
Board of Regents State of Iowa

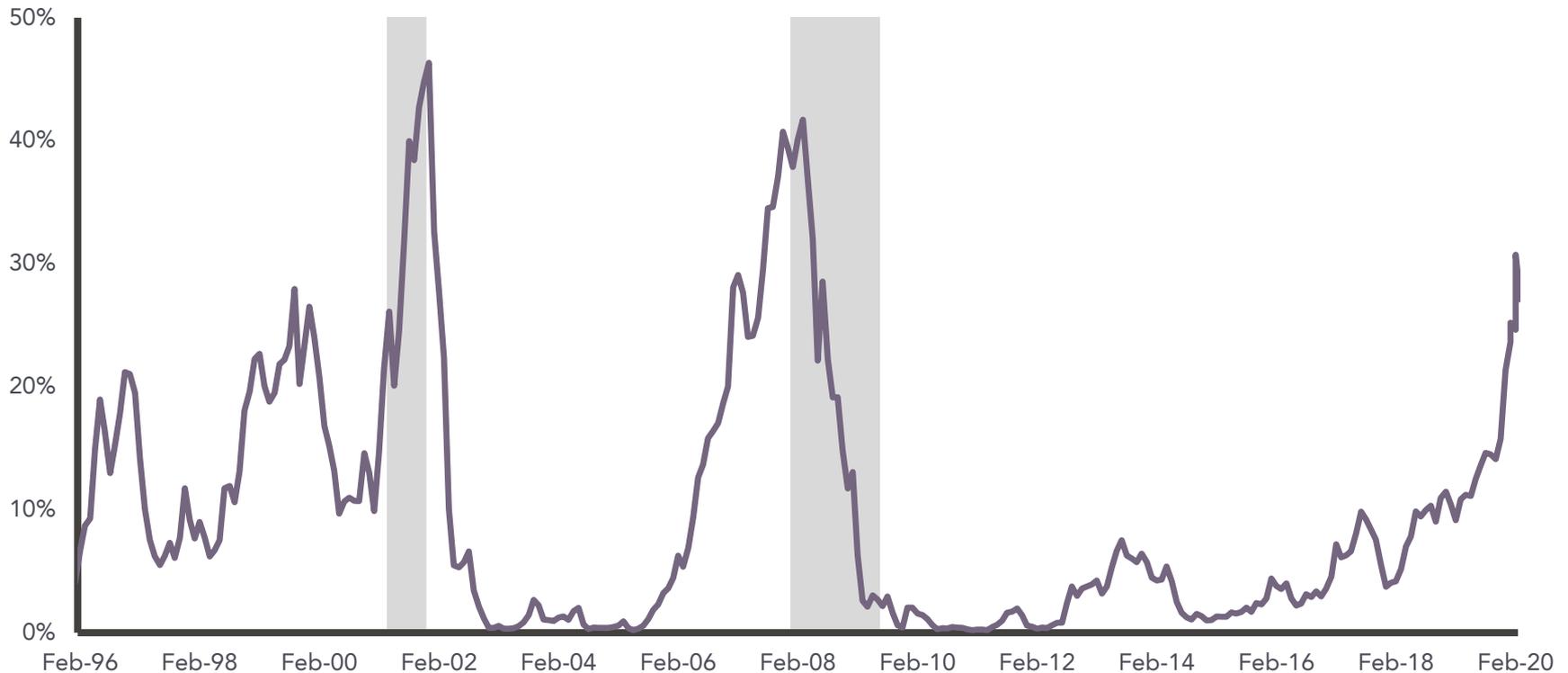
Market Environment

U.S. economy overview

- 4Q19 GDP grew 2.1%, driven mainly by consumption and increase in net exports
- The unemployment rate for December was unchanged at 3.5% with 145K new jobs added and ticked up slightly to 3.6% in January with 225K new jobs added vs. 165K expected
- CPI increased 2.3% in 2019 with core CPI also growing at 2.3%
- Phase one agreement reached in China tariff talks
- The Federal Reserve made an emergency 50 bps cut in early March reflecting concern that the spreading coronavirus epidemic will impact U.S. growth

Recession odds have dropped

Based on the shape of the yield curve, the NY Fed is predicting a **31%** chance of a recession within the next 12 months



Source: NY Federal Reserve

Fixed income

U.S.-China Phase 1 deal announcement steepened yield curve in December

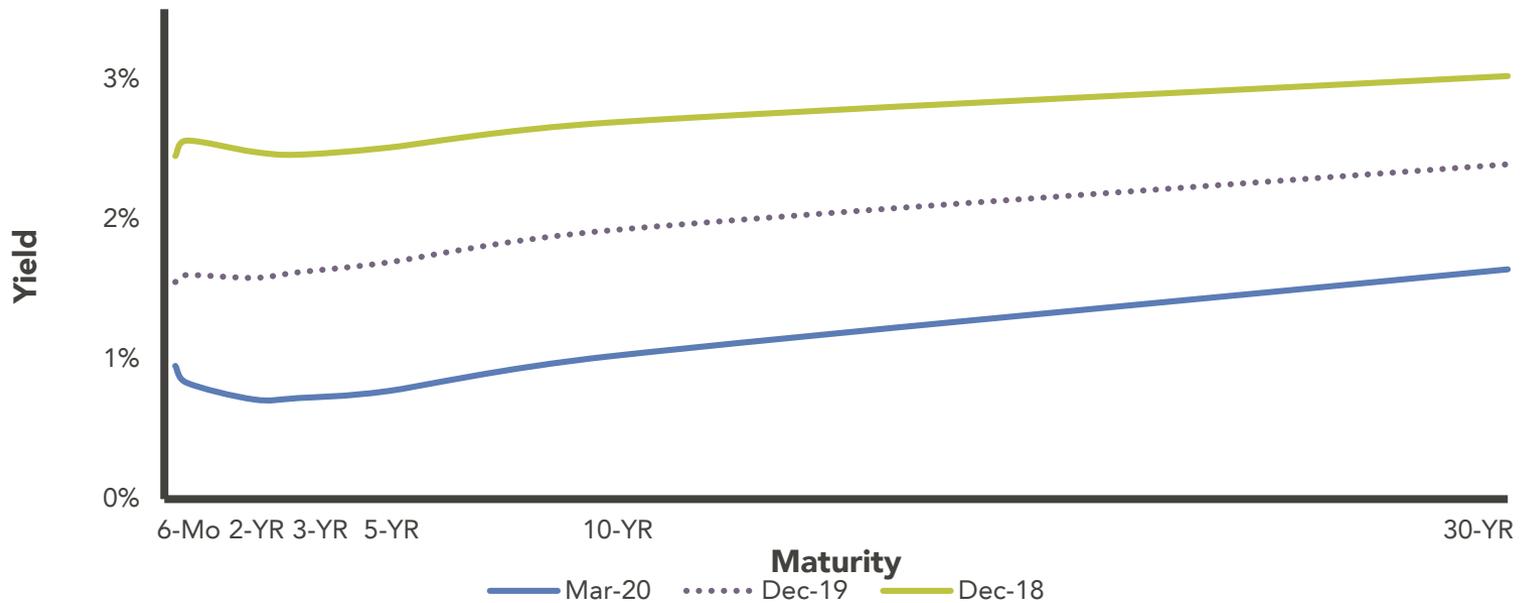
		Month (%)	Qtr (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Broad Market Indices	Blm BC Aggregate	-0.1	0.2	8.7	8.7	4.0	3.0	3.7
Intermediate Indices	Blm BC Int. Gov./Credit	0.1	0.4	6.8	6.8	3.2	2.6	3.1
Government Only Indices	Blm BC Long Gov.	-2.8	-4.1	14.7	14.7	6.9	4.2	7.0
	Blm BC Int. Gov.	0.0	0.0	5.2	5.2	2.6	2.0	2.4
	Blm BC 1-3 Year Gov.	0.2	0.5	3.6	3.6	1.9	1.4	1.2
	Blm BC U.S. TIPS	0.4	0.8	8.4	8.4	3.3	2.6	3.4
Credit Indices	Blm BC U.S. Long Credit	0.1	1.2	23.4	23.4	8.9	6.3	8.0
	Blm BC High Yield	2.0	2.6	14.3	14.3	6.4	6.1	7.6
	CS Leveraged Loan Index	1.6	1.7	8.2	8.2	4.5	4.5	5.2

