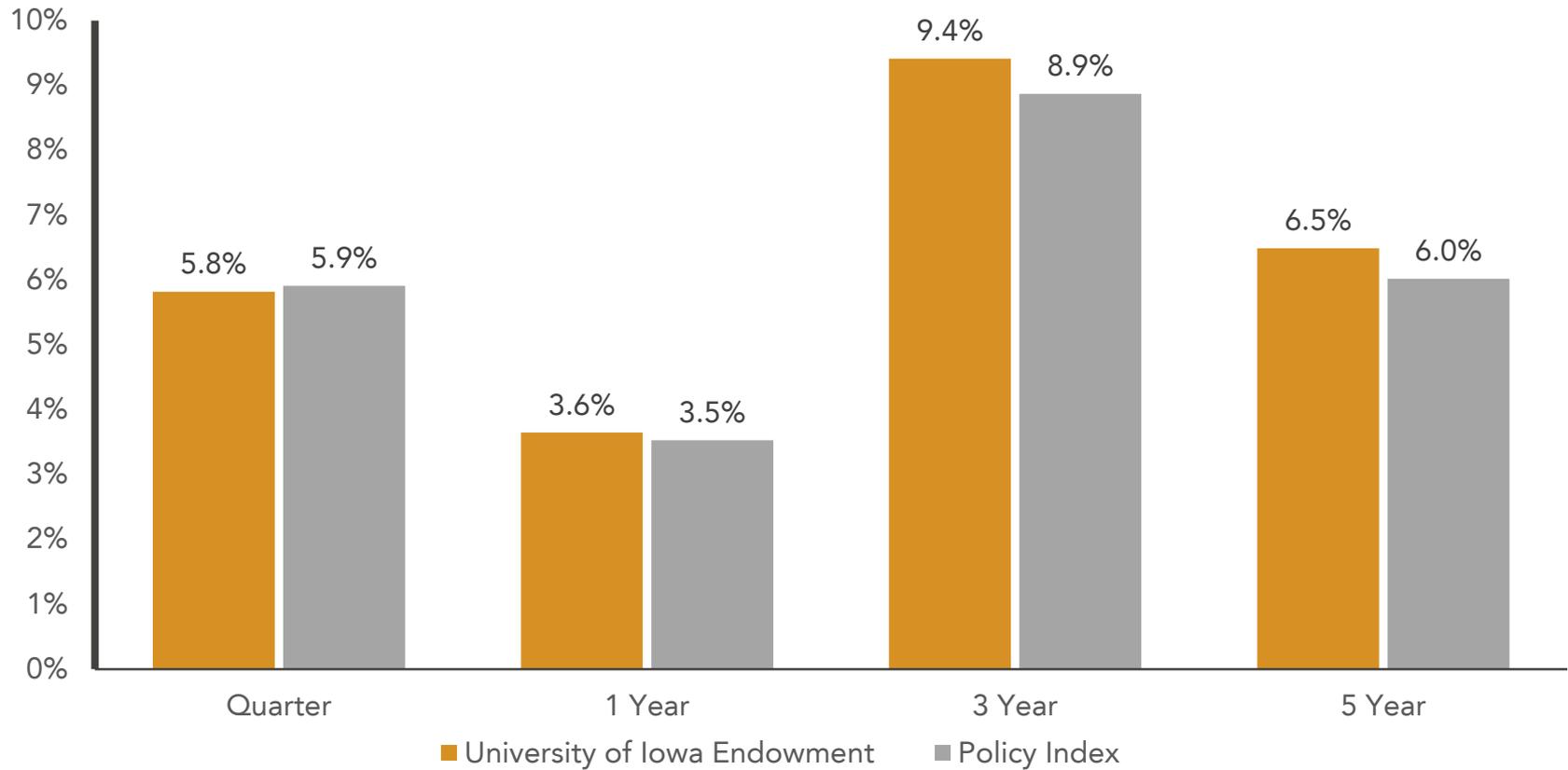
Note: See appendix for Policy Index definition.

