

City of Milwaukee Employees' Retirement System

Public Fund Universe Analysis

Period Ending June 30, 2016

Fund Number: 105



OVERVIEW

RVK, Inc. (“RVK”) was founded in 1985 and is one of the largest independent and employee-owned investment consulting firms in the US, providing world-class investment advice to institutional investors. We serve over 400 plans, including pension plans, defined contribution plans, endowments & foundations, insurance pools, and special purpose funds.

MISSION STATEMENT

To provide best-in-class investment consulting services to a wide array of sophisticated investors.

STRATEGIC INVESTMENT ADVICE WITH NO CONFLICTS OF INTEREST

RVK built its investment consulting practice on the principles of integrity, investment knowledge, client service, and our no conflicts of interest policy. We are exclusively focused on strategic investment consulting services and solely owned by active employees, enabling us to offer advice that is not influenced by other business activities. As a privately-held firm, with no affiliates or parent company, we provide informed and unbiased investment advice to our clients. We offer an extensive slate of consulting services and produce deliverables fully customized to meet each client’s needs.

KEY TENETS OF OUR CULTURE



RVK BY THE NUMBERS

- **30+** years of business
- **3** offices - Portland, Chicago, New York
- **\$650+** billion Full-Retainer AUA
- **90+** Investment Professionals
- **50+** Advanced Degrees and Certifications
- **100%** Employee Ownership
- **100%** Revenue Derived from Client Fees
- **100%** Non-Discretionary Services

GENERAL CONSULTING SERVICES

- Plan Evaluation
- Strategic Asset Allocation
- Investment Policy Development & Review
- Investment Manager Search & Selection
- Performance Analysis & Reporting
- Manager Structure Analysis
- Risk Monitoring and Management
- Client Education
- Special Projects

SPECIALTY CONSULTING SERVICES

- Real Estate Consulting Services
- Custody, Record keeper, Third-Party Administrator Searches
- Asset/Liability Studies
- Endowment Spending Policy Studies
- Securities Lending Reviews
- Pacing Studies
- Strategic Planning Reviews
- Outsourced CIO (“OCIO”) Searches, Evaluation, and Ongoing Monitoring
- Directed Consulting Services
- Fee Reviews
- Defined Contribution Solutions Services
- Investment Operations Solutions
- Board and Investment Program Operational Reviews

FOR MORE INFORMATION ABOUT OUR SERVICES, PLEASE CONTACT:

Business.Development@RVKInc.com
503-221-4200

Participants

Alameda County Employees' Retirement Association

California State Teachers' Retirement System

City of Milwaukee Employees' Retirement System (105)

Colorado Public Employees' Retirement Association

Contra Costa County Employees' Retirement Association

District of Columbia Retirement Board

Employees Retirement System of Texas

Fire and Police Pension Association of Colorado

Fort Worth Employees' Retirement Fund

Georgia Division of Investment Services

Illinois Municipal Retirement Fund

Iowa Public Employees' Retirement System

Kentucky Retirement Systems

Kern County Employees' Retirement Association

Los Angeles County Employees Retirement Association

Los Angeles Water & Power Employees Retirement Plan

Mendocino County Employees' Retirement Association

Montana Public Employees' Retirement System

Municipality of Anchorage Pre-Funding Program

Nevada Public Employees' Retirement System

Newport News Employees' Retirement Fund

Ohio Public Employees' Retirement System

Pennsylvania Public School Employees' Retirement System

Police Retirement System of Kansas City, Missouri

Sacramento County Employees' Retirement System

San Diego County Employees Retirement Association

San Joaquin County Employees' Retirement Association

San Jose Police and Fire Department Retirement Plan

Santa Barbara County Employees' Retirement System

Arlington County Employees' Retirement System

City of Fresno Retirement Systems

Civilian Employees' Retirement System of the Police Department of Kansas City, Missouri

Confederated Tribes of the Warm Springs Tribal Council Pension Fund

County Employees' Annuity & Benefit Fund of Cook County

Educational Employees' Supplementary Retirement System of Fairfax County

Fire & Police Employees' Retirement System of Baltimore

Florida State Board of Administration

Fresno County Employees' Retirement Association

Gila River Indian Community Retirement Plan

Imperial County Employees' Retirement System

Kansas Public Employees' Retirement System

Kentucky Teachers' Retirement System

Los Angeles City Employees' Retirement System

Los Angeles Fire and Police Pension System

Marin County Employees' Retirement Association

Merced County Employees' Retirement Association

Montana Teachers' Retirement System

Municipality of Anchorage Trust Fund

New York State Common Retirement Fund

North Carolina Retirement System

Orange County Employees' Retirement System

Pennsylvania State Employees' Retirement System

Public School and Education ERS of Missouri

San Bernardino County Employees' Retirement Association

San Diego Transit Corporation Employees Retirement

San Jose Federated City Employees' Retirement System

San Mateo County Employees' Retirement Association



South Dakota Retirement System
State of Michigan Retirement Systems
State Retirement and Pension System of Maryland
State Universities Retirement System of Illinois
Texas Municipal Retirement System
Tulare County Employees' Retirement Association
Virginia Retirement System
Wyoming Retirement System

Sonoma County Employees' Retirement Association
Stanislaus County Employees' Retirement Association
State of New Jersey Pension Fund
State Teachers Retirement System of Ohio
Teachers' Retirement System of the State of Illinois
The Navajo Nation Retirement Plan
Ventura County Employees' Retirement Association
West Virginia Investment Management Board

Second Quarter Economic Environment

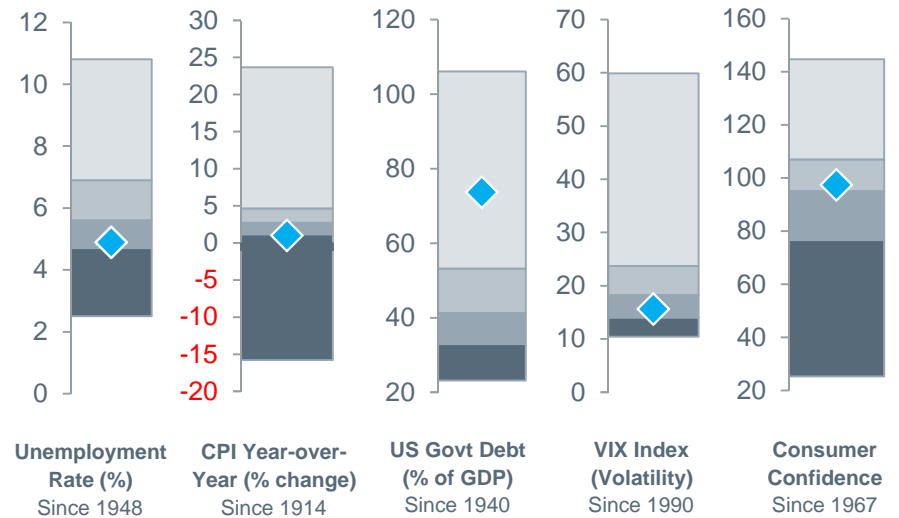
Key Economic Indicators

The second quarter of 2016 was characterized by a broad based rally across commodities, a range bound US dollar, and a flight to safety on the back of the UK's referendum vote to leave the European Union. Uncertainty around Brexit dominated the news flow in late June and catalyzed a flight to safety across risk assets. Recent data show that 36% of outstanding global developed market government debt is now yielding less than 0%. However, investors continue to have an appetite for risk where yields remain positive. In developed markets, the surprise Brexit vote led to sharp initial declines in equities, though markets recovered quickly following a series of dovish statements from central banks. Long duration assets outperformed short duration, and gold rallied amid the flight to safety. In the US, probabilities for a June interest rate hike swung from as high as 35% in late May, down to 0% after disappointing May payroll numbers were released.

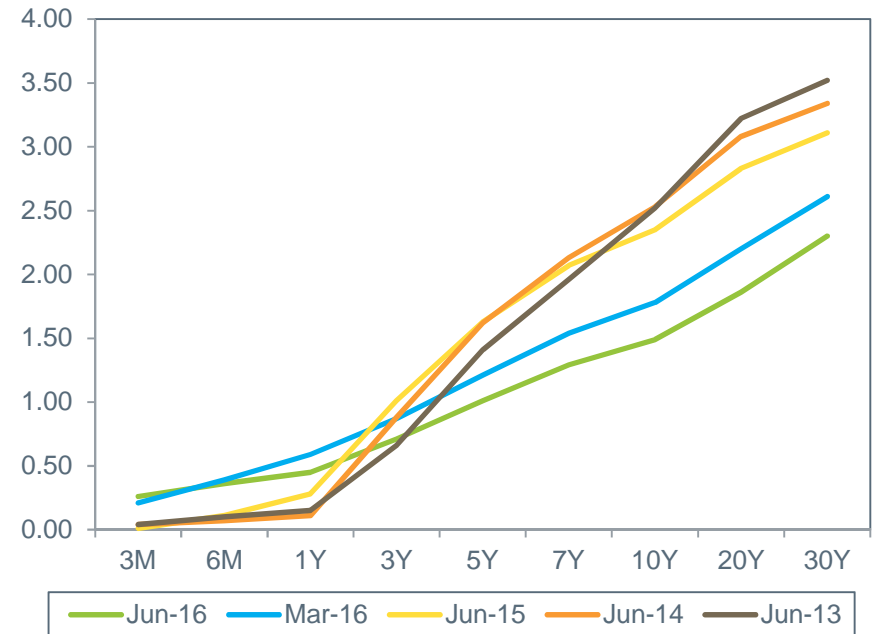
Economic Indicators	Jun-16	Mar-16	Jun-15	Jun-13	20 Yr
Federal Funds Rate (%)	0.30 ▲	0.25	0.08	0.07	2.47
Breakeven Infl. - 1 Yr (%)	1.17 ▼	2.10	0.73	0.74	N/A
Breakeven Infl. - 10 Yr (%)	1.44 ▼	1.63	1.89	1.99	N/A
CPI YoY (Headline) (%)	1.0 ▲	0.9	0.1	1.8	2.2
Unemployment Rate (%)	4.9 ▼	5.0	5.3	7.5	6.0
Real GDP YoY (%)	1.2 ▼	1.6	3.0	1.0	2.4
PMI - Manufacturing	53.20 ▲	51.80	53.10	52.30	52.20
USD Total Wtd Idx	90.64 ▲	89.84	89.96	77.58	86.76
WTI Crude Oil per Barrel (\$)	48 ▲	38	59	97	55
Gold Spot per Oz (\$)	1,322 ▲	1,233	1,172	1,235	762

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	2.46	3.84	3.99	12.10	7.42
Russell 2000	3.79	2.22	-6.73	8.35	6.20
MSCI EAFE (Net)	-1.46	-4.42	-10.16	1.68	1.58
MSCI EAFE SC (Net)	-2.60	-3.18	-3.67	4.84	3.57
MSCI Emg Mkts (Net)	0.66	6.41	-12.05	-3.78	3.54
Barclays US Agg Bond	2.21	5.31	6.00	3.76	5.13
BofA ML 3 Mo US T-Bill	0.07	0.15	0.19	0.09	1.04
NCREIF ODCE (Gross)	2.13	4.36	11.82	12.72	6.17
Wilshire US REIT	5.60	11.09	22.82	12.48	6.99
HFN FOF Multi-Strat	0.36	-2.83	-6.48	1.46	1.24
Bloomberg Cmdty (TR)	12.76	13.23	-13.34	-10.83	-5.59

Key Economic Indicators



Treasury Yield Curve (%)



Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as N/A.

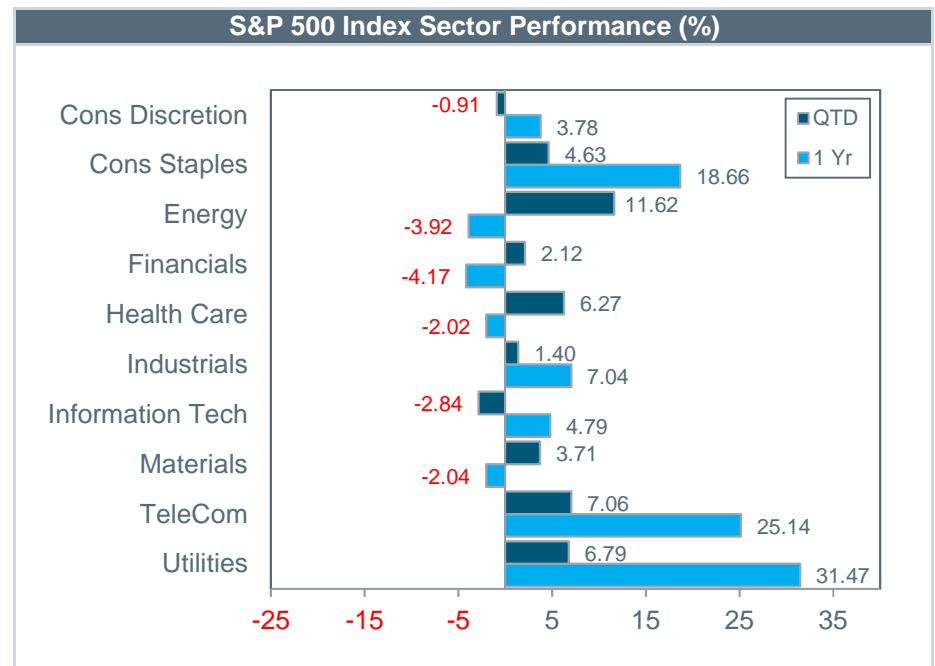
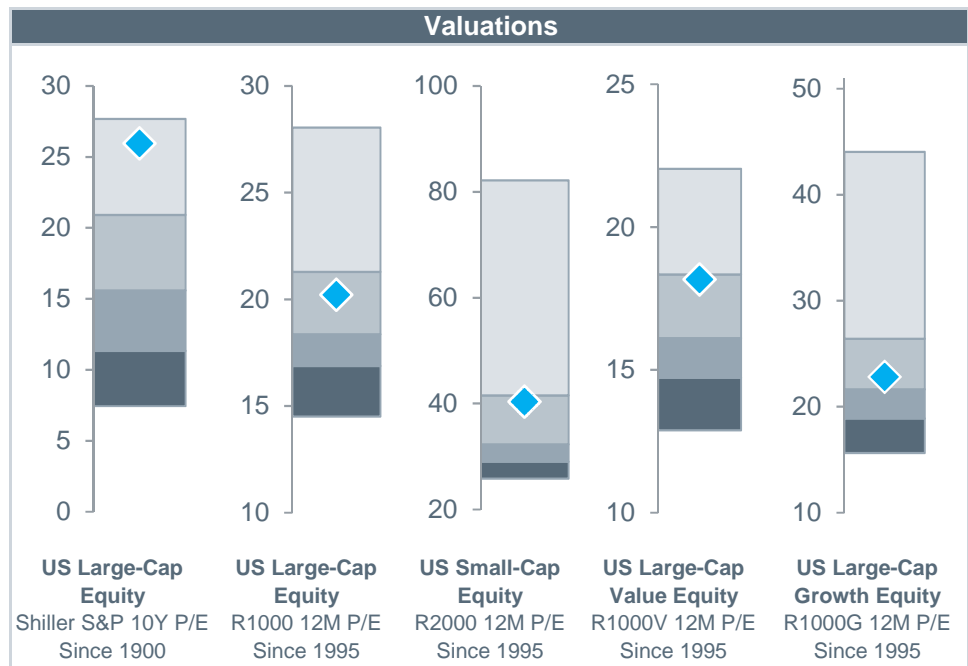
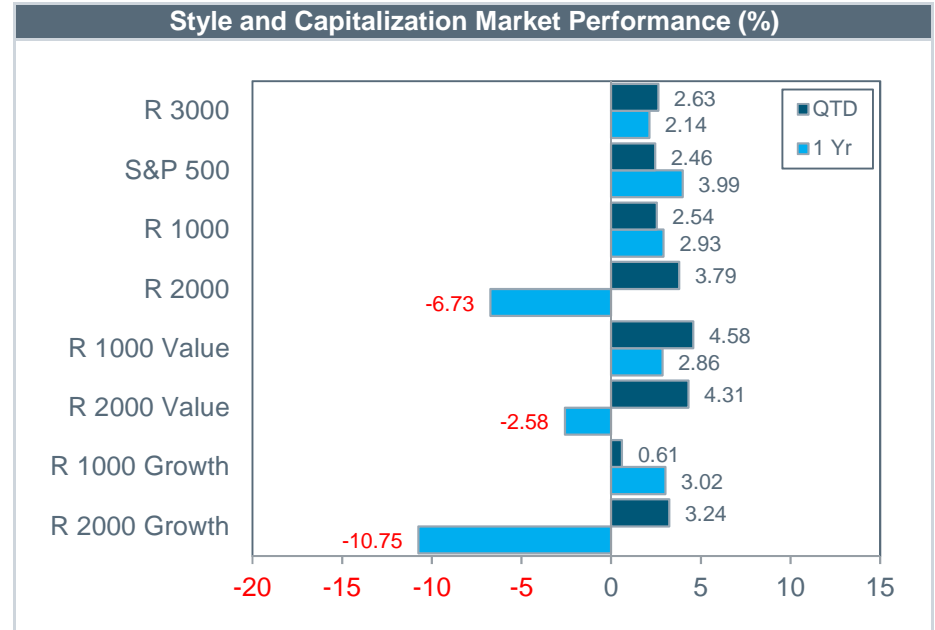


Second Quarter Review

Broad Market
 US equity markets finished the quarter in positive territory across all market capitalization ranges and styles, with the Russell 3000 Index rising 2.6%.

Market Cap
 Small cap stocks outperformed larger-cap stocks this quarter, as the Russell 2000 Index outperformed the Russell 1000 Index by 125 basis points.

Style and Sector
 Historically stable sectors such as utilities, consumer staples, and telecommunications continued to post strong gains as market volatility persisted and notably increased in the final week of the quarter amidst the uncertainty created by the UK's EU Referendum. Additionally, value stocks outperformed their growth counterparts over the quarter.



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Second Quarter Review

Developed Markets

Developed international markets continue to struggle, detracting value for the quarter and underperforming domestic equities. The uncertainty created by the UK's EU referendum is expected to result in a near-term slow-down in the EU, particularly in the UK. The European Economic Union ("EMU") was the worst performing developed region.

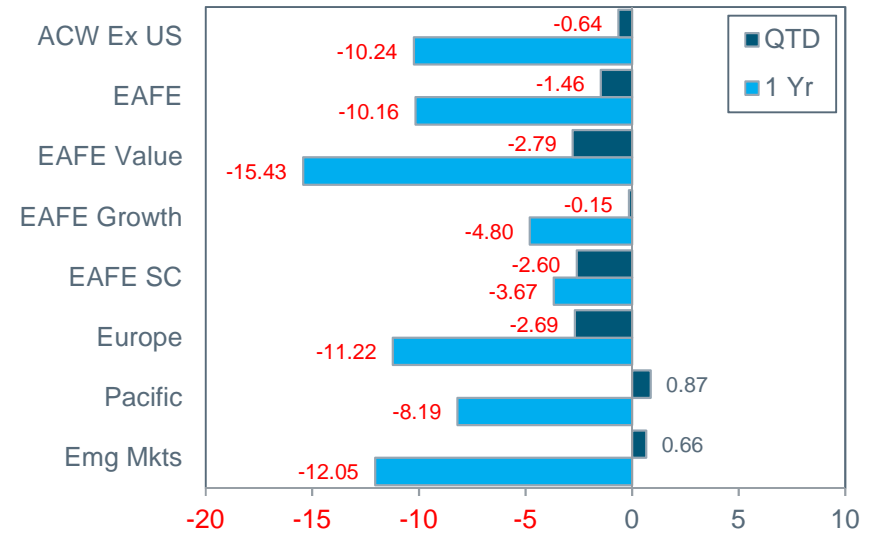
Emerging Markets

Emerging markets lagged domestic equities during the quarter, but performed better than developed international equity and have provided the highest returns among equity regions in 2016. Value underperformed growth for the quarter, but is still ahead year-to-date.

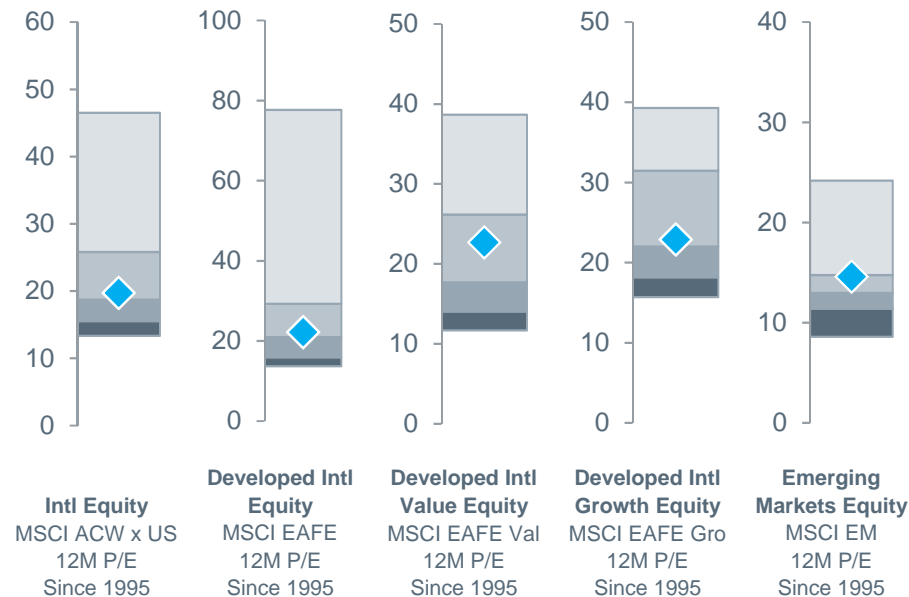
Market Cap & Style

The style trend continued as growth outpaced value with the MSCI EAFE Growth Index ending the quarter relatively flat at -0.1%, while the MSCI EAFE Value Index returned -2.8%. Small caps were a weak spot, lagging large cap developed stocks.

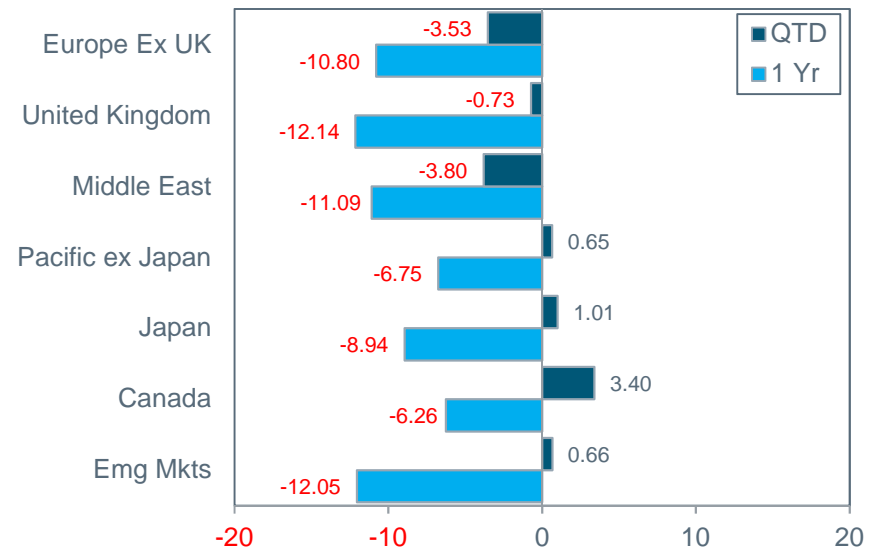
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.



Second Quarter Review

Broad Market

Virtually all fixed income sectors posted positive performance as interest rates fell and credits improved during the quarter. The Barclays US Agg posted a strong quarter, returning 2.21%.

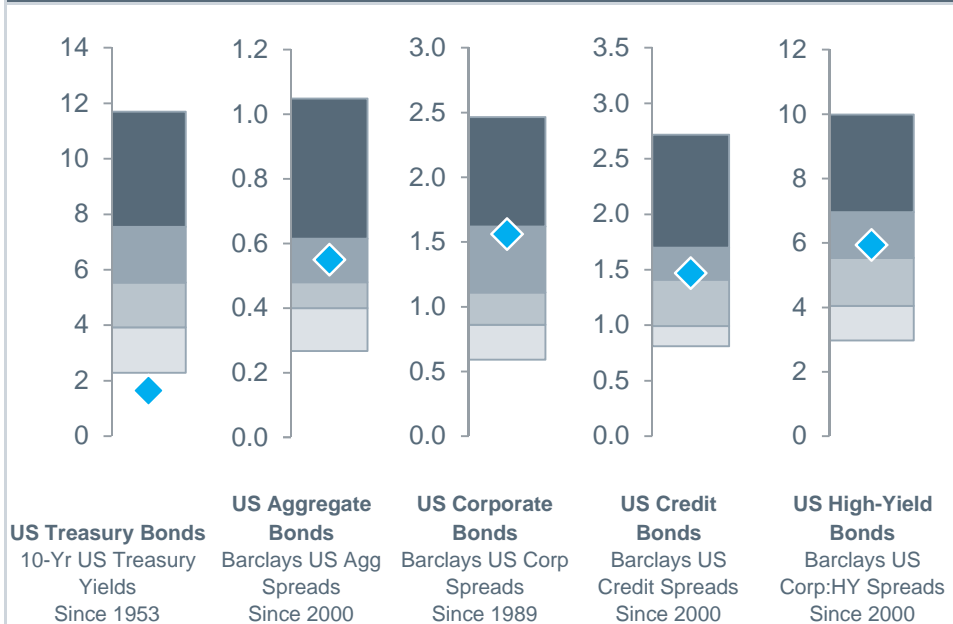
Credit Market

Utility and industrial bonds outperformed financial bonds as energy and commodity prices continued to rebound.

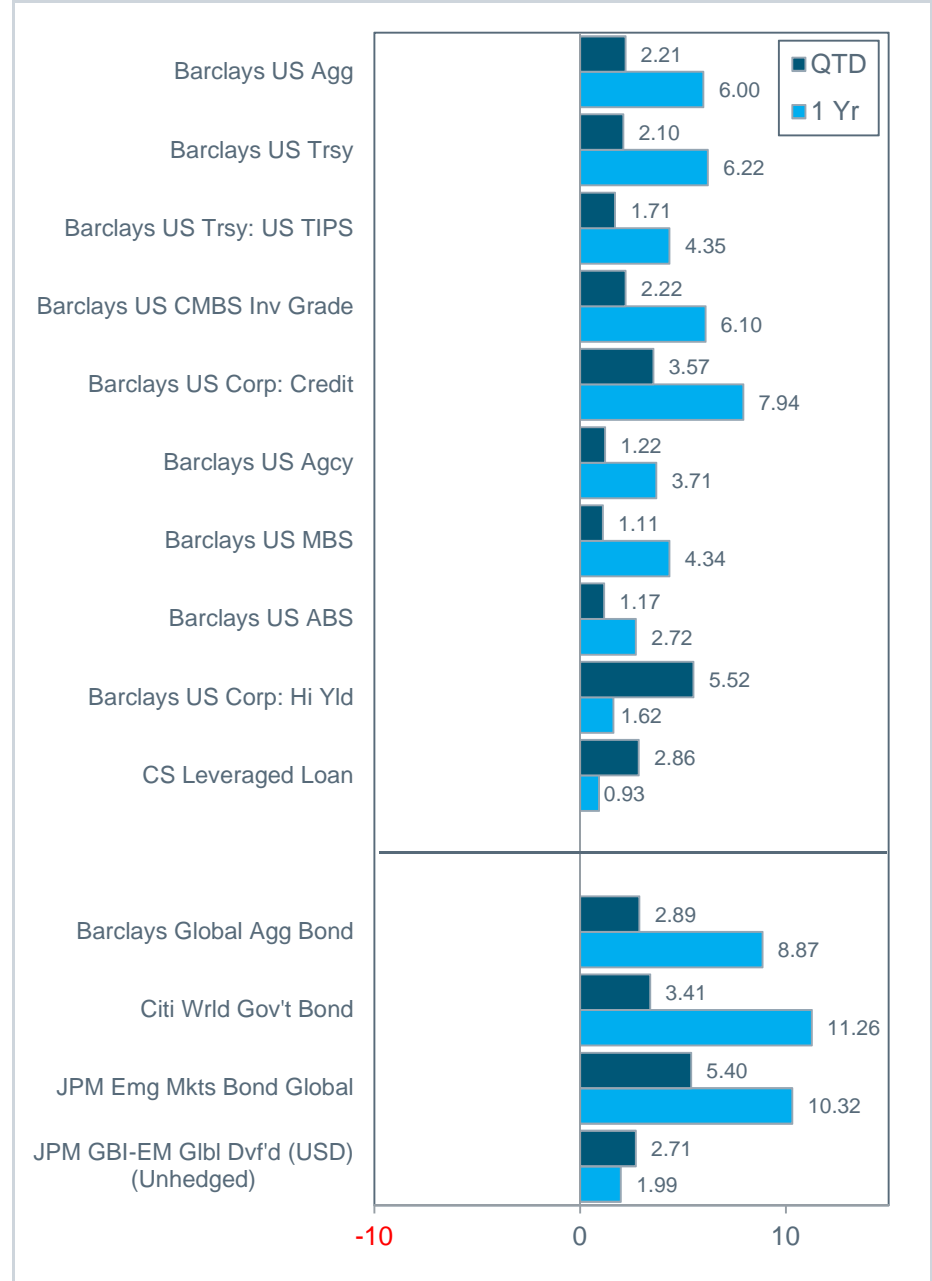
Emerging Market Debt

Both local currency and hard currency emerging markets debt posted strong returns for a second consecutive quarter. Emerging market debt outperformed both US and developed markets, as evidenced by the JPM Emg Mkts Bond Global Index returning 5.40% during the quarter.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Second Quarter Review - Absolute Return

General Market - Hedge Funds

After a poor first quarter, the hedge fund industry performed better during the second quarter of 2016, though Fund of Hedge Fund (“FoHF”) portfolios are still down between 2.5% to 3.0% year-to-date based on available peer group based benchmarks. Most of the FoHF managers RVK follows closely have performed roughly in line with peers YTD, with any dispersion explained to a large degree by strategy allocation. On the direct side, multi-strategy managers as a group continued to outperform their FoHF counterparts.

General Market - Global Tactical Asset Allocation (GTAA)

GTAA funds provided a dispersion in results for the second quarter, with many significantly outperforming an undiversified static portfolio of 60% US large cap equity and 40% US fixed income. Those that outperformed by the widest margins tended to follow fundamental value-oriented processes that have led to higher allocations to emerging market fixed income, high yield fixed income, and REITs.

Second Quarter Review - Real Assets

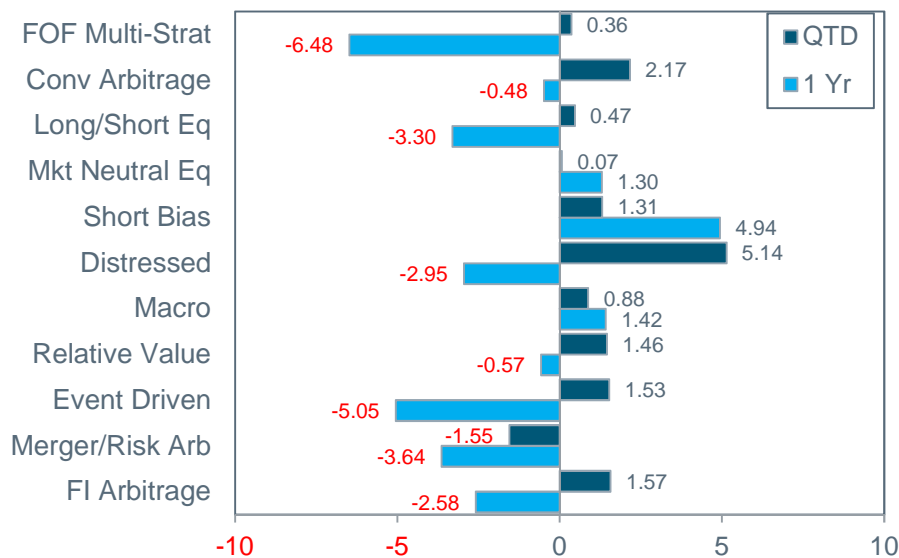
General Market - Diversified Inflation Strategies (DIS)

DIS provided strong performance with relatively narrow divergence for the second consecutive quarter. Most strategies significantly outperformed major world equity and fixed income indices, in addition to TIPS. Commodities, especially energy, provided strong performance over the quarter in a welcome reprieve from the longer-term trend of negative performance.

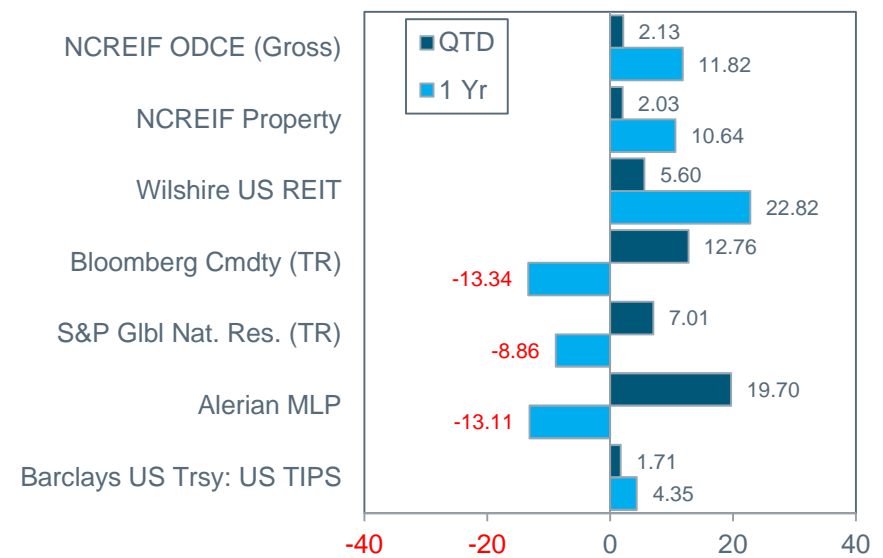
General Market - Real Estate

Due to the prolonged low-interest rate environment occurring globally and the economic uncertainty brought upon by the recent Brexit vote, the real estate sector proved to be an attractive option during the second quarter as investors sought the perceived safe-haven of property as well as the continued strong dividends yields relative to global treasury rates. The private real estate sector experienced themes similar to listed real estate as evidenced by a preliminary 2.1% return in the NCREIF-ODCE Index during Q2.