Sources: Bloomberg Barclays, Credit Suisse, JPMorgan as of December 31, 2019

10-year yield reaches an all time low

Coronavirus concerns send the 10-year to all time lows

Yield Curve

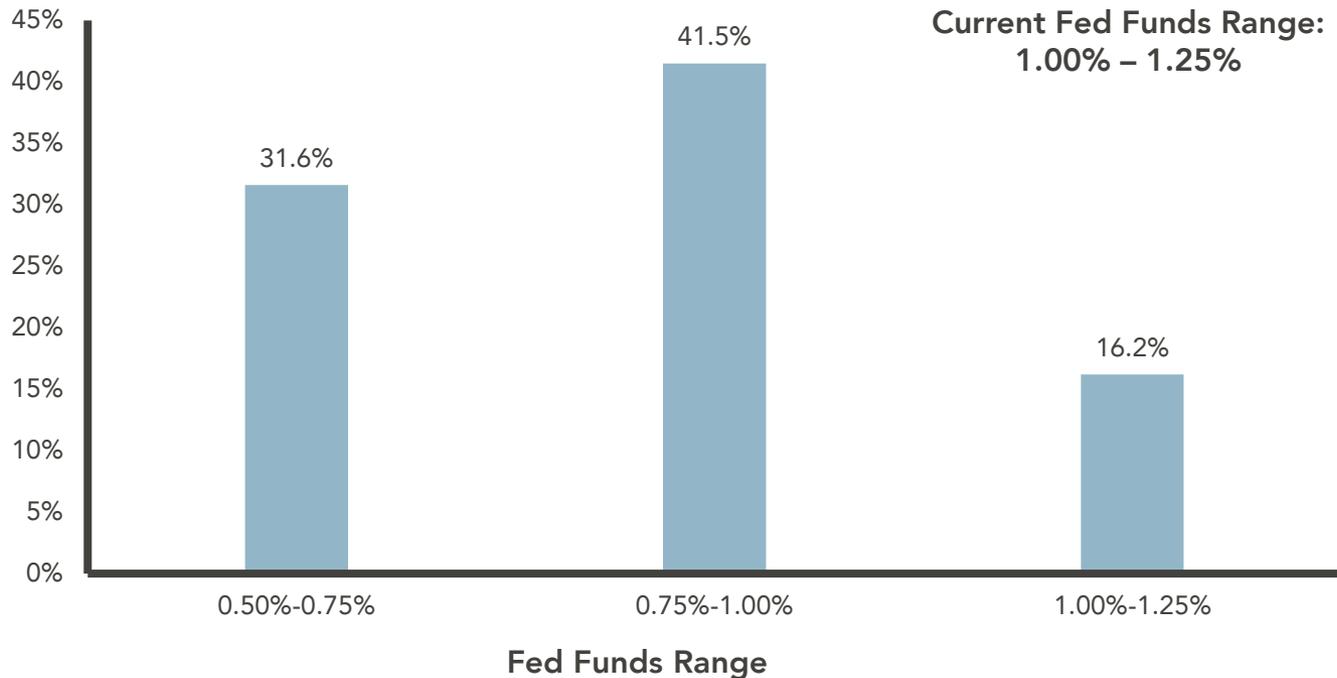


Source: U.S. Treasury. As of March 3, 2020

Coronavirus has accelerated cut expectations

Market expects about an **84%** probability of one or more rate cuts in **2020**

▣ Probability of Fed Funds Rate at December 16, 2020 Fed Meeting



Source: CME Group; latest data as March 4, 2020

U.S. equities: New all-time highs set in December

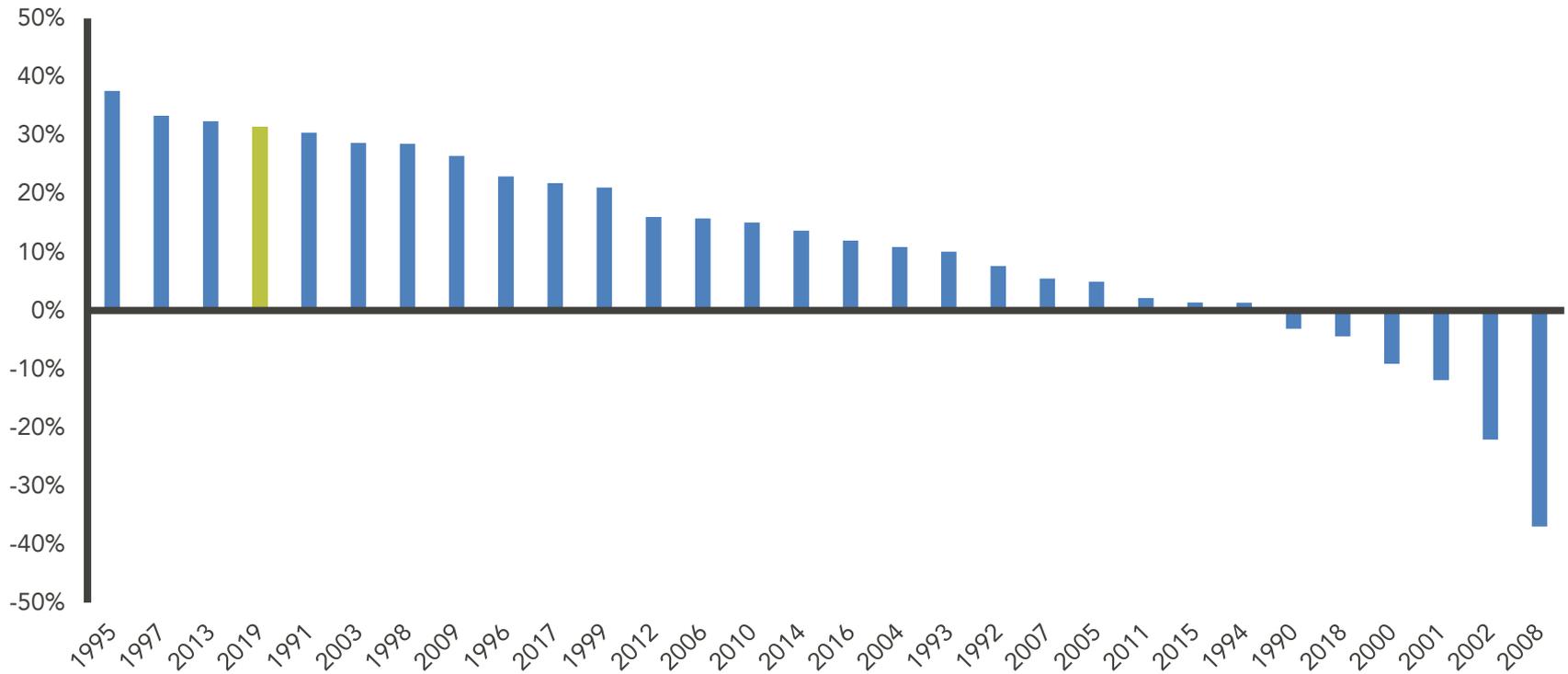
U.S. equity index returns

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	1.9	6.7	25.3	25.3	15.7	12.6	13.4
Wilshire 5000	2.9	9.1	31.0	31.0	14.5	11.4	13.4
Russell 3000	2.9	9.1	31.0	31.0	14.6	11.2	13.4
Large-Cap Market Indices							
S&P 500	3.0	9.1	31.5	31.5	15.3	11.7	13.6
Russell 1000	2.9	9.0	31.4	31.4	15.0	11.5	13.5
Russell 1000 Value	2.8	7.4	26.5	26.5	9.7	8.3	11.8
Russell 1000 Growth	3.0	10.6	36.4	36.4	20.5	14.6	15.2
Mid-Cap Market Indices							
Russell MidCap	2.3	7.1	30.5	30.5	12.1	9.3	13.2
Russell MidCap Value	3.0	6.4	27.1	27.1	8.1	7.6	12.4
Russell MidCap Growth	1.2	8.2	35.5	35.5	17.4	11.6	14.2
Small-Cap Market Indices							
Russell 2000	2.9	9.9	25.5	25.5	8.6	8.2	11.8
Russell 2000 Value	3.5	8.5	22.4	22.4	4.8	7.0	10.6
Russell 2000 Growth	2.3	11.4	28.5	28.5	12.5	9.3	13.0

Source: Morningstar Direct as of December 31, 2019

A stellar year for U.S. equities

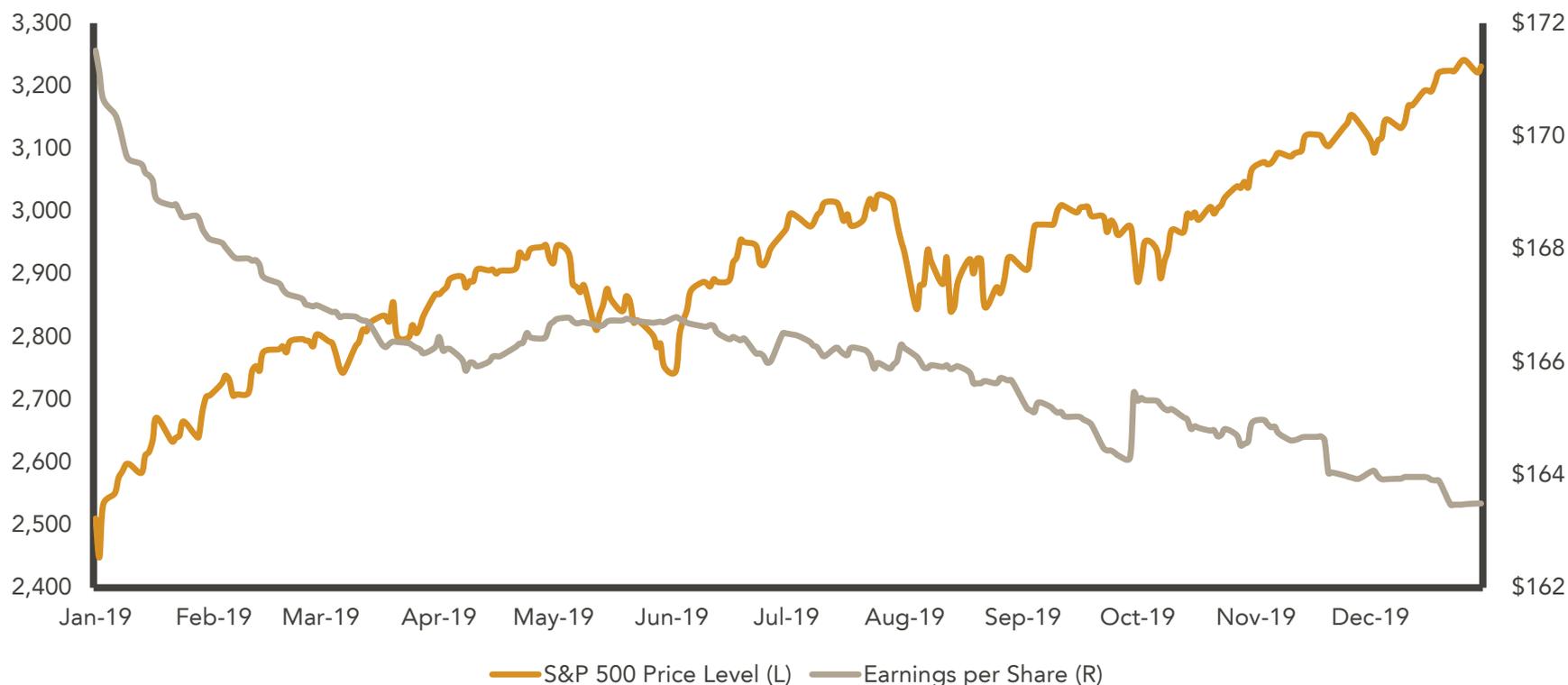
S&P 500 had the 4th highest returning calendar year the past 30 years



Source: eVestment; data as of December 31, 2019

Multiple expansion drove returns in 2019

Earnings declined 2.3% in 3Q and is estimated to decline 1.5% in 4Q;
S&P 500 forward P/E now at 19.8x vs. 10-year average of 16.0x

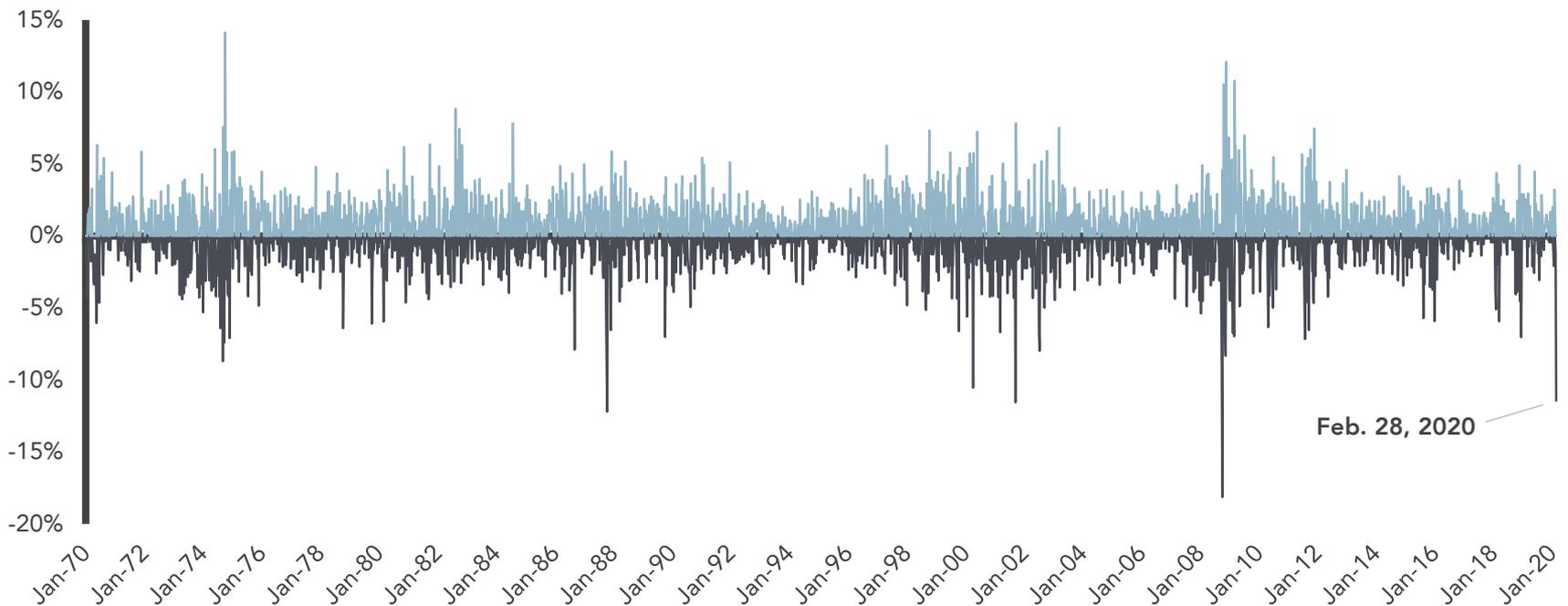


Source: Bloomberg as of December 31, 2019

Rapid sell-off for U.S. equities

February 24th - 28th was among the top 5 largest weekly declines over the last 50 years

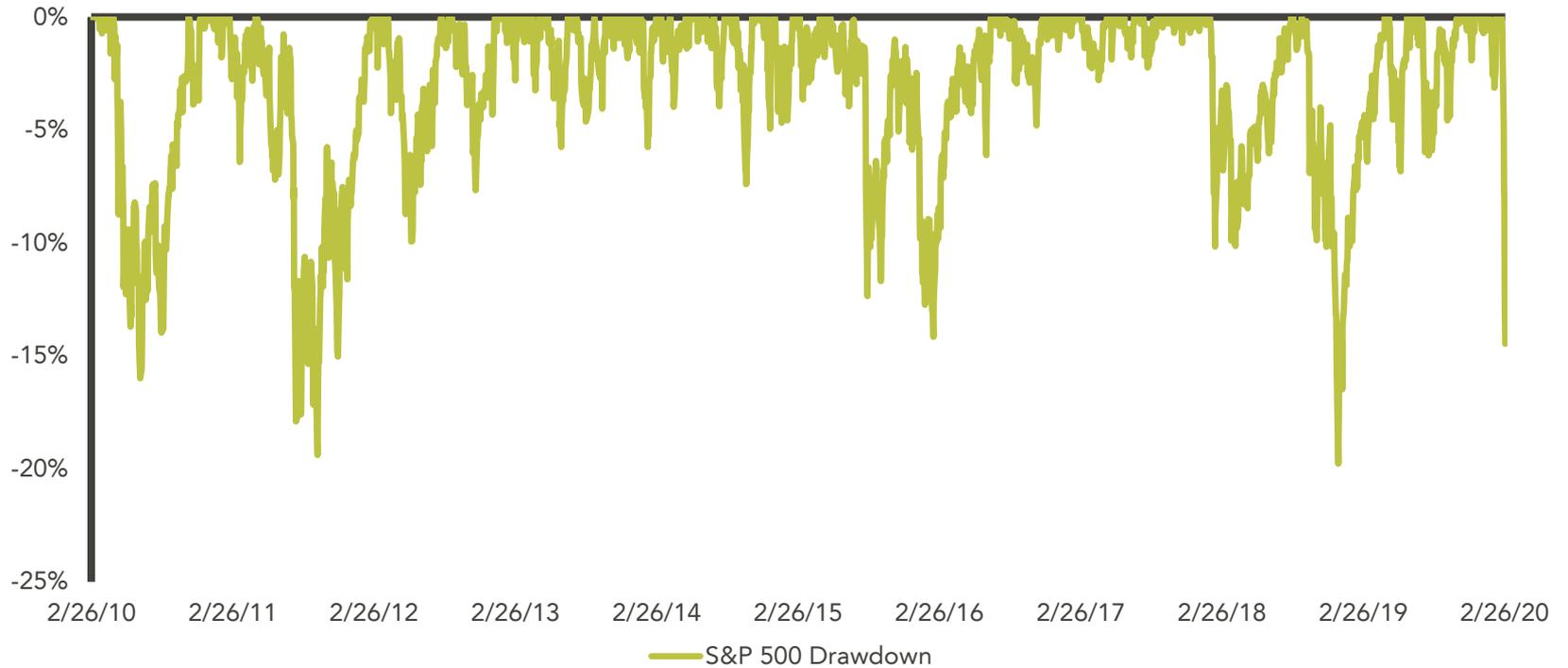
▣ S&P 500 Week Over Week Change



Source: Bloomberg

Large drawdowns are not uncommon

S&P 500 drawdowns since 2010



Source: Bloomberg

Non-U.S. equities: finish the year with a bang

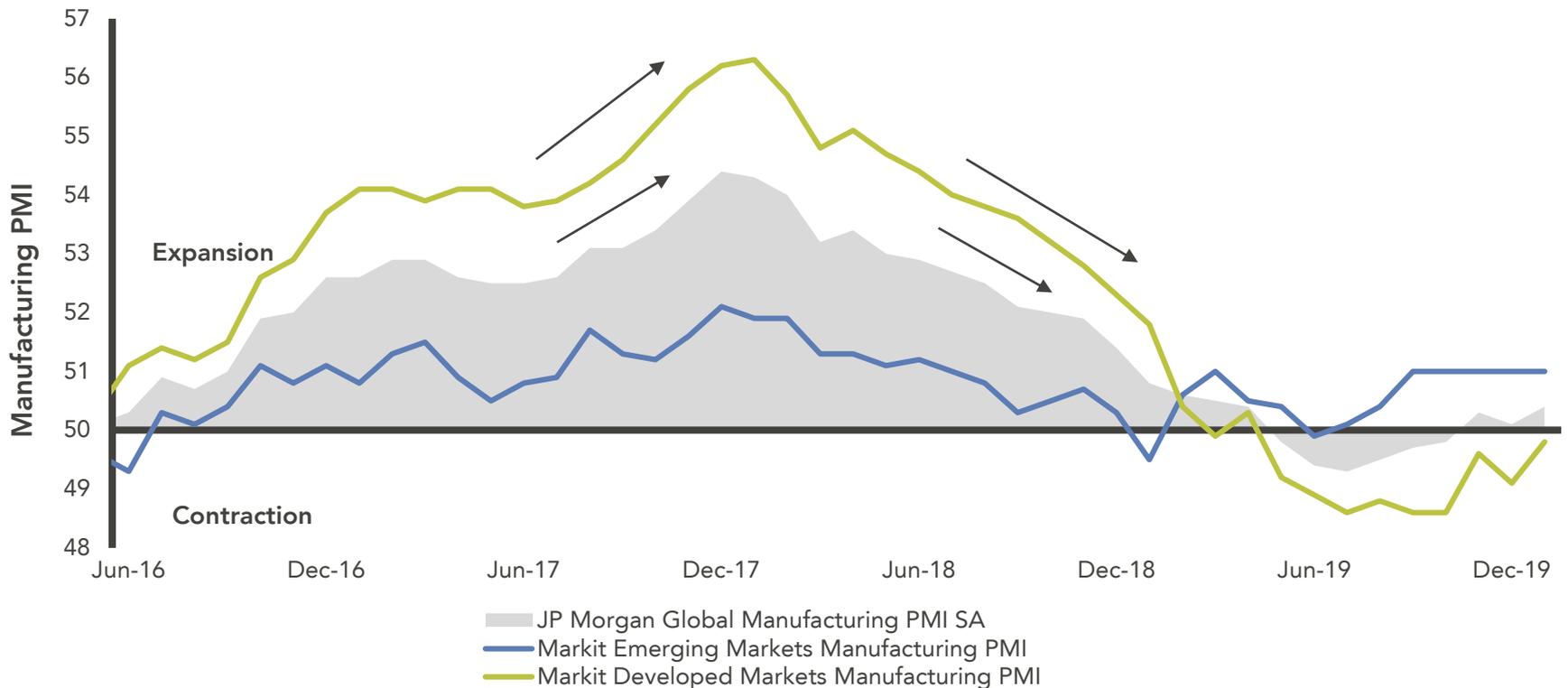
Double digit returns across the board in 2019