University of Iowa Endowment – Asset Allocation*



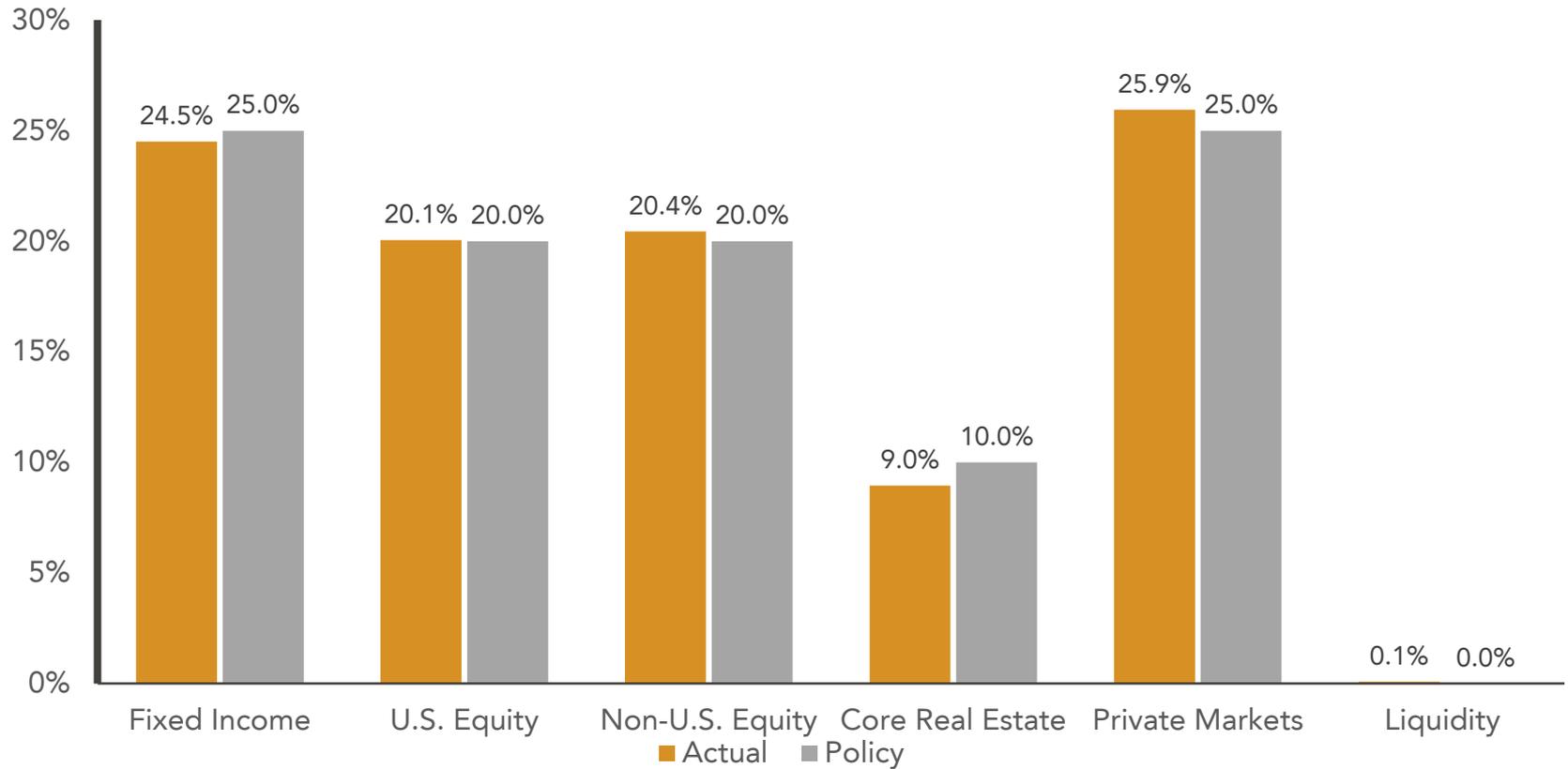
*Includes University of Northern Iowa

University of Iowa Endowment – Return Summary*

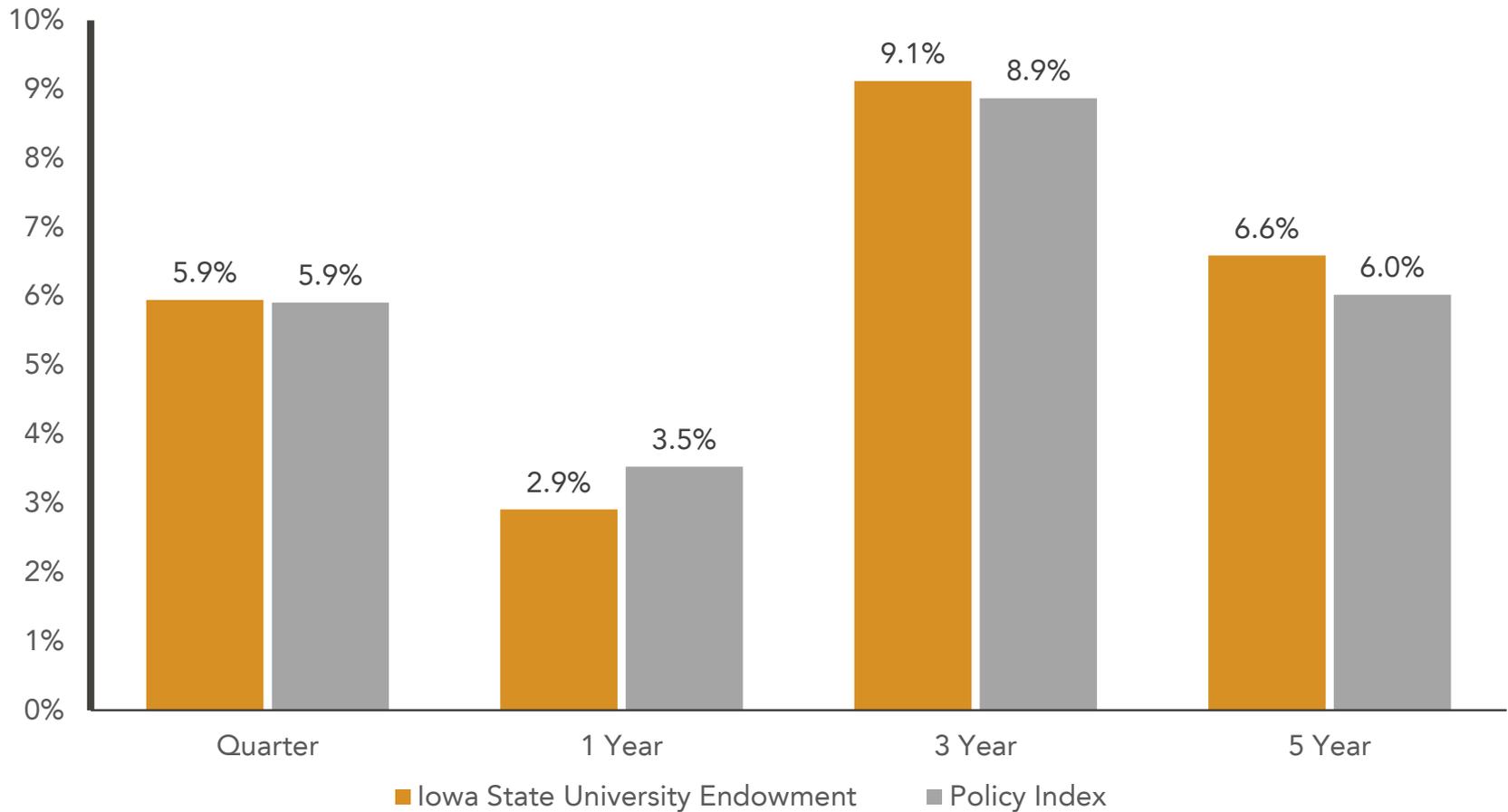


*Includes University of Northern Iowa. Note: See appendix for Policy Index definition.

Iowa State University Endowment – Asset Allocation



Iowa State University Endowment – Return Summary



Note: See appendix for Policy Index definition.