HFN Hedge Fund Performance (%)



Real Asset Performance (%)

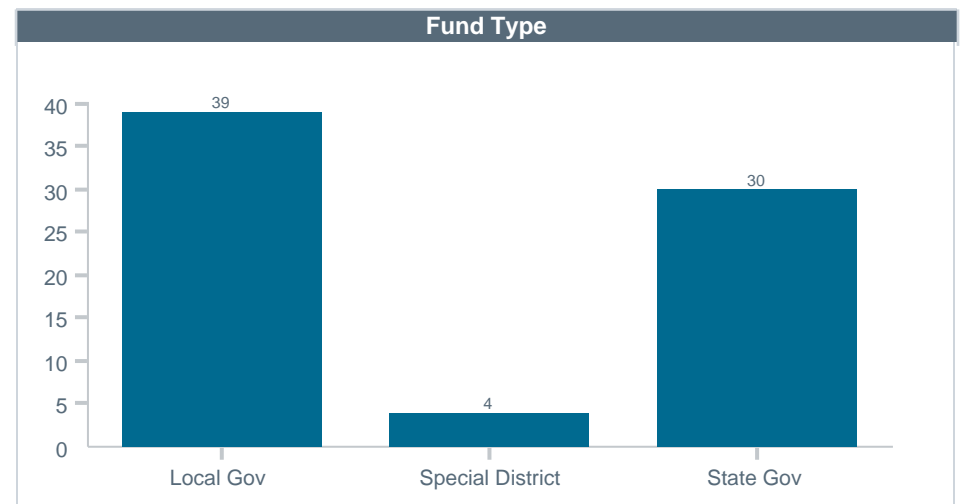
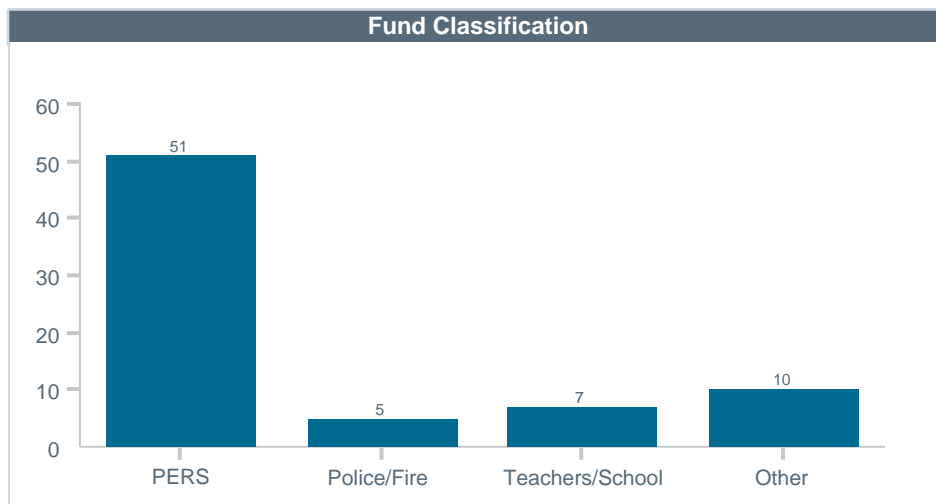
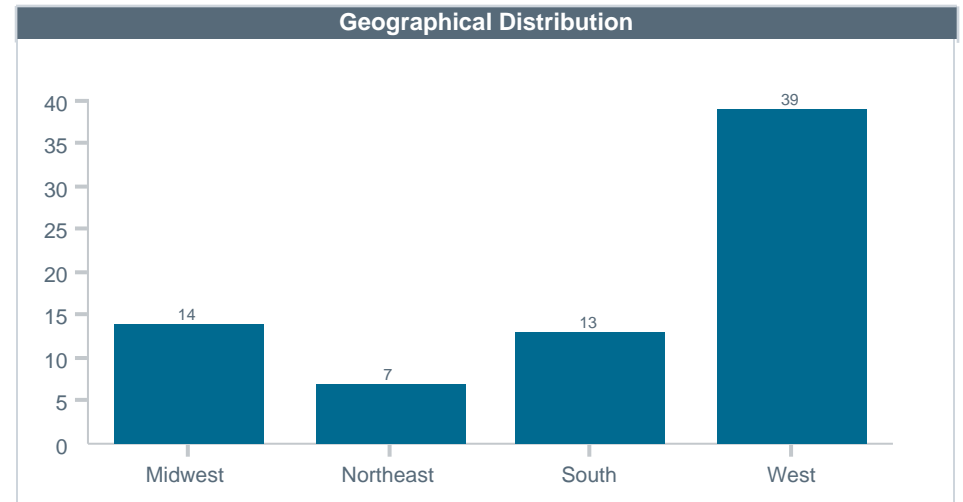
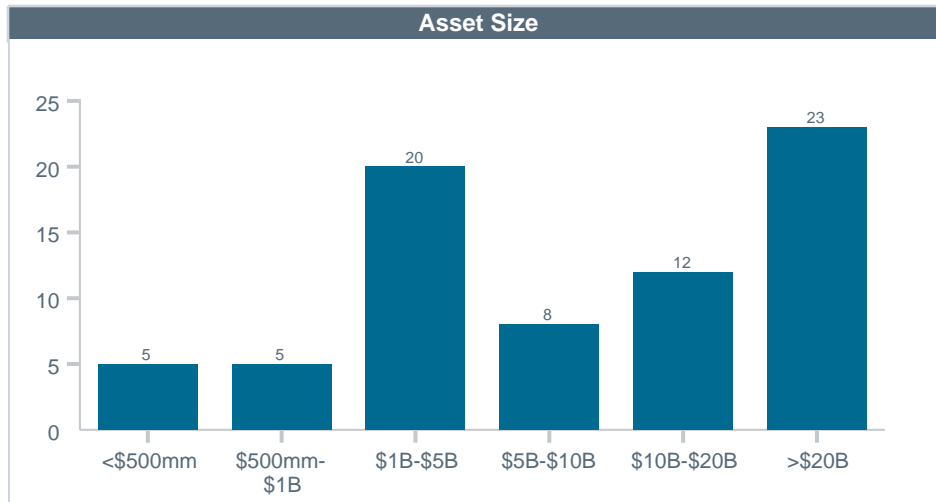


Annual Asset Class Performance

As of June 30, 2016

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	YTD
Best	25.91	61.34	33.16	34.00	35.97	39.38	8.44	78.51	28.60	22.49	20.00	38.82	31.78	15.02	14.33
	16.56	55.81	31.45	26.19	32.18	16.23	5.24	58.21	26.86	15.99	18.23	32.39	19.31	9.59	13.23
	14.81	47.25	25.55	21.39	26.34	15.97	2.06	46.78	22.04	13.56	17.59	29.30	13.69	4.23	11.09
	10.25	38.59	20.25	21.36	19.31	11.63	-2.35	31.78	18.88	9.24	17.32	22.78	12.50	1.38	9.06
	5.54	36.18	18.33	13.82	18.37	11.17	-10.01	28.60	16.83	7.84	16.34	13.94	5.97	0.55	6.41
	3.58	28.97	13.06	13.54	16.32	9.91	-20.47	27.18	16.36	4.98	16.00	9.10	4.89	0.05	6.24
	3.12	28.68	11.13	6.75	15.79	6.97	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.81	5.31
	1.78	23.93	10.88	5.33	11.85	6.60	-33.79	18.91	15.06	0.10	10.94	1.86	3.03	-1.24	4.36
	-1.41	11.93	9.15	4.91	9.85	5.49	-35.65	11.41	10.16	-4.18	8.82	0.07	2.45	-1.44	3.84
	-6.17	9.28	8.56	4.55	4.85	5.00	-37.00	9.72	7.75	-5.55	6.98	-2.02	0.04	-3.30	2.22
	-7.83	8.39	8.46	3.07	4.33	1.87	-39.20	5.93	6.54	-12.14	4.80	-2.60	-2.19	-4.41	0.15
	-15.94	5.87	6.79	2.84	2.71	1.45	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.30	-4.47	-2.83
	-20.48	4.10	4.34	2.74	2.07	-1.57	-47.01	0.21	4.77	-15.94	0.11	-8.83	-4.95	-14.92	-3.18
Worst	-22.10	1.15	1.33	2.43	0.41	-17.55	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	-4.42
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Barclays US Agg Bond - FI	Barclays US Corp: Hi Yield - FI	Barclays US Trsy: US TIPS - FI	Barclays US Gov/Credit: Lng - FI	NCREIF ODCE (Gross) - Real Estate	Wilshire US REIT - REITs	HFN FOF Multi-Strat (Net) - ARS	Bloomberg Cmdty (TR) - Commod.	BofA ML 3 Mo T-Bill - Cash Equiv	



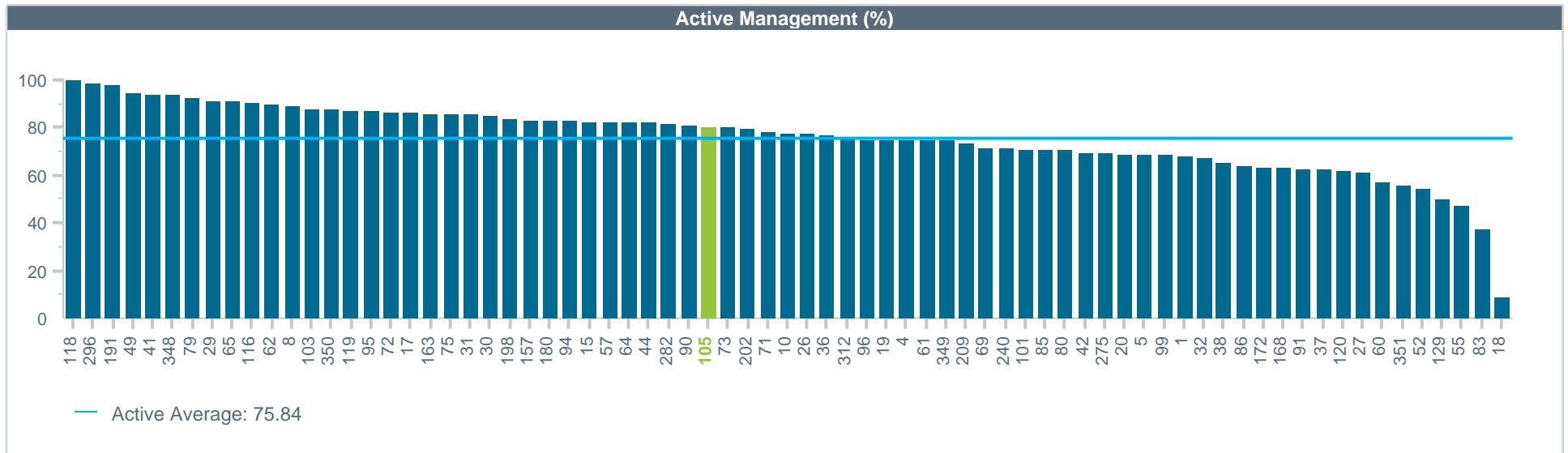
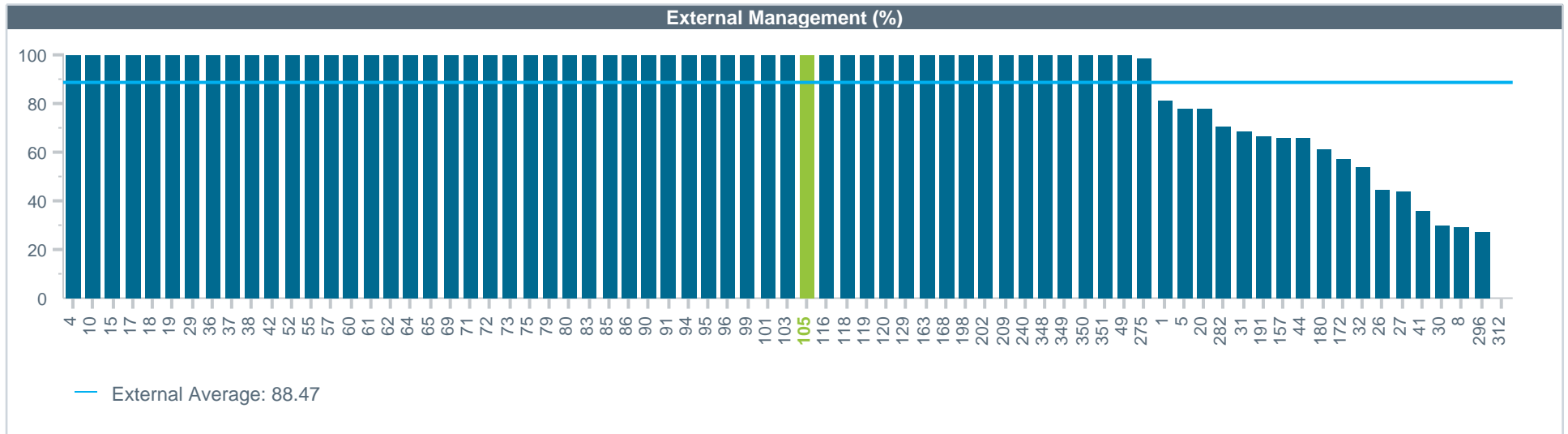


■ Universe: 73 funds



Portfolio Management

Percentage Externally Managed & Percentage Actively Managed



■ City of Milwaukee ERS



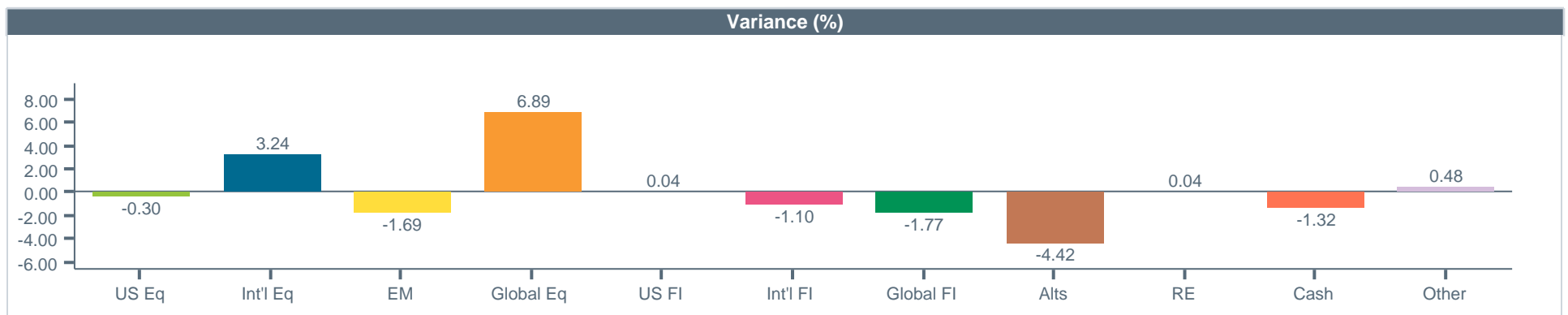
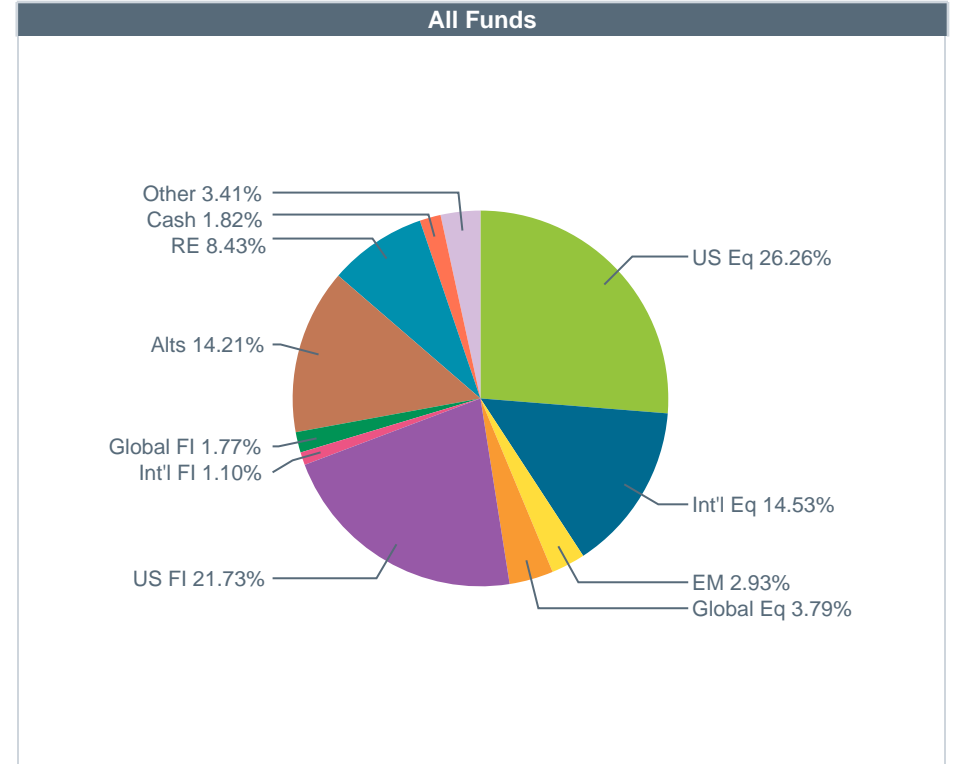
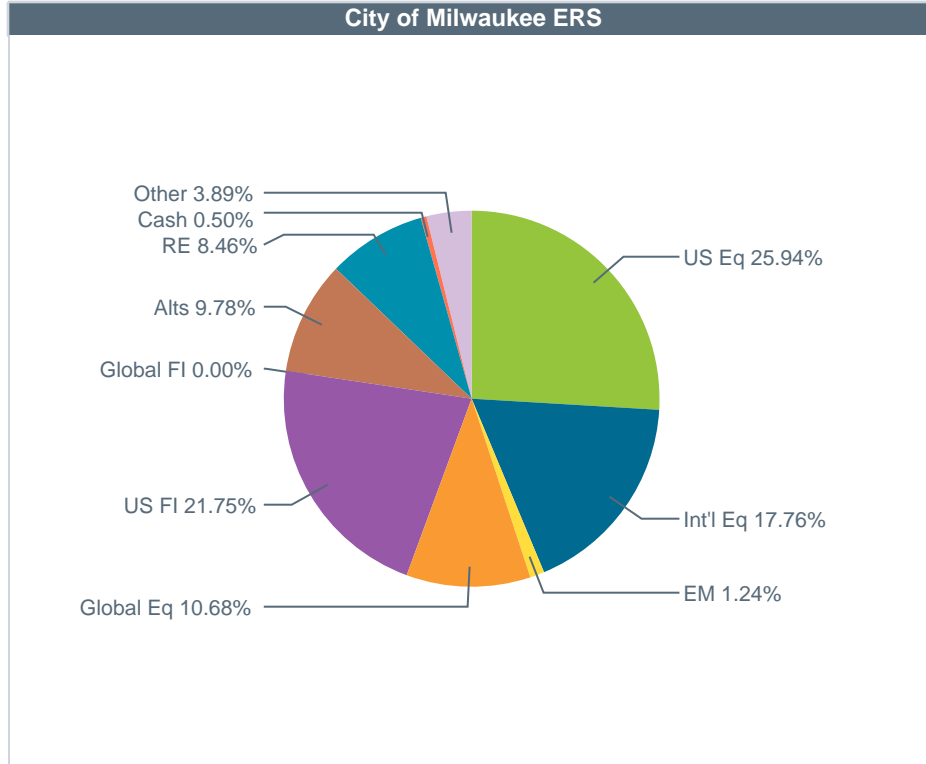
Asset Range	Actively Managed (%)	Passively Managed (%)	Externally Managed (%)	Internally Managed (%)
Over \$20B	75.54	24.46	75.18	24.82
\$10B-\$20B	73.18	26.82	81.24	18.76
\$5B-\$10B	72.43	27.57	97.26	2.74
\$1B-\$5B	76.78	23.22	98.91	1.09
\$500mm-\$1B	74.62	25.38	99.71	0.29
Under \$500mm	86.49	13.51	99.96	0.04
City of Milwaukee ERS	80.47	19.53	100.00	0.00

Portfolio (%)	Active Management		External Management	
	Public Fund Universe	City of Milwaukee ERS	Public Fund Universe	City of Milwaukee ERS
90 to 100	10	0	55	1
50 to 89	59	1	11	0
10 to 49	3	0	6	0
Less than 10	1	0	1	0
Total Funds Reporting	73	1	73	1



Asset Allocation

City of Milwaukee ERS vs. Average of All Funds

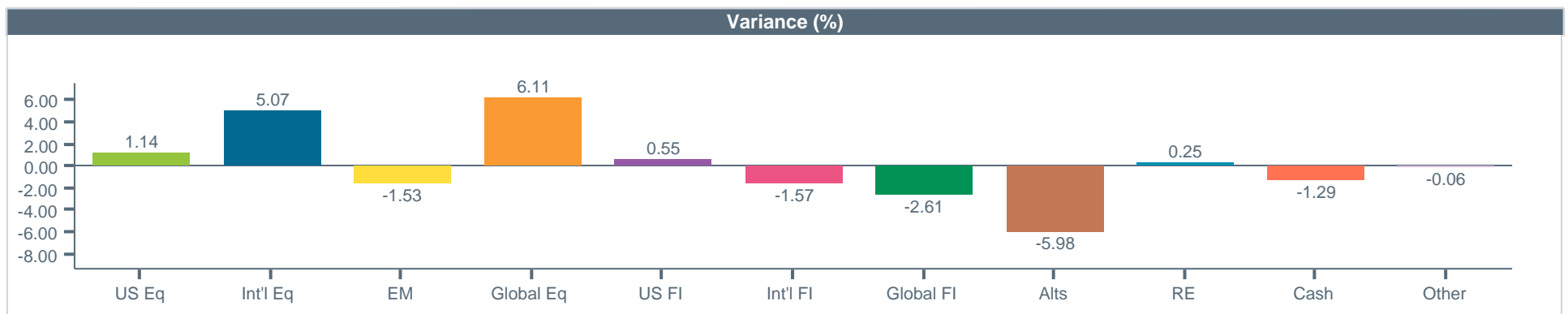
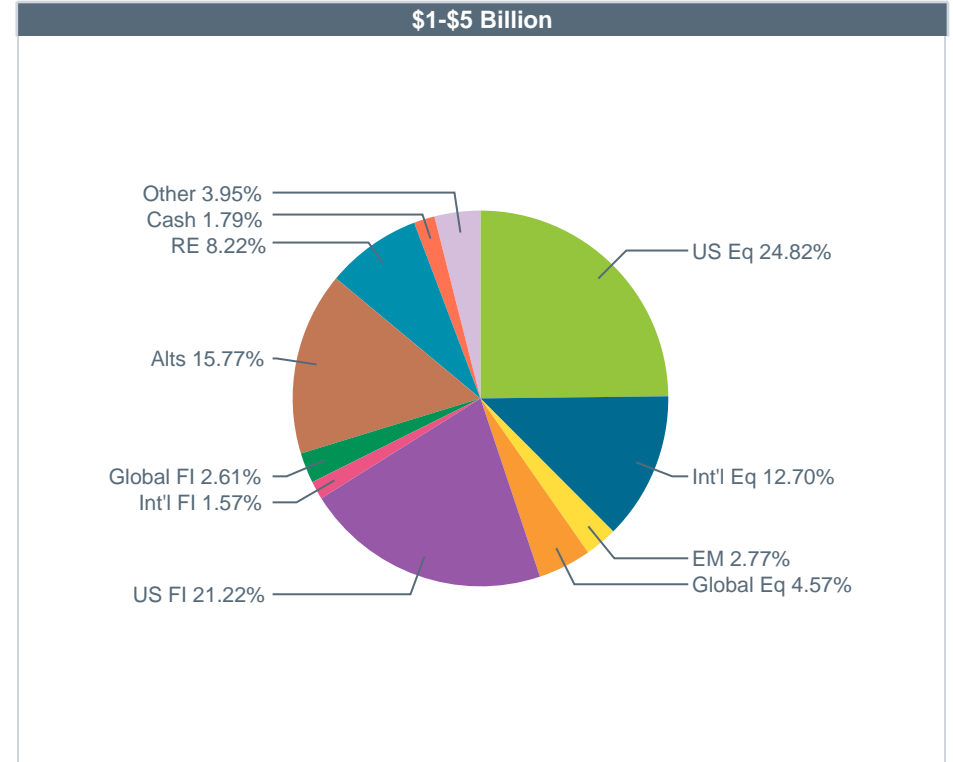
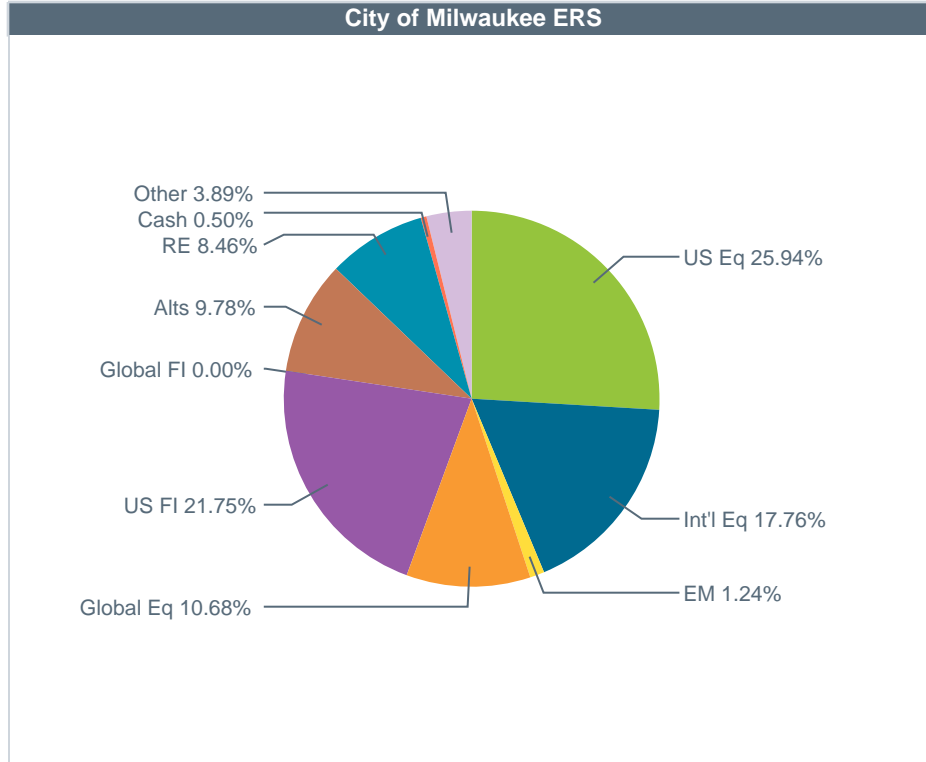


Allocations shown may not sum up to 100% exactly due to rounding.



Asset Allocation

City of Milwaukee ERS vs. Average of Similar Size Funds

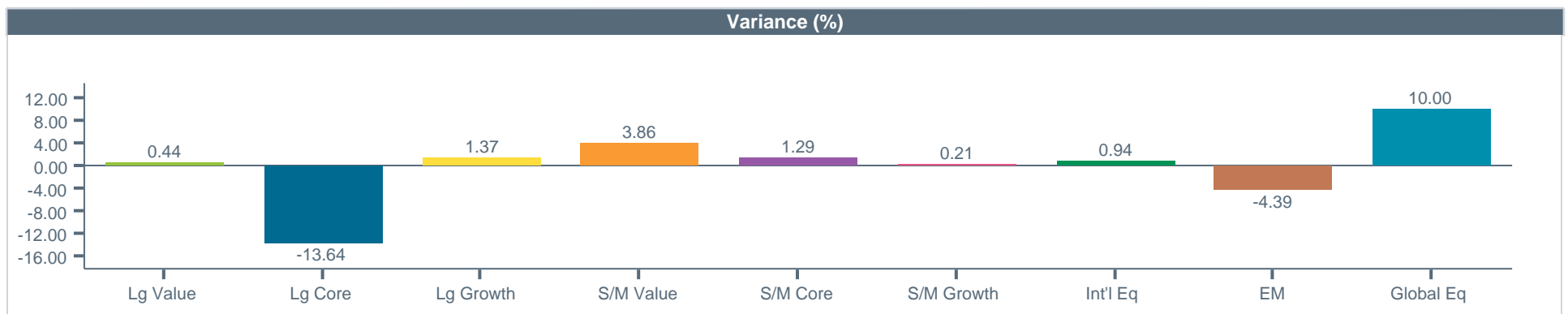
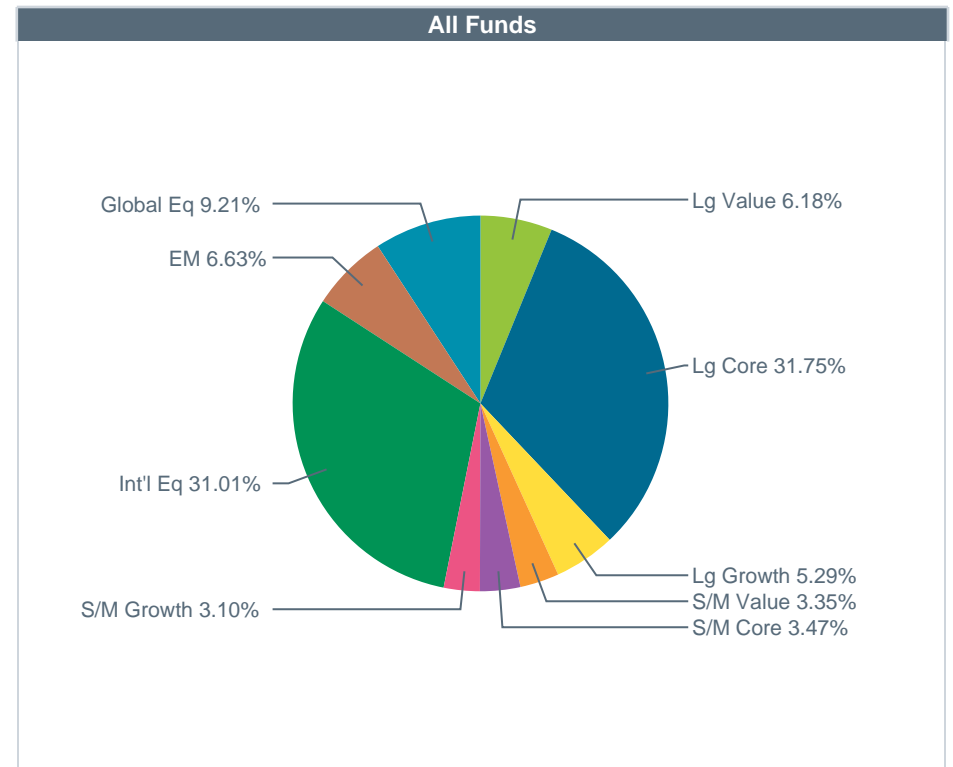
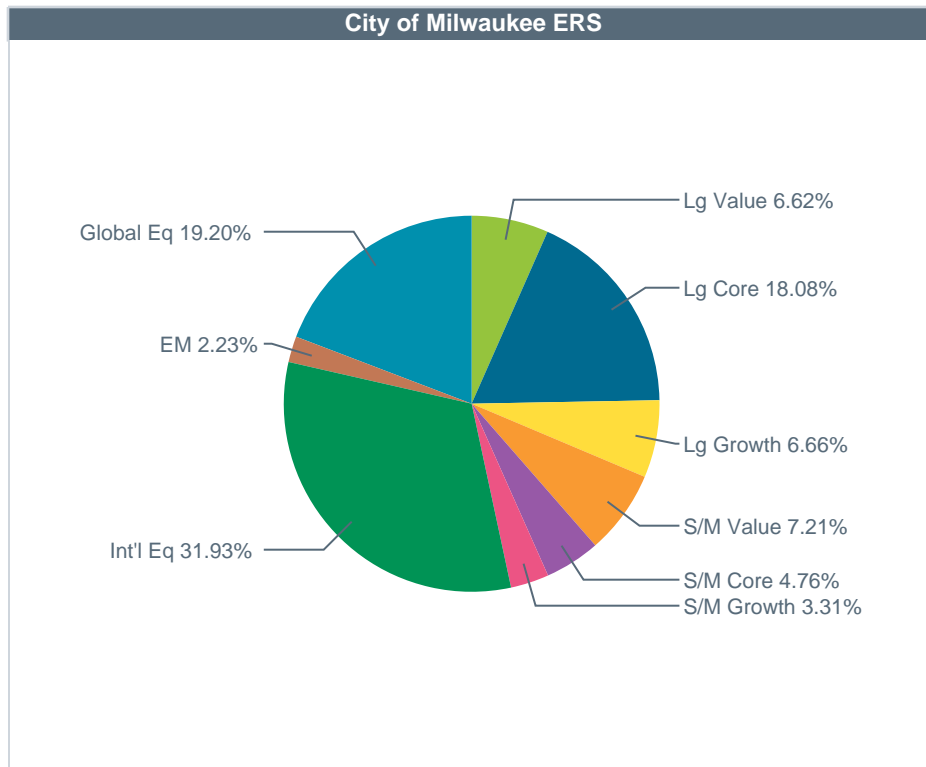


Allocations shown may not sum up to 100% exactly due to rounding.