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI	3.5	9.0	26.6	26.6	12.4	8.4	8.8
MSCI ACWI ex. U.S.	4.3	8.9	21.5	21.5	9.9	5.5	5.0
MSCI EAFE	3.3	8.2	22.0	22.0	9.6	5.7	5.5
MSCI EAFE Local	1.3	5.2	21.7	21.7	7.7	6.7	7.2
MSCI Emerging Markets	7.5	11.8	18.4	18.4	11.6	5.6	3.7
MSCI EM Local	5.7	9.5	18.1	18.1	11.5	7.5	6.1
MSCI EAFE Small-Cap	4.4	11.5	25.0	25.0	10.9	8.9	8.7
MSCI EM Small-Cap	6.1	9.5	11.5	11.5	6.7	3.0	3.0
MSCI Frontier	4.3	6.6	18.0	18.0	9.2	2.7	5.3

Source: eVestment as of December 31, 2019

Manufacturing slowdown flattens

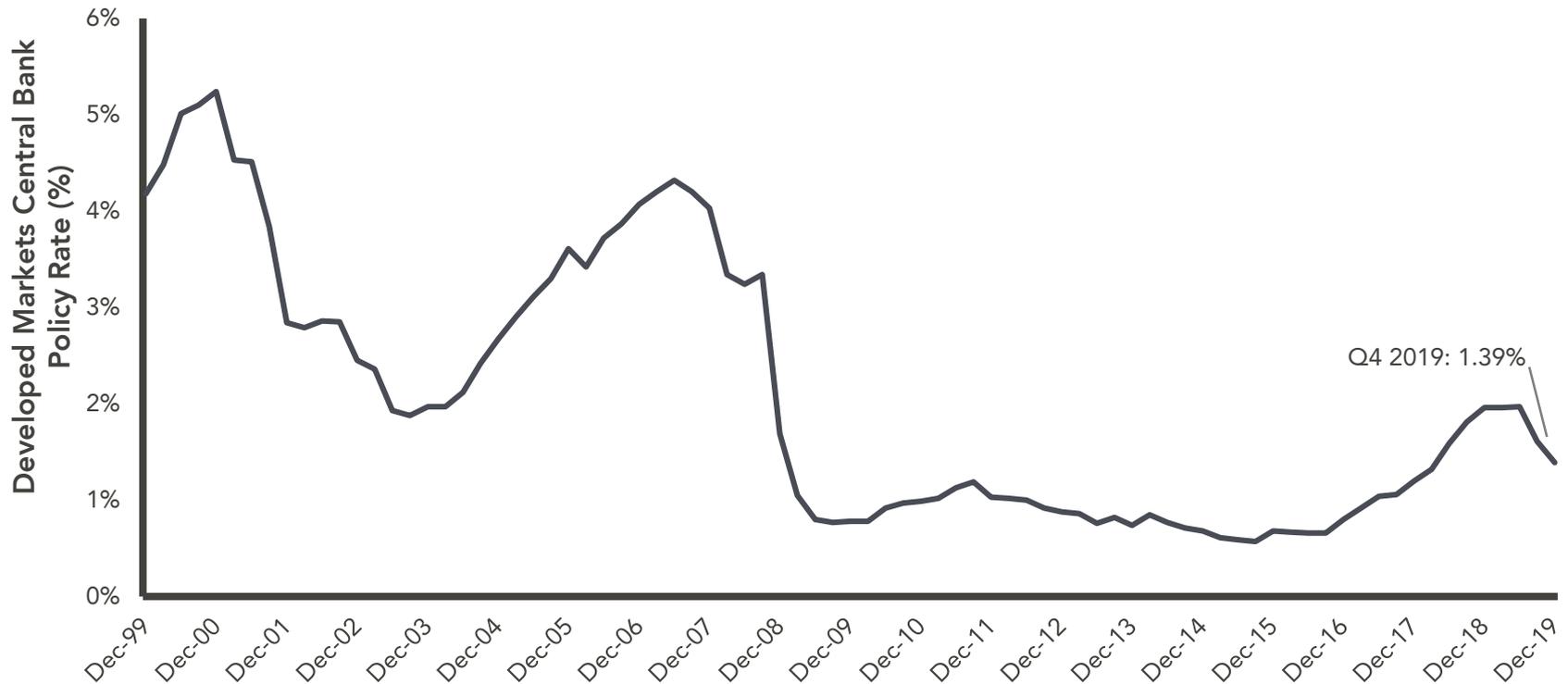
Data was showing signs of improvement prior to coronavirus



Source: Bloomberg

Central banks become more accommodative

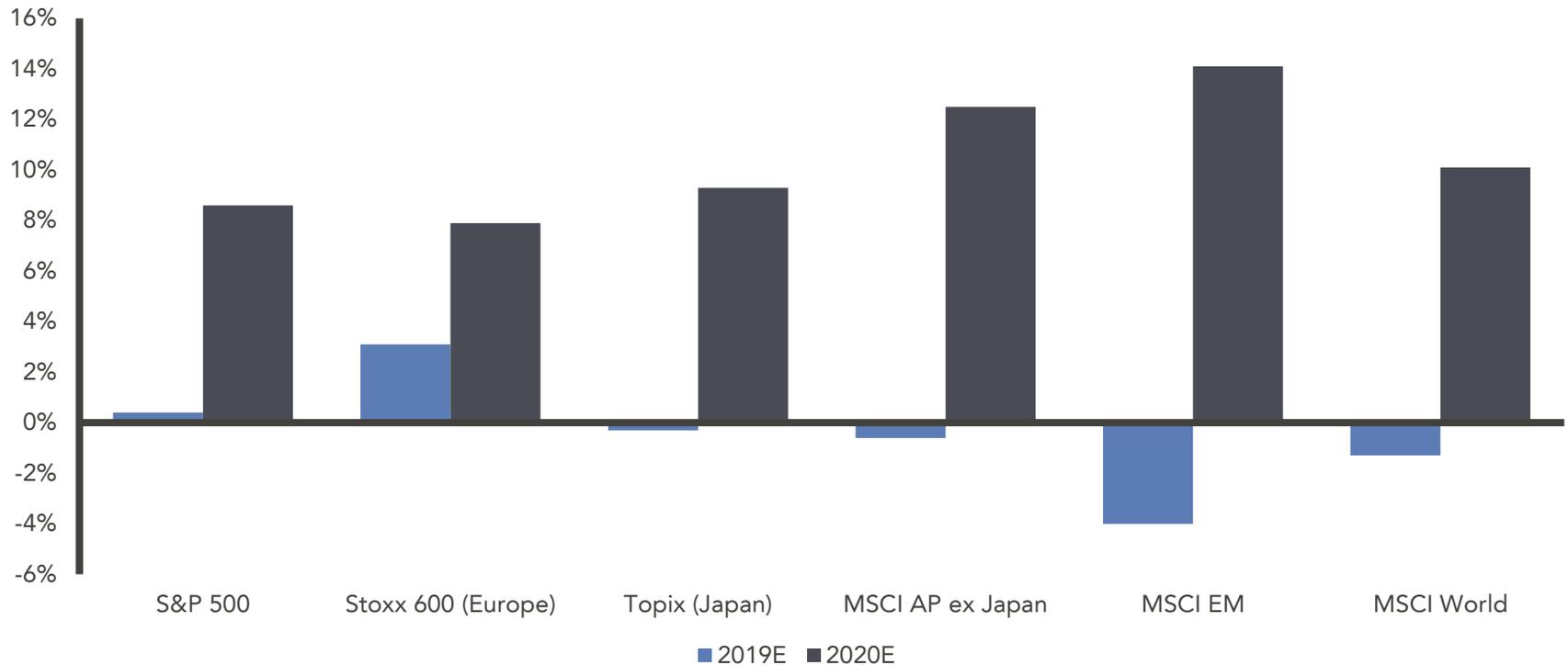
Accommodative monetary policy accelerates in developed markets



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

Will 2020 earnings expectations hold up?