Appendix

University of Iowa Operating Portfolio – Market Values*

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Operating Pool		\$1,241,551,255	100.0%	100.0%
Total Fixed Income Composite		\$701,245,672	56.5%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$58,976,949	4.8%	5.0%
U.S. Fixed Income Composite		\$642,268,723	51.7%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$294,837,739	23.7%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$234,921,490	18.9%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$29,886,911	2.4%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$28,569,183	2.3%	2.5%
Voya Senior Loan	Senior Secured Loans	\$26,806,935	2.2%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$27,246,464	2.2%	2.5%
U.S. Equity Composite		\$58,486,301	4.7%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$58,486,301	4.7%	5.0%
Non-U.S. Equity Composite		\$57,804,473	4.7%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$57,804,473	4.7%	5.0%
Global Low Volatility Composite		\$57,304,757	4.6%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$57,304,757	4.6%	5.0%
Real Estate Composite		\$48,289,885	3.9%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$24,494,566	2.0%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$23,795,319	1.9%	2.5%
Liquidity Composite		\$318,420,166	25.6%	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		\$331,387,134	100.0%	100.0%
Total Fixed Income Composite		\$208,056,135	62.8%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$16,963,333	5.1%	5.0%
U.S. Fixed Income Composite		\$191,092,802	57.7%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$87,800,591	26.5%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$69,418,323	20.9%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$9,451,435	2.9%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$8,165,457	2.5%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$16,256,995	4.9%	5.0%
U.S. Equity Composite		\$16,094,213	4.9%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$16,094,213	4.9%	5.0%
Non-U.S. Equity Composite		\$16,564,813	5.0%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$16,564,813	5.0%	5.0%
Global Low Volatility Composite		\$16,280,492	4.9%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$16,280,492	4.9%	5.0%
Real Estate Composite		\$16,376,277	4.9%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$8,623,280	2.6%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$7,752,997	2.3%	2.5%
Liquidity Composite		\$58,015,205	17.5%	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		\$448,018,649	100.0%	100.0%
Fixed Income Composite		\$264,478,682	59.0%	62.0%
SSgA U.S. Aggregate Bond Index	Core Fixed Income	\$52,435,360	11.7%	14.0%
Dodge & Cox Core Fixed Income	Core Fixed Income	\$58,911,031	13.1%	14.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$73,827,006	16.5%	17.0%
SSgA US High Yield Bond	High Yield Fixed Income	\$16,567,620	3.7%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$12,008,584	2.7%	2.5%
Voya Senior Loan	Senior Secured Loans	\$11,251,824	2.5%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$11,065,969	2.5%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$28,411,288	6.3%	7.0%
U.S. Equity Composite		\$54,612,757	12.2%	10.0%
SSgA U.S. Total Market Index	All-Cap Core	\$54,612,757	12.2%	10.0%
Non-U.S. Equity Composite		\$47,707,602	10.6%	10.0%
SSgA MSCI ACWI ex US	Non-U.S. Large-Cap Core	\$47,707,602	10.6%	10.0%
Global Low Volatility Composite		\$22,433,385	5.0%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$22,433,385	5.0%	5.0%
Real Estate Composite		\$45,070,595	10.1%	10.0%
UBS Trumbull Property Fund	Core Real Estate	\$22,861,595	5.1%	5.0%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$22,209,000	5.0%	5.0%
Liquidity Composite		\$13,715,628	3.1%	3.0%