Equity Style Allocation

City of Milwaukee ERS vs. Average of All Funds

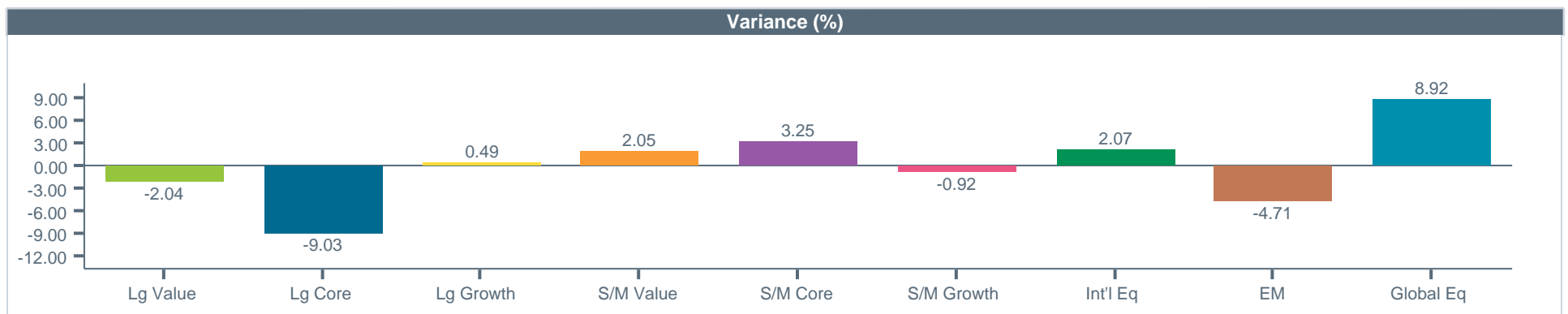
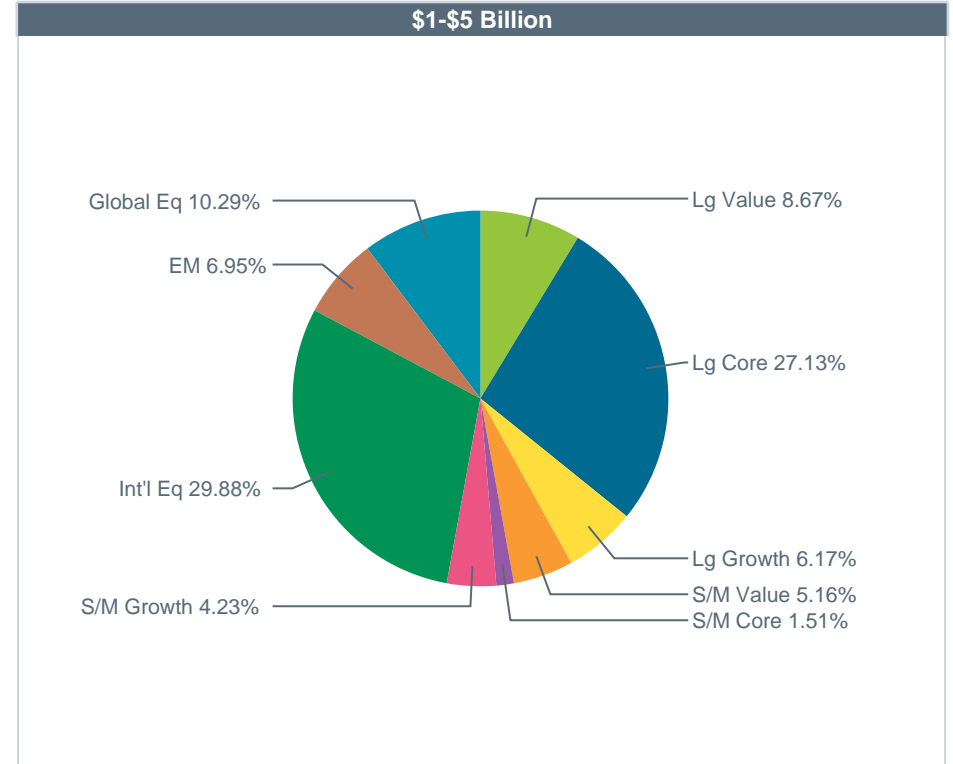
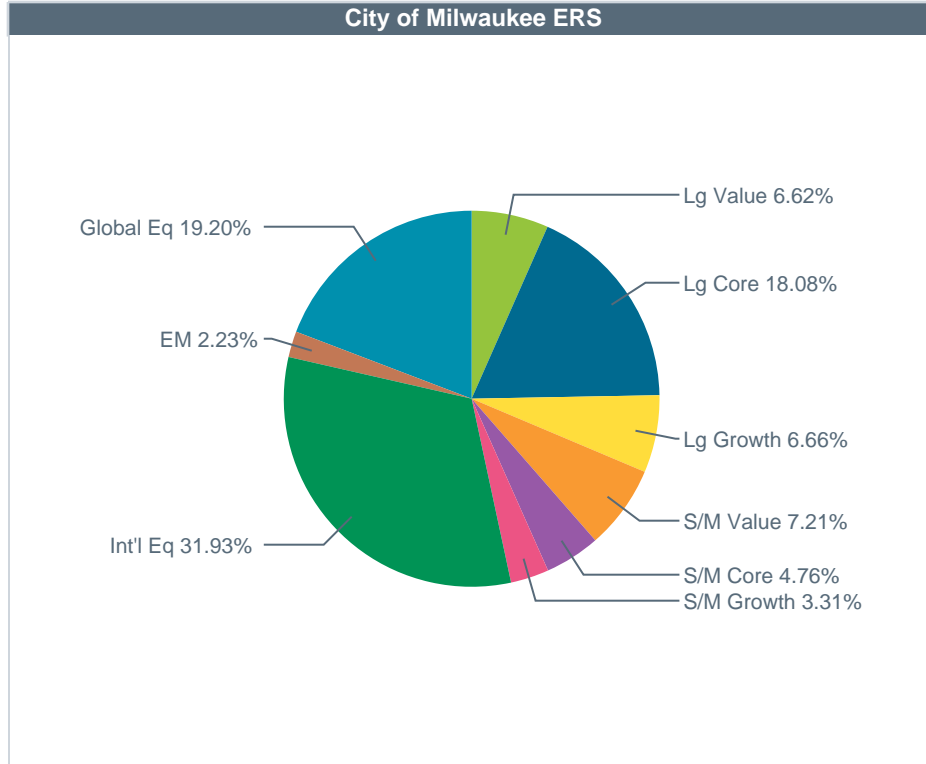


Allocations shown may not sum up to 100% exactly due to rounding.



Equity Style Allocation

City of Milwaukee ERS vs. Average of Similar Size Funds

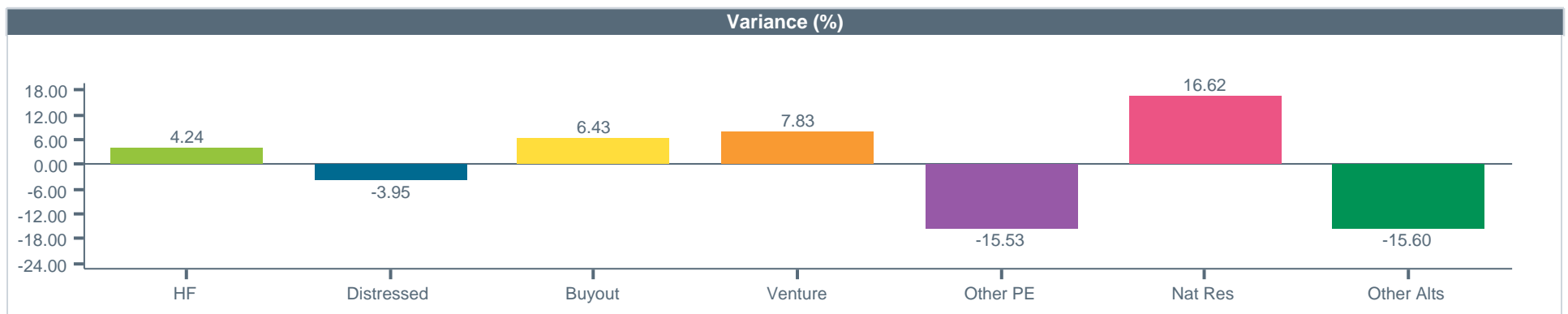
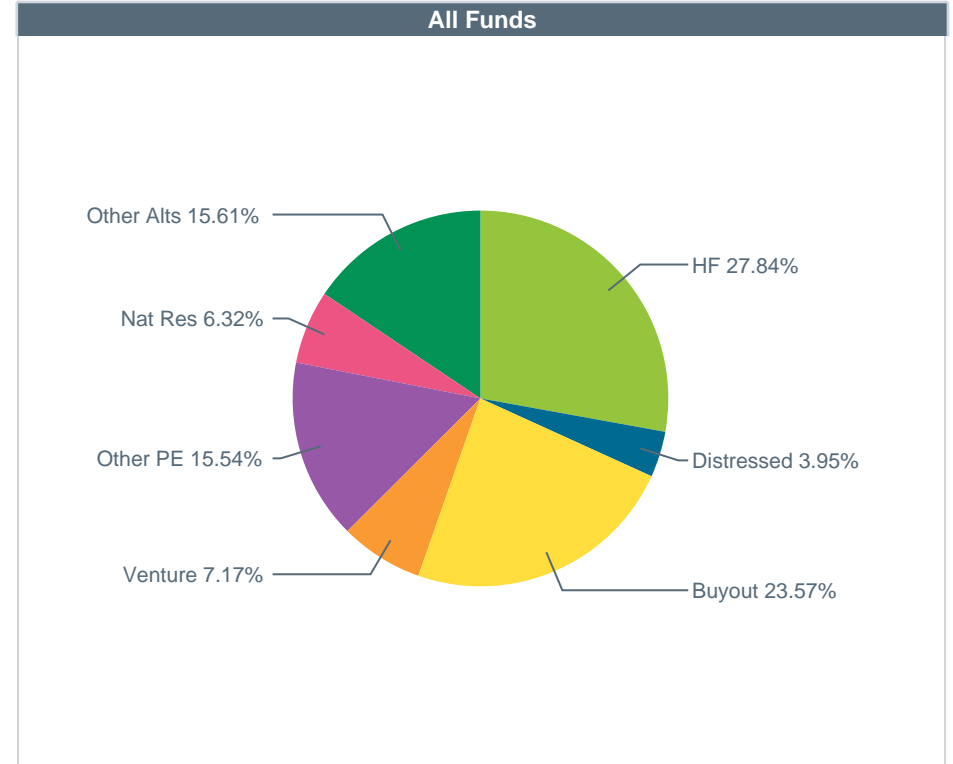
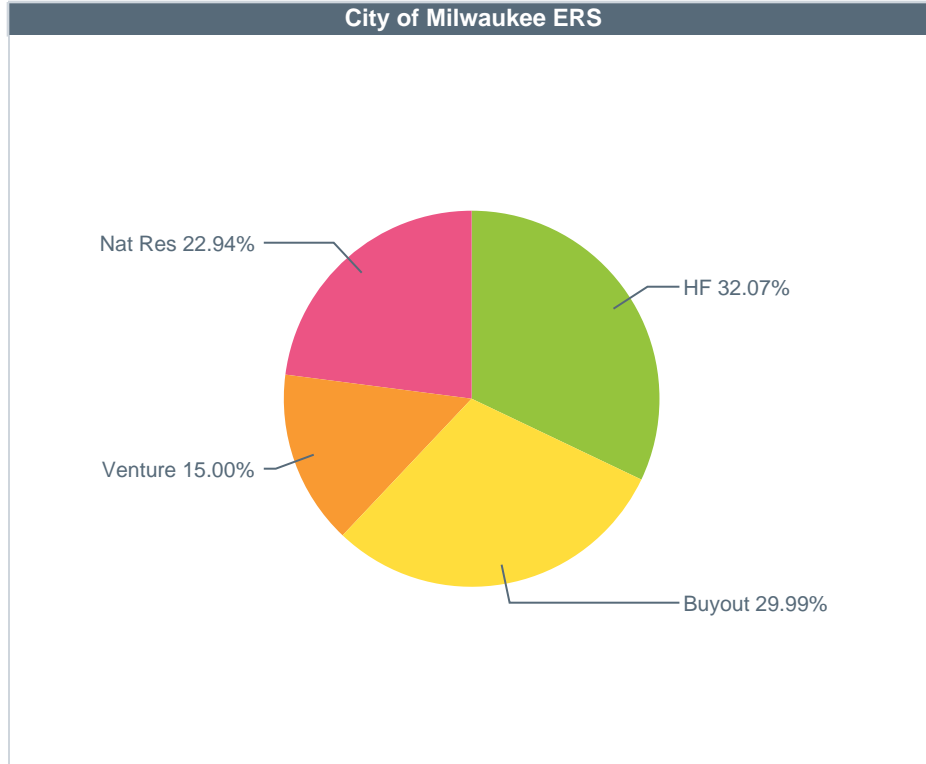


Allocations shown may not sum up to 100% exactly due to rounding.



Alternatives Style Allocation

City of Milwaukee ERS vs. Average of All Funds

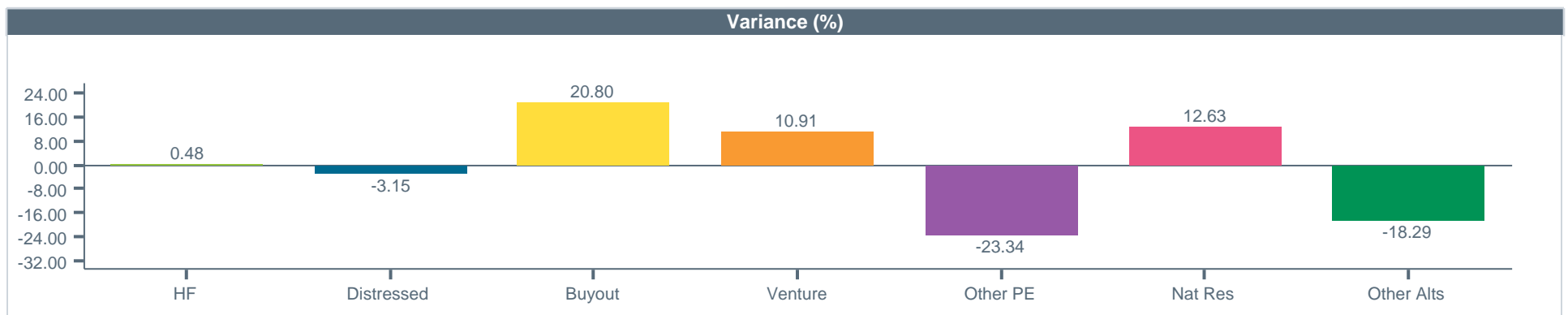
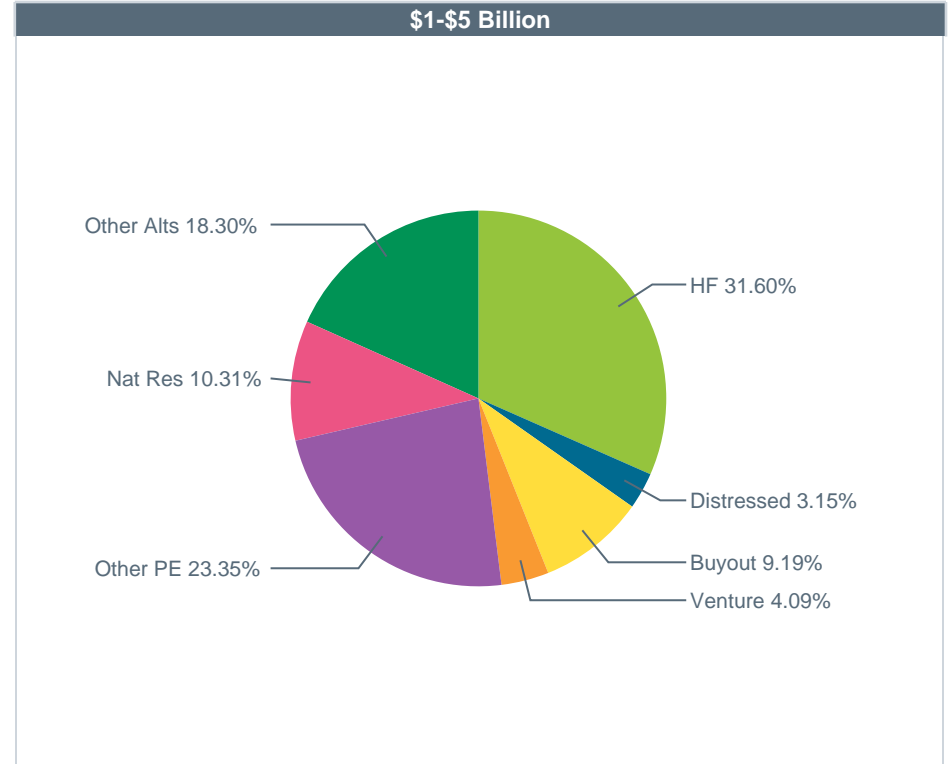
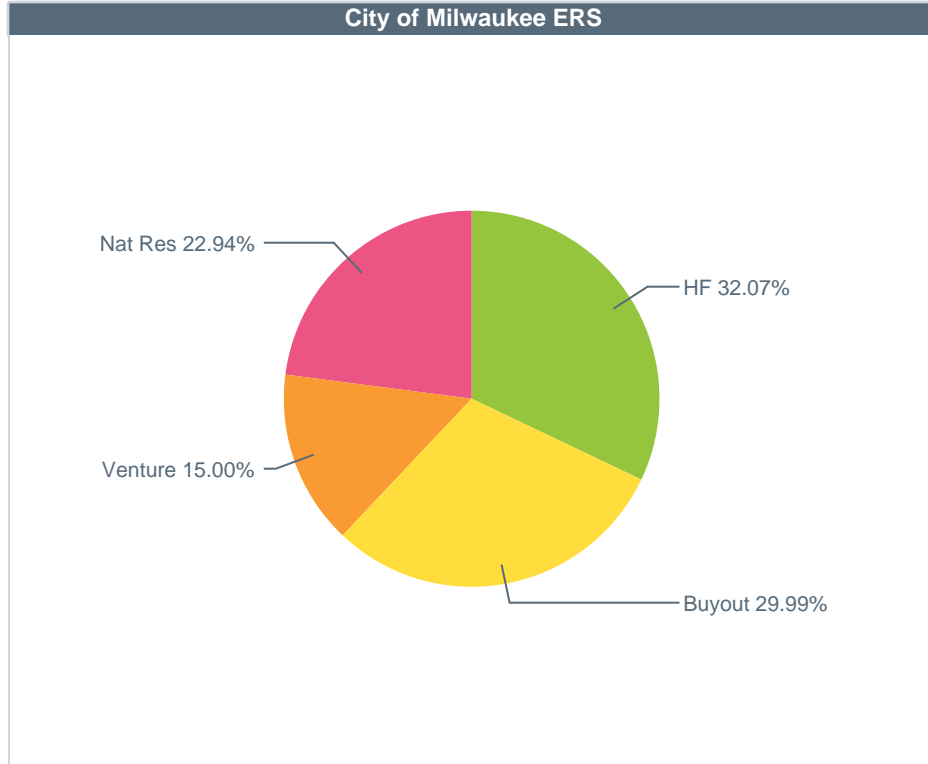


Allocations shown may not sum up to 100% exactly due to rounding.



Alternatives Style Allocation

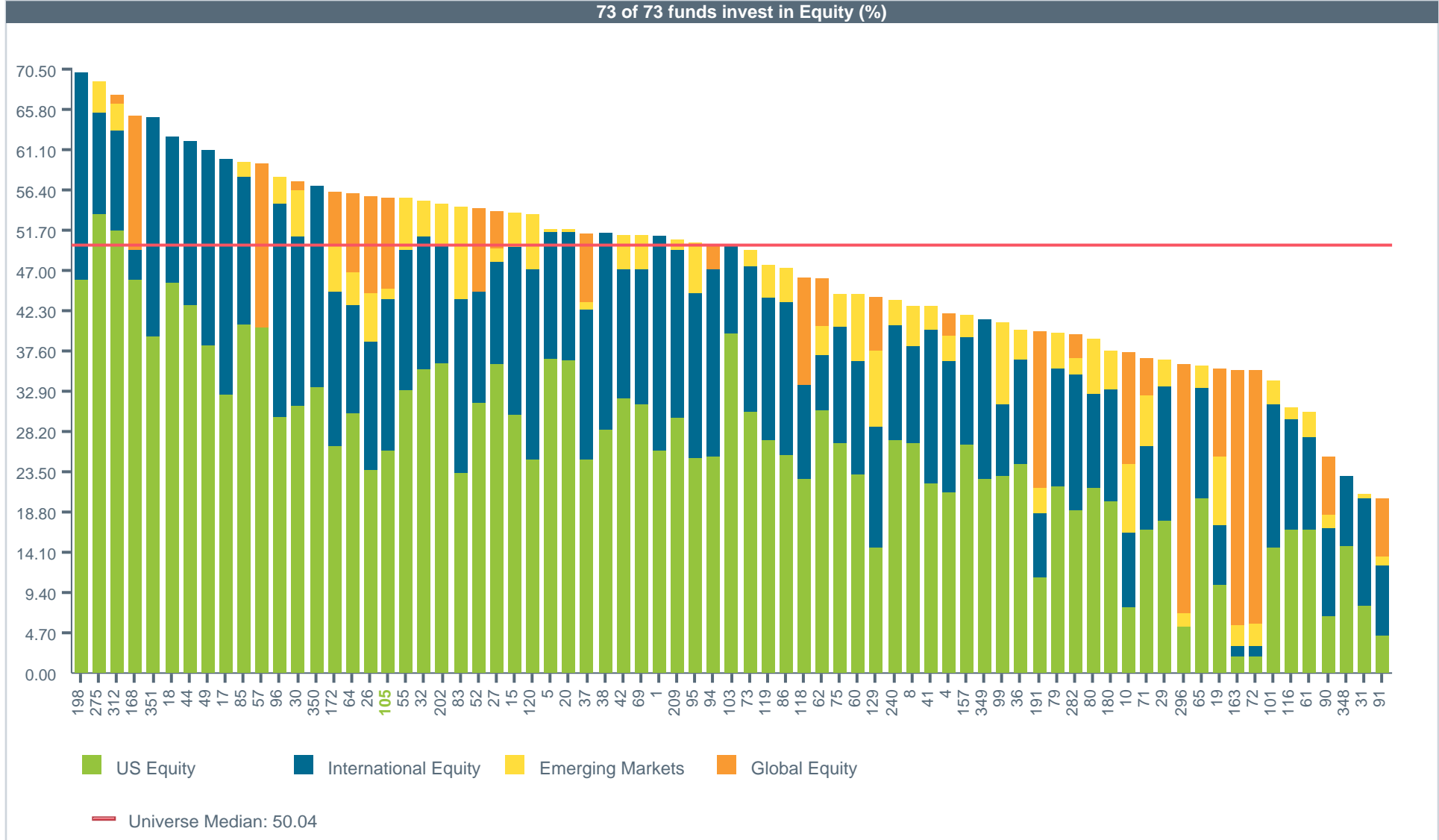
City of Milwaukee ERS vs. Average of Similar Size Funds

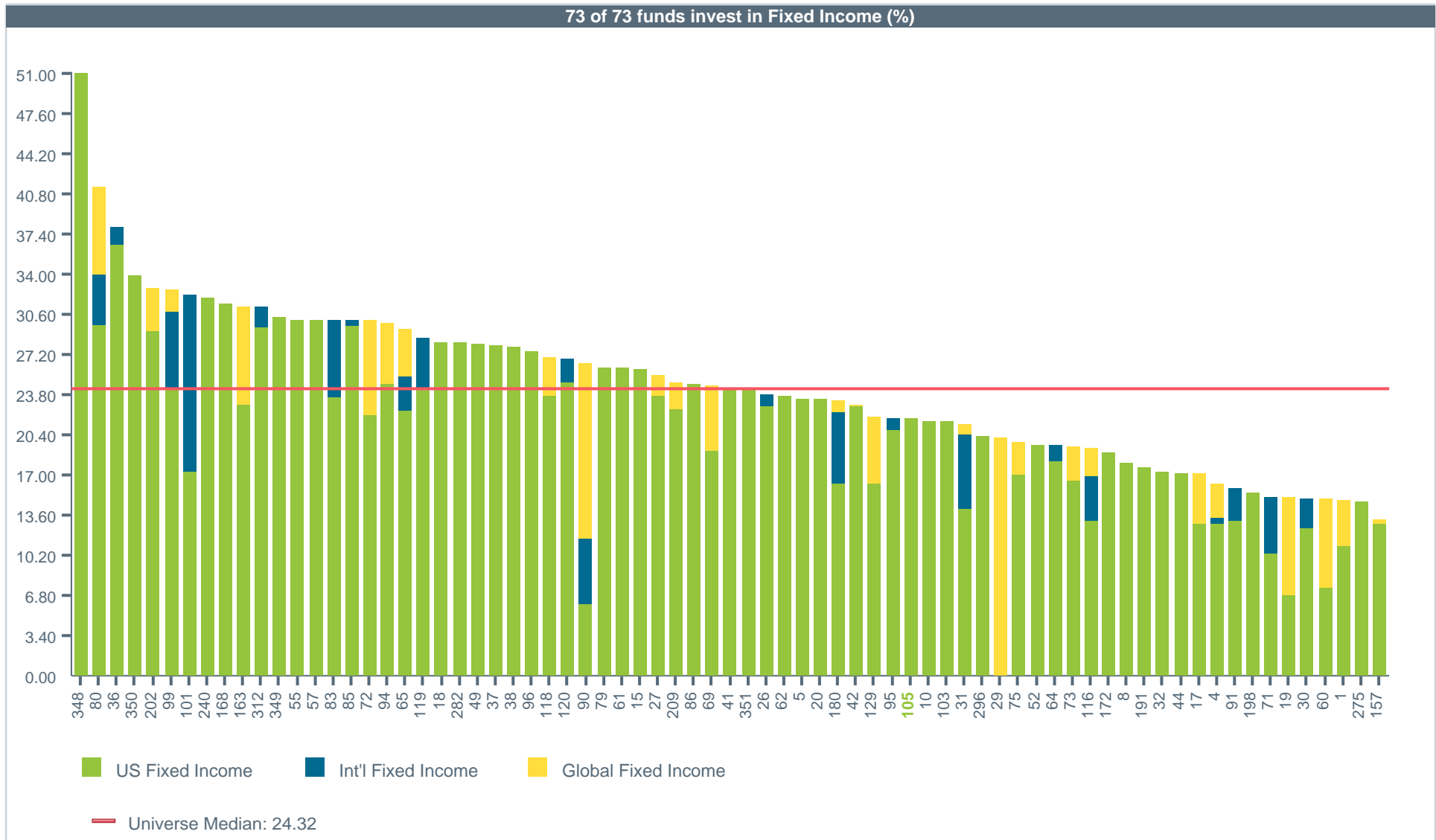


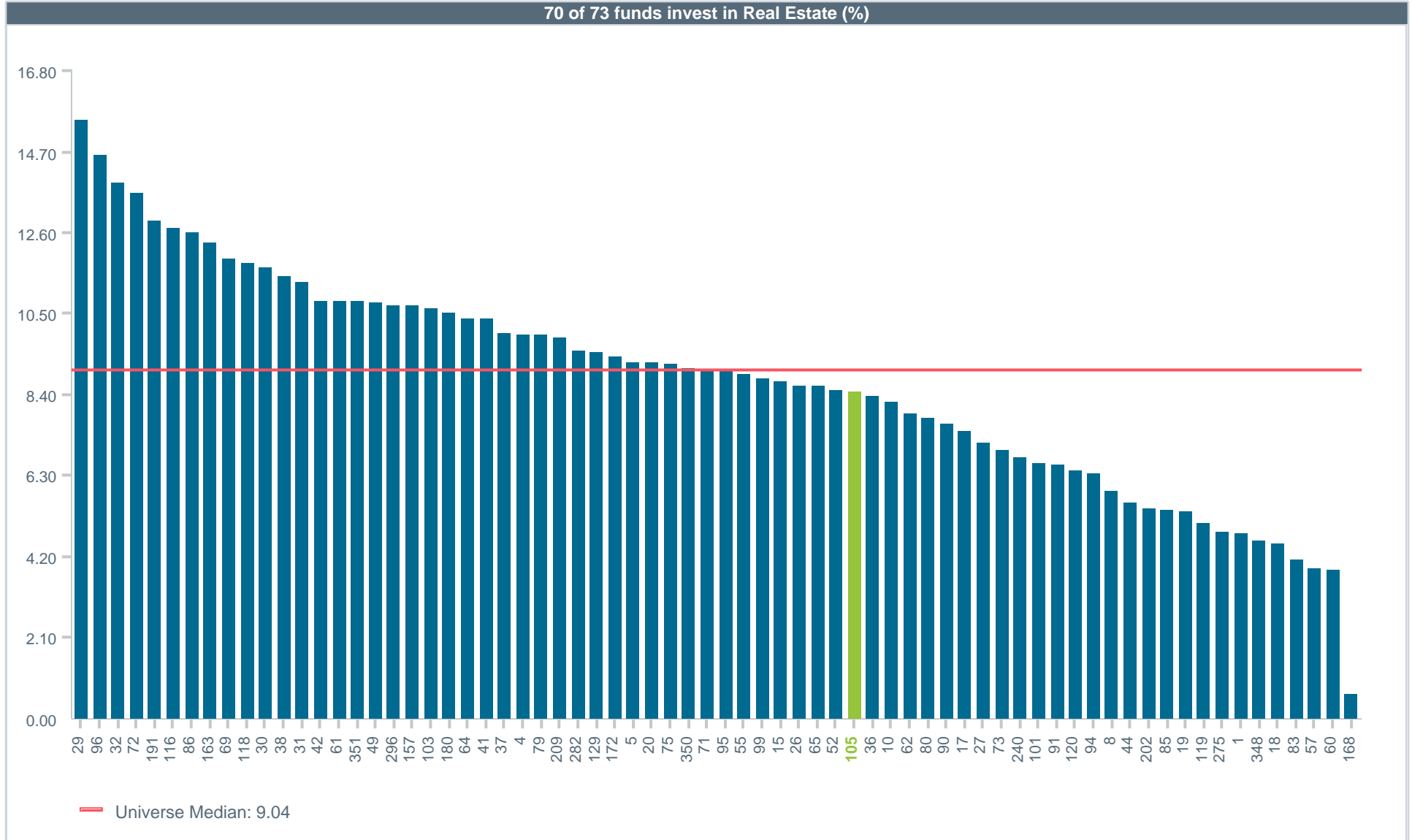
Allocations shown may not sum up to 100% exactly due to rounding.

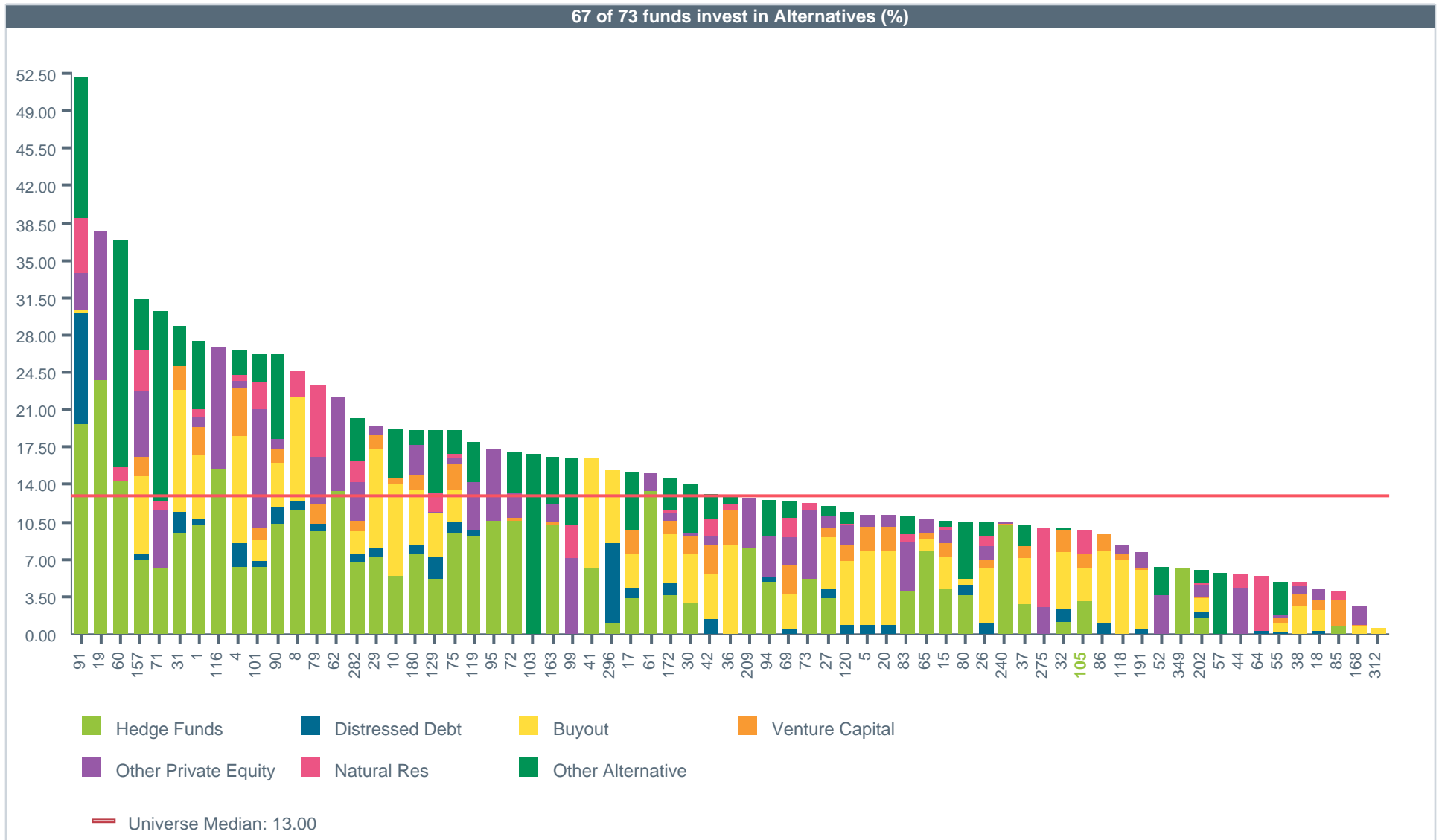


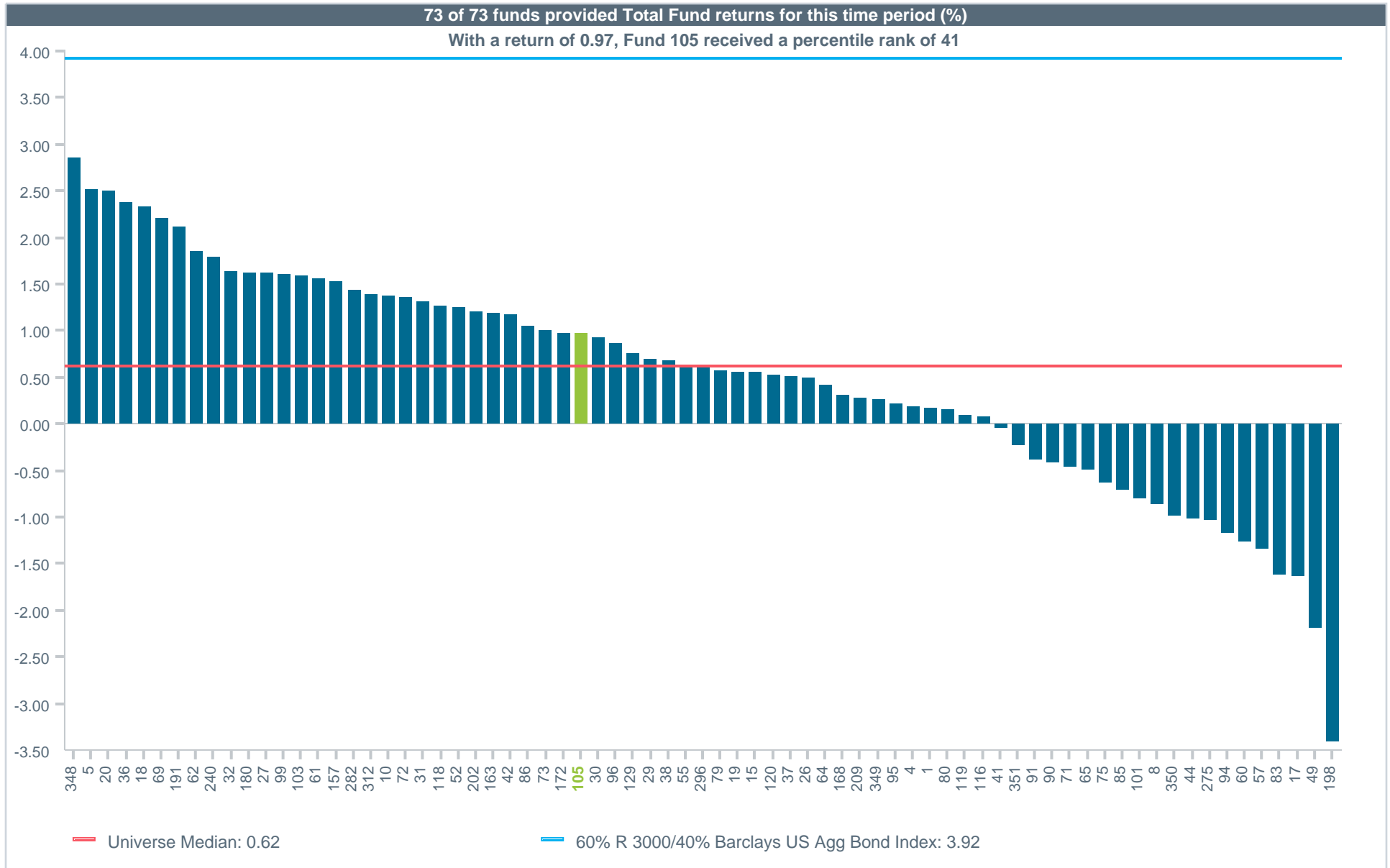
73 of 73 funds invest in Equity (%)