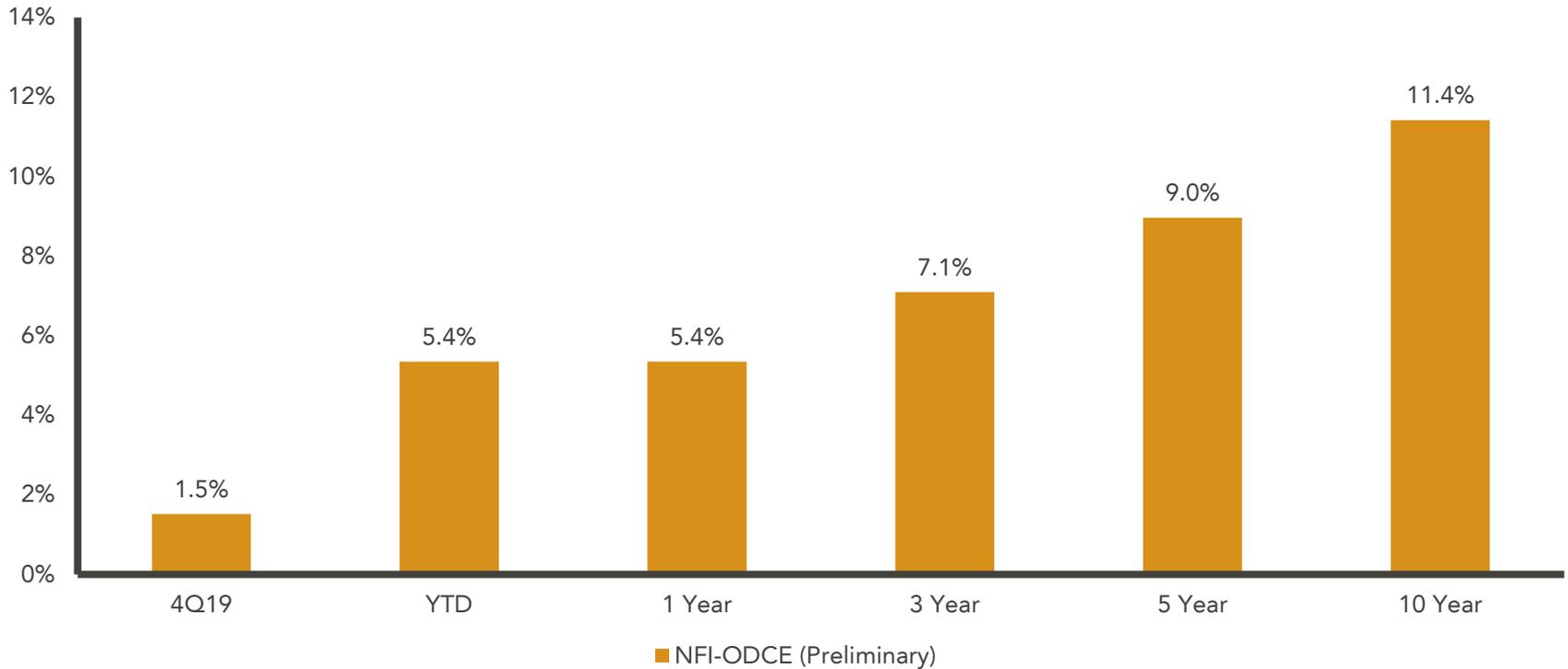
Earnings momentum sputtered in 2019



Source: Goldman Sachs Global Investment Research as of January 6, 2020

4Q19 performance

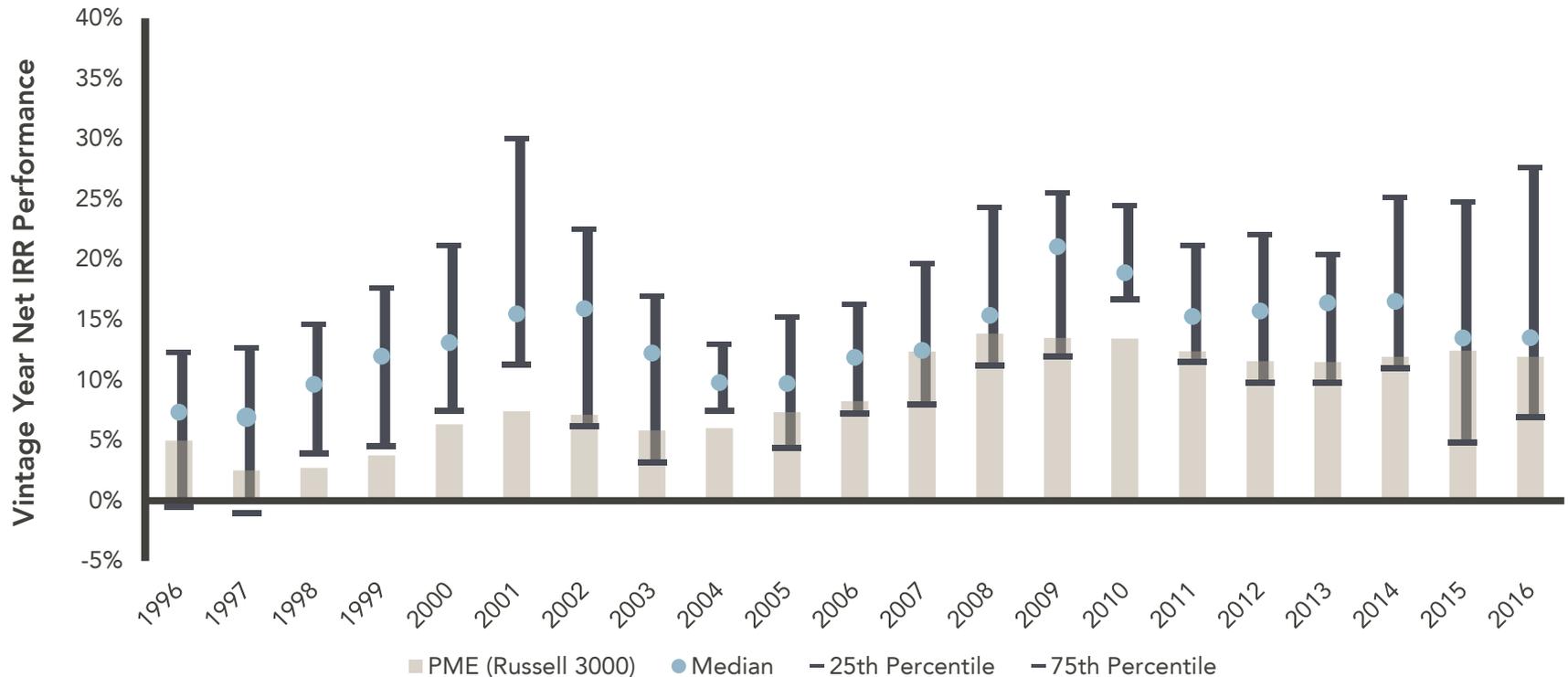
Core real estate delivers a 5.4% gross return for calendar year 2019 as returns continue to moderate



Source: NFI-ODCE Manager reported information

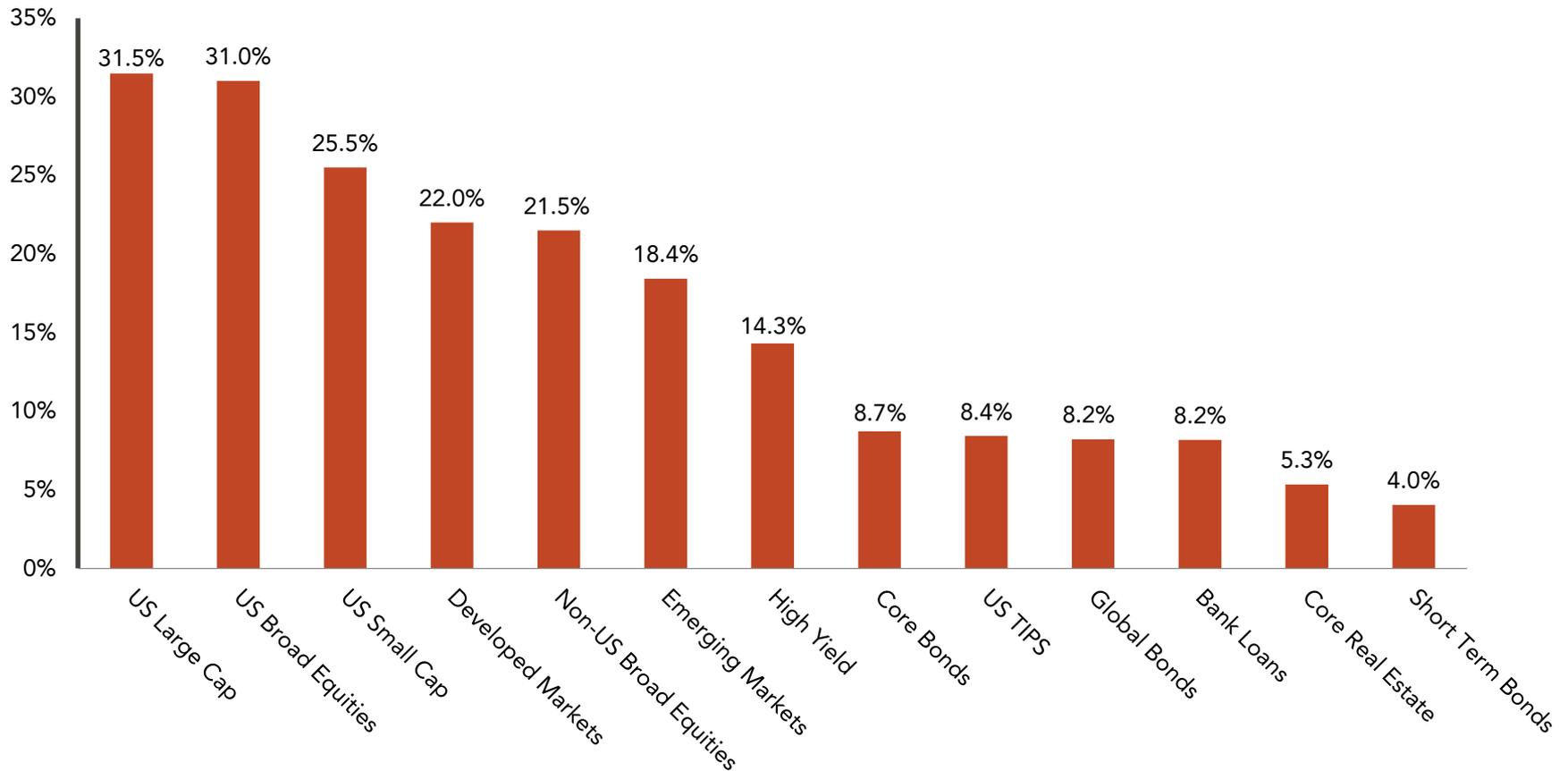
U.S. private equity vintage performance

Consistent long-term private equity outperformance continues to provide compelling support for increasing investor allocations



Source: Cambridge Associates U.S. Private Equity Index and Russell 3000 as of June 30, 2019