University of Iowa Endowment – Market Values*

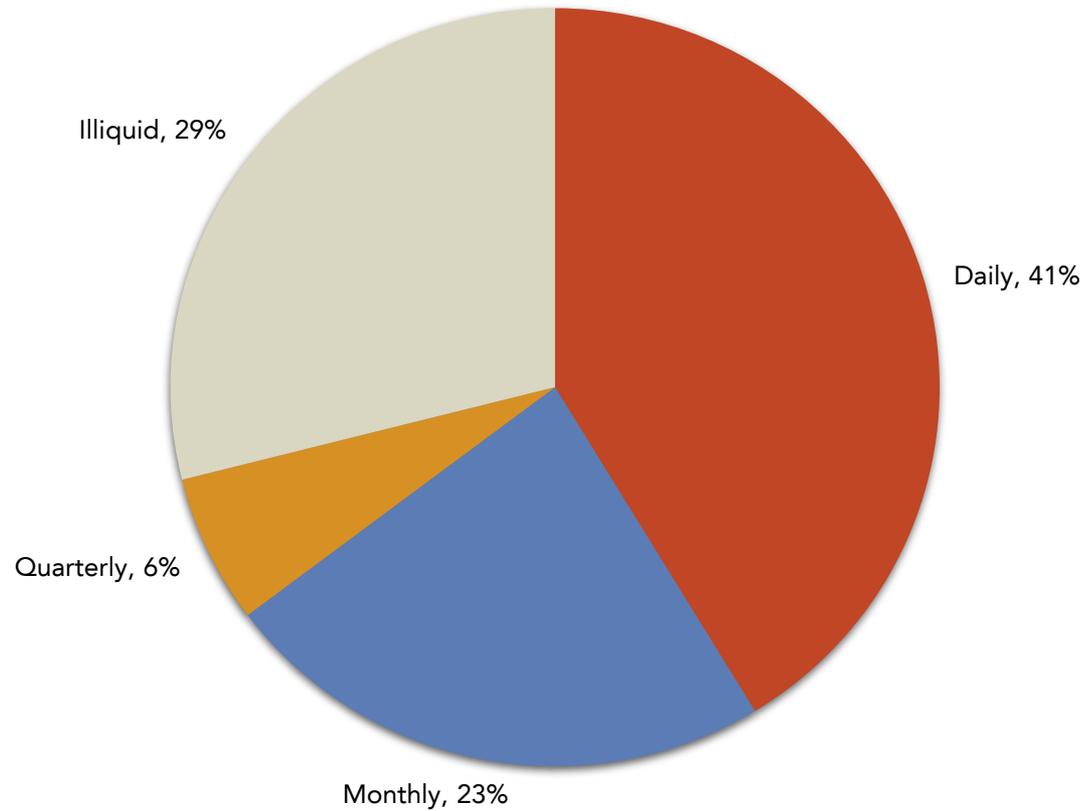
	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Endowment		\$424,839,895	100.0%	100.0%
Fixed Income Composite		\$100,037,292	23.5%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$41,493,593	9.8%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$18,476,901	4.3%	5.0%
Voya Senior Loan	Senior Secured Loans	\$10,791,132	2.5%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$10,328,238	2.4%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$18,947,429	4.5%	5.0%
U.S. Equity Composite		\$86,024,650	20.2%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$60,088,025	14.1%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$13,155,628	3.1%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$12,780,997	3.0%	3.0%
Non-U.S. Equity Composite		\$85,975,285	20.2%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$26,020,306	6.1%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$30,114,186	7.1%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$29,840,793	7.0%	6.7%
Core Real Estate Composite		\$26,956,384	6.3%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$21,647,732	5.1%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$2,664,704	0.6%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$2,643,947	0.6%	2.5%
Private Markets Composite		\$122,860,553	28.9%	25.0%
Liquidity Composite		\$2,985,732	0.7%	0.0%

*Includes University of Northern Iowa

Iowa State University Endowment – Market Values

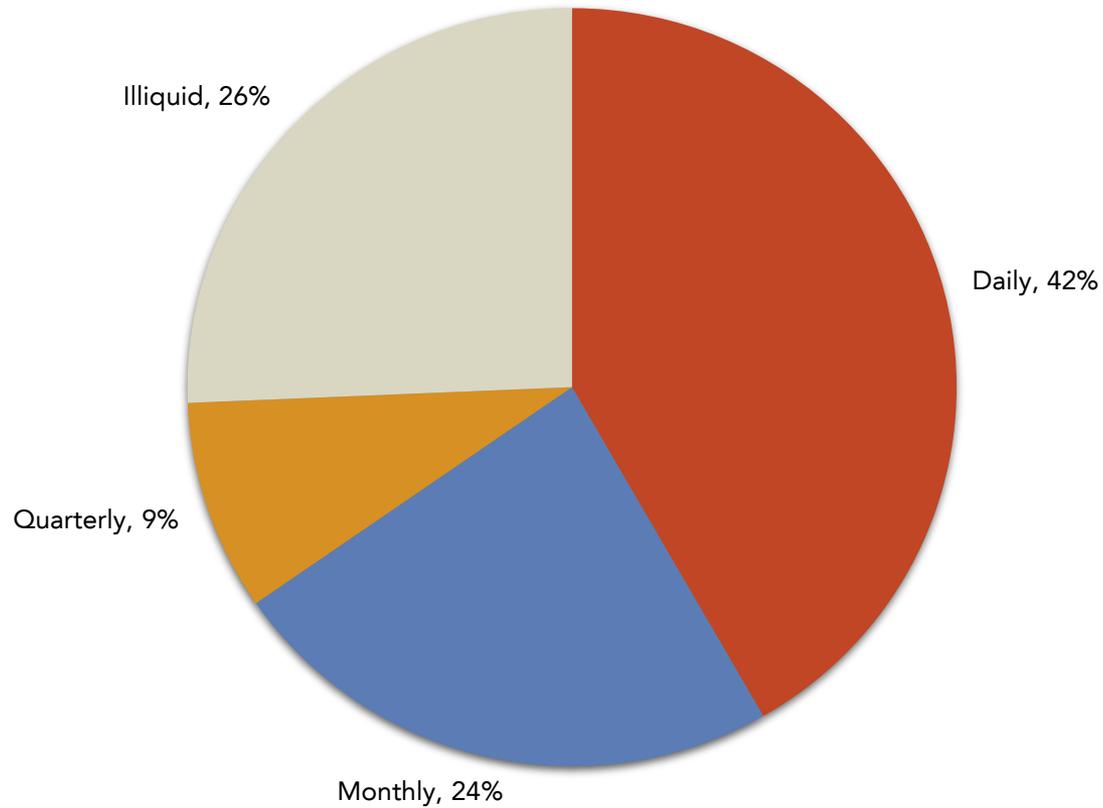
	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Endowment		\$178,830,660	100.0%	100.0%
Fixed Income Composite		\$43,831,471	24.5%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$17,981,983	10.1%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$8,301,709	4.6%	5.0%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$9,379,726	5.2%	5.0%
Brandywine Global Opportunistic	Global Fixed Income	\$8,168,052	4.6%	5.0%
U.S. Equity Composite		\$35,870,471	20.1%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$22,084,319	12.3%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$5,979,777	3.3%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$7,806,375	4.4%	3.0%
Non-U.S. Equity Composite		\$36,545,990	20.4%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$12,127,749	6.8%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$12,041,401	6.7%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$12,376,840	6.9%	6.7%
Core Real Estate Composite		\$16,018,826	9.0%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$9,436,103	5.3%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$3,304,233	1.8%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$3,278,490	1.8%	2.5%
Private Markets Composite		\$46,401,354	25.9%	25.0%
Liquidity Composite		\$162,548	0.1%	0.0%