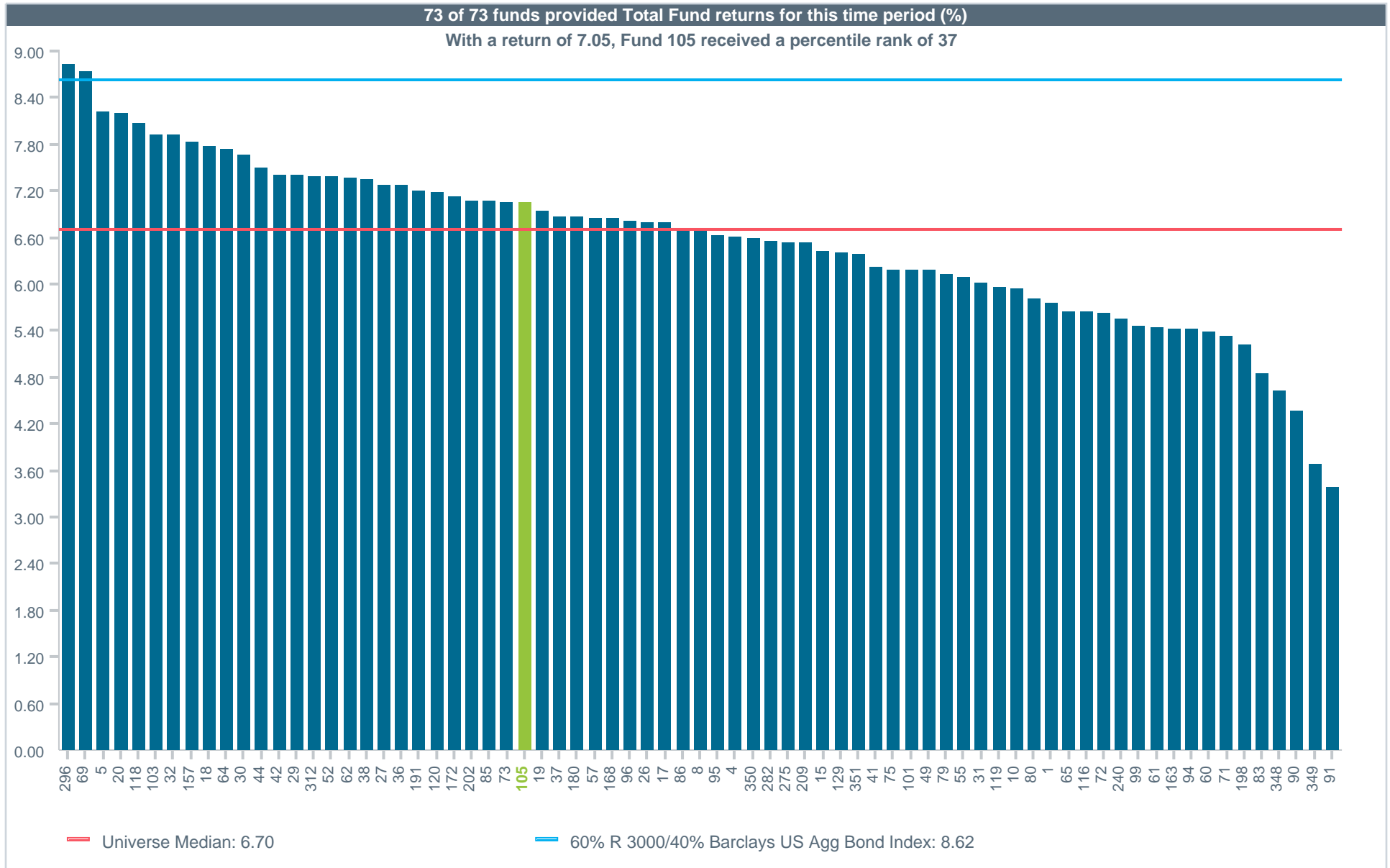






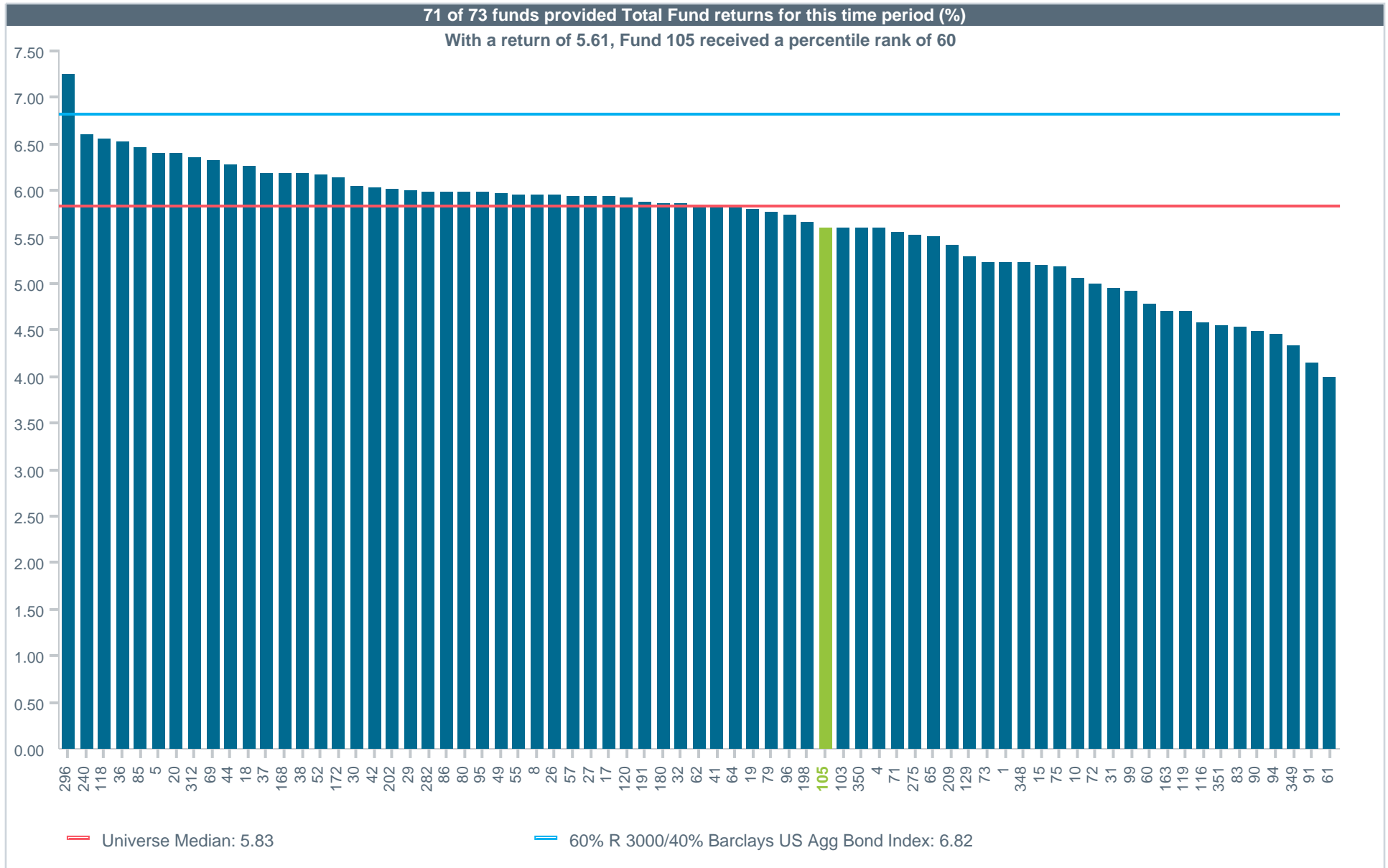
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



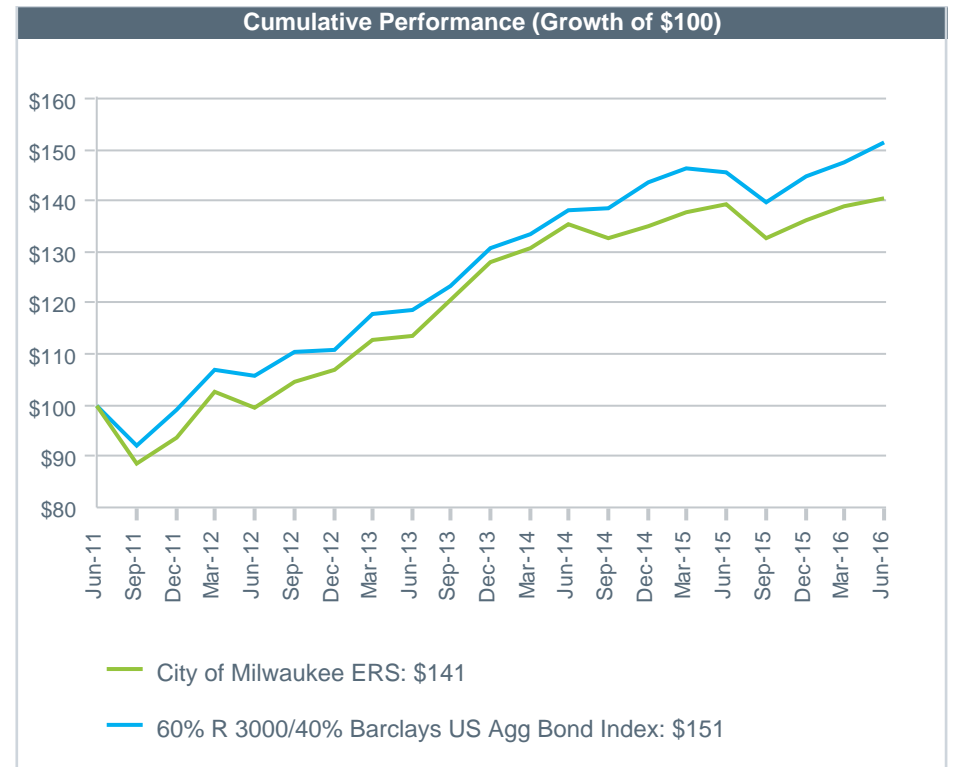
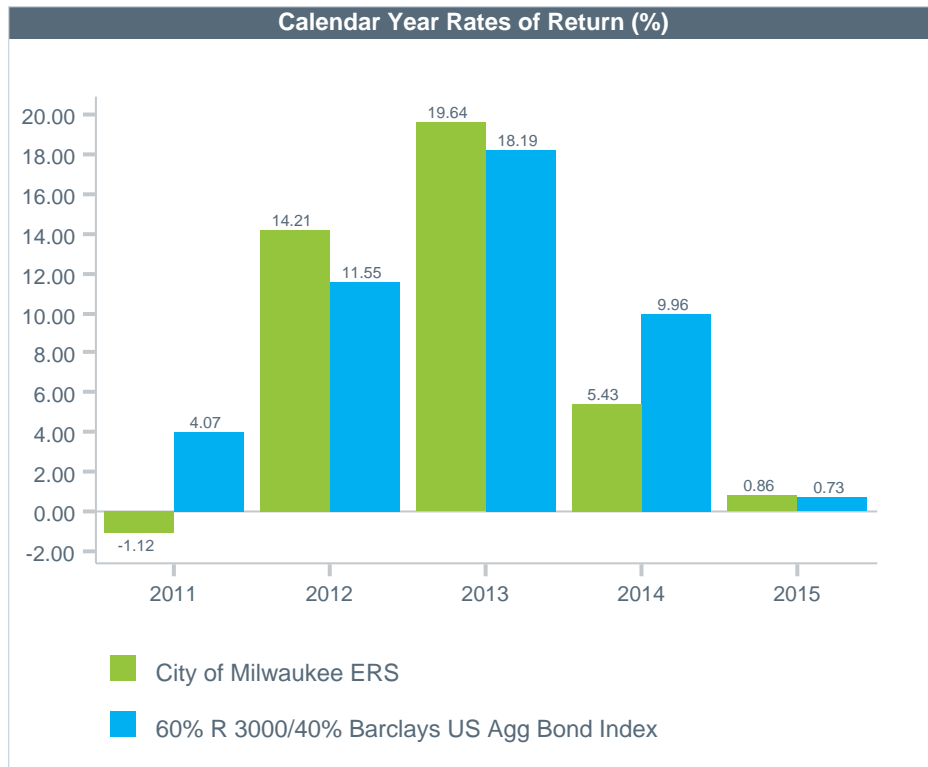


Funds with less history than the specified time period will not appear in the chart.



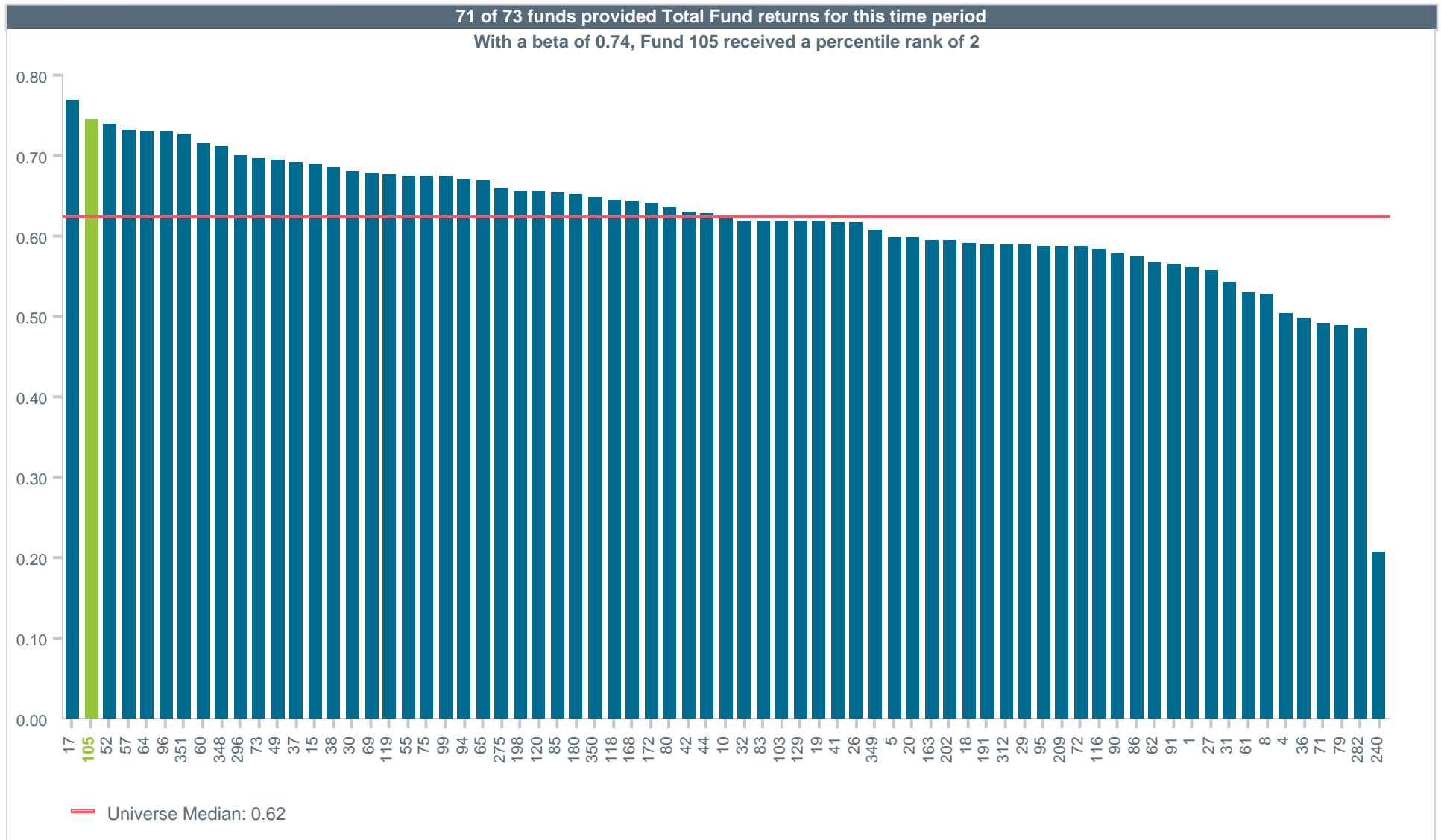
Total Return - Total Fund

City of Milwaukee ERS vs. 60% R 3000/40% Barclays US Agg Bond Index



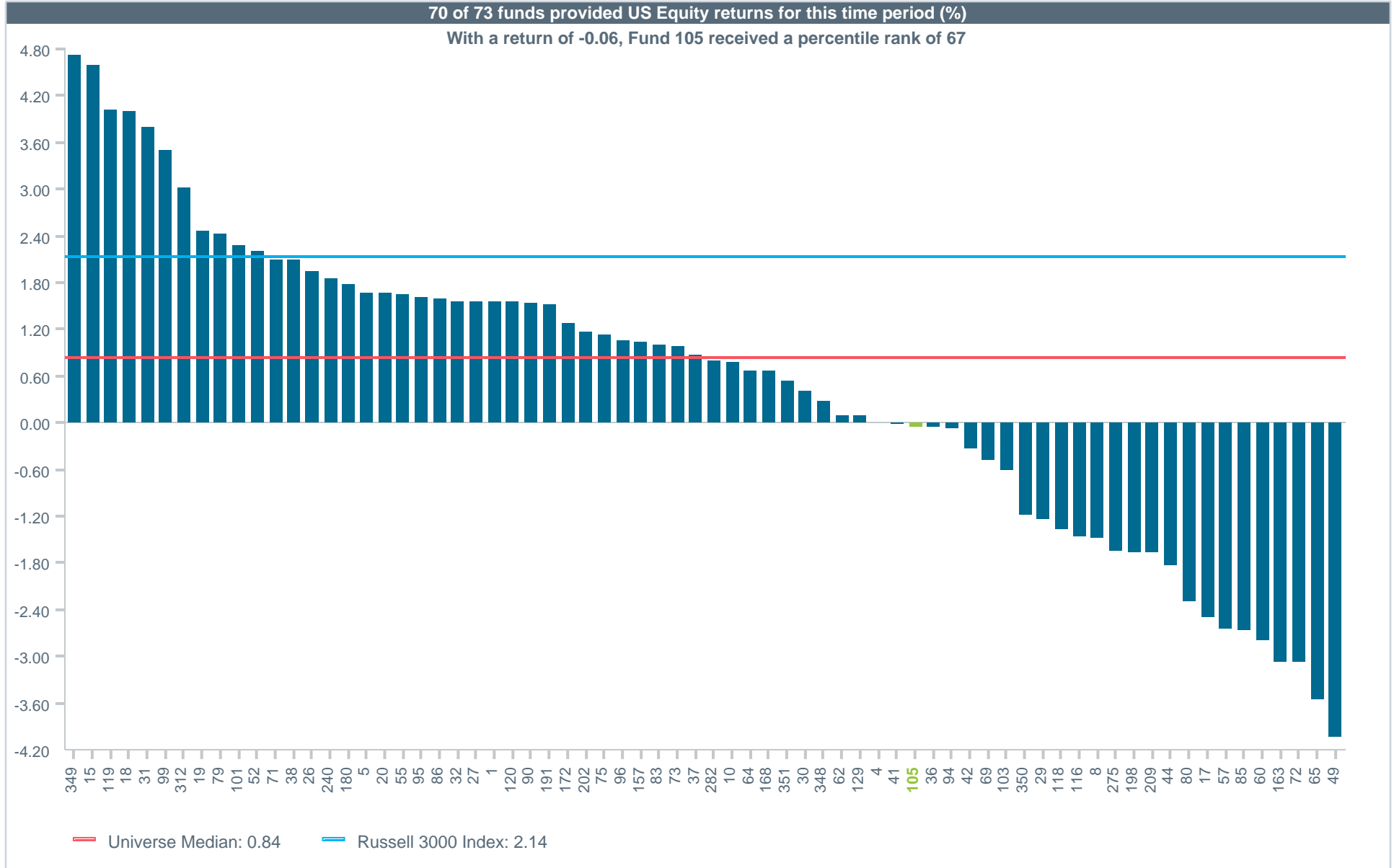
Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	0.97	7.43	7.05
60% R 3000/40% Barclays US Agg Bond Index	3.92	8.42	8.62
Variance	-2.95	-0.99	-1.57





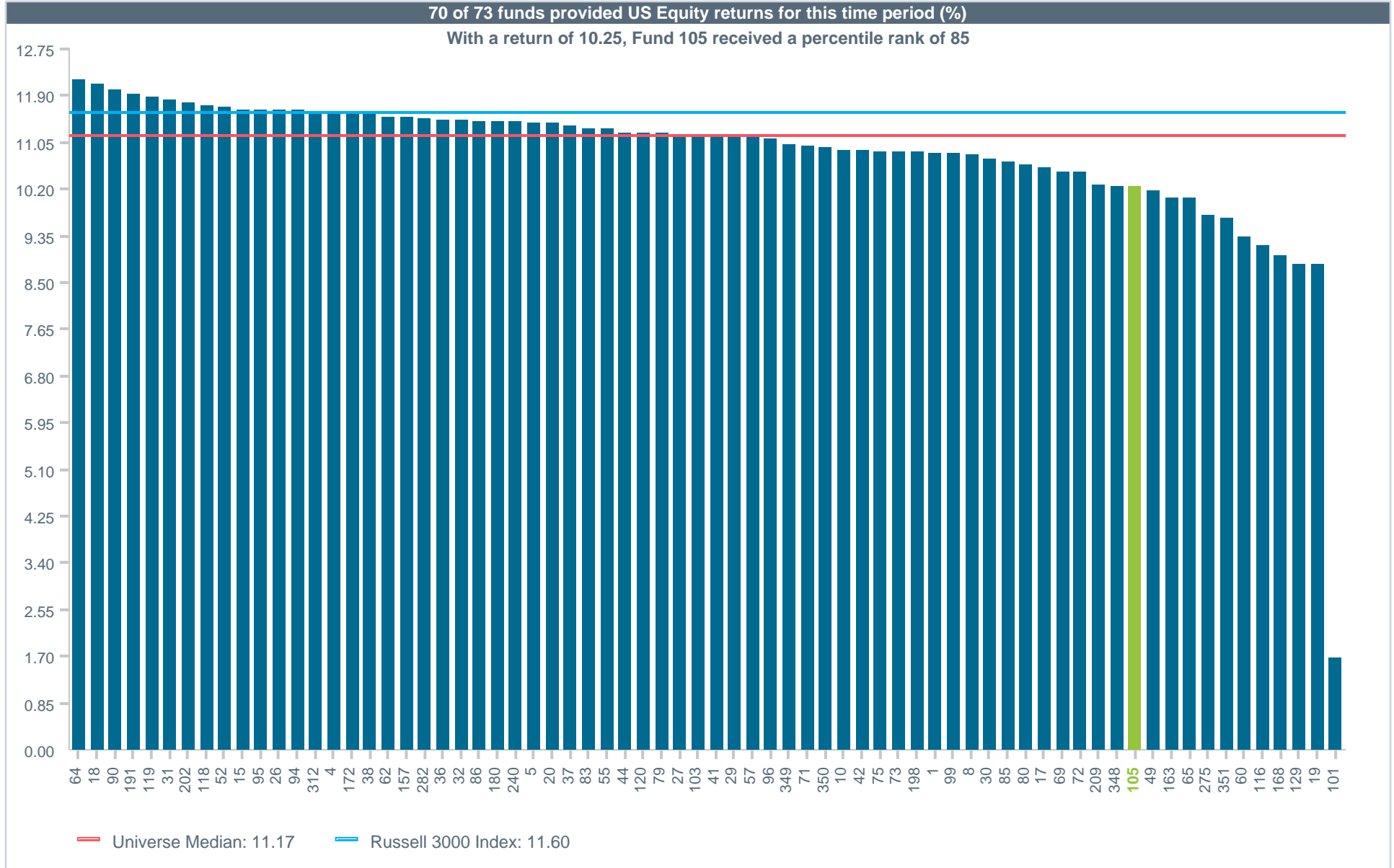
Funds with less history than the specified time period will not appear in the chart. Benchmark used is the S&P 500 Index (Cap Wtd).





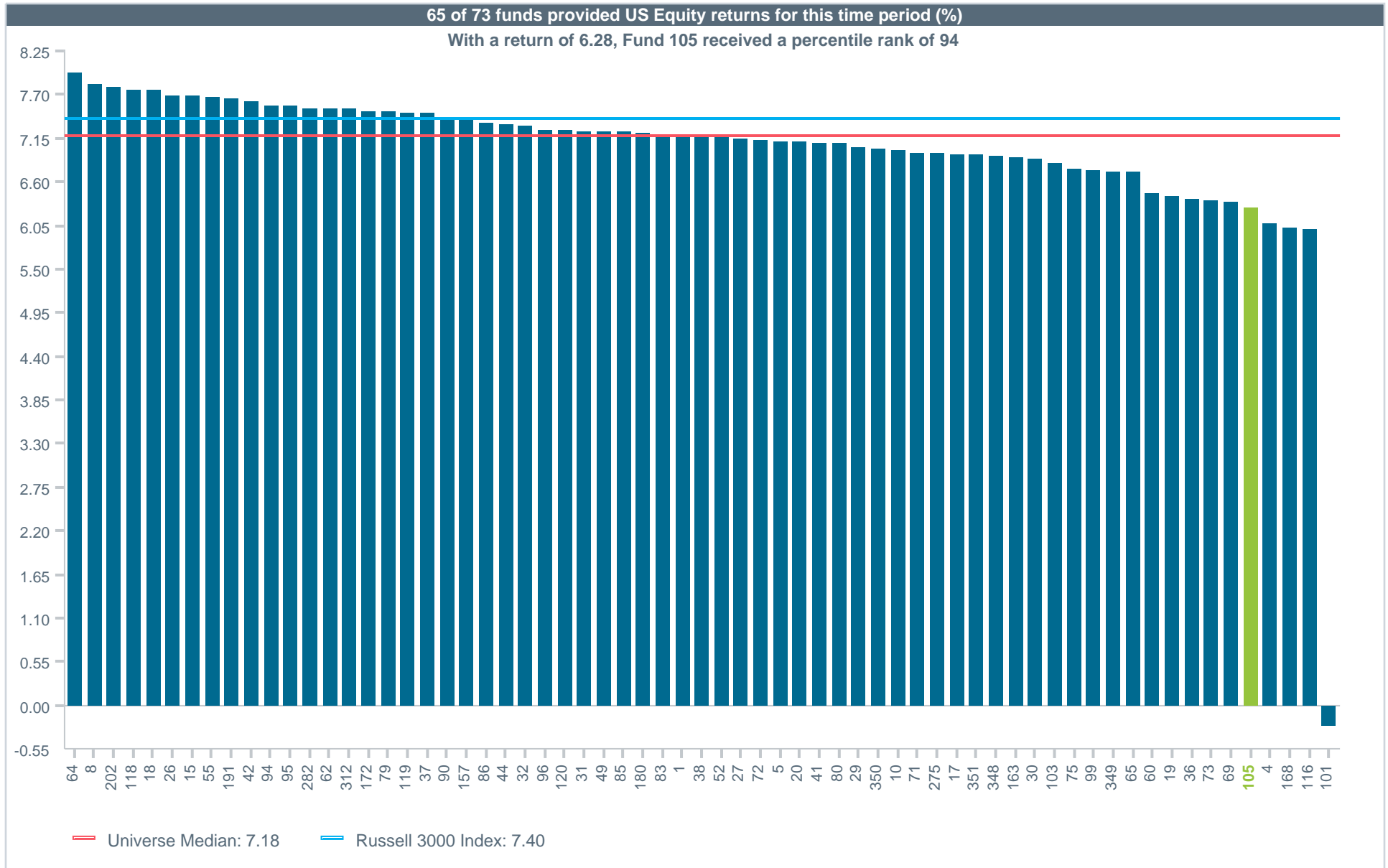
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



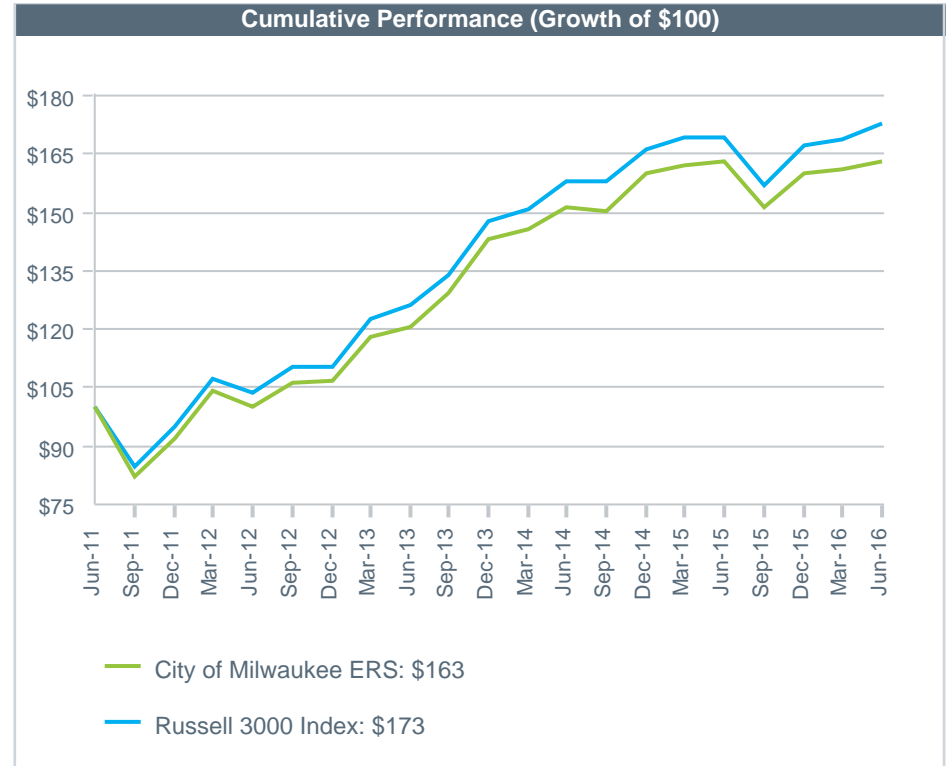
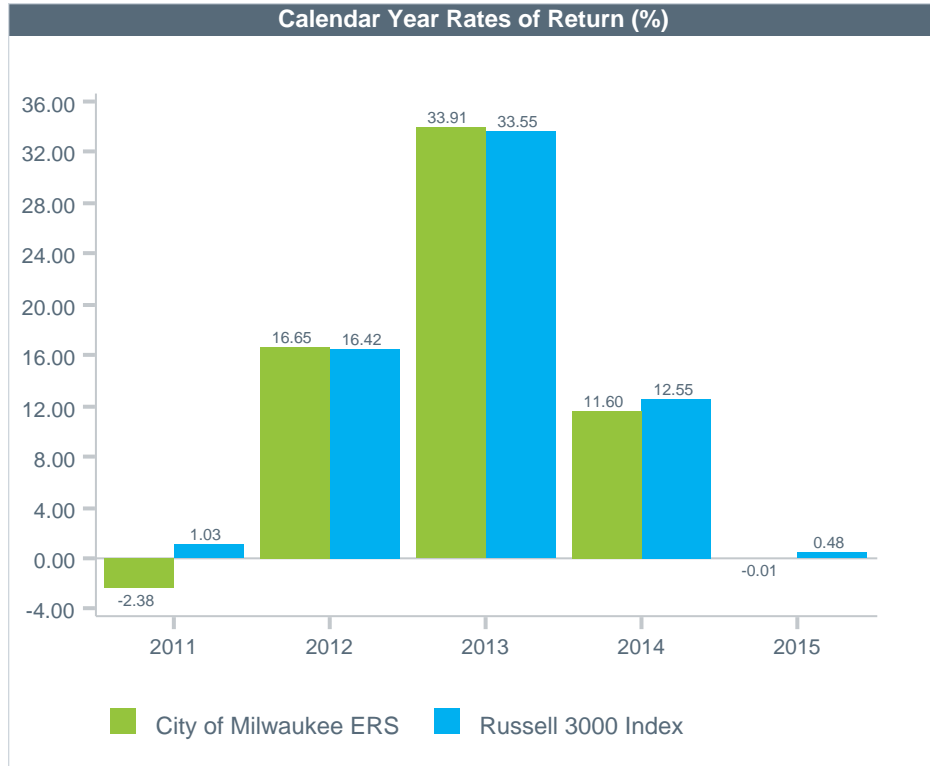


Funds with less history than the specified time period will not appear in the chart.