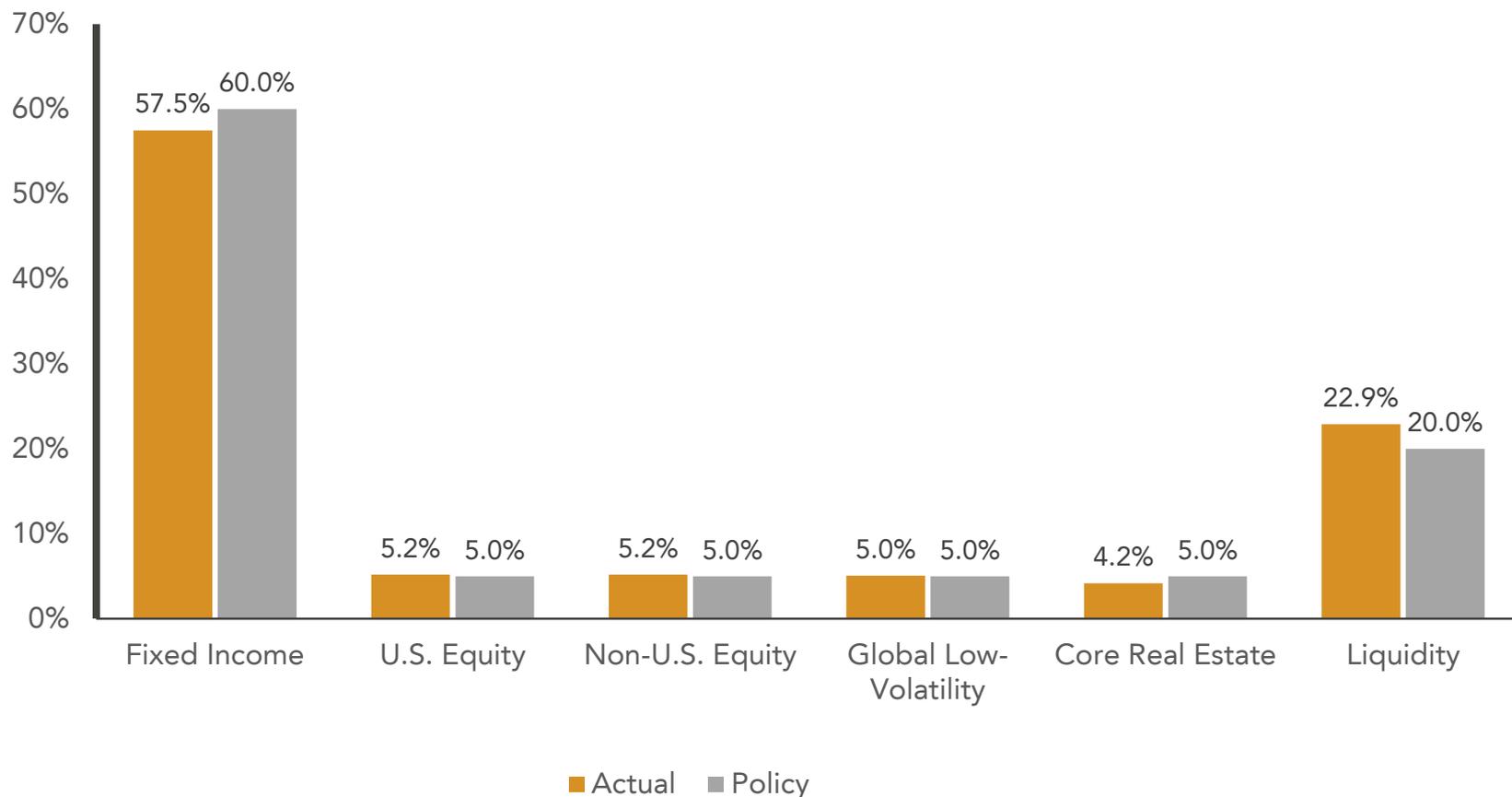
2019 asset class returns



Source: Morningstar as of December 31, 2019

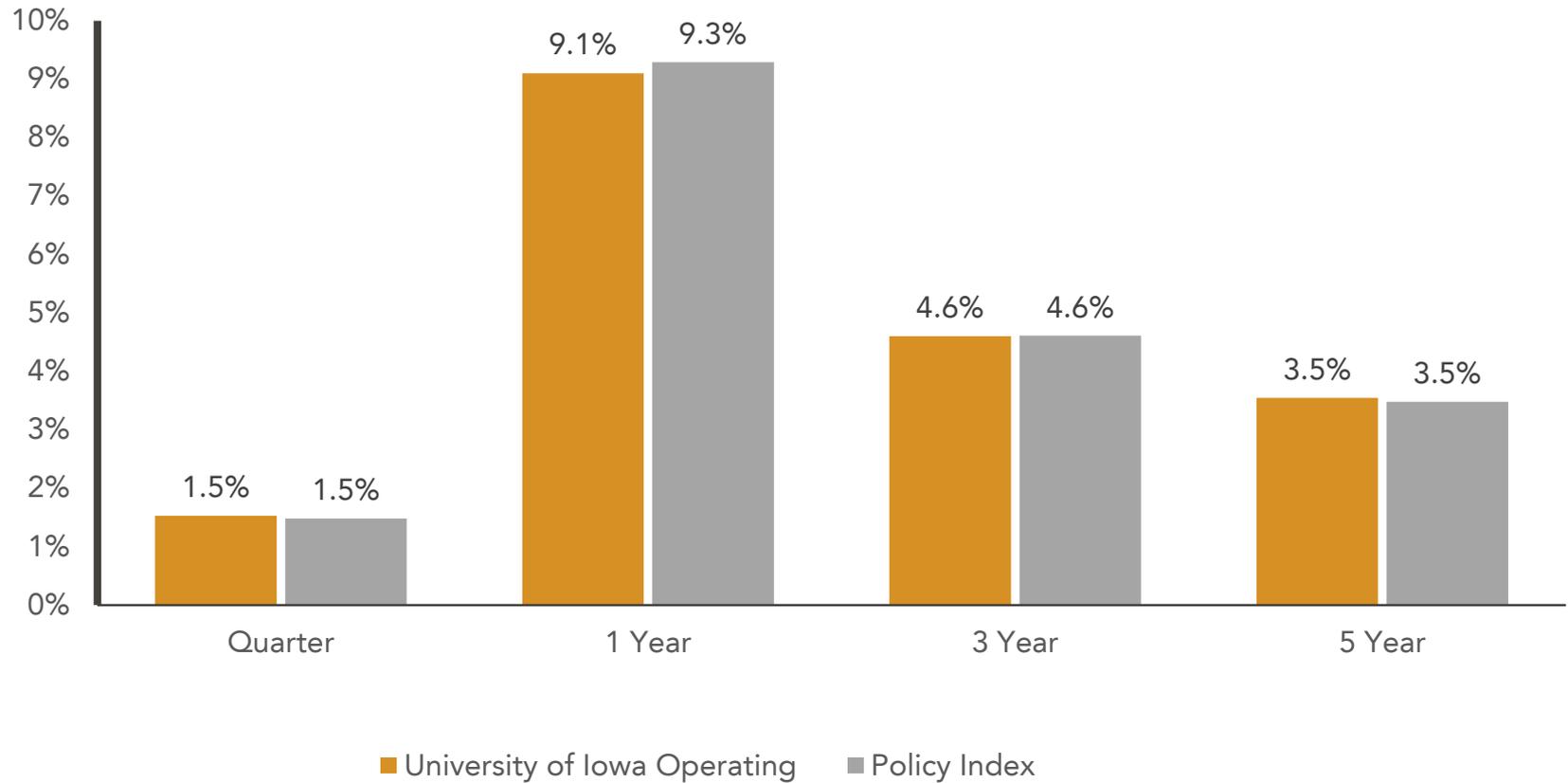
Performance Review

University of Iowa Operating Portfolio – Asset Allocation*



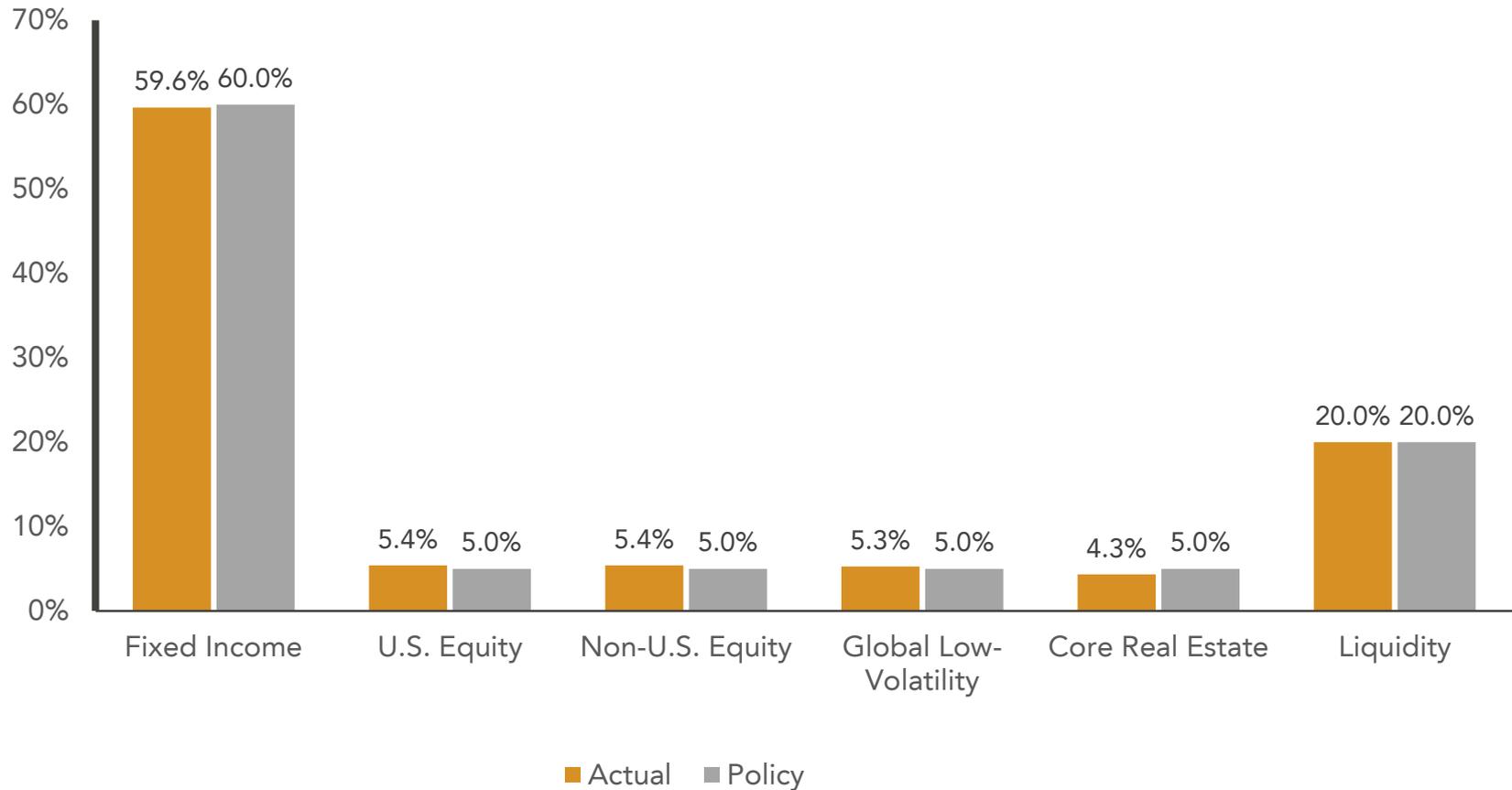
*Includes University of Northern Iowa

University of Iowa Operating Portfolio – Return Summary*

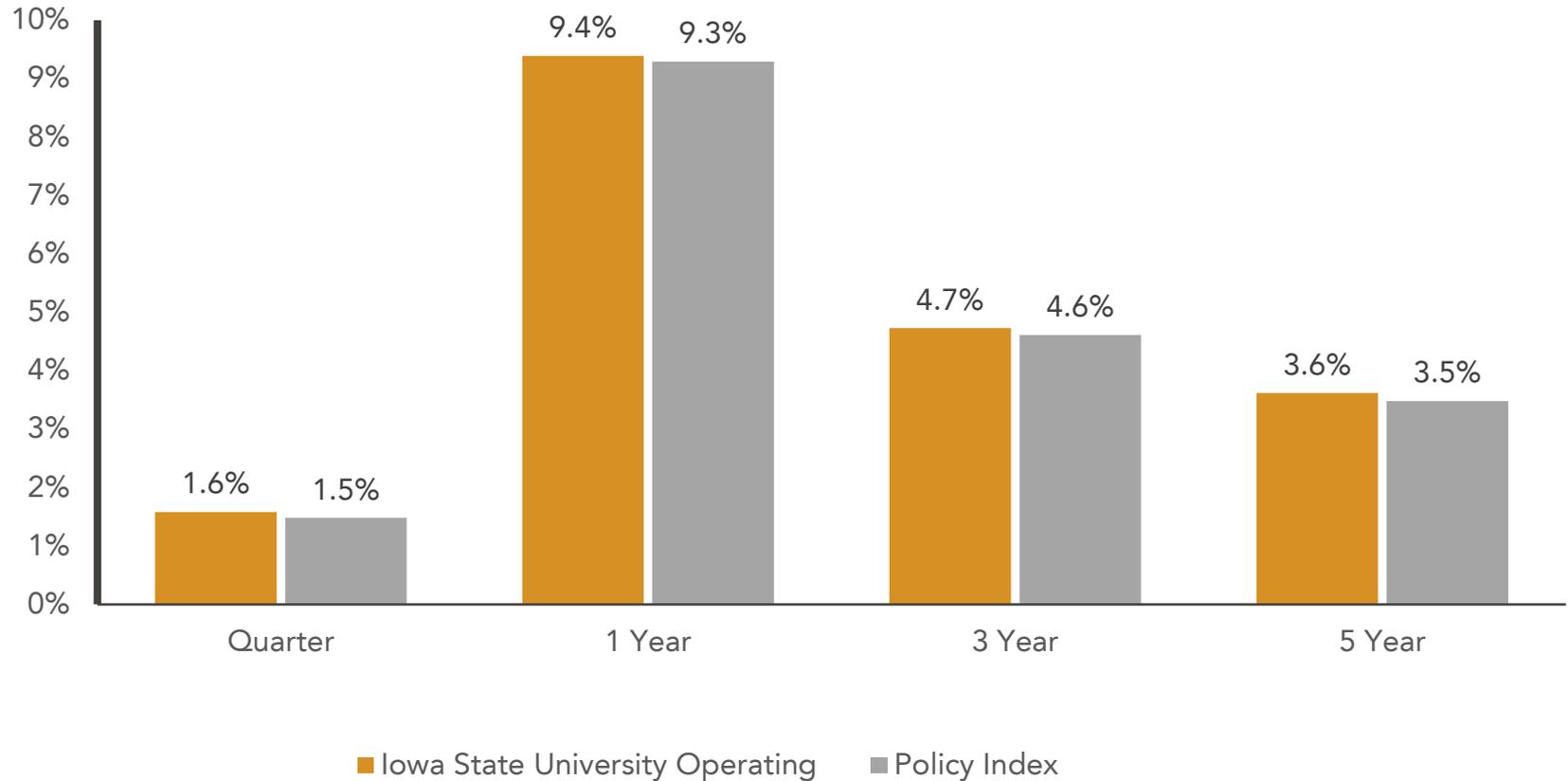


*Includes University of Northern Iowa. Note: See appendix for Policy Index definition.

Iowa State University Operating Portfolio – Asset Allocation

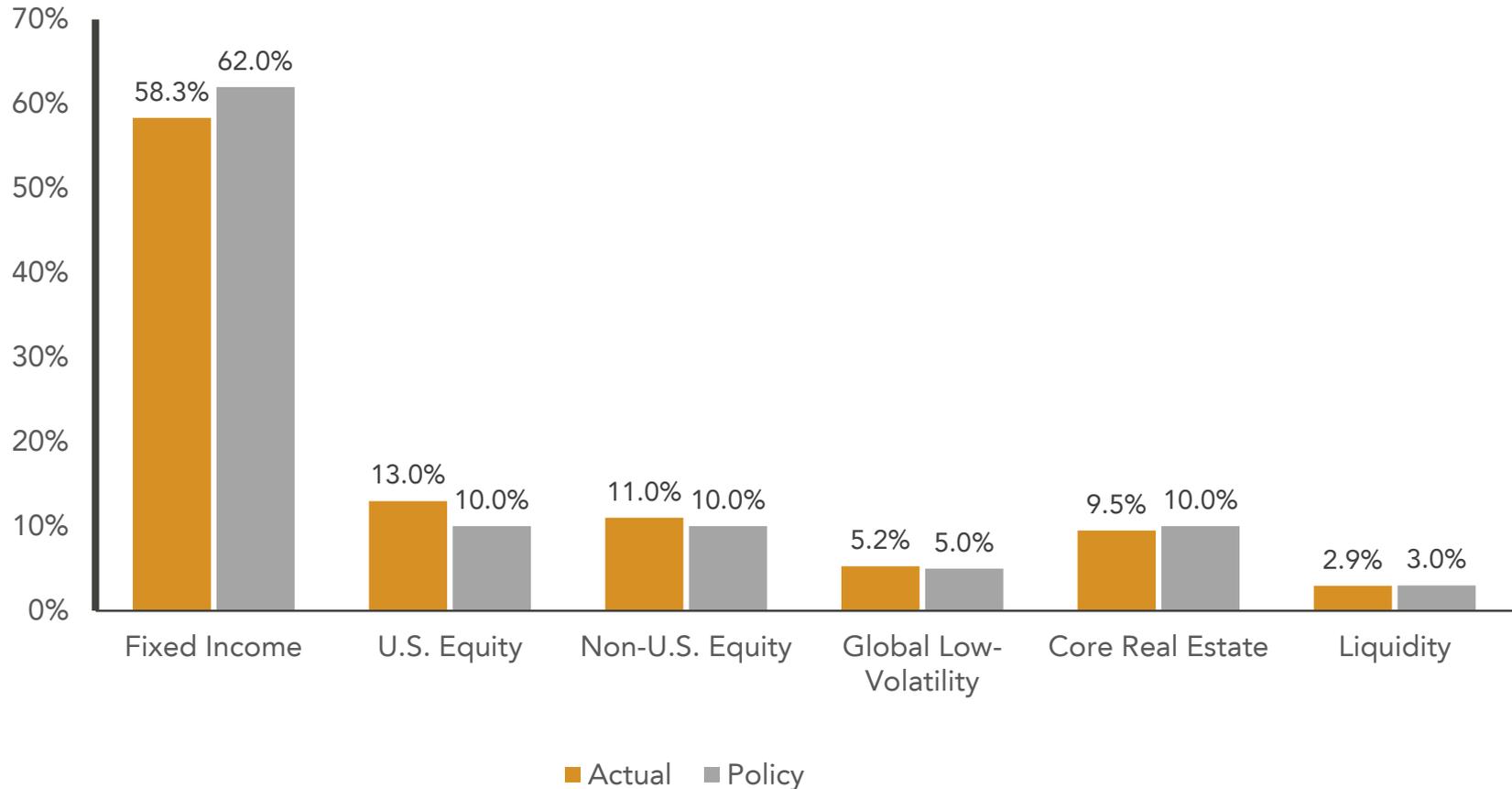


Iowa State University Operating Portfolio – Return Summary

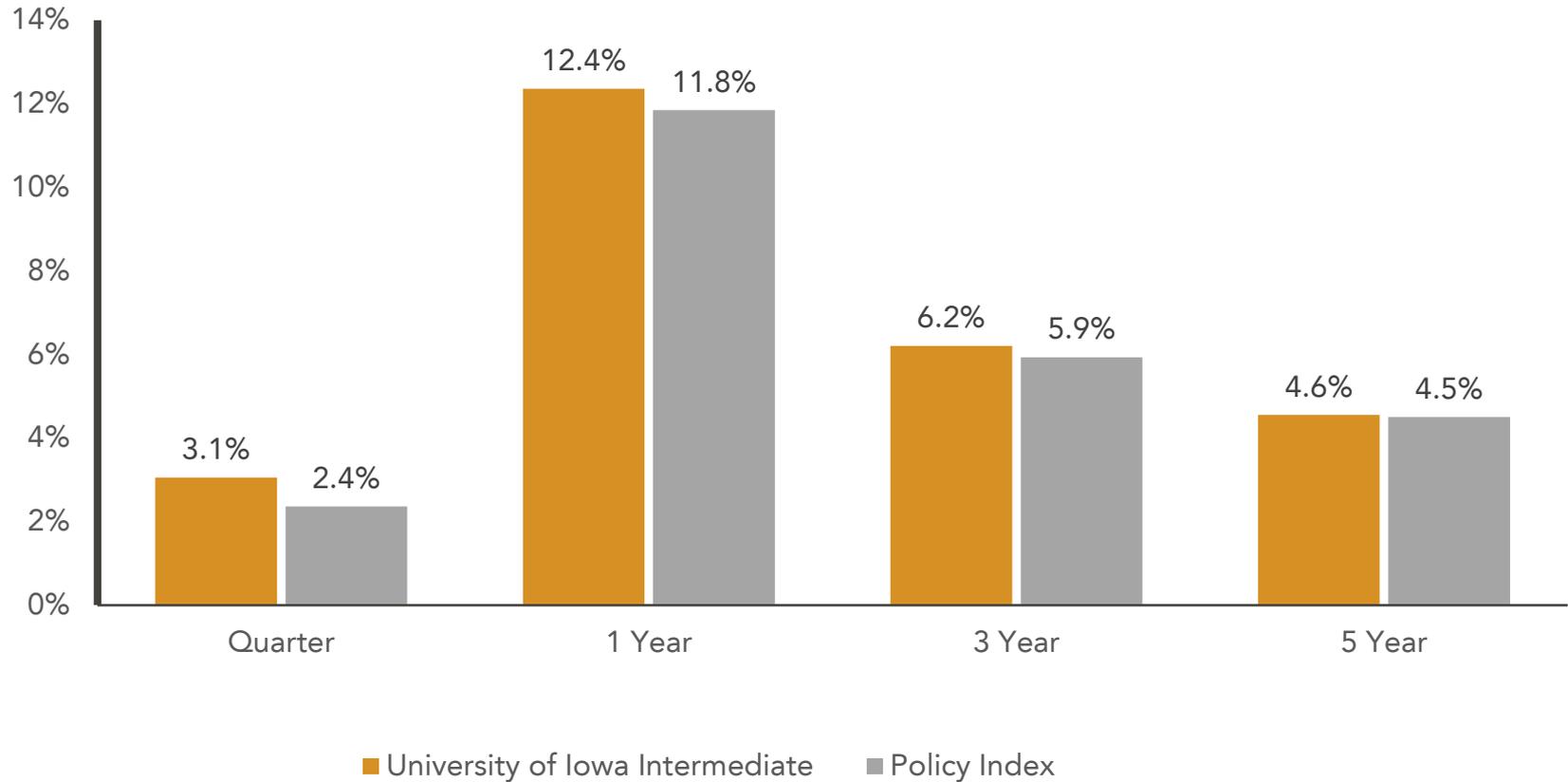


Note: See appendix for Policy Index definition.