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, 2018

Asset Class	Fund Company	Commitment	Capital Calls	Distributions	Ending Value	¹ Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$6,000,000	\$4,980,000	\$6,503,290	\$1,292,075	1.6
Fund of Funds	Commonfund Capital Venture Partners VIII	\$1,000,000	\$960,000	\$981,318	\$881,383	1.9
International Fund of Funds	Commonfund Capital International Partners VI	\$1,200,000	\$1,119,000	\$1,381,733	\$382,366	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$2,400,000	\$2,200,800	\$2,794,059	\$1,503,372	2.0
Value Added	Commonfund NR Partners VIII	\$6,000,000	\$5,790,000	\$2,577,188	\$3,067,656	1.0
Fund of Funds	Adams Street US Partnership 2010	\$2,440,000	\$2,149,640	\$1,473,009	\$2,167,962	1.7
International Fund of Funds	Adams Street Non-US Developed 2010	\$1,470,000	\$1,286,985	\$897,386	\$1,040,118	1.5
International Fund of Funds	Adams Street Non-US Emerging 2010	\$490,000	\$440,020	\$116,016	\$576,376	1.6
Secondary Fund of Funds	Landmark Equity Partners XIV	\$4,400,000	\$4,263,174	\$4,693,734	\$931,684	1.3
Opportunistic	MREP Global III	\$5,000,000	\$4,555,128	\$5,374,787	\$996,813	1.4
Fund of Funds	Adams Street US Partnership 2012	\$7,050,000	\$5,731,650	\$1,343,835	\$6,670,166	1.4
International Fund of Funds	Adams Street Non-US Developed 2012	\$4,240,000	\$3,037,960	\$1,379,787	\$2,978,307	1.4
International Fund of Funds	Adams Street Non-US Emerging 2012	\$1,410,000	\$1,260,540	\$220,779	\$1,791,580	1.6
Opportunistic	Commonfund NR Partners IX2	\$11,000,000	\$9,410,501	\$1,563,670	\$10,562,286	1.3
Value Added	MREP Global VI	\$9,000,000	\$8,040,909	\$6,350,418	\$4,286,719	1.3
Fund of Funds	Adams Street US Partnership 2013	\$5,500,000	\$4,309,250	\$759,714	\$4,947,654	1.3
International Fund of Funds	Adams Street Non-US Developed 2013	\$2,800,000	\$1,948,800	\$714,438	\$2,004,869	1.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$1,700,000	\$1,518,100	\$127,956	\$2,355,413	1.6
Secondary Fund of Funds	Landmark Equity Partners XV	\$5,000,000	\$3,405,300	\$2,326,190	\$2,092,963	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$12,500,000	\$8,875,000	\$235,862	\$11,850,563	1.4
Value Added	Aberdeen Energy & Resources Partners III2	\$9,000,000	\$8,100,000	\$2,547,300	\$8,002,057	1.3
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$9,000,000	\$8,117,739	\$4,722,866	\$5,259,760	1.2
Separate Account	Neuberger Berman IPU Feeder	\$93,000,000	\$37,891,741	\$0	\$46,421,279	1.2
Total Private Markets		\$201,600,000	\$129,392,237	\$49,085,335	\$122,063,421	1.3