Total Return - US Equity

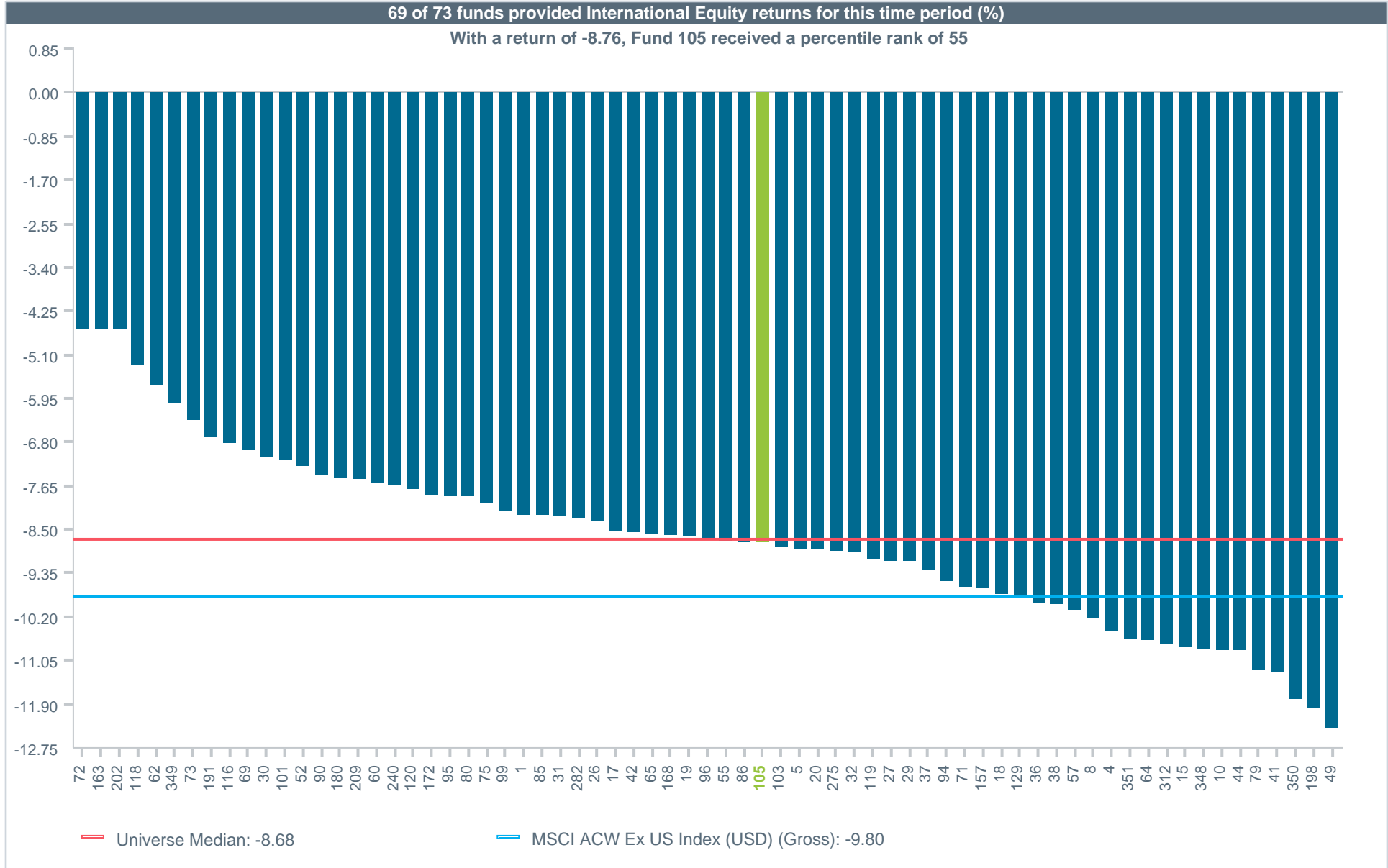
City of Milwaukee ERS vs. Russell 3000 Index



Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	-0.06	10.47	10.25
Russell 3000 Index	2.14	11.12	11.60
Variance	-2.20	-0.65	-1.35

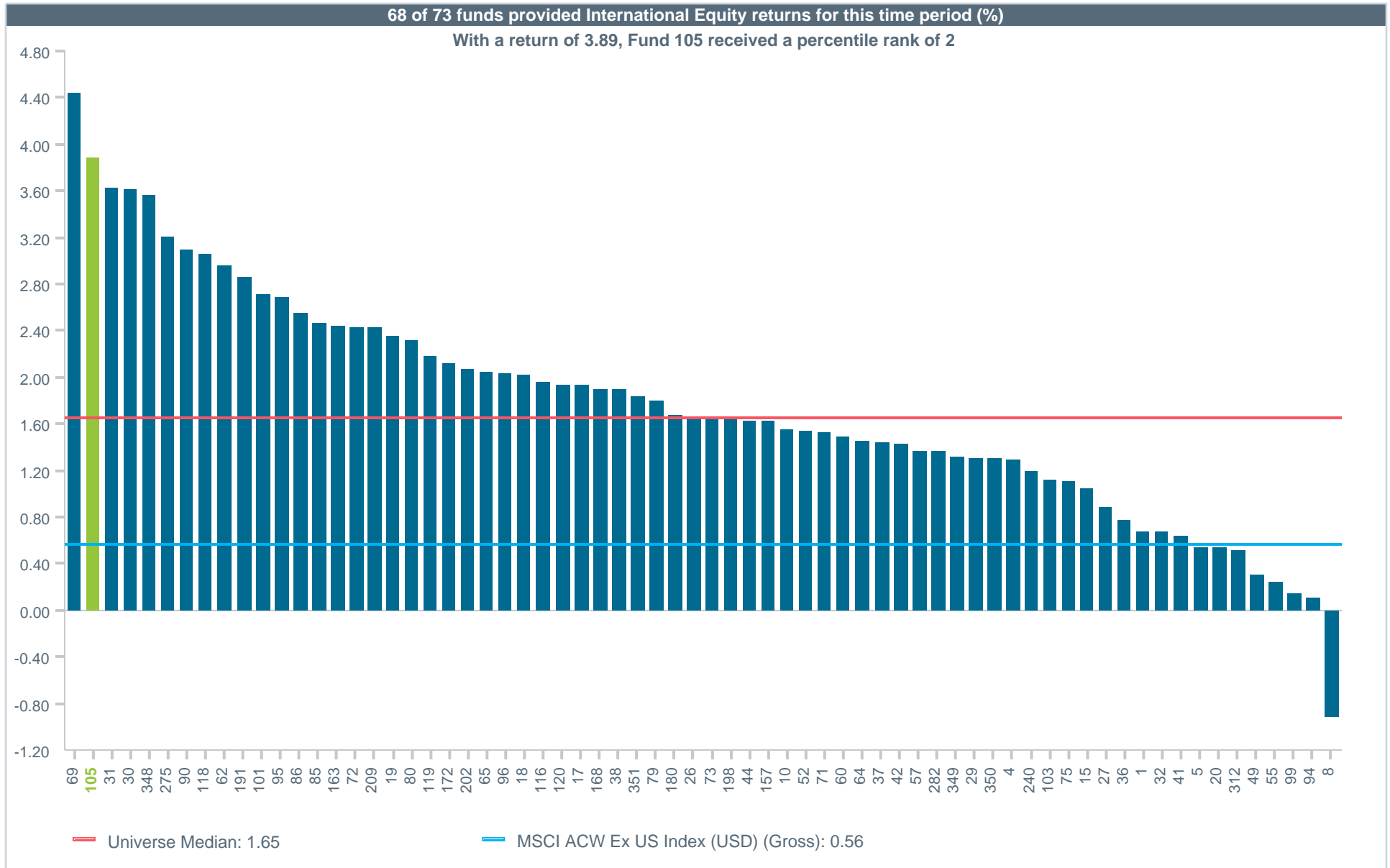


1 Year Annualized International Equity Returns



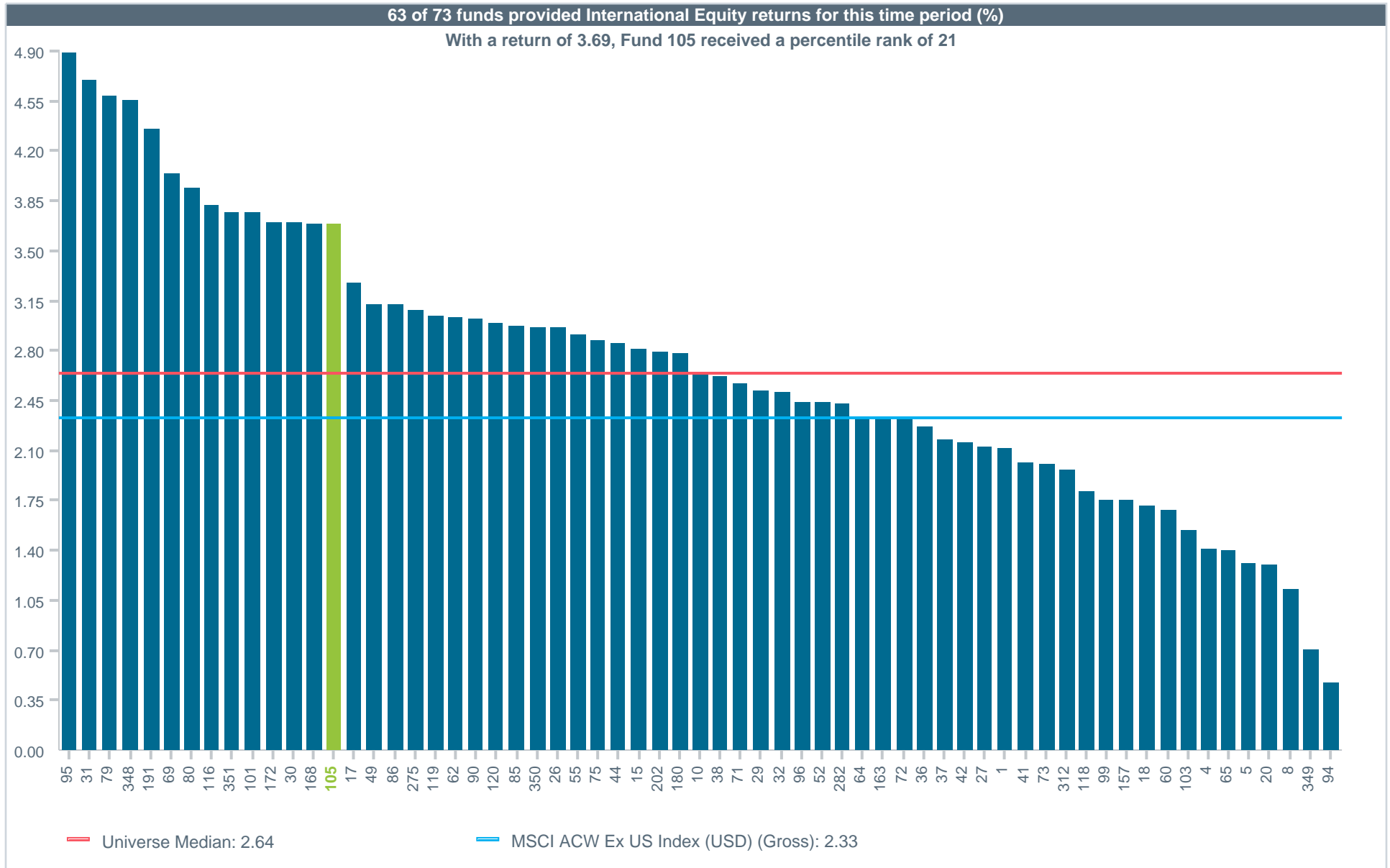
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



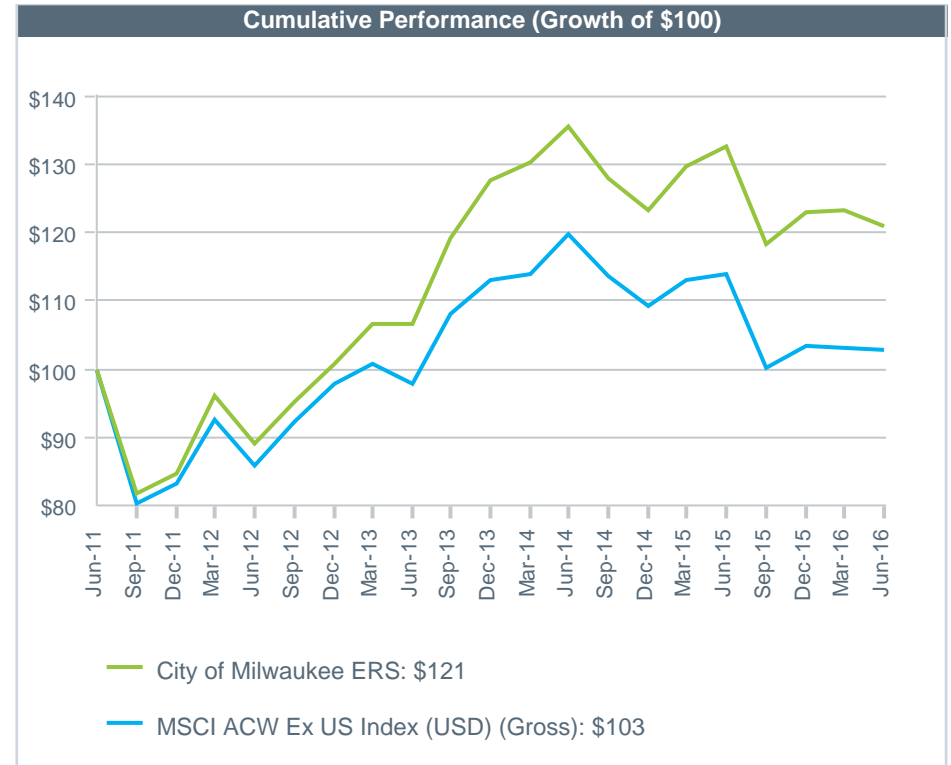
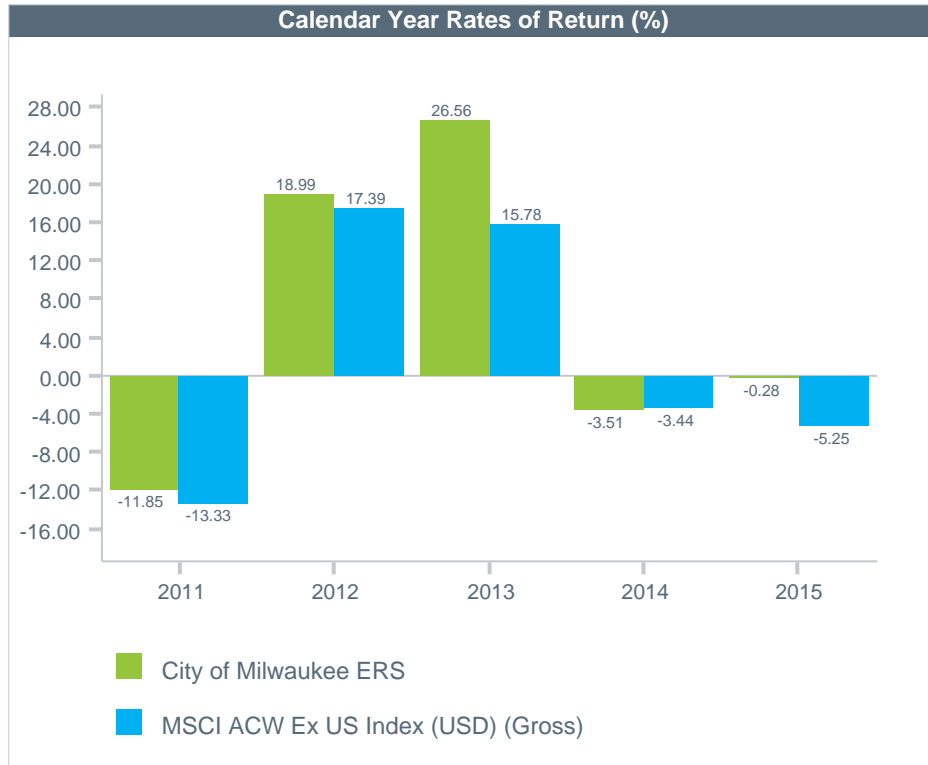


Funds with less history than the specified time period will not appear in the chart.



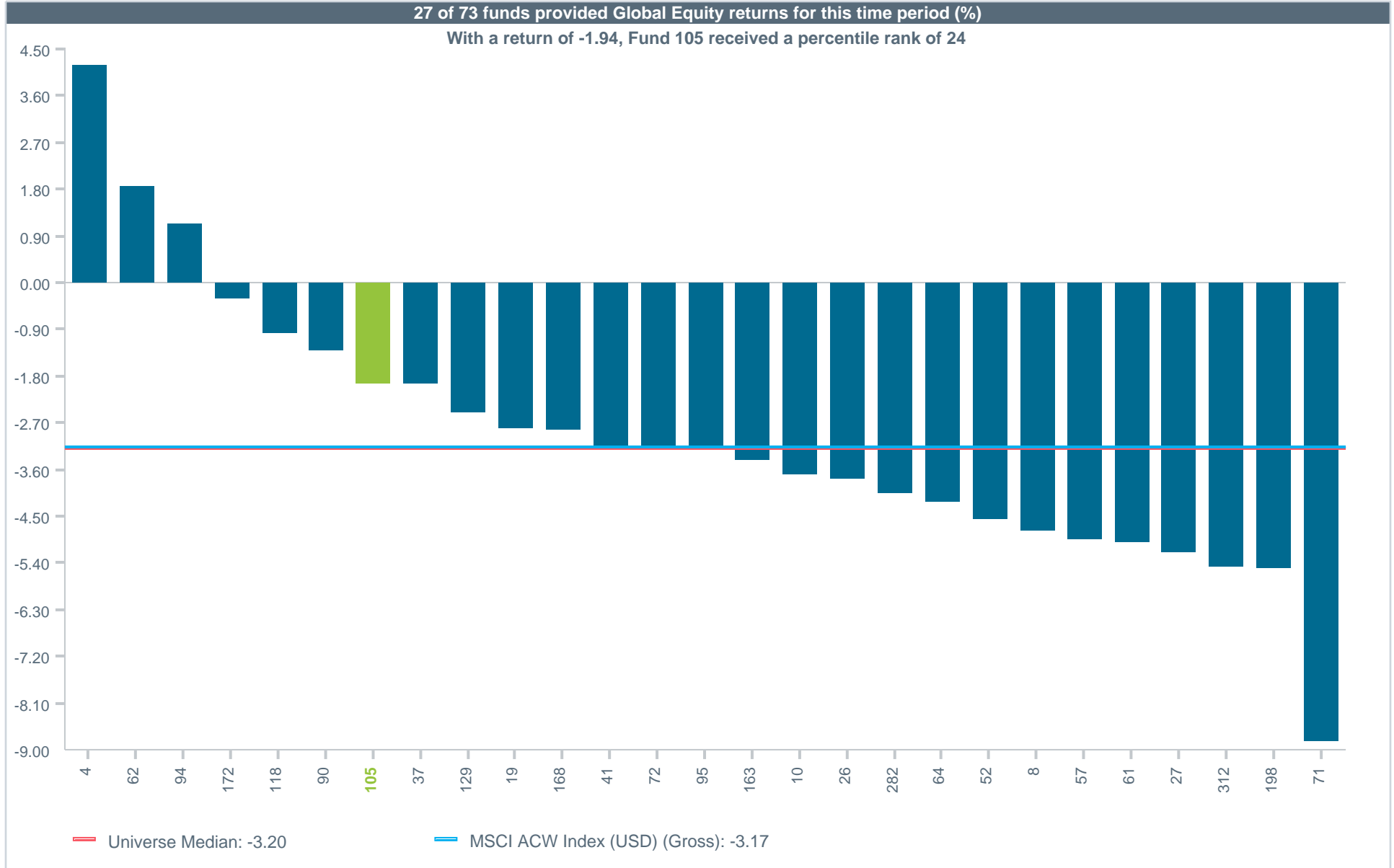
Total Return - International Equity

City of Milwaukee ERS vs. MSCI ACW Ex US Index (USD) (Gross)



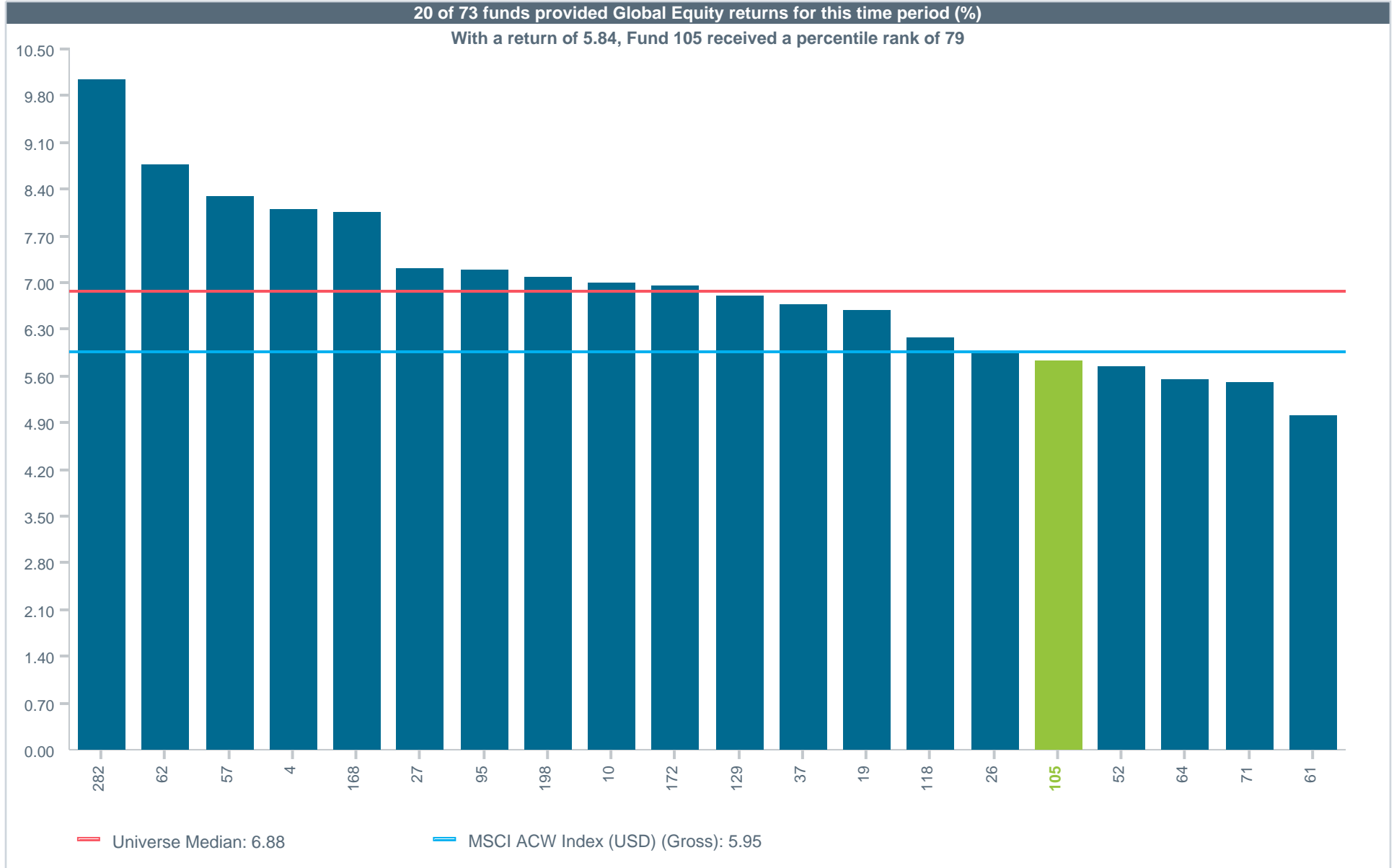
Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	-8.76	4.35	3.89
MSCI ACW Ex US Index (USD) (Gross)	-9.80	1.62	0.56
Variance	1.04	2.73	3.33





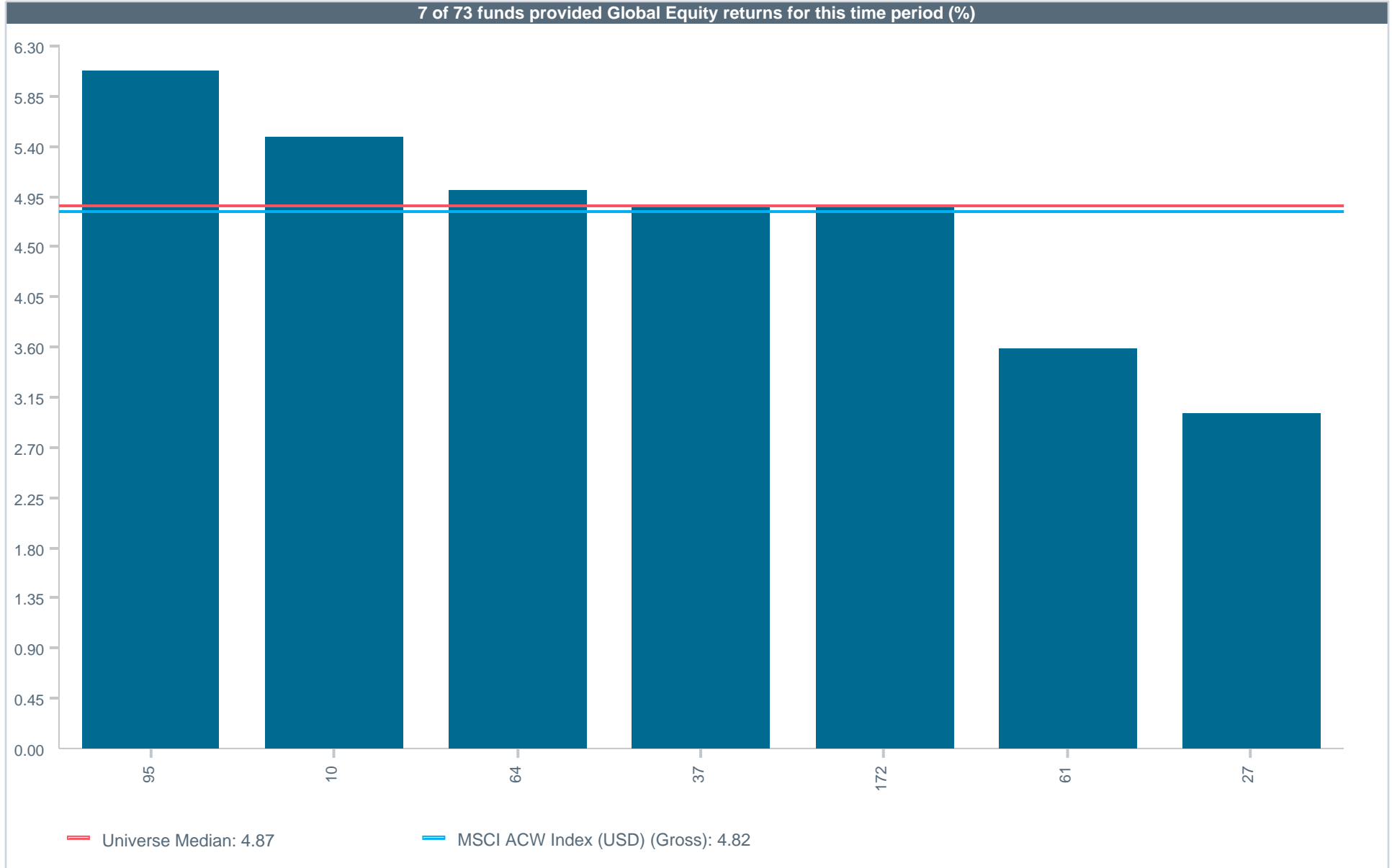
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



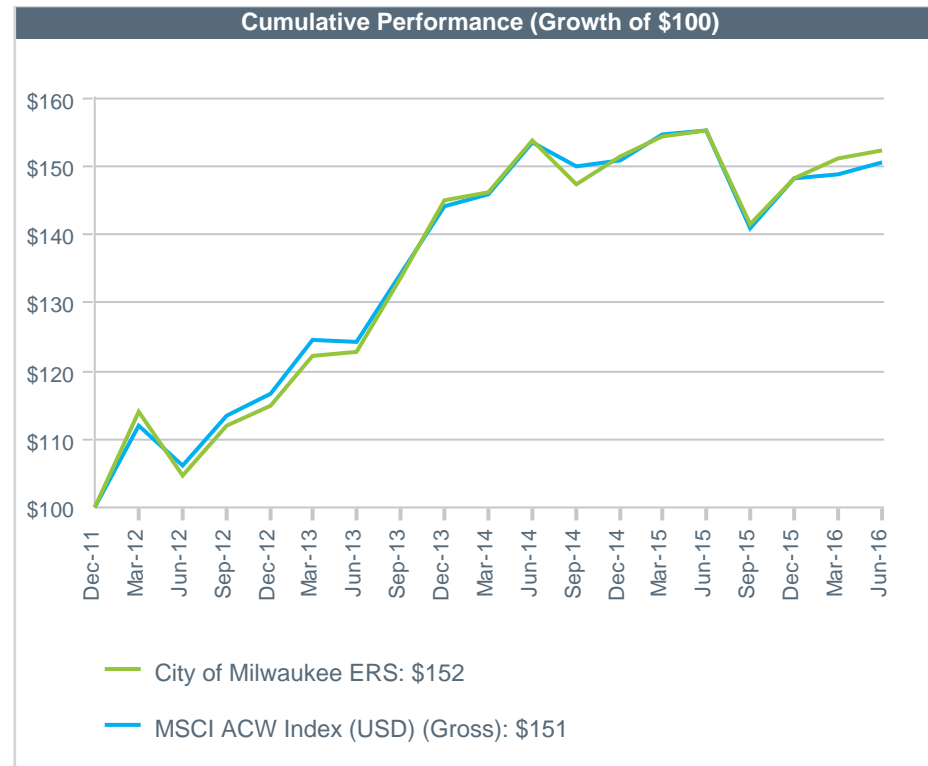
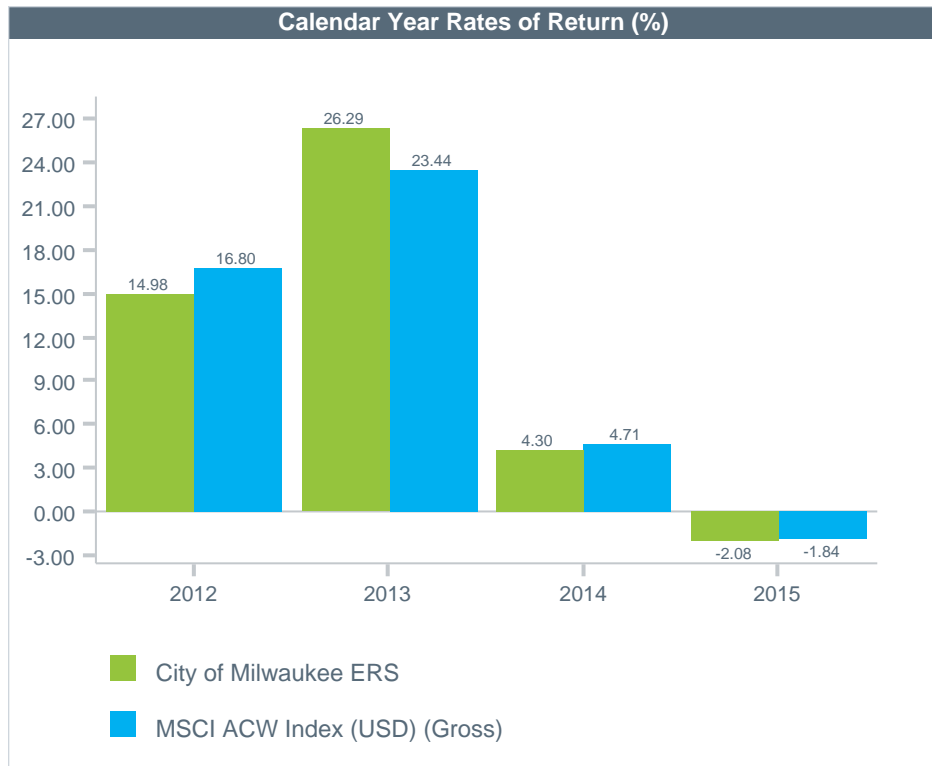


Funds with less history than the specified time period will not appear in the chart.