University of Iowa Diversified Intermediate Term Portfolio – Asset Allocation

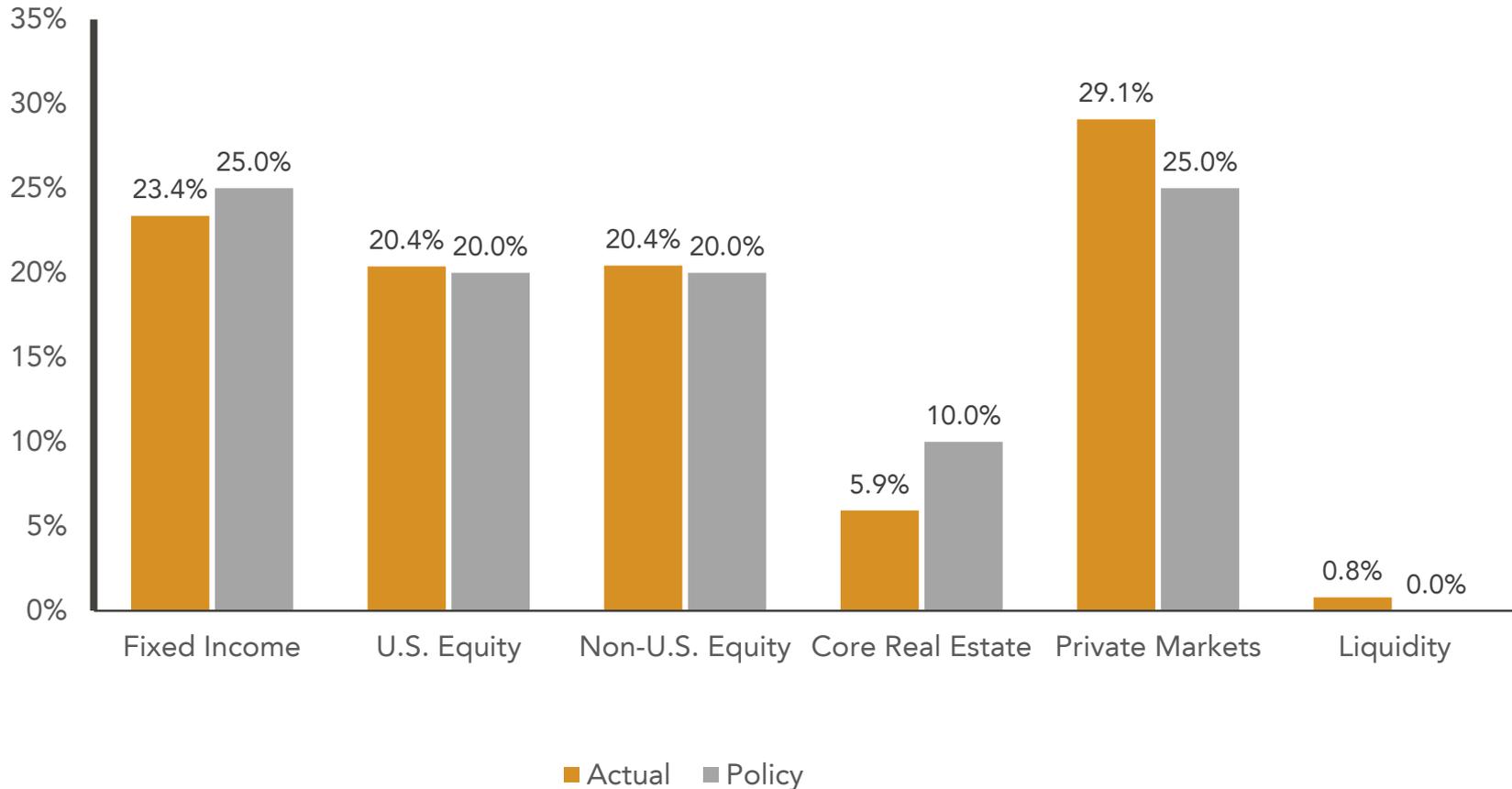


University of Iowa Diversified Intermediate Term Portfolio – Return Summary



Note: See appendix for Policy Index definition.

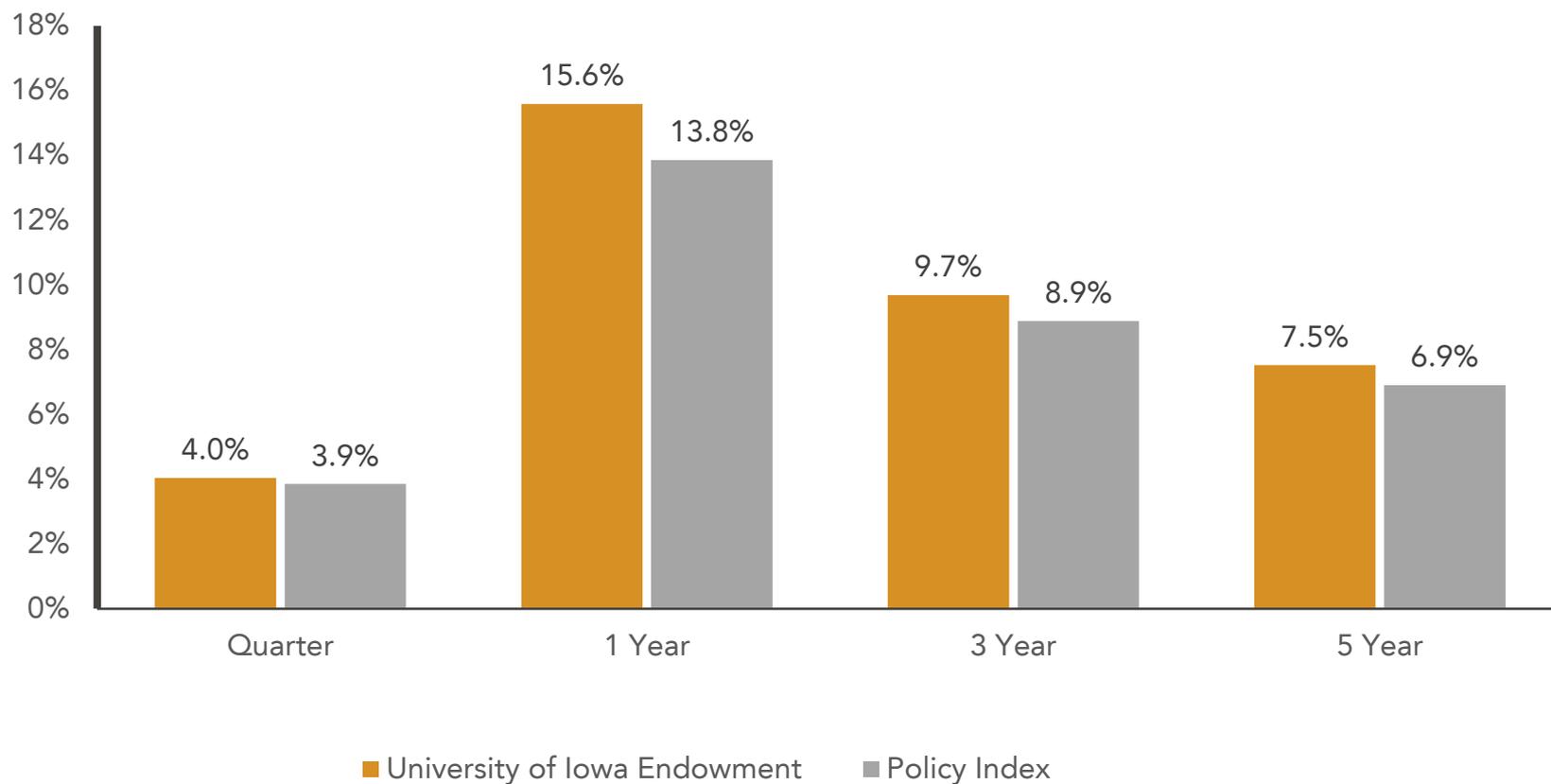
University of Iowa Endowment – Asset Allocation*



*Includes University of Northern Iowa.

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

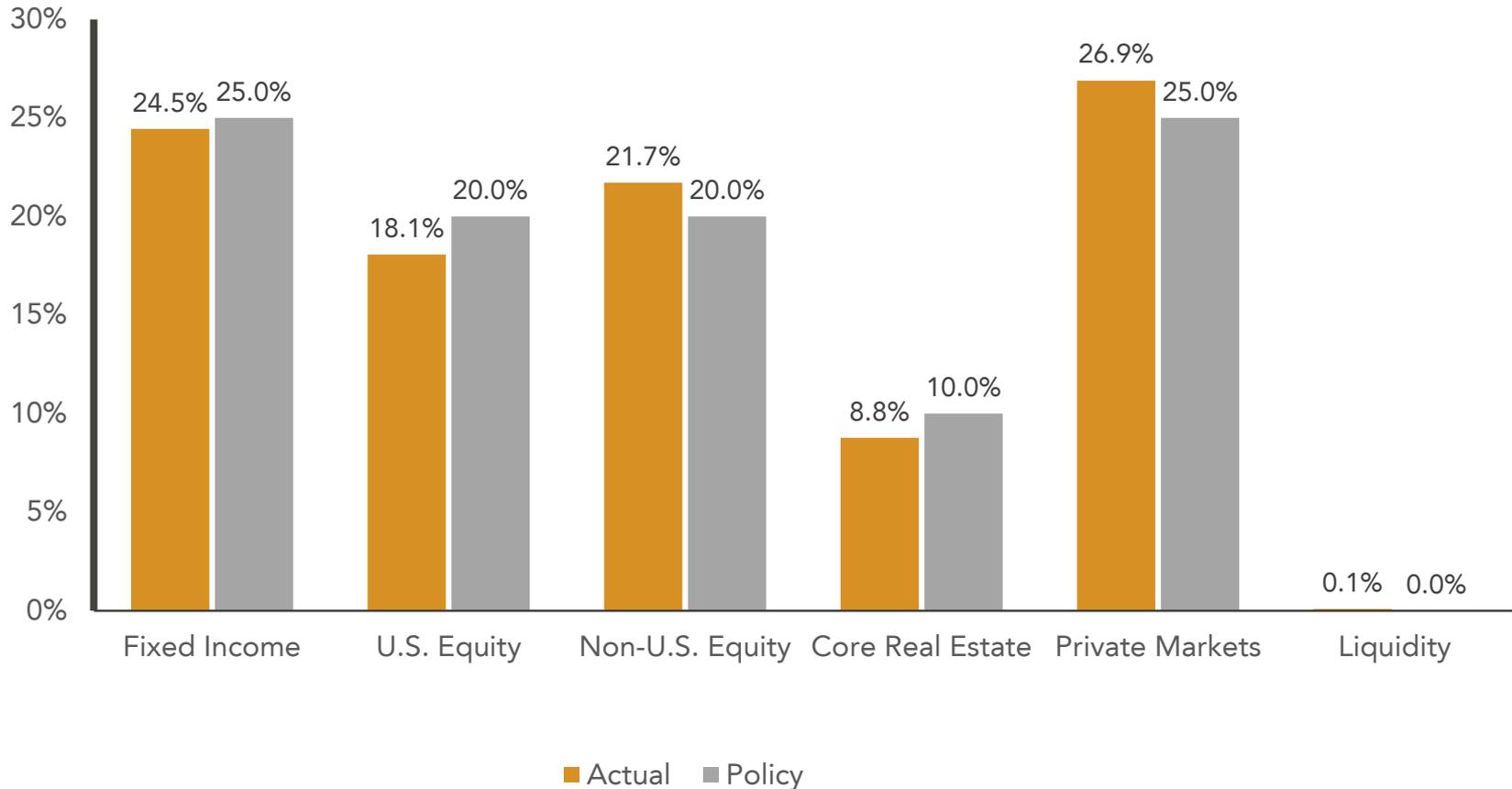
University of Iowa Endowment – Return Summary*



*Includes University of Northern Iowa.