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

² The Commonfund NR Partners IX & Aberdeen Energy & Resources Partners III ending values are unavailable as of 12/31/2018. Market values are final as of 9/30/18 and adjusted for subsequent cash flows.

University of Iowa Endowment – Private Markets

Annualized Performance

Asset Class	Fund Company	Vintage Yr.	Perf. as of:	Net IRR	Rank as of:	Preqin Rank
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	12/31/2018	6.5%	9/30/2018	2nd
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	12/31/2018	11.4%	9/30/2018	2nd
International Fund of Funds	Commonfund Capital International Partners VI	2007	12/31/2018	9.2%	9/30/2018	3rd
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	12/31/2018	1.7%	9/30/2018	2nd
Value Added	Commonfund NR Partners VIII	2008	12/31/2018	-0.6%	9/30/2018	4th
Fund of Funds	Adams Street US Partnership 2010	2010	12/31/2018	14.3%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Developed 2010	2010	12/31/2018	11.7%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	12/31/2018	11.3%	9/30/2018	3rd
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	12/31/2018	10.3%	9/30/2018	4th
Opportunistic	MREP Global III	2010	12/31/2018	9.4%	---	---
Fund of Funds	Adams Street US Partnership 2012	2012	12/31/2018	10.9%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Developed 2012	2012	12/31/2018	12.3%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	12/31/2018	16.1%	9/30/2018	1st
Opportunistic	Commonfund NR Partners IX ¹	2012	9/30/2018	9.5%	9/30/2018	3rd
Value Added	MREP Global VI	2012	12/31/2018	10.6%	---	---
Fund of Funds	Adams Street US Partnership 2013	2013	12/31/2018	10.5%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Developed 2013	2013	12/31/2018	13.1%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	12/31/2018	20.7%	9/30/2018	1st
Secondary Fund of Funds	Landmark Equity Partners XV	2013	12/31/2018	14.1%	9/30/2018	3rd
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	12/31/2018	9.6%	9/30/2018	4th
Value Added	Aberdeen Energy & Resources Partners III ¹	2014	9/30/2018	10.9%	---	---
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	12/31/2018	13.4%	9/30/2018	3rd
Separate Account	Neuberger Berman IPU Feeder	2015	12/31/2018	13.4%	---	---
Total Private Markets			9/30/2018	10.1%		

¹ The 12/31/18 IRRs for the Commonfund NR Partners IX & Aberdeen Energy & Resources Partners III are unavailable.