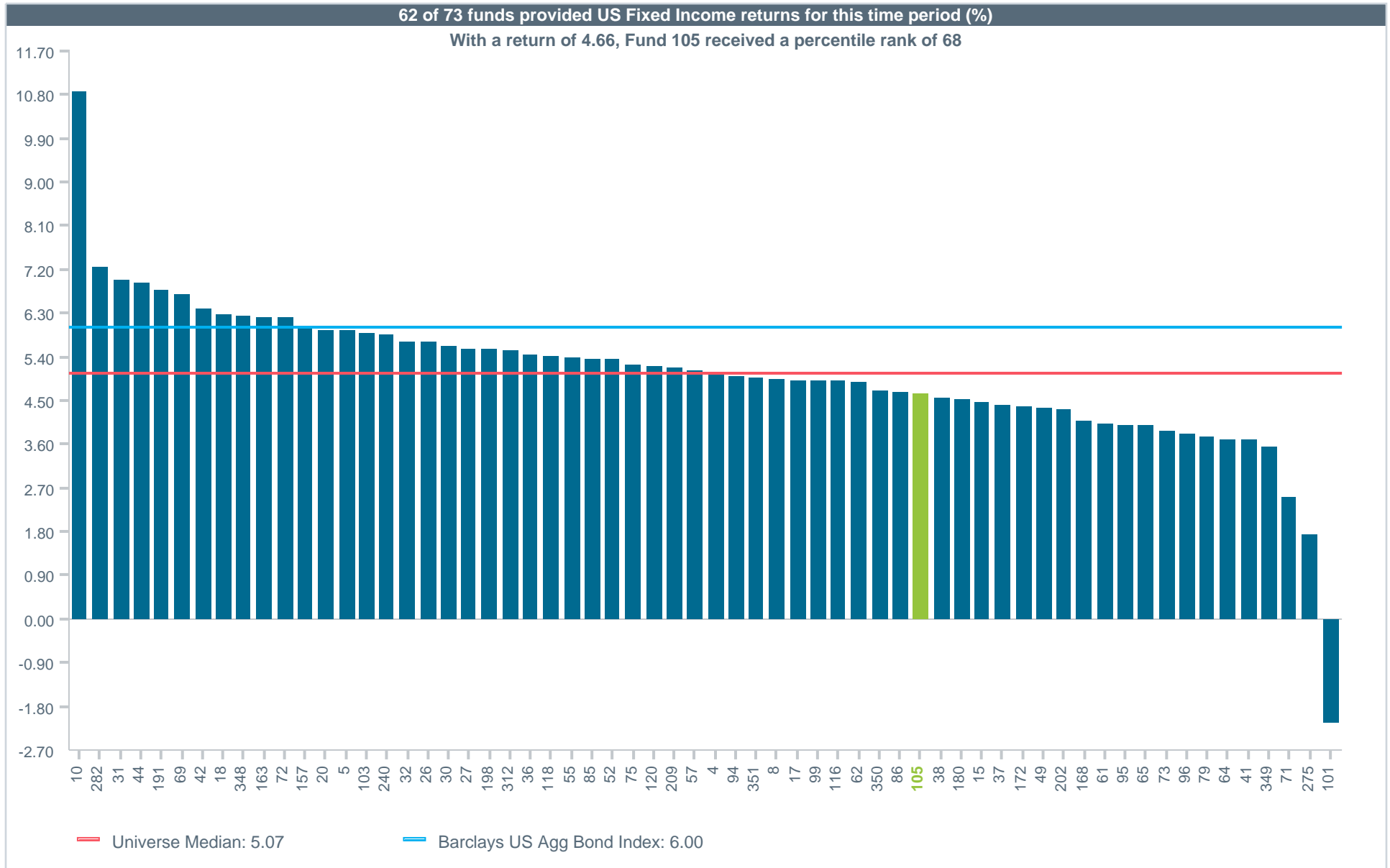
Total Return - Global Equity

City of Milwaukee ERS vs. MSCI ACW Index (USD) (Gross)



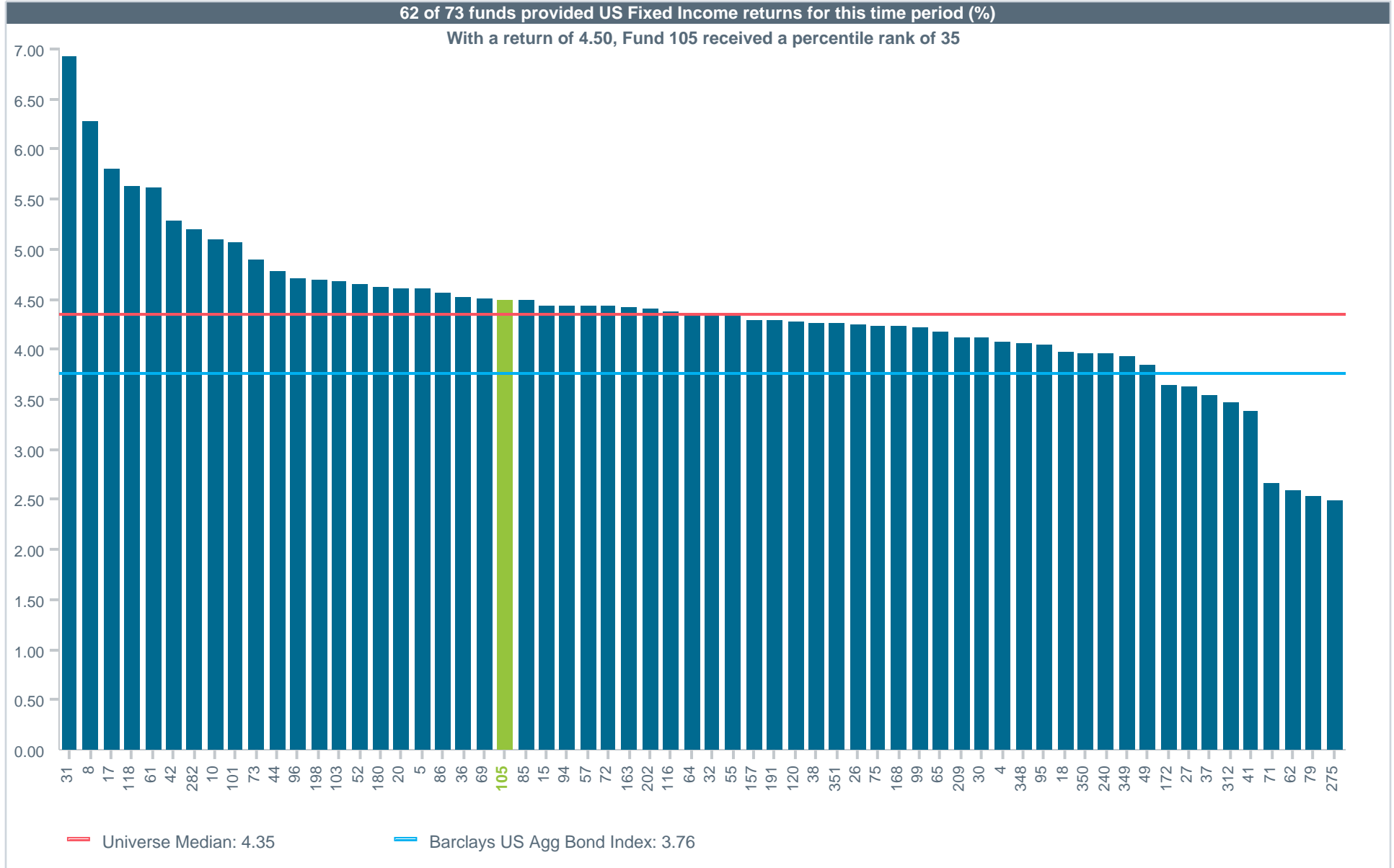
Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	-1.94	7.47	5.84
MSCI ACW Index (USD) (Gross)	-3.17	6.60	5.95
Variance	1.23	0.87	-0.11





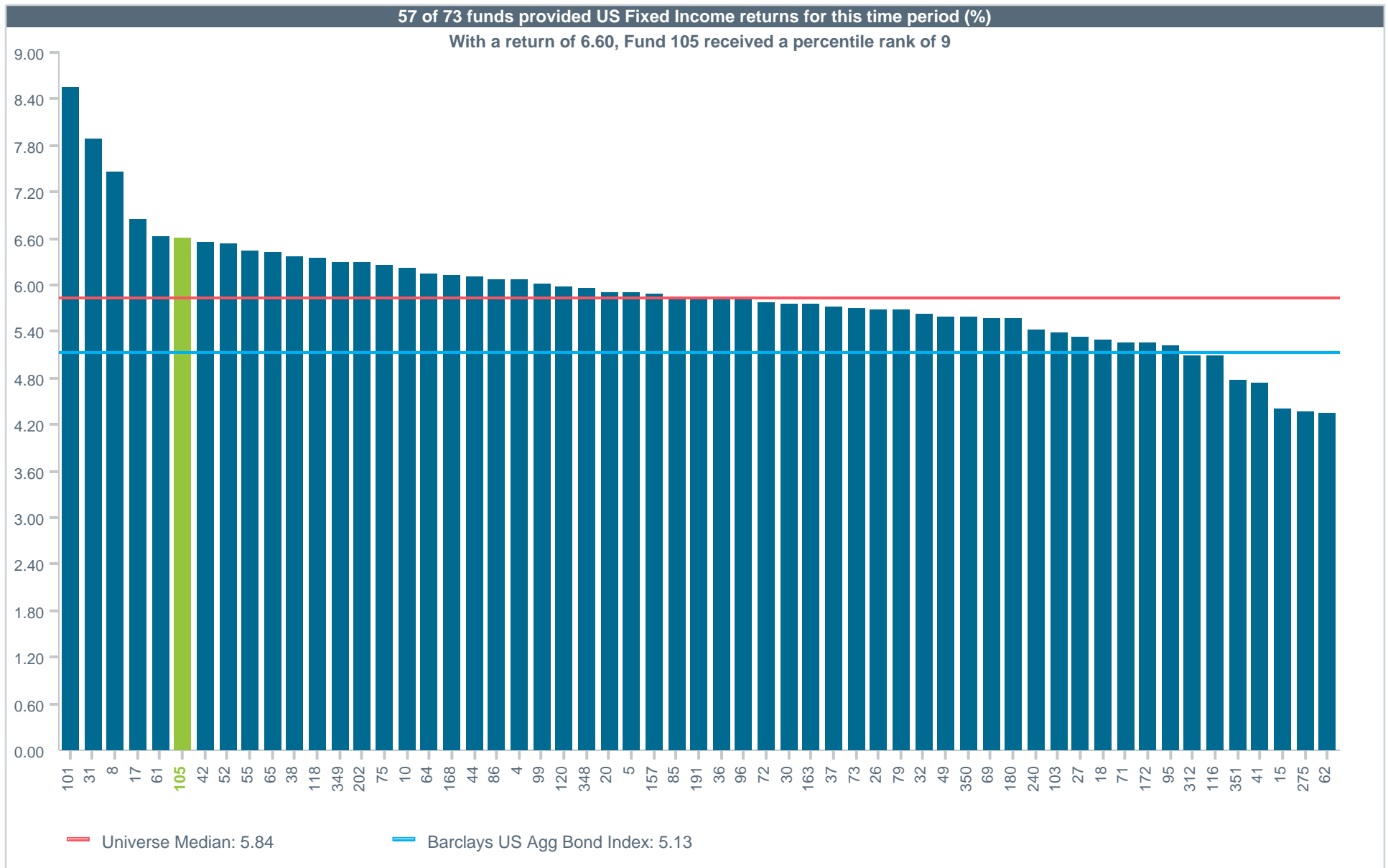
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



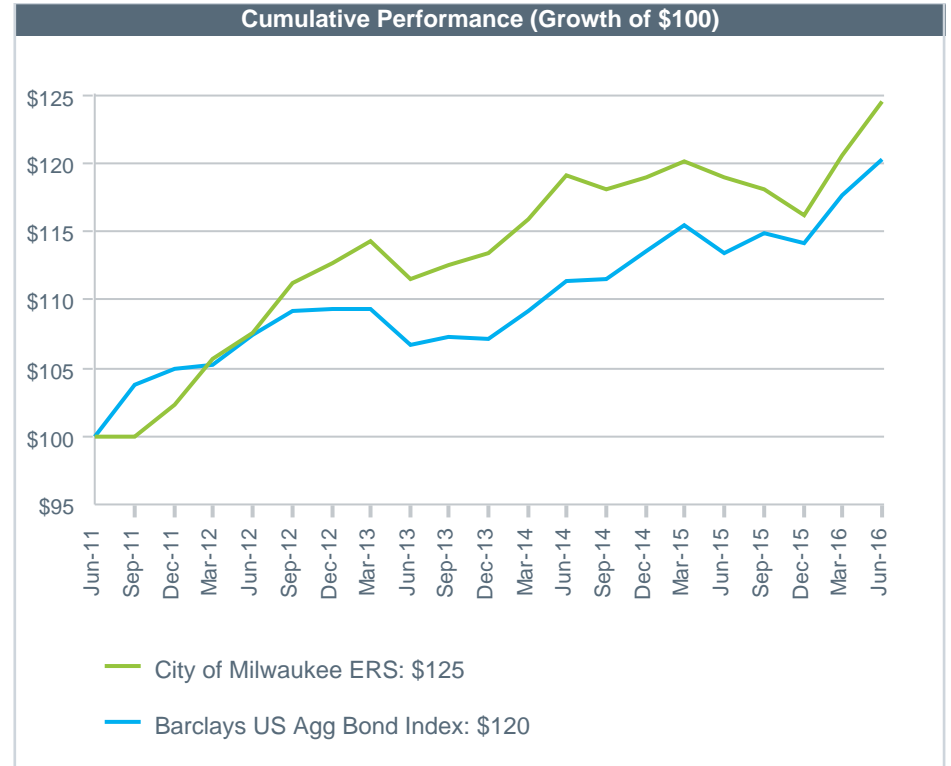
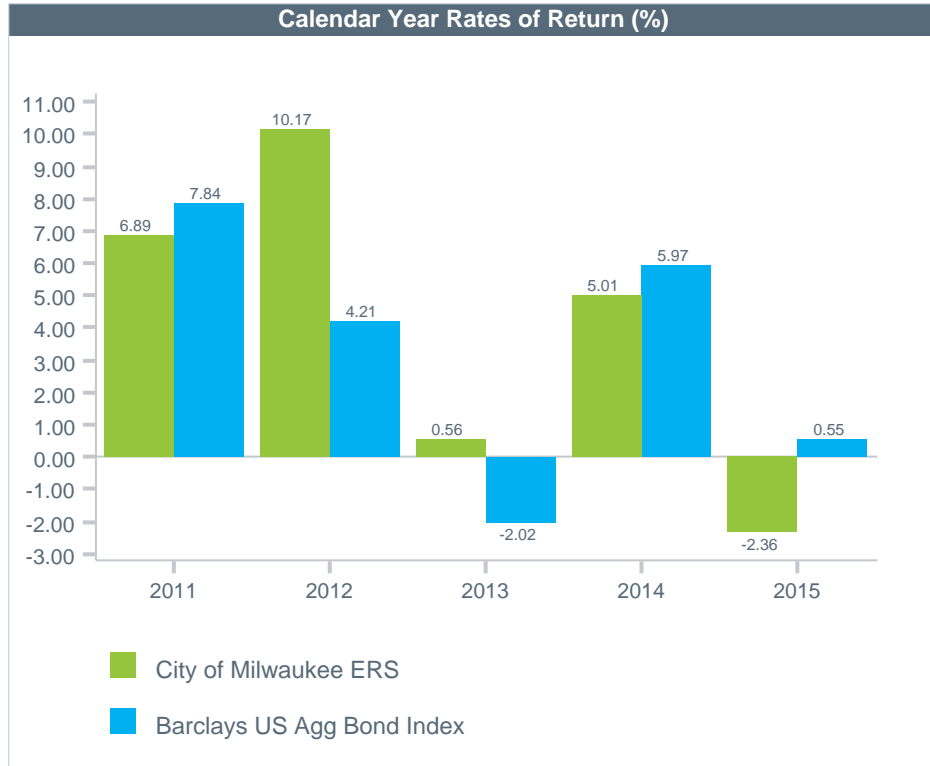


Funds with less history than the specified time period will not appear in the chart.



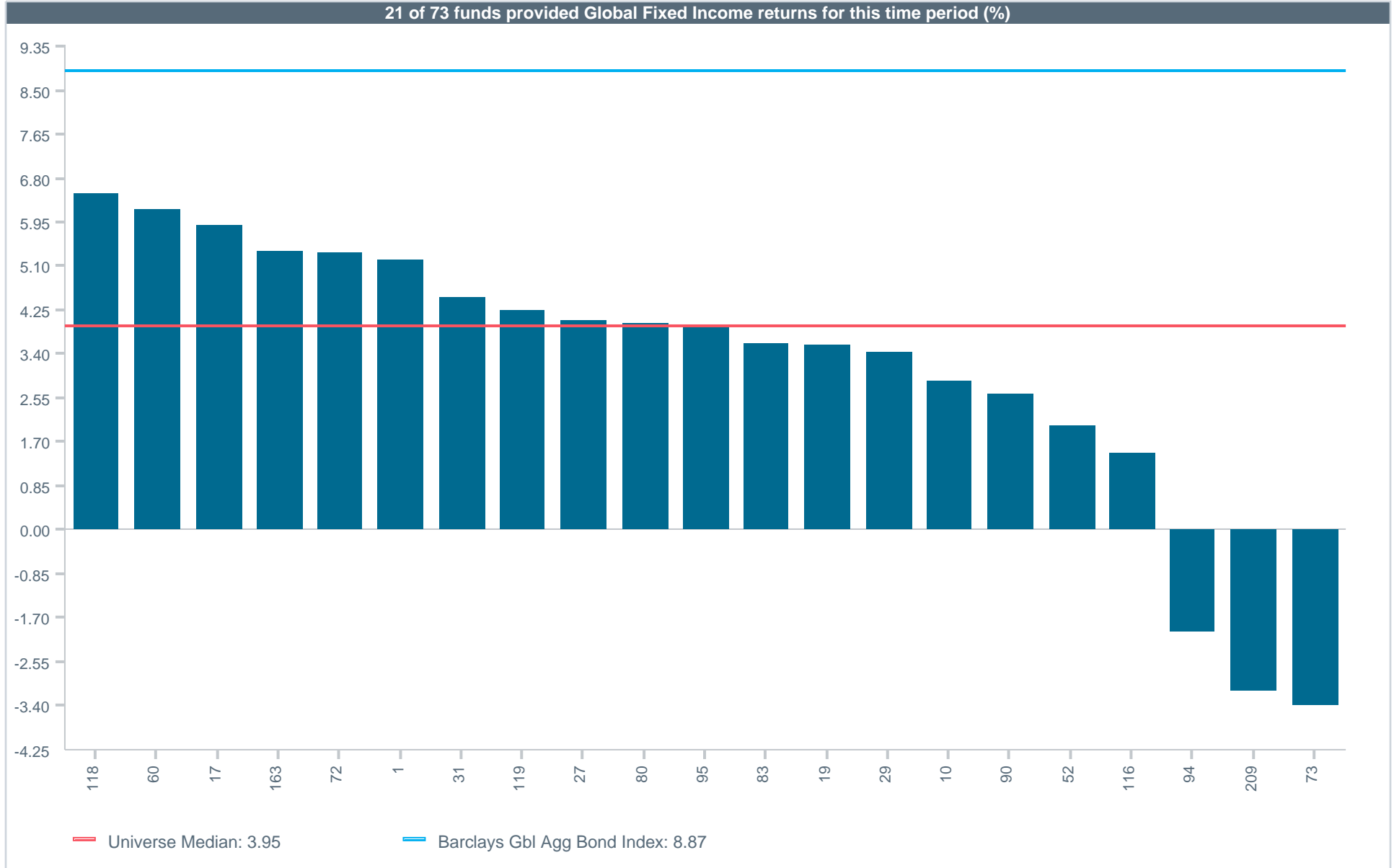
Total Return - US Fixed Income

City of Milwaukee ERS vs. Barclays US Agg Bond Index



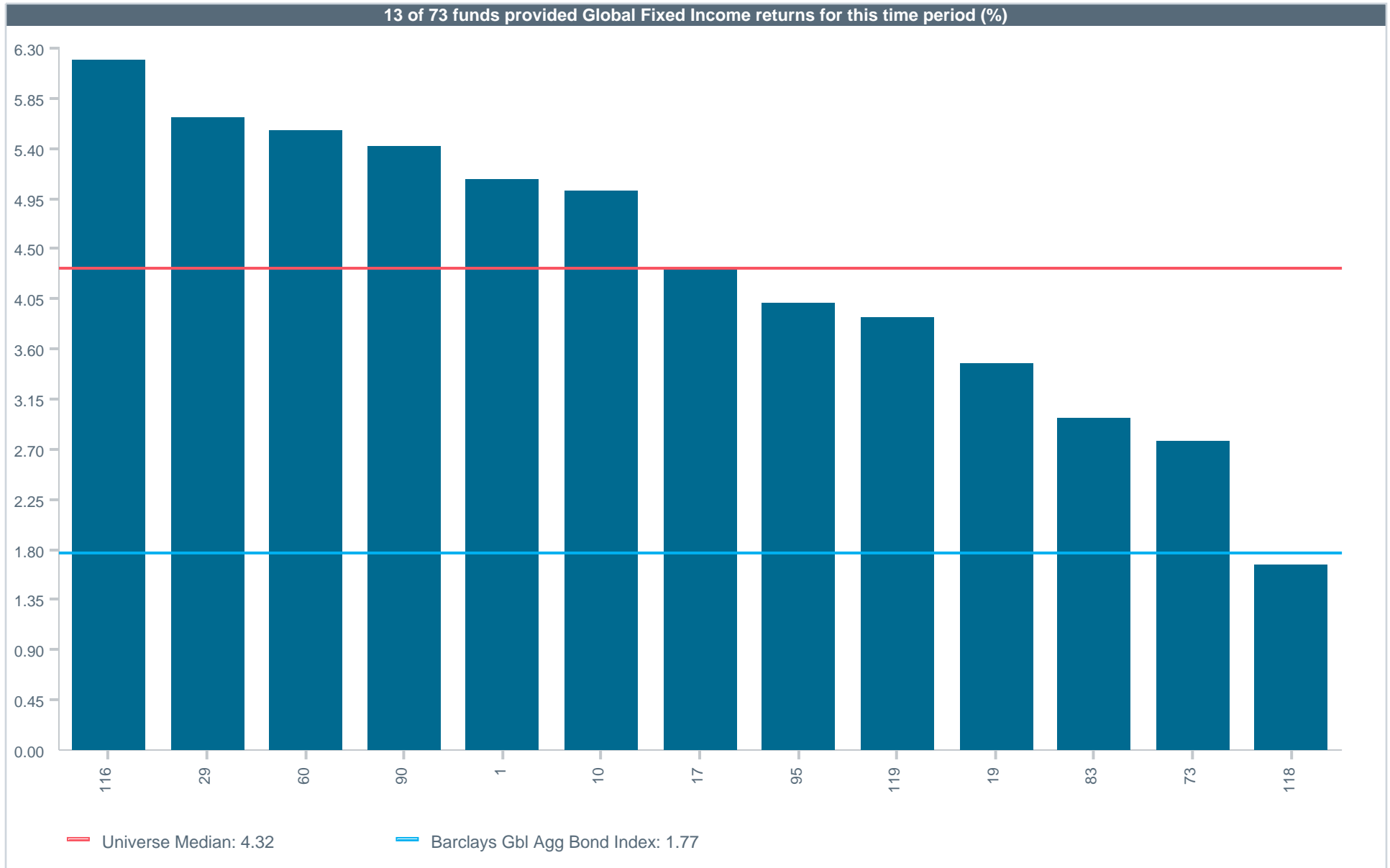
Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	4.66	3.77	4.50
Barclays US Agg Bond Index	6.00	4.06	3.76
Variance	-1.34	-0.29	0.74





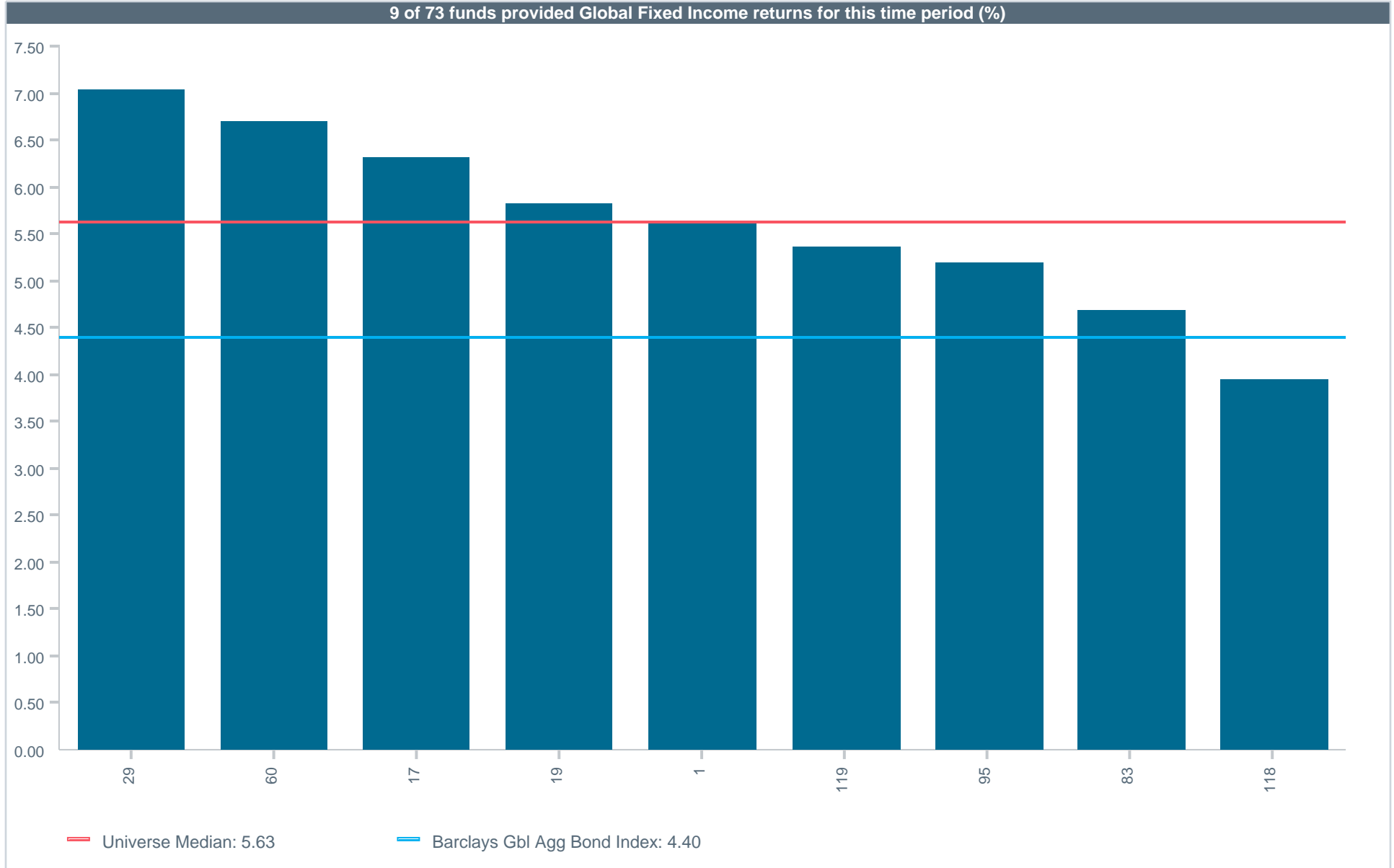
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



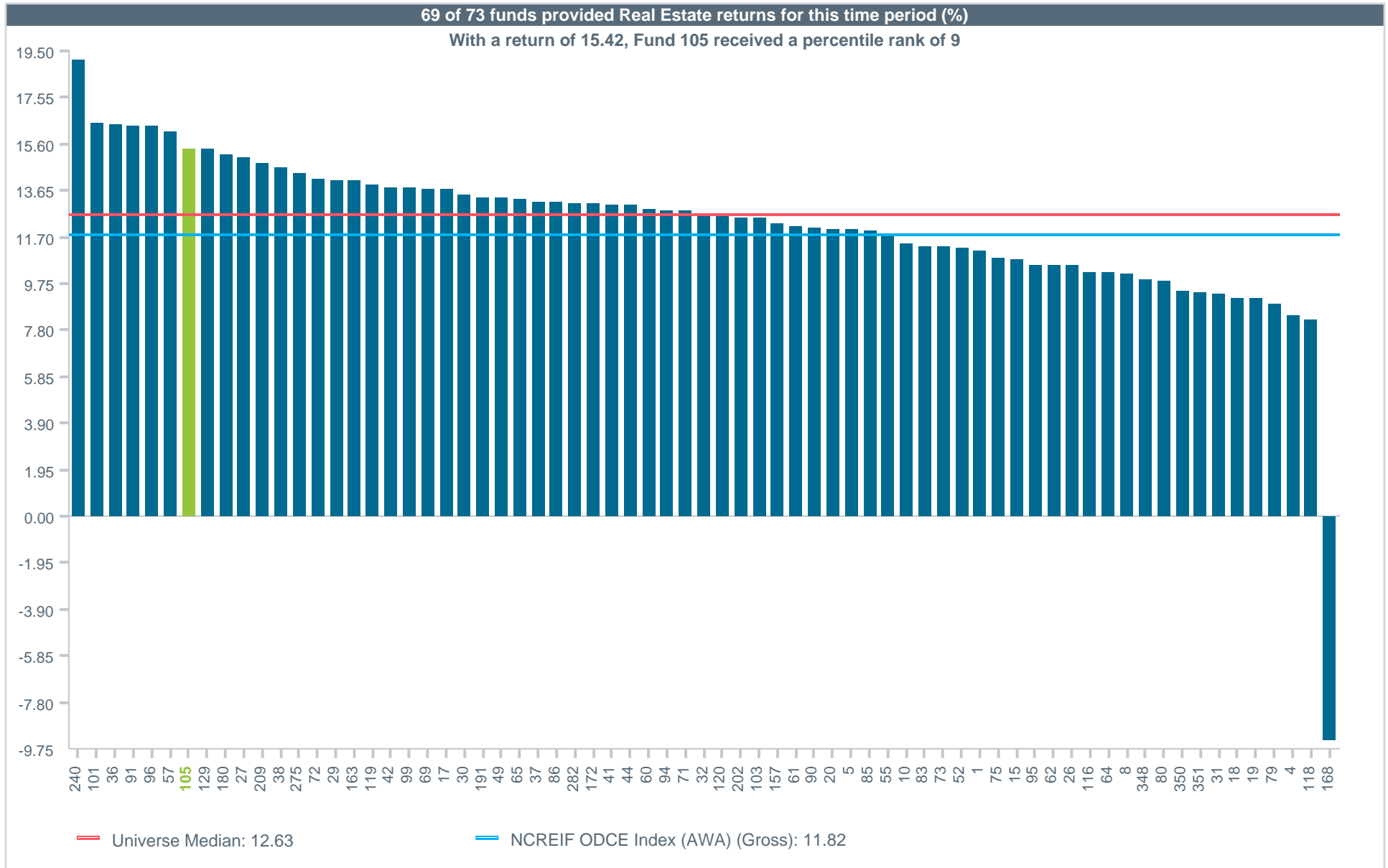
Total Return - Global Fixed Income

City of Milwaukee ERS vs. Barclays Gbl Agg Bond Index

Calendar Year Rates of Return (%)	Cumulative Performance (Growth of \$100)
<p>City of Milwaukee ERS does not have return data for Global Fixed Income</p>	

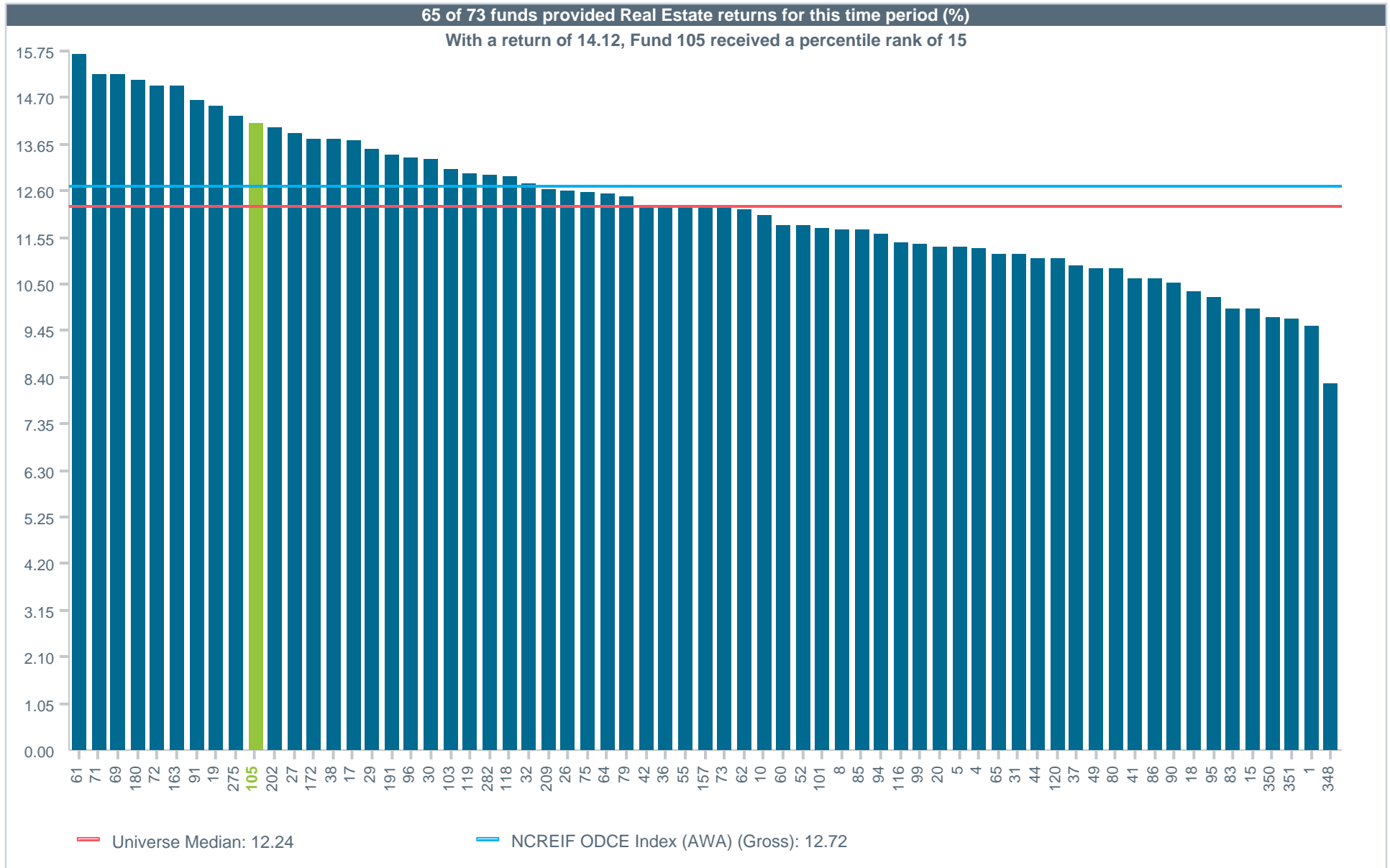
Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	N/A	N/A	N/A
Barclays Gbl Agg Bond Index	N/A	N/A	N/A
Variance	N/A	N/A	N/A





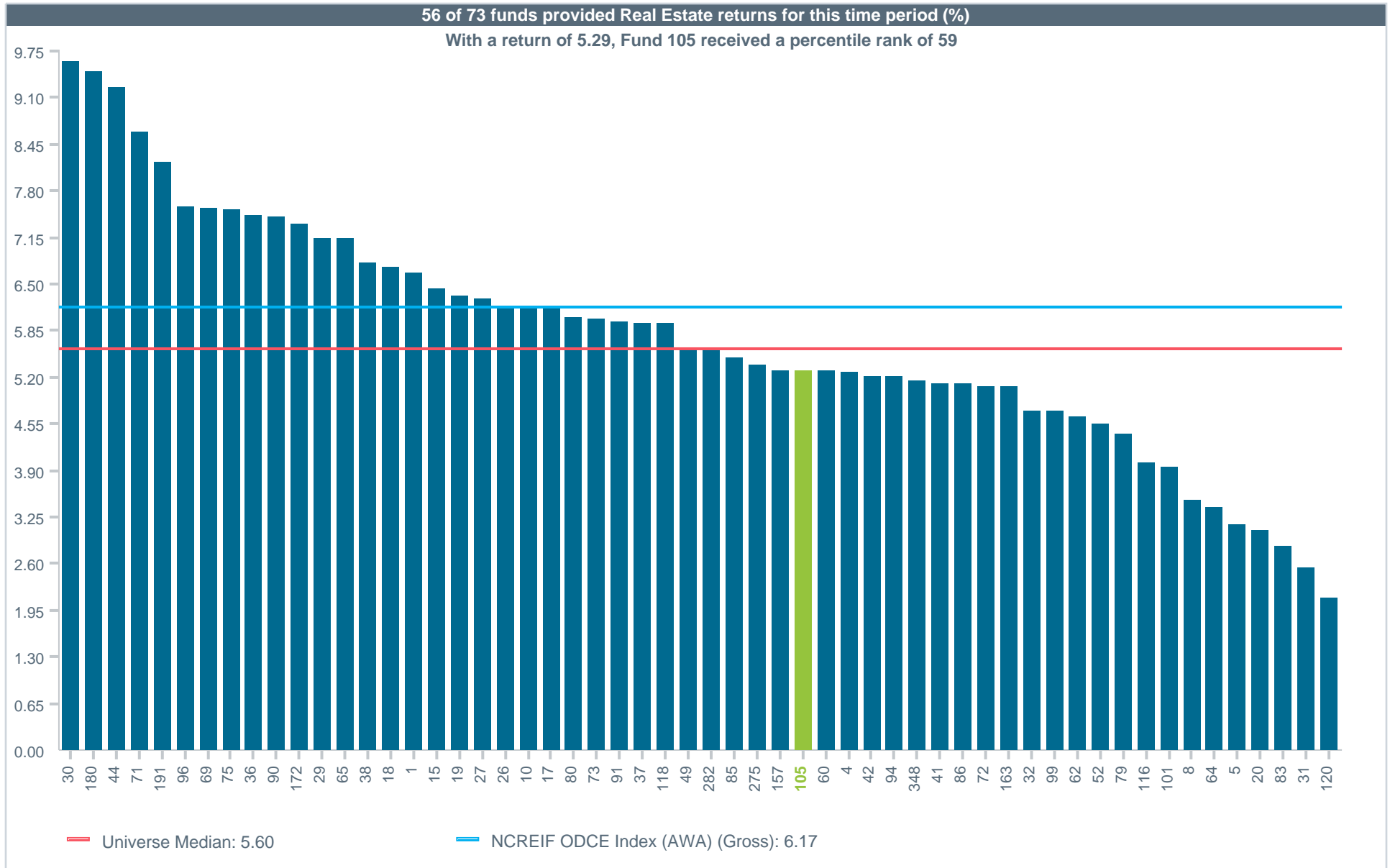
Funds with less history than the specified time period will not appear in the chart.