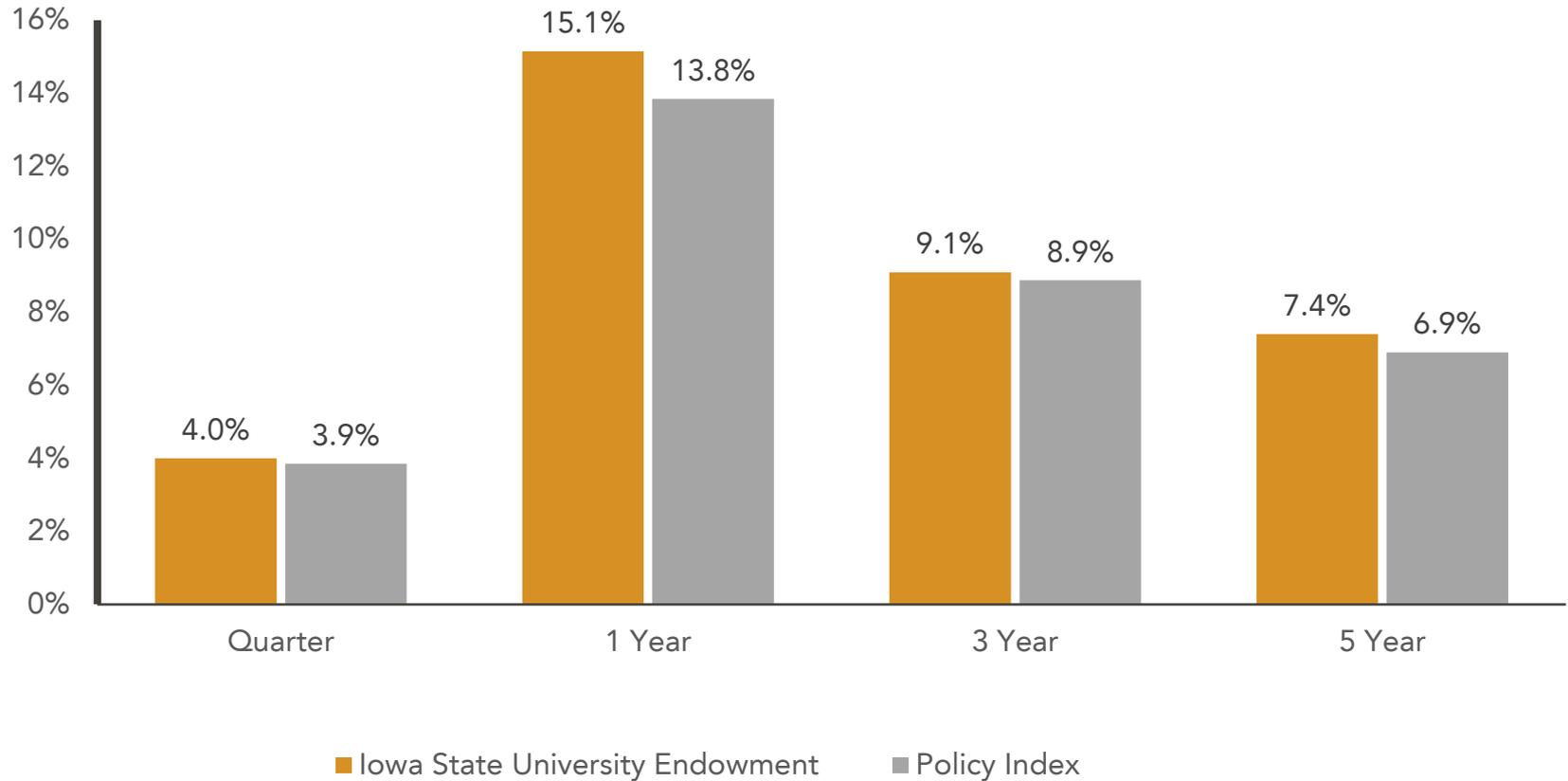
Note: See appendix for Policy Index definition. Some private market valuations may be carried over from the previous quarter. Returns are preliminary and subject to change.

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		\$1,319,903,348	100.0%	100.0%
Total Fixed Income Composite		\$758,785,359	57.5%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$62,449,746	4.7%	5.0%
U.S. Fixed Income Composite		\$696,335,614	52.8%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$314,424,362	23.8%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$252,782,865	19.2%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$32,197,547	2.4%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$32,546,182	2.5%	2.5%
Voya Senior Loan	Senior Secured Loans	\$31,989,232	2.4%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$32,395,426	2.5%	2.5%
U.S. Equity Composite		\$68,715,374	5.2%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$68,715,374	5.2%	5.0%
Non-U.S. Equity Composite		\$68,655,332	5.2%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$68,655,332	5.2%	5.0%
Global Low Volatility Composite		\$66,624,745	5.0%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$66,624,745	5.0%	5.0%
Real Estate Composite		\$55,141,217	4.2%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$25,650,511	1.9%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$29,490,707	2.2%	2.5%
Liquidity Composite		\$301,981,321	22.9%	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		\$388,392,462	100.0%	100.0%
Total Fixed Income Composite		\$231,646,144	59.6%	60.0%
AllianceBernstein Global Bond Fund	Global Fixed Income	\$19,068,206	4.9%	5.0%
U.S. Fixed Income Composite		\$212,577,938	54.7%	55.0%
Vanguard Total Bond Market Index Fund	Core Fixed Income	\$96,315,881	24.8%	25.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$76,880,465	19.8%	20.0%
Vanguard High-Yield Corporate Fund	High Yield Fixed Income	\$10,182,151	2.6%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$9,738,541	2.5%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$19,460,900	5.0%	5.0%
U.S. Equity Composite		\$20,889,218	5.4%	5.0%
Vanguard Total Stock Market Index	All-Cap Core	\$20,889,218	5.4%	5.0%
Non-U.S. Equity Composite		\$20,918,657	5.4%	5.0%
Vanguard FTSE All-World ex US	Non-U.S. Large-Cap Core	\$20,918,657	5.4%	5.0%
Global Low Volatility Composite		\$20,412,598	5.3%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$20,412,598	5.3%	5.0%
Real Estate Composite		\$16,836,785	4.3%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$8,348,563	2.1%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$8,488,222	2.2%	2.5%
Liquidity Composite		\$77,689,059	20.0%	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		\$477,573,091	100.0%	100.0%
Fixed Income Composite		\$278,608,712	58.3%	62.0%
SSgA U.S. Aggregate Bond Index	Core Fixed Income	\$55,368,137	11.6%	14.0%
Dodge & Cox Core Fixed Income	Core Fixed Income	\$62,339,928	13.1%	14.0%
MacKay Shields Intermediate Bond Fund	Int. Fixed Income	\$77,077,358	16.1%	17.0%
SSgA US High Yield Bond	High Yield Fixed Income	\$17,704,233	3.7%	2.5%
Neuberger Berman High Income	High Yield Fixed Income	\$12,818,410	2.7%	2.5%
Voya Senior Loan	Senior Secured Loans	\$11,717,502	2.5%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$11,502,606	2.4%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$30,080,539	6.3%	7.0%
U.S. Equity Composite		\$61,919,143	13.0%	10.0%
SSgA U.S. Total Market Index	All-Cap Core	\$61,919,143	13.0%	10.0%
Non-U.S. Equity Composite		\$52,510,913	11.0%	10.0%
SSgA MSCI ACWI ex US	Non-U.S. Large-Cap Core	\$52,510,913	11.0%	10.0%
Global Low Volatility Composite		\$25,060,731	5.2%	5.0%
Acadian Global Low Volatility	Global Low-Volatility	\$25,060,731	5.2%	5.0%
Real Estate Composite		\$45,416,071	9.5%	10.0%
UBS Trumbull Property Fund	Core Real Estate	\$22,133,278	4.6%	5.0%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$23,282,793	4.9%	5.0%
Liquidity Composite		\$14,057,521	2.9%	3.0%

University of Iowa Endowment – Market Values*

	Asset Class	Market Value	% of Portfolio	Policy %
University of Iowa Endowment		\$461,948,461	100.0%	100.0%
Fixed Income Composite		\$108,009,386	23.4%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$46,252,297	10.0%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$19,722,933	4.3%	5.0%
Voya Senior Loan	Senior Secured Loans	\$11,237,743	2.4%	2.5%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$10,735,766	2.3%	2.5%
Brandywine Global Opportunistic	Global Fixed Income	\$20,060,648	4.3%	5.0%
U.S. Equity Composite		\$94,119,465	20.4%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$66,152,766	14.3%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$13,908,551	3.0%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$14,058,147	3.0%	3.0%
Non-U.S. Equity Composite		\$94,374,458	20.4%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$28,688,347	6.2%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$33,073,369	7.2%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$32,612,742	7.1%	6.7%
Core Real Estate Composite		\$27,443,993	5.9%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$22,092,389	4.8%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$2,579,813	0.6%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$2,771,791	0.6%	2.5%
Private Markets Composite		\$134,373,166	29.1%	25.0%
Liquidity Composite		\$3,627,993	0.8%	0.0%

*Includes University of Northern Iowa.

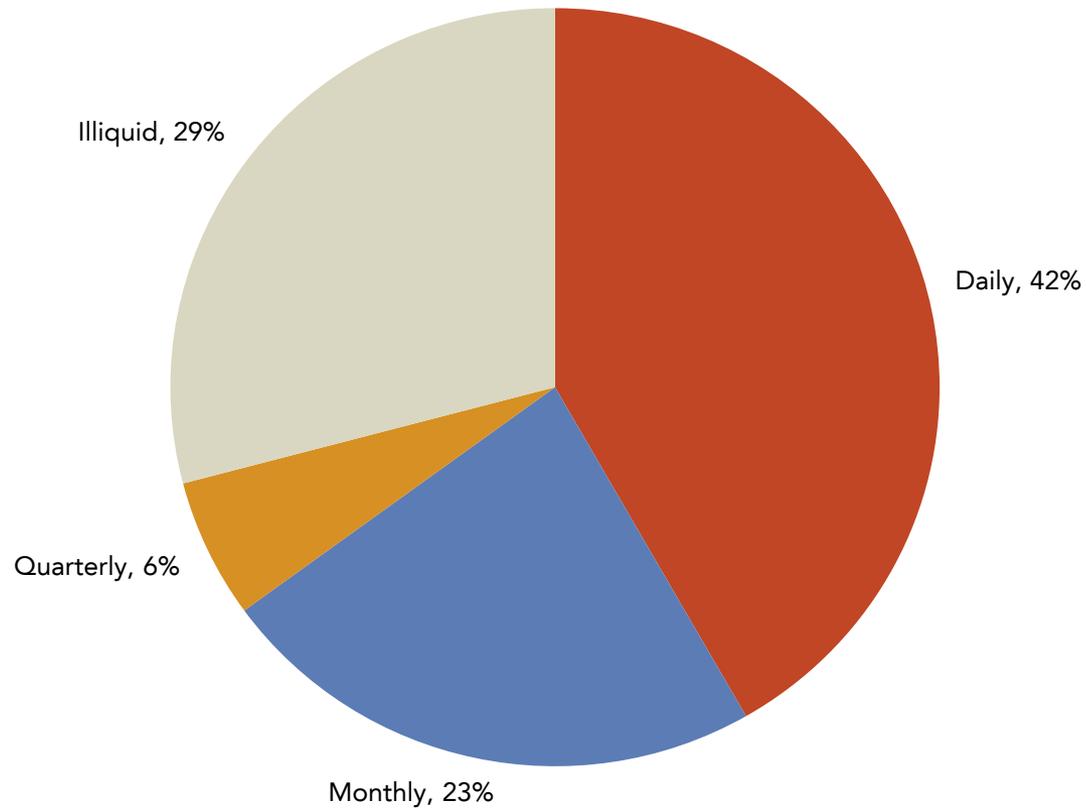
Note: Some private market valuations may be carried over from the previous quarter. Allocations are preliminary and subject to change.

Iowa State University Endowment – Market Values

	Asset Class	Market Value	% of Portfolio	Policy %
Iowa State University Endowment		\$185,270,086	100.0%	100.0%
Fixed Income Composite		\$45,305,807	24.5%	25.0%
MacKay Shields Core Fund	Core Fixed Income	\$18,047,720	9.7%	10.0%
Neuberger Berman High Income	High Yield Fixed Income	\$8,860,309	4.8%	5.0%
Symphony BayCity Senior Loan Fund	Senior Secured Loans	\$9,749,828	5.3%	5.0%
Brandywine Global Opportunistic	Global Fixed Income	\$8,647,950	4.7%	5.0%
U.S. Equity Composite		\$33,479,242	18.1%	20.0%
Vanguard Institutional Index	Large-Cap Core	\$21,062,112	11.4%	14.0%
Vanguard Mid Cap Index	Mid-Cap Core	\$5,879,790	3.2%	3.0%
Macquarie Small Cap Core	Small-Cap Core	\$6,537,341	3.5%	3.0%
Non-U.S. Equity Composite		\$40,230,877	21.7%	20.0%
Vanguard Total International Index	Non-U.S. Large-Cap Core	\$13,371,291	7.2%	6.7%
Arrowstreet International Equity	Non-U.S. Large-Cap Core	\$13,333,046	7.2%	6.7%
Earnest Partners International Large Cap	Non-U.S. Large-Cap Core	\$13,526,541	7.3%	6.7%
Core Real Estate Composite		\$16,266,354	8.8%	10.0%
Principal Enhanced Property	Core Plus Real Estate	\$9,630,379	5.2%	5.0%
UBS Trumbull Property Fund	Core Real Estate	\$3,198,968	1.7%	2.5%
Morgan Stanley PRIME Property Fund	Core Real Estate	\$3,437,007	1.9%	2.5%
Private Markets Composite		\$49,828,820	26.9%	25.0%
Liquidity Composite		\$158,985	0.1%	0.0%

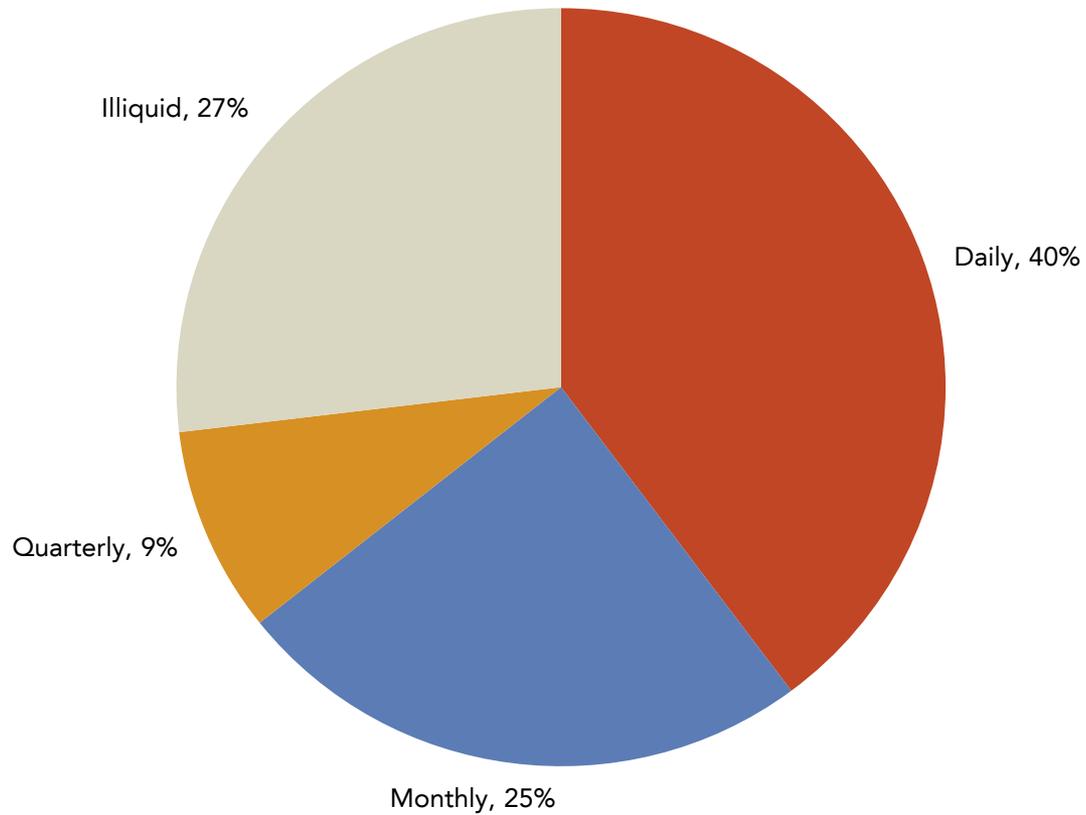
Note: Some private market valuations may be carried over from the previous quarter. Market values are preliminary and subject to change.