Iowa State University Endowment – Private Markets

Since Inception Cash Flows Data as of December 31, 2018

Asset Class	Fund Company	Commitment	Capital Calls	Distributions	Ending Value ¹	Cash Multiple
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	\$3,750,000	\$3,112,500	\$4,064,556	\$807,544	1.6
Fund of Funds	Commonfund Capital Venture Partners VIII	\$600,000	\$576,000	\$588,791	\$528,826	1.9
International Fund of Funds	Commonfund Capital International Partners VI	\$800,000	\$746,000	\$921,155	\$254,919	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$1,600,000	\$1,467,200	\$1,862,708	\$1,002,241	2.0
Value Added	Commonfund NR Partners VIII	\$4,000,000	\$3,860,000	\$1,718,125	\$2,045,104	1.0
Fund of Funds	Adams Street US Partnership 2010	\$1,442,000	\$1,270,402	\$870,525	\$1,281,231	1.7
International Fund of Funds	Adams Street Non-US Developed 2010	\$869,000	\$760,813	\$530,497	\$614,874	1.5
International Fund of Funds	Adams Street Non-US Emerging 2010	\$289,000	\$259,522	\$68,426	\$339,944	1.6
Secondary Fund of Funds	Landmark Equity Partners XIV	\$2,600,000	\$2,519,154	\$2,773,596	\$550,530	1.3
Opportunistic	MREP Global III	\$3,000,000	\$2,733,077	\$3,224,872	\$598,088	1.4
Fund of Funds	Adams Street US Partnership 2012	\$3,100,000	\$2,520,300	\$590,906	\$2,932,981	1.4
International Fund of Funds	Adams Street Non-US Developed 2012	\$1,870,000	\$1,339,855	\$608,538	\$1,313,546	1.4
International Fund of Funds	Adams Street Non-US Emerging 2012	\$630,000	\$563,220	\$98,646	\$800,493	1.6
Opportunistic	Commonfund NR Partners IX	\$4,000,000	\$3,422,000	\$568,608	\$3,840,835	1.3
Value Added	MREP Global VI	\$4,000,000	\$3,573,737	\$2,822,408	\$1,905,208	1.3
Fund of Funds	Adams Street US Partnership 2013	\$2,080,000	\$1,629,680	\$287,310	\$1,871,111	1.3
International Fund of Funds	Adams Street Non-US Developed 2013	\$1,040,000	\$723,840	\$265,362	\$744,663	1.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$630,000	\$562,590	\$47,419	\$872,891	1.6
Secondary Fund of Funds	Landmark Equity Partners XV	\$1,875,000	\$1,276,992	\$872,314	\$784,857	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$1,875,000	\$1,331,250	\$40,789	\$1,777,584	1.4
Value Added	Aberdeen Energy & Resources Partners III	\$3,000,000	\$2,700,000	\$849,101	\$2,667,352	1.3
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$3,000,000	\$2,705,913	\$1,574,288	\$1,753,254	1.2
Separate Account	Neuberger Berman IPU Feeder	\$38,000,000	\$13,968,260	\$0	\$16,999,286	1.2
Total Private Markets		\$84,050,000	\$53,622,305	\$25,248,940	\$46,287,362	1.3

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

² The Commonfund NR Partners IX & Aberdeen Energy & Resources Partners III ending values are unavailable as of 12/31/2018. Market values are final as of 9/30/18 and adjusted for subsequent cash flows.

Iowa State University Endowment – Private Markets

Annualized Performance

Asset Class	Fund Company	Vintage Yr.	Perf. as of:	Net IRR	Rank as of:	Preqin Rank
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	12/31/2018	6.5%	9/30/2018	2nd
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	12/31/2018	11.4%	9/30/2018	2nd
International Fund of Funds	Commonfund Capital International Partners VI	2007	12/31/2018	9.2%	9/30/2018	3rd
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	12/31/2018	13.7%	9/30/2018	2nd
Value Added	Commonfund NR Partners VIII	2008	12/31/2018	-0.6%	9/30/2018	4th
Fund of Funds	Adams Street US Partnership 2010	2010	12/31/2018	14.3%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Developed 2010	2010	12/31/2018	11.7%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	12/31/2018	11.3%	9/30/2018	3rd
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	12/31/2018	9.9%	9/30/2018	4th
Opportunistic	MREP Global III	2010	12/31/2018	9.4%	---	---
Fund of Funds	Adams Street US Partnership 2012	2012	12/31/2018	10.9%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Developed 2012	2012	12/31/2018	12.3%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	12/31/2018	16.1%	9/30/2018	1st
Opportunistic	Commonfund NR Partners IX ¹	2012	9/30/2018	9.5%	9/30/2018	3rd
Value Added	MREP Global VI	2012	12/31/2018	10.6%	---	---
Fund of Funds	Adams Street US Partnership 2013	2013	12/31/2018	10.5%	9/30/2018	3rd
International Fund of Funds	Adams Street Non-US Developed 2013	2013	12/31/2018	13.1%	9/30/2018	2nd
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	12/31/2018	20.7%	9/30/2018	1st
Secondary Fund of Funds	Landmark Equity Partners XV	2013	12/31/2018	14.1%	9/30/2018	3rd
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	12/31/2018	9.6%	9/30/2018	4th
Value Added	Aberdeen Energy & Resources Partners III ¹	2014	9/30/2018	10.6%	---	---
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	12/31/2018	12.3%	9/30/2018	3rd
Separate Account	Neuberger Berman IPU Feeder Fund	2015	12/31/2018	13.4%	---	---
Total Private Markets			9/30/2018	9.6%		

¹ The 12/31/18 IRRs for the Commonfund NR Partners IX & Aberdeen Energy & Resources Partners III are 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, 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

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