Funds with less history than the specified time period will not appear in the chart.



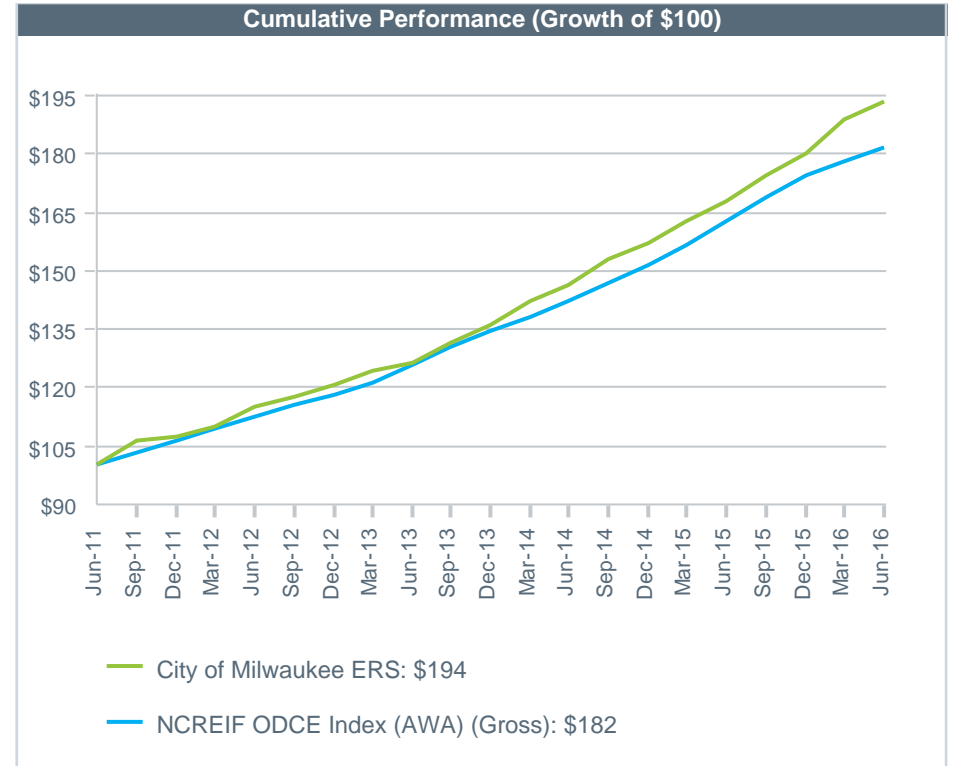
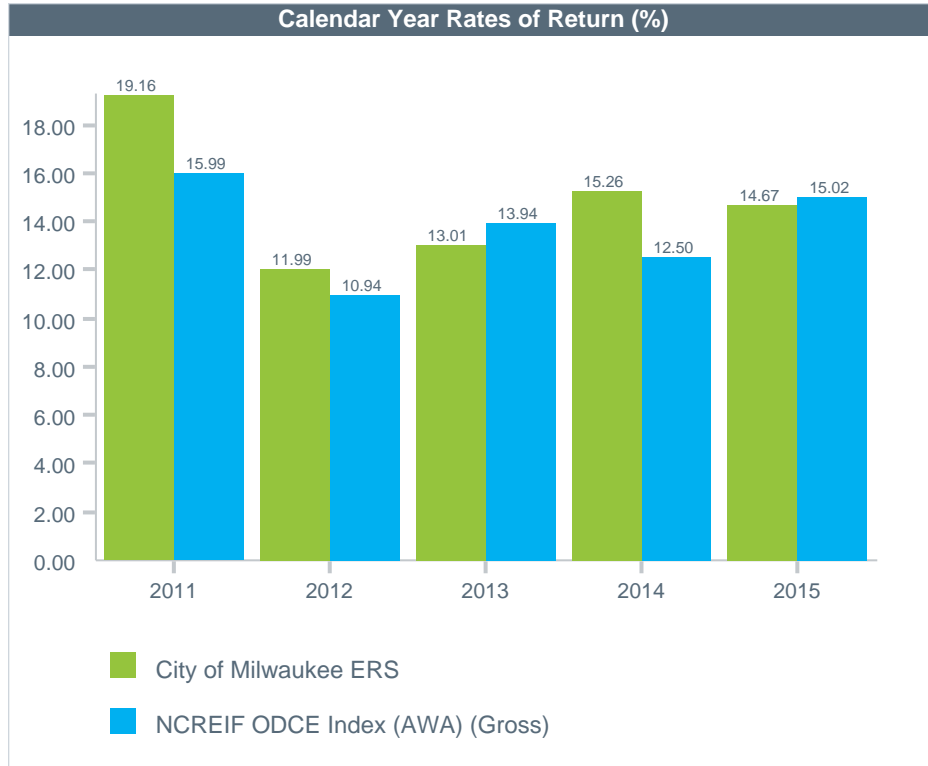


Funds with less history than the specified time period will not appear in the chart.



Total Return - Real Estate

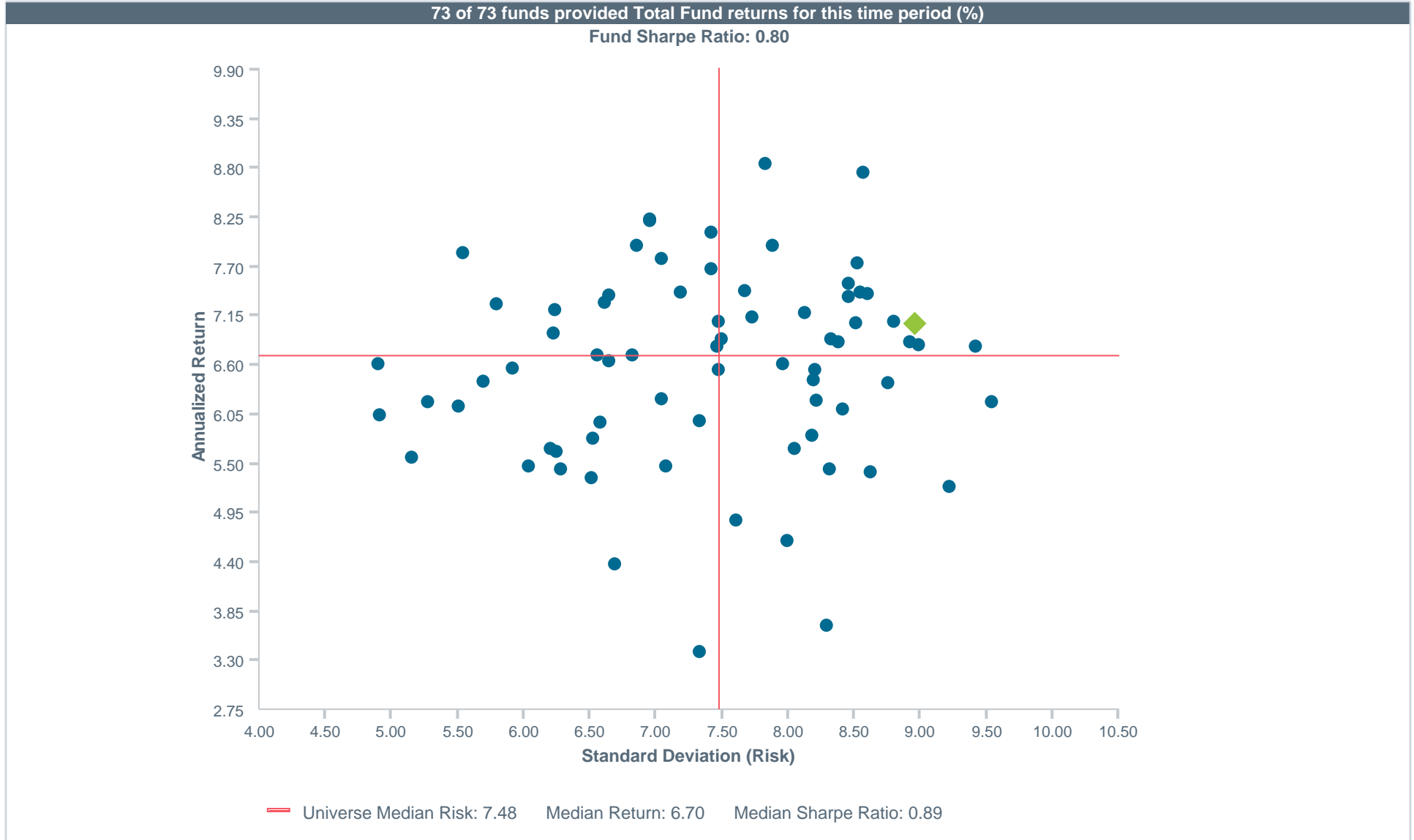
City of Milwaukee ERS vs. NCREIF ODCE Index (AWA) (Gross)



Annualized Returns (%)			
	1 Year	3 Years	5 Years
City of Milwaukee ERS	15.42	15.33	14.12
NCREIF ODCE Index (AWA) (Gross)	11.82	13.00	12.72
Variance	3.60	2.33	1.40



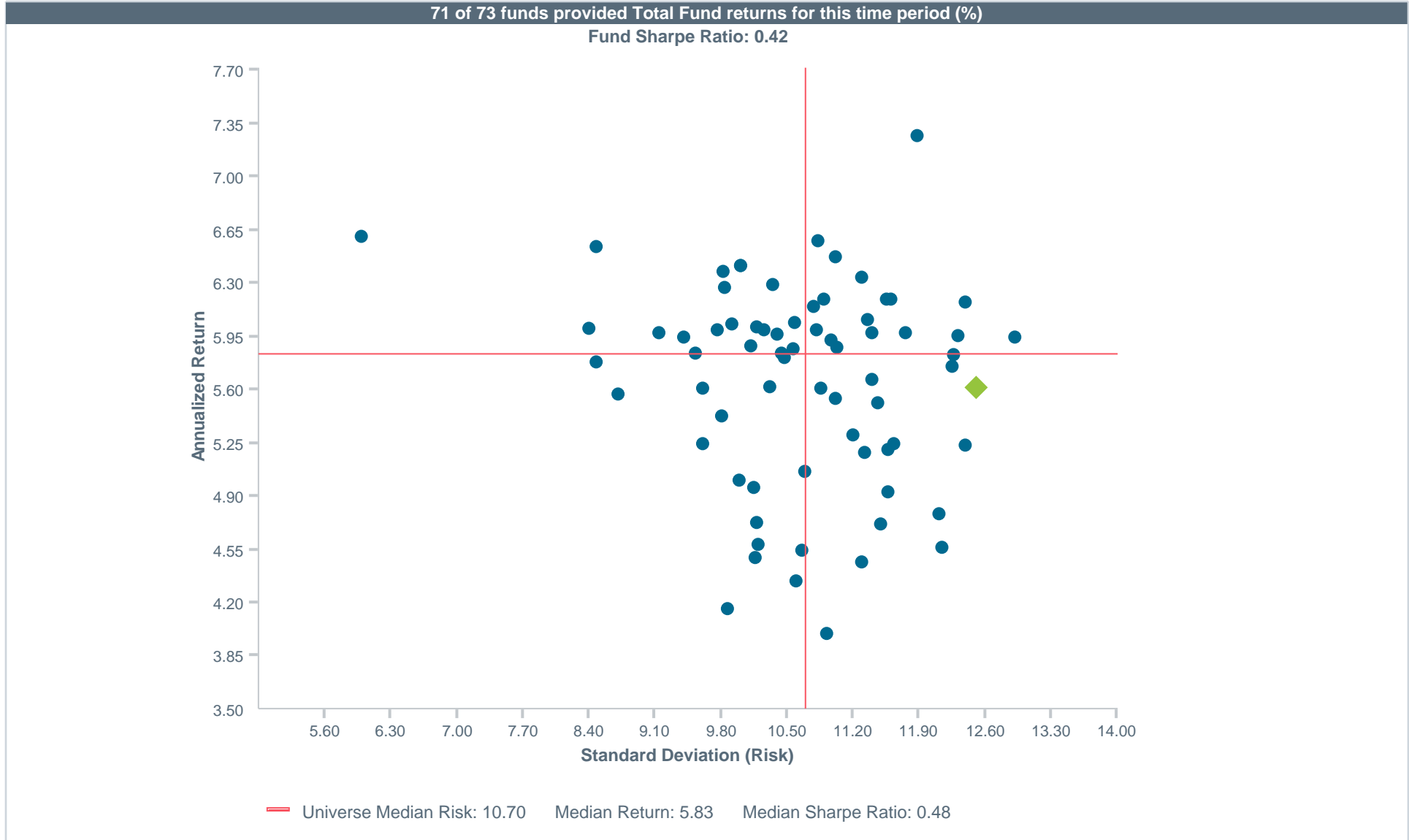
5 Year Annualized Total Fund Returns vs. Standard Deviation



Funds with less history than the specified time period will not appear in the chart.



10 Year Annualized Total Fund Returns vs. Standard Deviation



Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

5 Year Annualized US Equity Returns vs. Standard Deviation

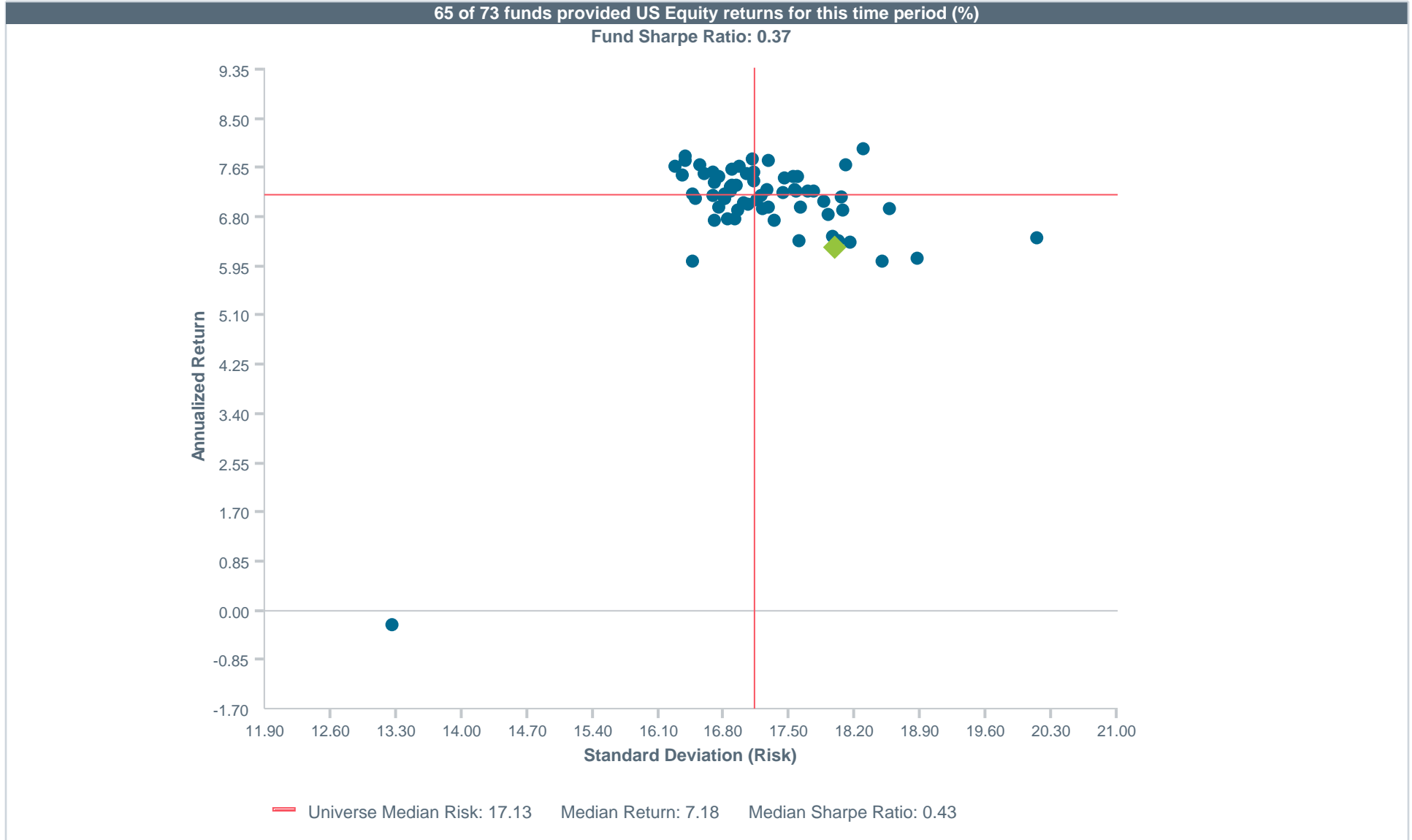


Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

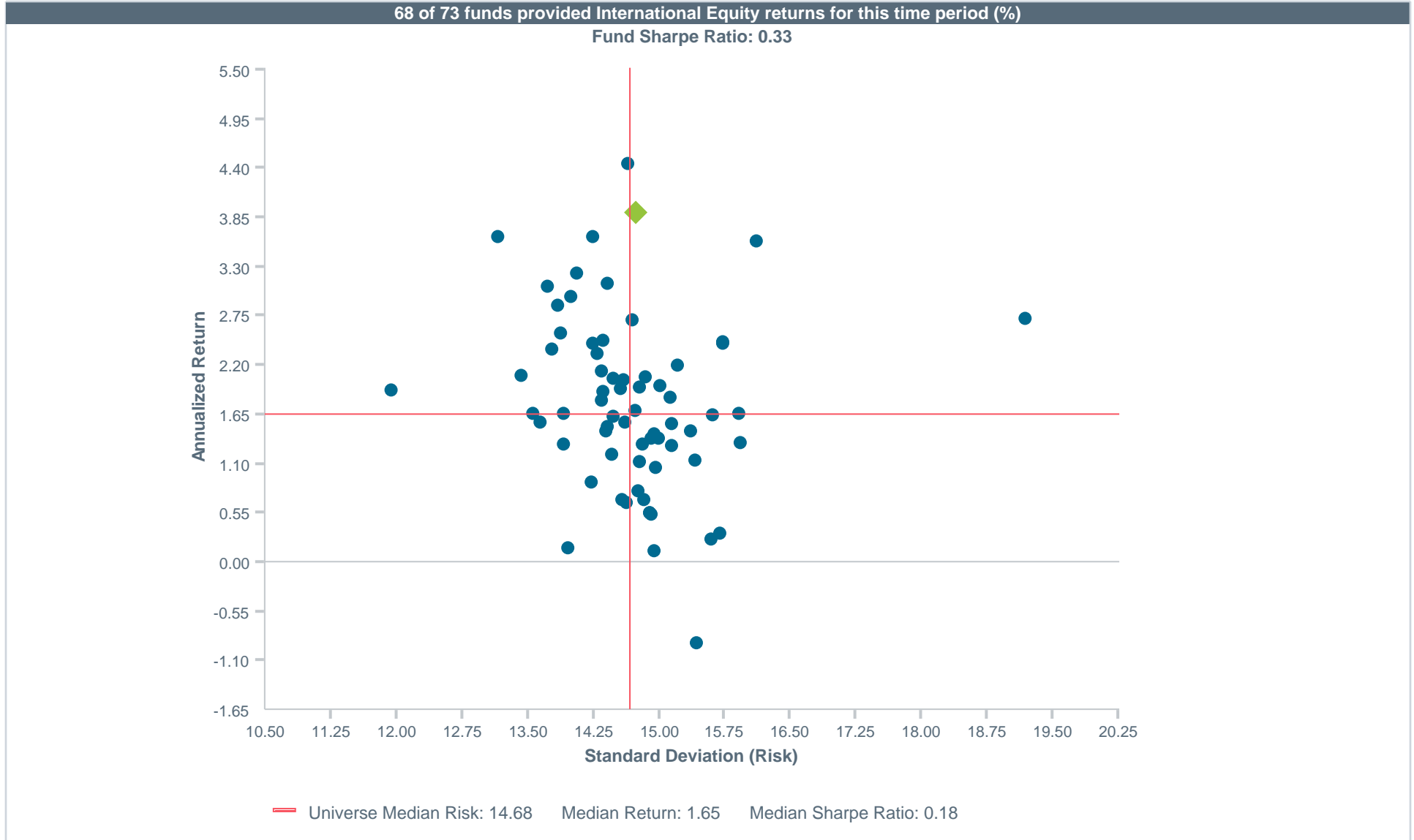
10 Year Annualized US Equity Returns vs. Standard Deviation



Funds with less history than the specified time period will not appear in the chart.



5 Year Annualized International Equity Returns vs. Standard Deviation

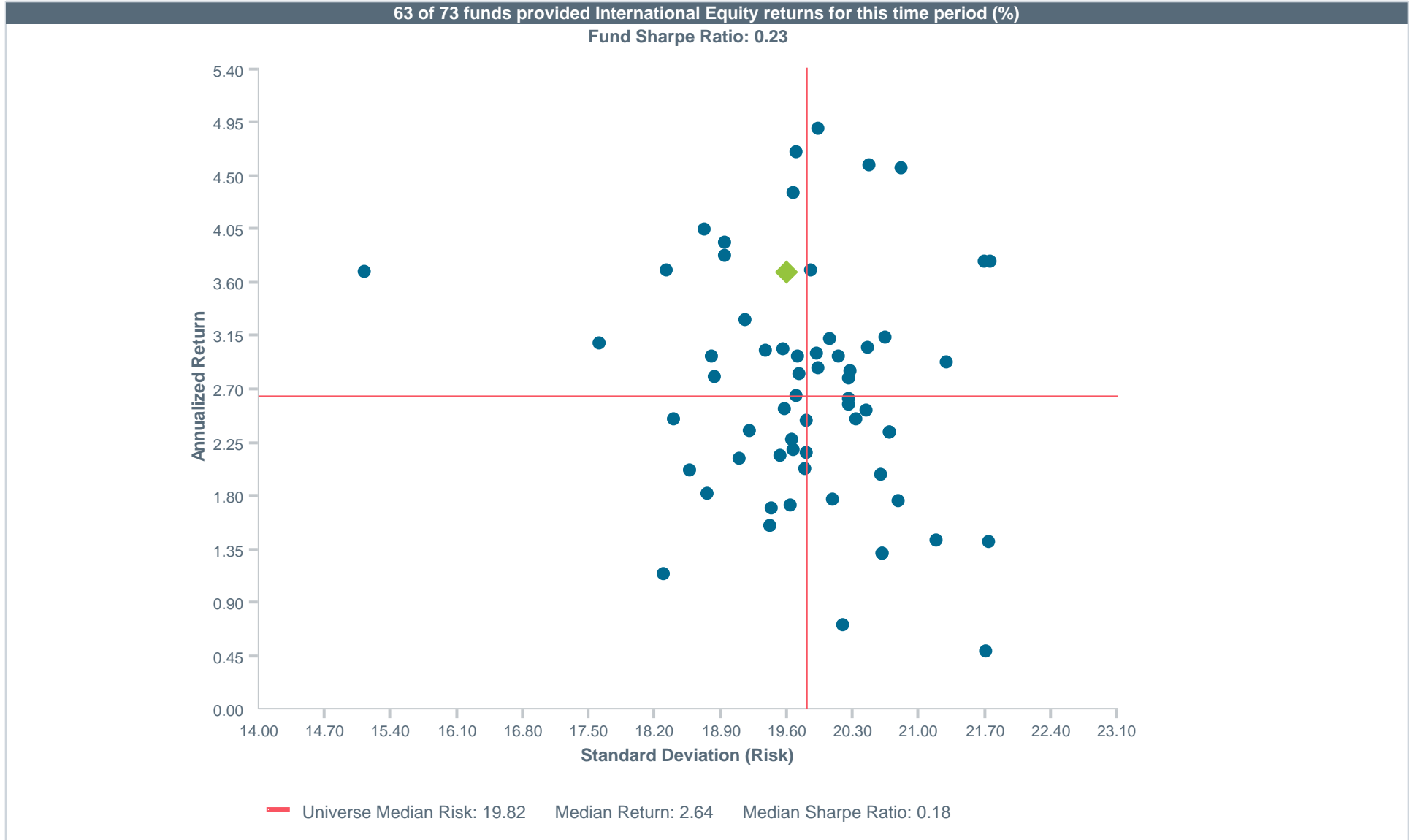


Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

10 Year Annualized International Equity Returns vs. Standard Deviation

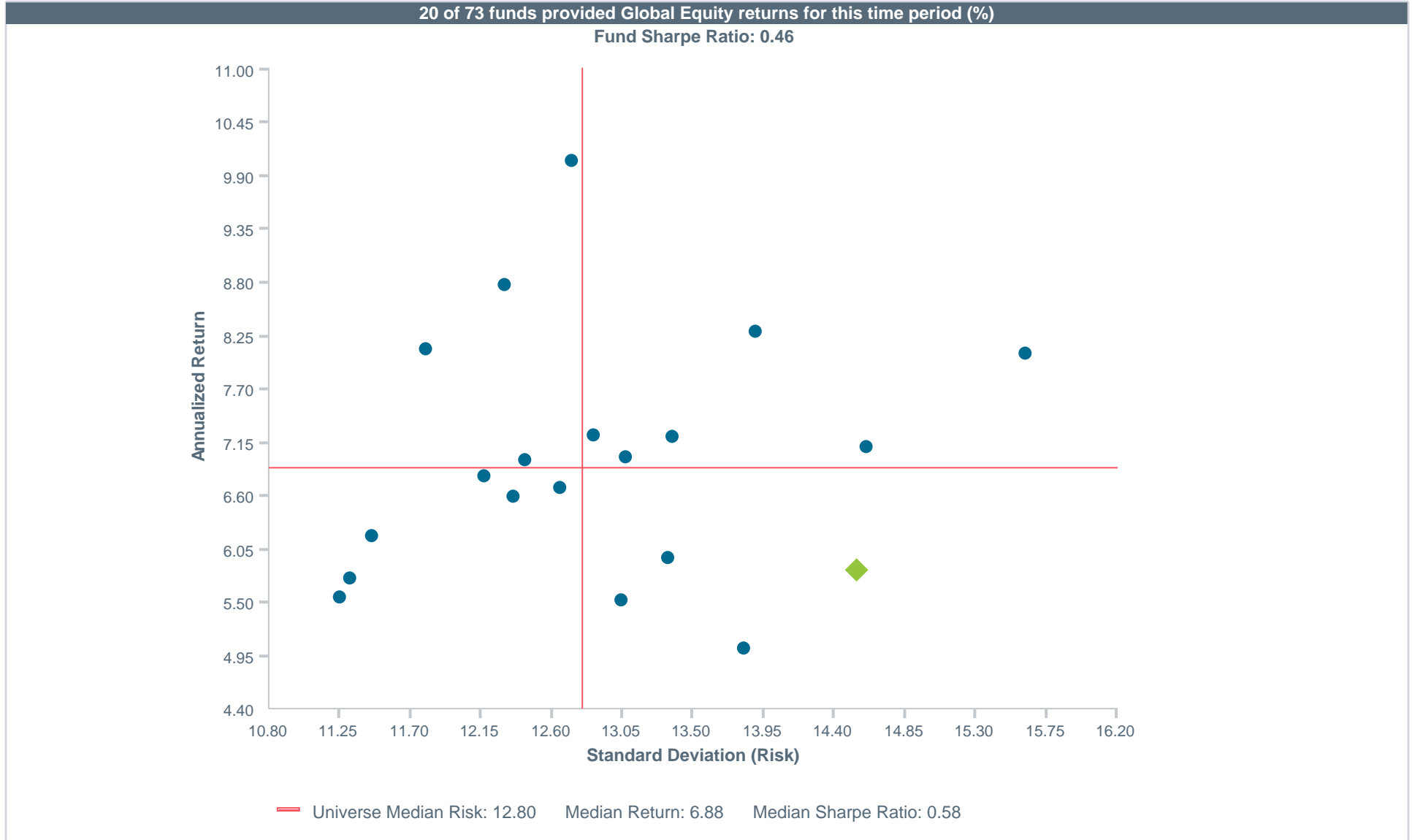


Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

5 Year Annualized Global Equity Returns vs. Standard Deviation



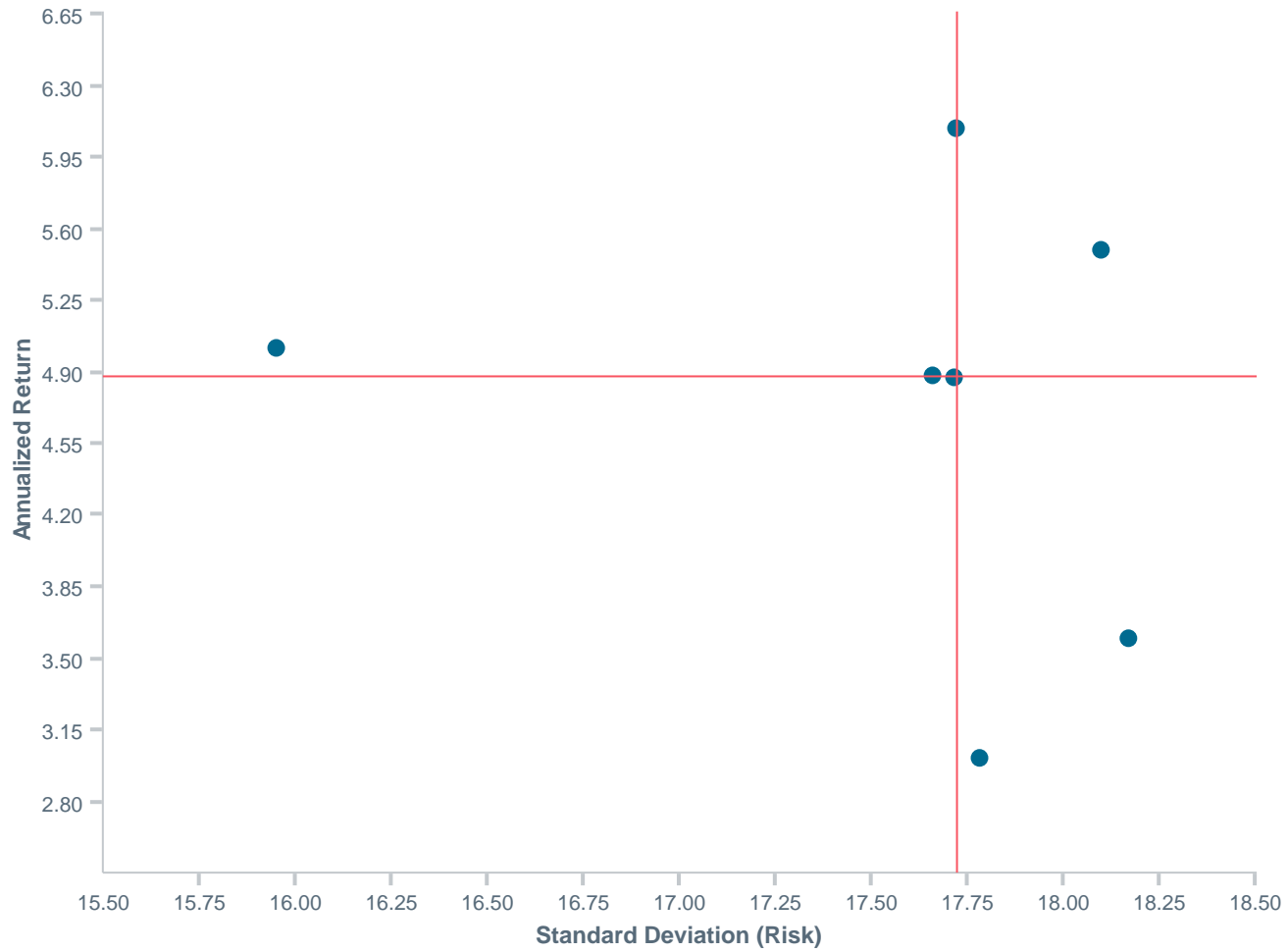
Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

10 Year Annualized Global Equity Returns vs. Standard Deviation

7 of 73 funds provided Global Equity returns for this time period (%)