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 September 30, 2019

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	\$6,713,290	\$1,149,807	1.6
Fund of Funds	Commonfund Capital Venture Partners VIII	\$1,000,000	\$965,000	\$1,189,209	\$810,781	2.1
International Fund of Funds	Commonfund Capital International Partners VI	\$1,200,000	\$1,119,000	\$1,491,364	\$272,399	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$2,400,000	\$2,206,800	\$3,106,320	\$1,329,941	2.0
Value Added	Commonfund NR Partners VIII	\$6,000,000	\$5,790,000	\$2,973,067	\$2,464,975	0.9
Fund of Funds	Adams Street US Partnership 2010	\$2,440,000	\$2,149,640	\$1,674,879	\$2,193,151	1.8
International Fund of Funds	Adams Street Non-US Developed 2010	\$1,470,000	\$1,286,985	\$1,107,798	\$934,300	1.6
International Fund of Funds	Adams Street Non-US Emerging 2010	\$490,000	\$440,020	\$143,641	\$581,971	1.6
Secondary Fund of Funds	Landmark Equity Partners XIV	\$4,400,000	\$4,263,174	\$4,878,610	\$734,280	1.3
Opportunistic	MREP Global III	\$5,000,000	\$4,562,256	\$5,481,968	\$858,115	1.4
Fund of Funds	Adams Street US Partnership 2012	\$7,050,000	\$6,013,650	\$2,129,094	\$6,877,622	1.5
International Fund of Funds	Adams Street Non-US Developed 2012	\$4,240,000	\$3,334,760	\$1,908,075	\$2,936,327	1.5
International Fund of Funds	Adams Street Non-US Emerging 2012	\$1,410,000	\$1,309,890	\$297,259	\$1,879,402	1.7
Opportunistic	Commonfund NR Partners IX	\$11,000,000	\$9,531,501	\$2,301,372	\$9,154,643	1.2
Value Added	MREP Global VI	\$9,000,000	\$8,197,130	\$7,712,941	\$3,723,929	1.4
Fund of Funds	Adams Street US Partnership 2013	\$5,500,000	\$4,551,250	\$970,405	\$5,514,078	1.4
International Fund of Funds	Adams Street Non-US Developed 2013	\$2,800,000	\$2,098,600	\$868,154	\$2,148,535	1.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$1,700,000	\$1,518,100	\$178,583	\$2,573,260	1.8
Secondary Fund of Funds	Landmark Equity Partners XV	\$5,000,000	\$3,637,029	\$2,612,714	\$2,103,348	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$12,500,000	\$8,875,000	\$673,362	\$13,013,709	1.5
Value Added	Aberdeen Energy & Resources Partners III	\$9,000,000	\$8,640,000	\$2,793,921	\$7,861,304	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$9,000,000	\$8,117,739	\$5,606,722	\$4,285,432	1.2
Separate Account	Neuberger Berman IPU Feeder Fund	\$93,000,000	\$46,459,198	\$0	\$61,699,354	1.3
Total Private Markets		\$201,600,000	\$140,046,722	\$56,812,748	\$135,100,663	1.4

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
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	9/30/2019	6.5%
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	9/30/2019	11.8%
International Fund of Funds	Commonfund Capital International Partners VI	2007	9/30/2019	9.0%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	9/30/2019	13.7%
Value Added	Commonfund NR Partners VIII	2008	9/30/2019	-1.3%
Fund of Funds	Adams Street US Partnership 2010	2010	9/30/2019	14.3%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	9/30/2019	11.9%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	9/30/2019	10.9%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	9/30/2019	10.0%
Opportunistic	MREP Global III	2010	9/30/2019	9.1%
Fund of Funds	Adams Street US Partnership 2012	2012	9/30/2019	11.5%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	9/30/2019	11.9%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	9/30/2019	14.8%
Opportunistic	Commonfund NR Partners IX	2012	9/30/2019	5.3%
Value Added	MREP Global VI	2012	9/30/2019	11.5%
Fund of Funds	Adams Street US Partnership 2013	2013	9/30/2019	11.2%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	9/30/2019	12.5%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	9/30/2019	19.7%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	9/30/2019	12.9%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	9/30/2019	11.0%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2019	6.4%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	9/30/2019	10.6%
Separate Account	Neuberger Berman IPU Feeder Fund	2015	9/30/2019	15.0%
Total Private Markets			9/30/2019	10.1%

Iowa State University Endowment – Private Markets

Since Inception Cash Flows Data as of September 30, 2019

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	\$4,195,806	\$718,627	1.6
Fund of Funds	Commonfund Capital Venture Partners VIII	\$600,000	\$579,000	\$713,525	\$486,467	2.1
International Fund of Funds	Commonfund Capital International Partners VI	\$800,000	\$746,000	\$994,242	\$181,606	1.6
Venture Fund of Funds	Commonfund Private Equity Partners VII	\$1,600,000	\$1,471,200	\$2,070,883	\$886,617	2.0
Value Added	Commonfund NR Partners VIII	\$4,000,000	\$3,860,000	\$1,982,045	\$1,643,314	0.9
Fund of Funds	Adams Street US Partnership 2010	\$1,442,000	\$1,270,402	\$989,827	\$1,296,115	1.8
International Fund of Funds	Adams Street Non-US Developed 2010	\$869,000	\$760,813	\$654,883	\$552,319	1.6
International Fund of Funds	Adams Street Non-US Emerging 2010	\$289,000	\$259,522	\$84,719	\$343,244	1.6
Secondary Fund of Funds	Landmark Equity Partners XIV	\$2,600,000	\$2,519,154	\$2,882,842	\$433,878	1.3
Opportunistic	MREP Global III	\$3,000,000	\$2,737,353	\$3,289,181	\$514,869	1.4
Fund of Funds	Adams Street US Partnership 2012	\$3,100,000	\$2,644,300	\$936,198	\$3,024,203	1.5
International Fund of Funds	Adams Street Non-US Developed 2012	\$1,870,000	\$1,470,755	\$841,533	\$1,295,029	1.5
International Fund of Funds	Adams Street Non-US Emerging 2012	\$630,000	\$585,270	\$132,818	\$839,732	1.7
Opportunistic	Commonfund NR Partners IX	\$4,000,000	\$3,466,000	\$836,864	\$3,328,965	1.2
Value Added	MREP Global VI	\$4,000,000	\$3,643,169	\$3,427,974	\$1,655,079	1.4
Fund of Funds	Adams Street US Partnership 2013	\$2,080,000	\$1,721,200	\$366,989	\$2,085,324	1.4
International Fund of Funds	Adams Street Non-US Developed 2013	\$1,040,000	\$779,480	\$322,456	\$798,026	1.4
International Fund of Funds	Adams Street Non-US Emerging 2013	\$630,000	\$562,590	\$66,181	\$953,622	1.8
Secondary Fund of Funds	Landmark Equity Partners XV	\$1,875,000	\$1,363,893	\$979,763	\$788,761	1.3
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	\$1,875,000	\$1,331,250	\$106,414	\$1,952,057	1.5
Value Added	Aberdeen Energy & Resources Partners III	\$3,000,000	\$2,880,000	\$931,307	\$2,573,382	1.2
Secondary Fund of Funds	Landmark Real Estate Fund VII	\$3,000,000	\$2,705,913	\$1,868,907	\$1,428,479	1.2
Separate Account	Neuberger Berman IPU Feeder	\$38,000,000	\$17,000,802	\$0	\$22,376,239	1.3
Total Private Markets		\$84,050,000	\$57,470,566	\$28,675,357	\$50,155,954	1.4

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
Global Fund of Funds	Neuberger Berman Crossroads Fund XVIII	2006	9/30/2019	6.5%
Fund of Funds	Commonfund Capital Venture Partners VIII	2007	9/30/2019	11.8%
International Fund of Funds	Commonfund Capital International Partners VI	2007	9/30/2019	9.0%
Venture Fund of Funds	Commonfund Private Equity Partners VII	2007	9/30/2019	13.7%
Value Added	Commonfund NR Partners VIII	2008	9/30/2019	-1.3%
Fund of Funds	Adams Street US Partnership 2010	2010	9/30/2019	14.3%
International Fund of Funds	Adams Street Non-US Developed 2010	2010	9/30/2019	11.9%
International Fund of Funds	Adams Street Non-US Emerging 2010	2010	9/30/2019	10.9%
Secondary Fund of Funds	Landmark Equity Partners XIV	2010	9/30/2019	9.6%
Opportunistic	MREP Global III	2010	9/30/2019	9.1%
Fund of Funds	Adams Street US Partnership 2012	2012	9/30/2019	11.5%
International Fund of Funds	Adams Street Non-US Developed 2012	2012	9/30/2019	11.9%
International Fund of Funds	Adams Street Non-US Emerging 2012	2012	9/30/2019	14.8%
Opportunistic	Commonfund NR Partners IX	2012	9/30/2019	5.3%
Value Added	MREP Global VI	2012	9/30/2019	11.5%
Fund of Funds	Adams Street US Partnership 2013	2013	9/30/2019	11.2%
International Fund of Funds	Adams Street Non-US Developed 2013	2013	9/30/2019	12.5%
International Fund of Funds	Adams Street Non-US Emerging 2013	2013	9/30/2019	19.7%
Secondary Fund of Funds	Landmark Equity Partners XV	2013	9/30/2019	12.9%
Global Fund of Funds	Neuberger Berman Crossroads Fund XX	2013	9/30/2019	11.0%
Value Added	Aberdeen Energy & Resources Partners III	2014	9/30/2019	6.3%
Secondary Fund of Funds	Landmark Real Estate Fund VII	2014	9/30/2019	9.7%
Separate Account	Neuberger Berman IPU Feeder Fund	2015	9/30/2019	14.2%
Total Private Markets			9/30/2019	9.5%

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

The sources of information used in this report are believed to be reliable. Marquette Associates, Inc. ("Marquette") has not independently verified all of the information and its accuracy cannot be guaranteed. The views contained herein are those of Marquette and should not be taken as financial advice or a recommendation to buy or sell any security. Any forecasts, figures, opinions or investment techniques and strategies described are intended for informational purposes only. They are based on certain assumptions and current market conditions, and although accurate at the time of writing, are subject to change without prior notice. Opinions, estimates, projections and comments on financial market trends constitute our judgment and are subject to change without notice. References to specific securities are for illustrative purposes only and do not constitute recommendations. Past performance does not guarantee future results.

The results are shown gross of Marquette's investment advisory fees which are described in further detail in Marquette's Form ADV, Part 2 which is available upon request. For example if Marquette's fee is .05% the performance as shown would be reduced by .05%. The results shown include the reinvestment of dividends and other earnings. The peer group used for comparison purposes is InvestorForce. InvestorForce is a financial software company that provides investment performance calculation and analysis software and peer group data for roughly 9,500 plan sponsors and \$4 trillion in assets. It is not owned or affiliated with Marquette in any capacity. Past performance may not be indicative of future results and the performance of a specific individual client account may vary substantially from the median result shown in part, because of specific managers, timing, risk tolerances, and allocation differences. Investors may experience a loss.

This presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any interest in any investment vehicle, and should not be relied on as such. Targets, ranges and expectations set forth in this presentation are approximations; actual results may differ.

The information and opinions expressed herein are as of the date appearing in this material only, are subject to change without prior notice, and do not contain material information regarding the Marquette Model Portfolio, including specific information relating to portfolio investments and related important risk disclosures. The descriptions herein of Marquette's investment objectives or criteria, the characteristics of its investments, investment process, or investment strategies and styles may not be fully indicative of any present or future investments, are not intended to reflect performance and may be changed in the discretion of Marquette. While the data contained herein has been prepared from information that Marquette believes to be reliable, Marquette does not warrant the accuracy or completeness of such information.

Forward-looking statements, including without limitation any statement or prediction about a future event contained in this presentation, are based on a variety of estimates and assumptions by Marquette, including, but not limited to, estimates of future operating results, the value of assets and market conditions. These estimates and assumptions, including the risk assessments and projections referenced, are inherently uncertain and are subject to numerous business, industry, market, regulatory, geo-political, competitive and financial risks that are outside of Marquette's control. There can be no assurance that the assumptions made in connection with any forward-looking statement will prove accurate, and actual results may differ materially. The inclusion of any forward-looking statement herein should not be regarded as an indication that Marquette considers forward-looking statements to be a reliable prediction of future events.

Indices have been selected for comparison purposes only. Client account holdings may differ significantly from the securities in the indices and the volatility of the index may be materially different from client account performance. You cannot invest directly in an index.

Marquette is an independent investment adviser registered under the Investment Advisers Act of 1940, as amended. Registration does not imply a certain level of skill or training. More information about Marquette including our investment strategies, fees and objectives can be found in our ADV Part 2, which is available upon request.