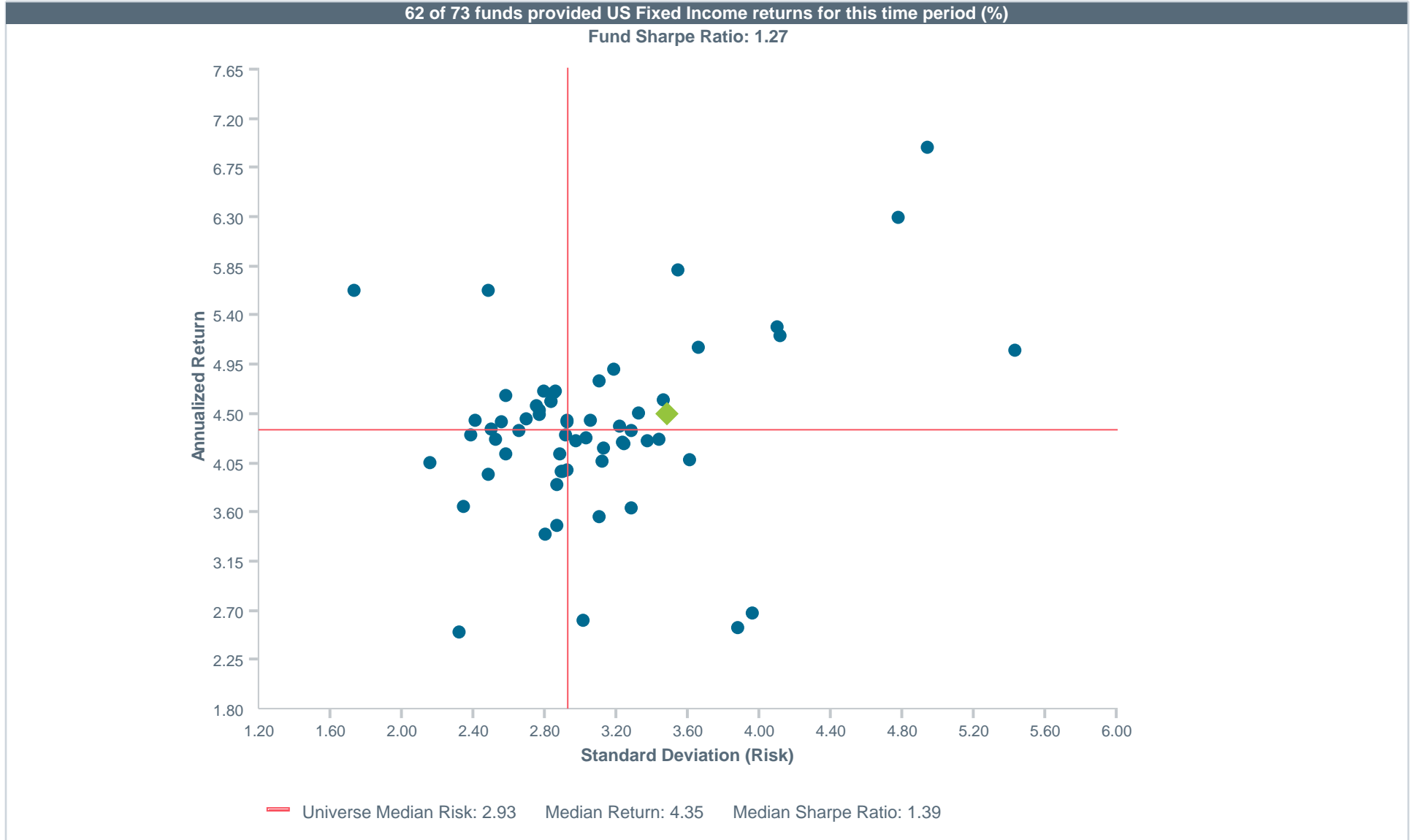
— Universe Median Risk: 17.72 Median Return: 4.87 Median Sharpe Ratio: 0.30

Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

5 Year Annualized US Fixed Income Returns vs. Standard Deviation

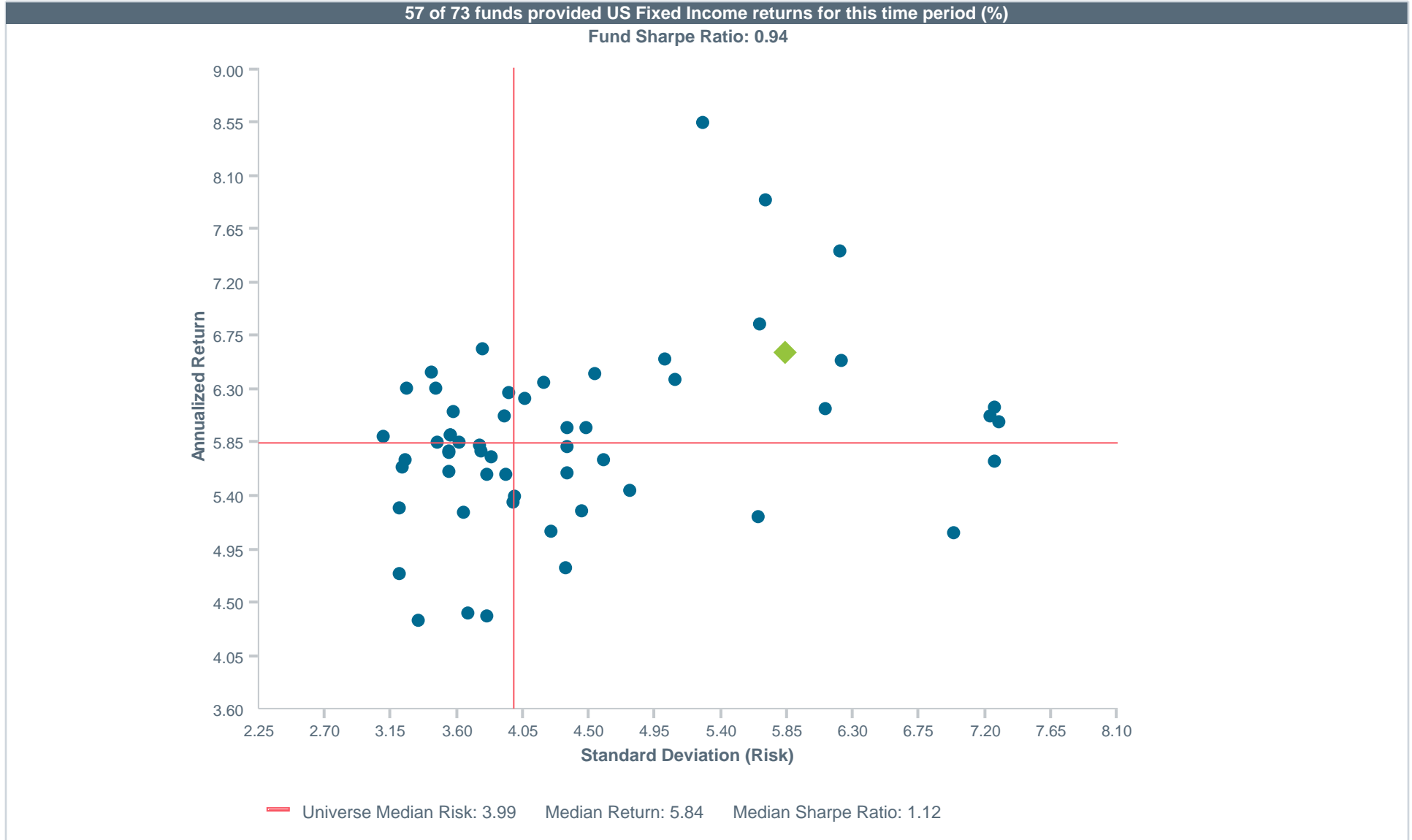


Funds with less history than the specified time period will not appear in the chart.



Risk/Return Analysis

10 Year Annualized US Fixed Income Returns vs. Standard Deviation

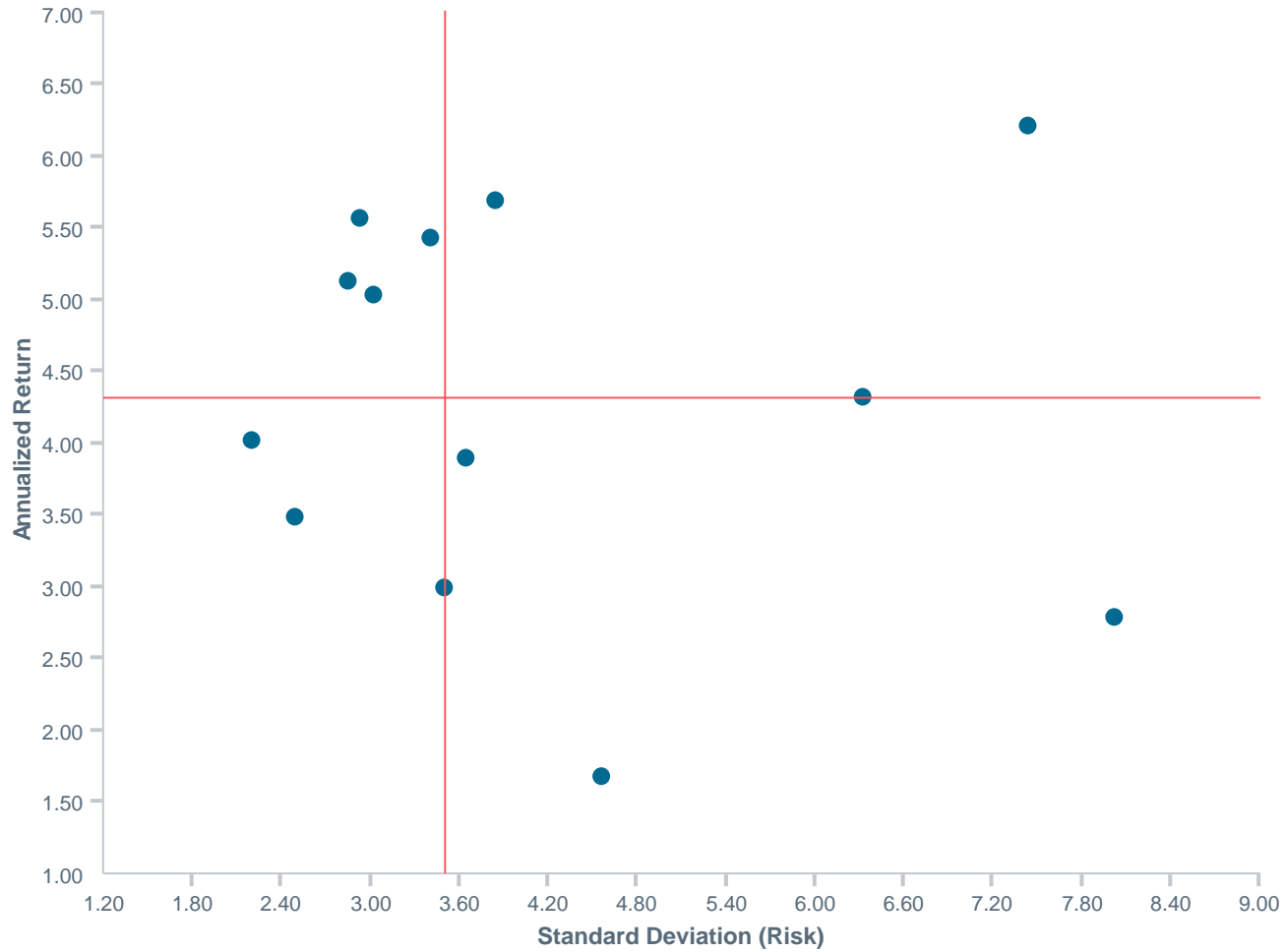


Funds with less history than the specified time period will not appear in the chart.



5 Year Annualized Global Fixed Income Returns vs. Standard Deviation

13 of 73 funds provided Global Fixed Income returns for this time period (%)



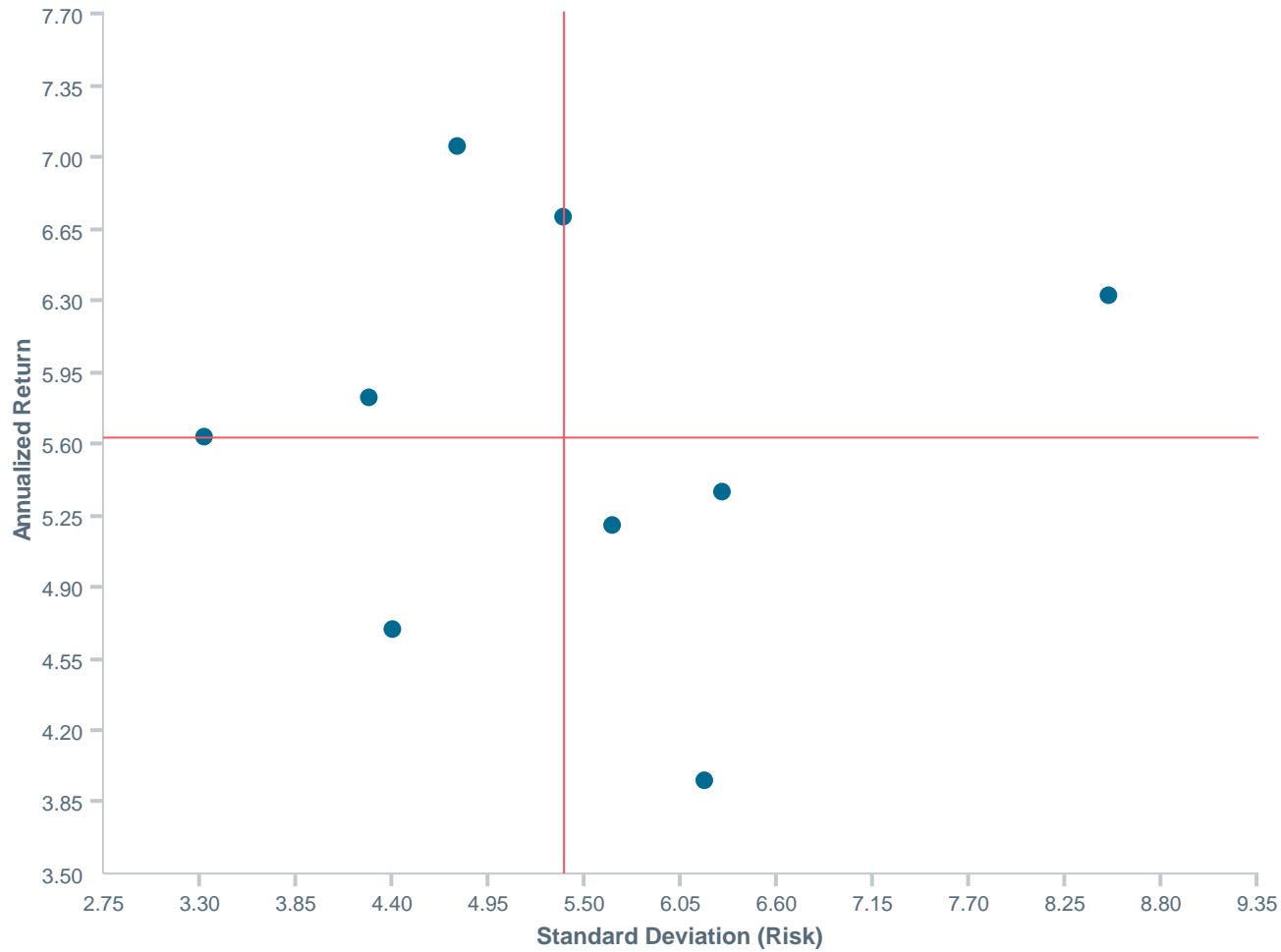
— Universe Median Risk: 3.51 Median Return: 4.32 Median Sharpe Ratio: 1.35

Funds with less history than the specified time period will not appear in the chart.



10 Year Annualized Global Fixed Income Returns vs. Standard Deviation

9 of 73 funds provided Global Fixed Income returns for this time period (%)

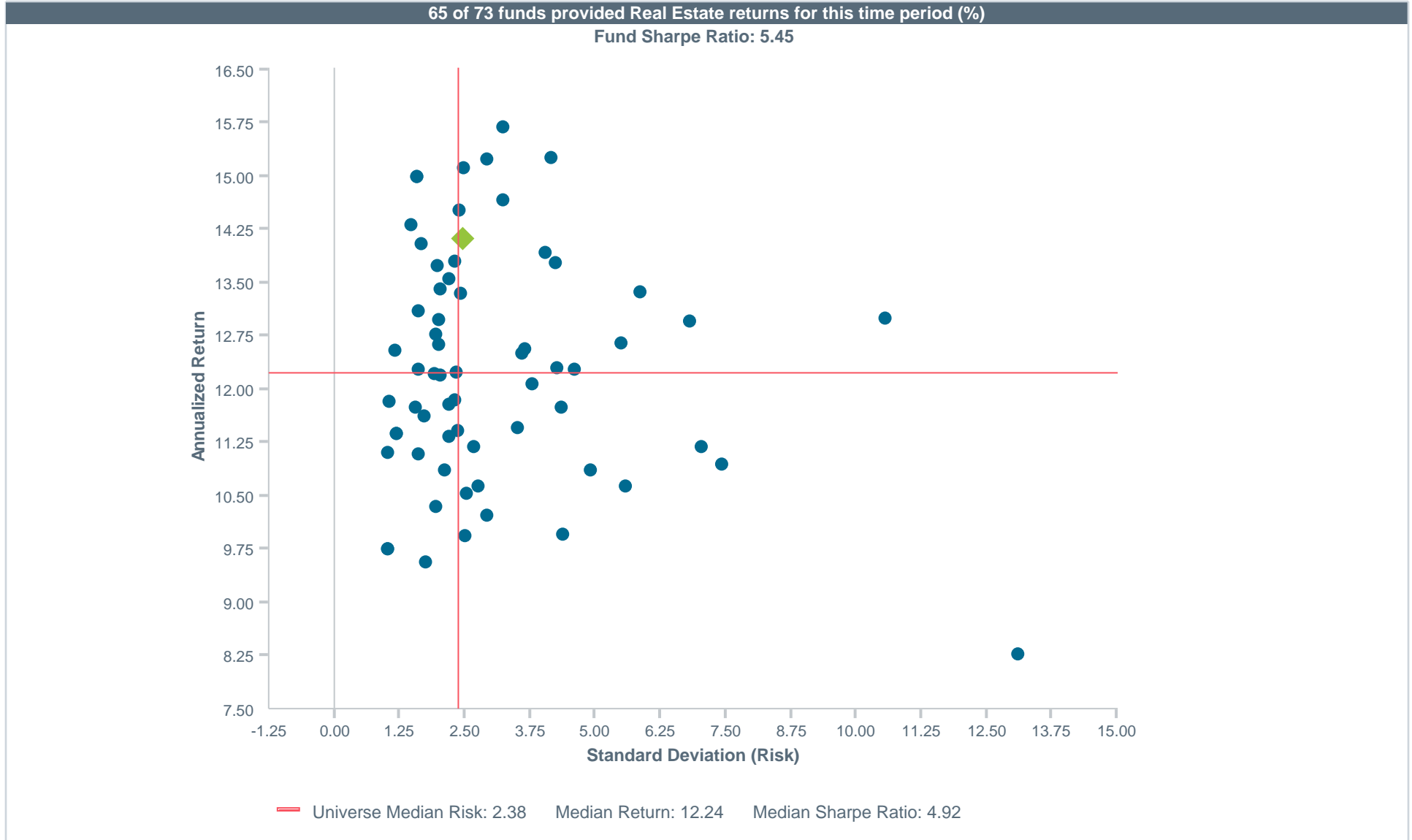


— Universe Median Risk: 5.38 Median Return: 5.63 Median Sharpe Ratio: 0.82

Funds with less history than the specified time period will not appear in the chart.



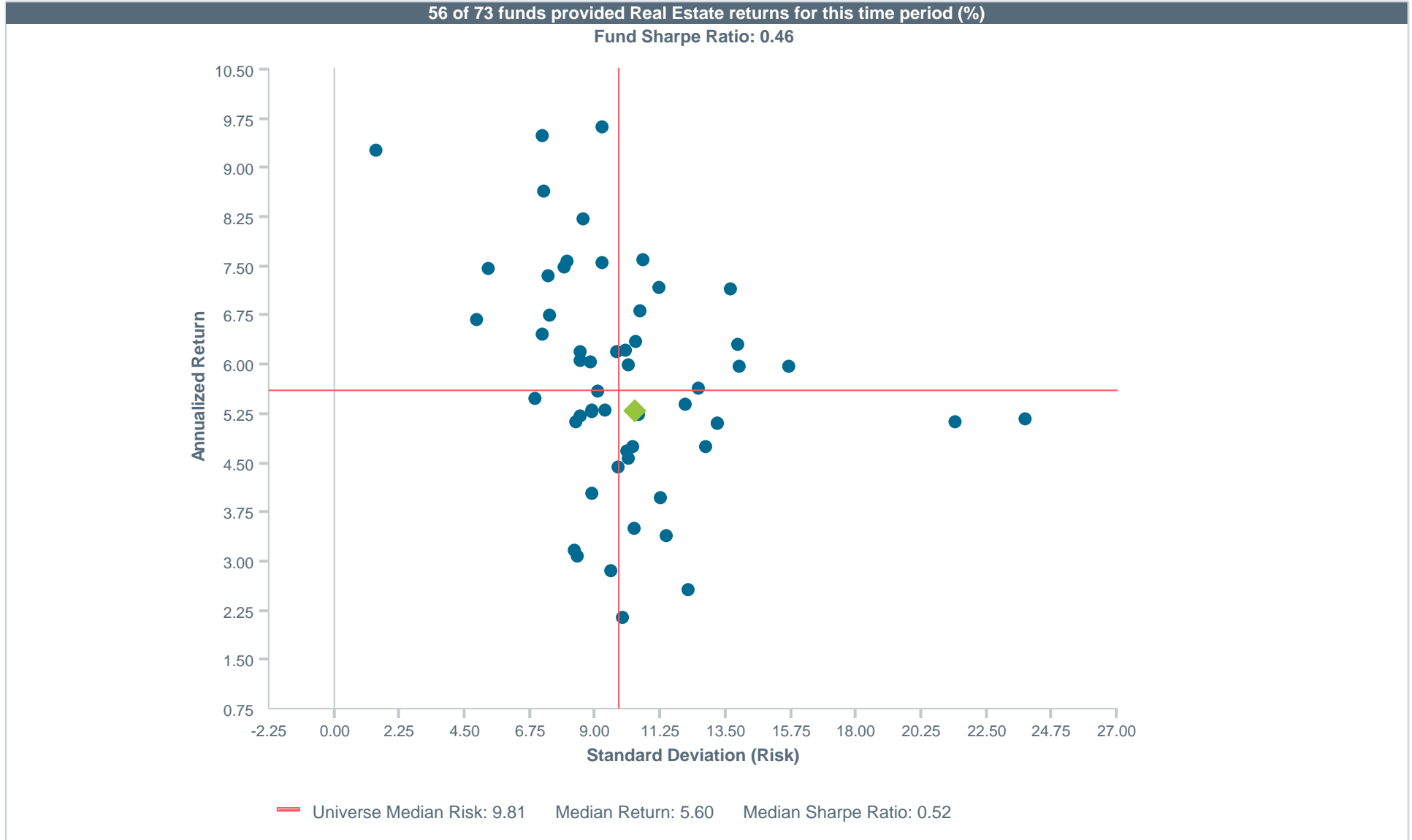
5 Year Annualized Real Estate Returns vs. Standard Deviation



Funds with less history than the specified time period will not appear in the chart.



10 Year Annualized Real Estate Returns vs. Standard Deviation

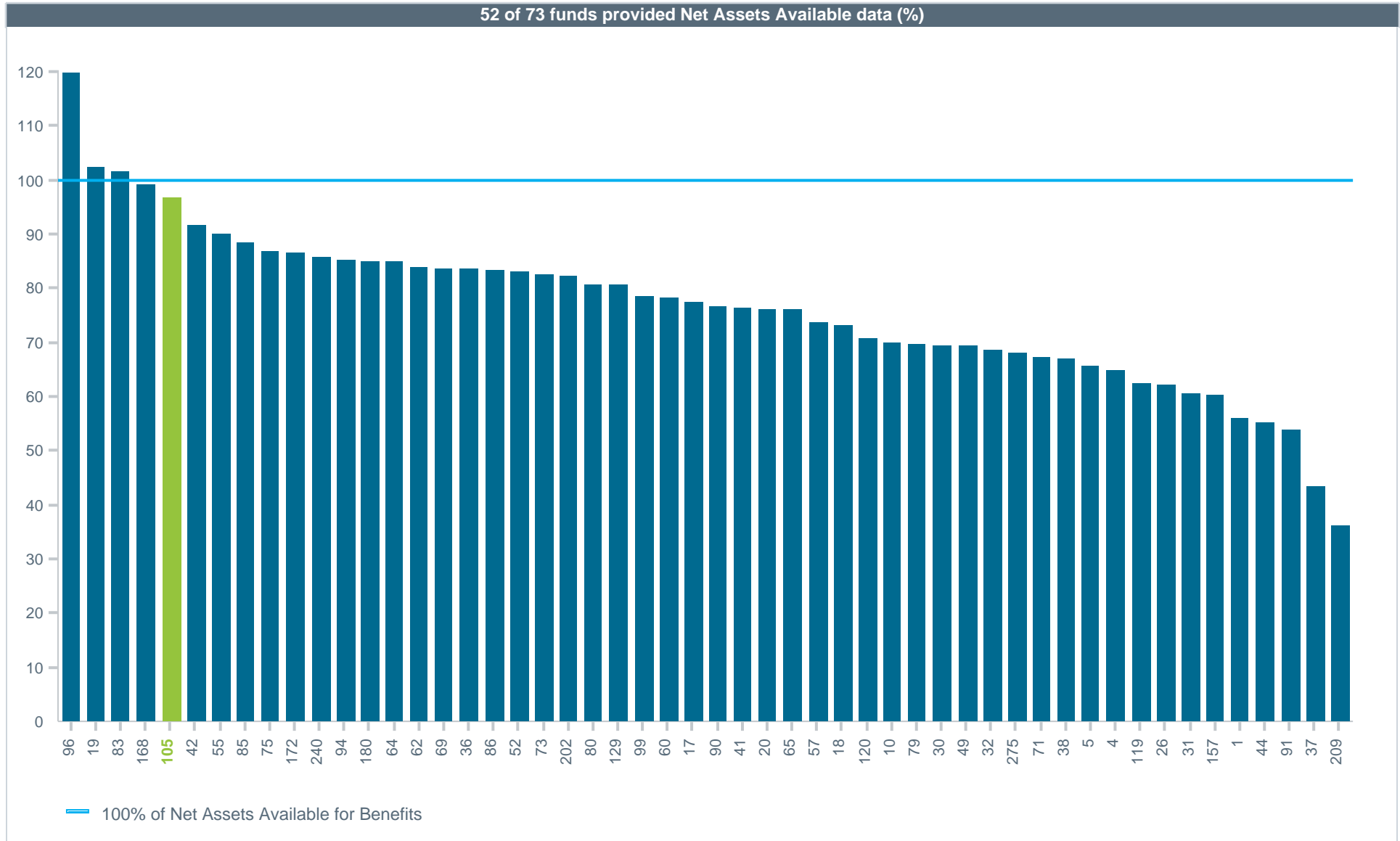


Funds with less history than the specified time period will not appear in the chart.



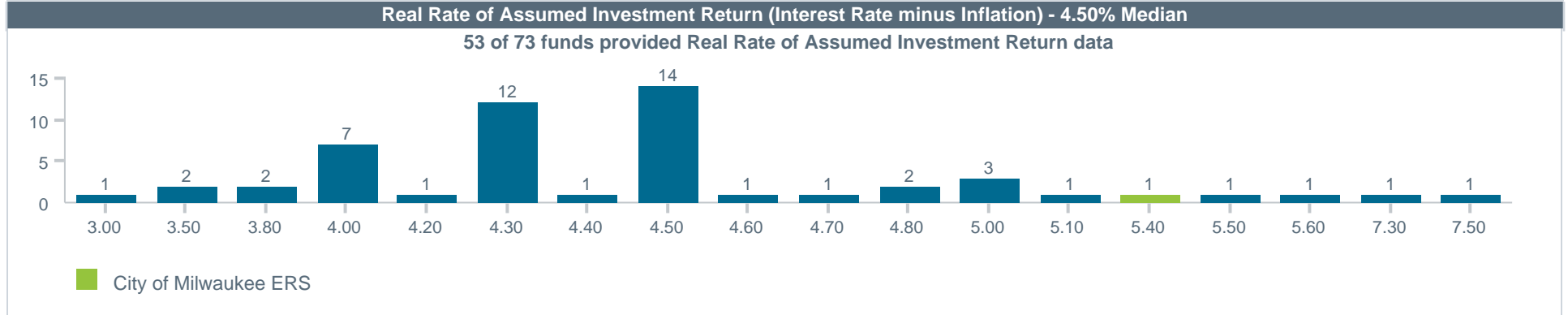
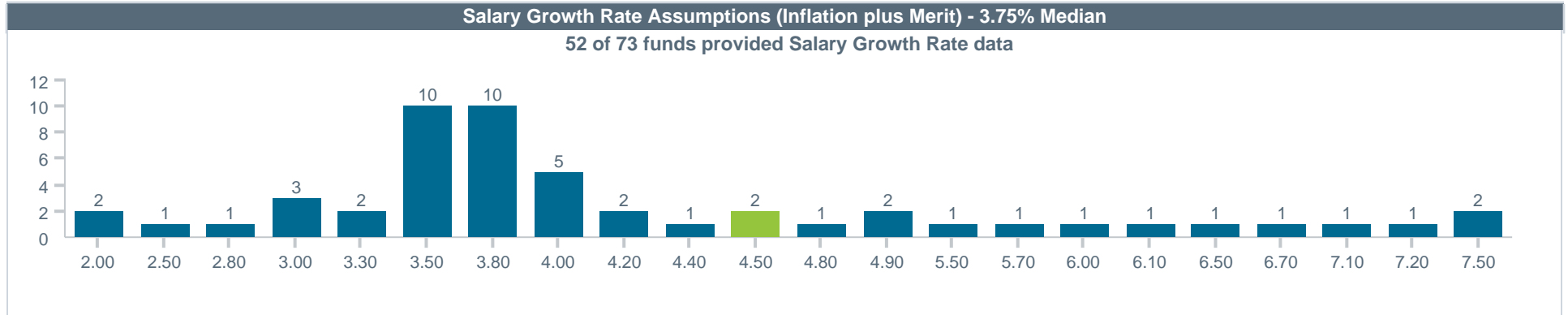
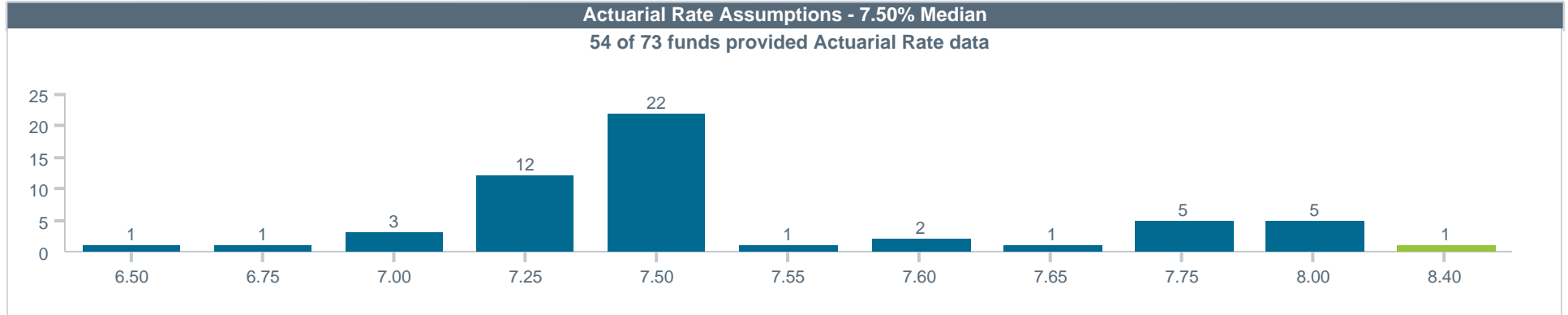
Net Assets Available For Benefits

Expressed as a Percentage of the Pension Benefit Obligation



Funds that did not provide data will not appear in the chart.

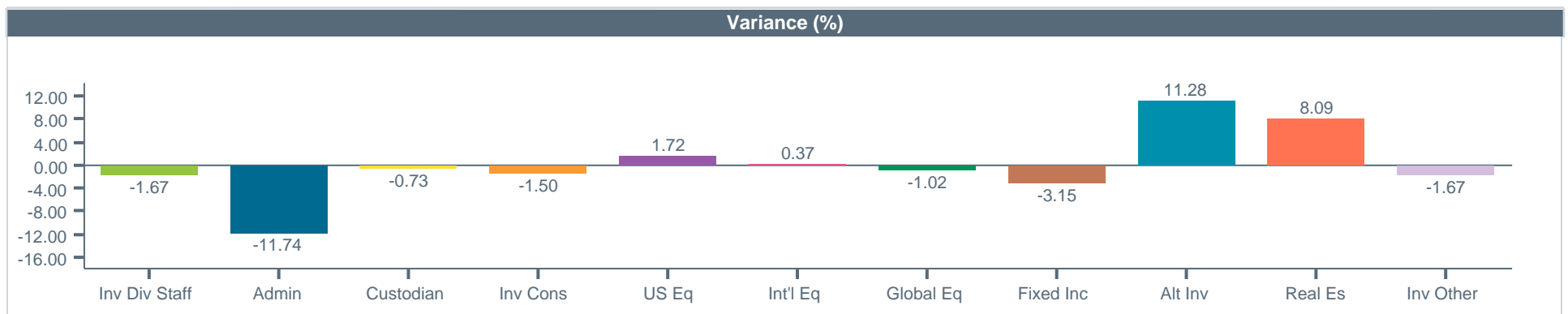
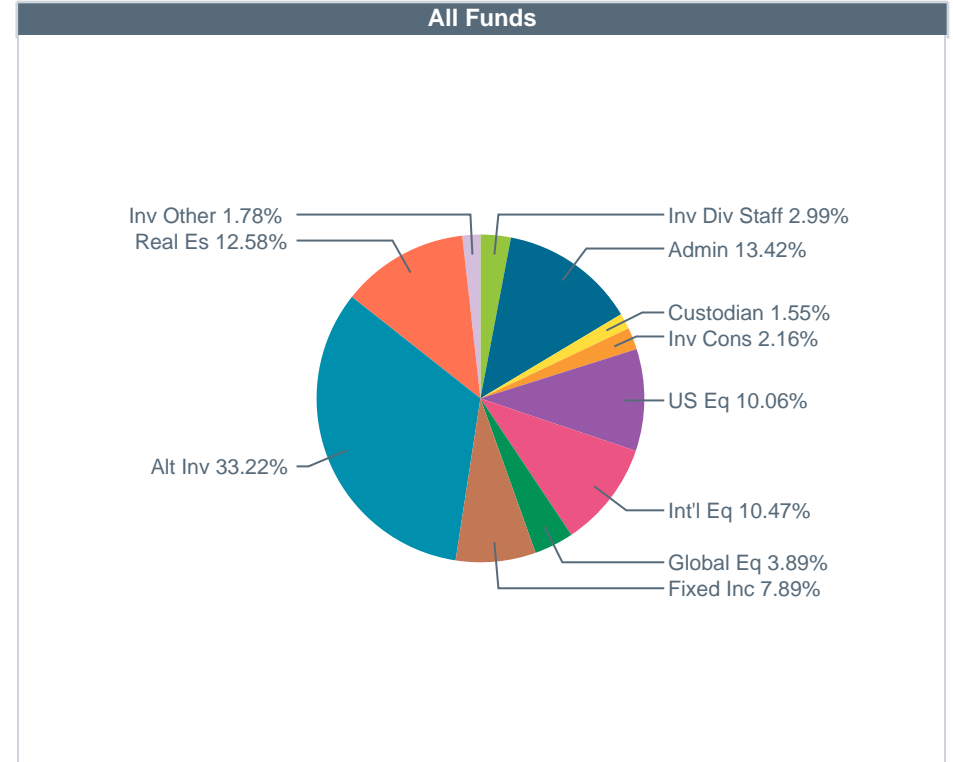
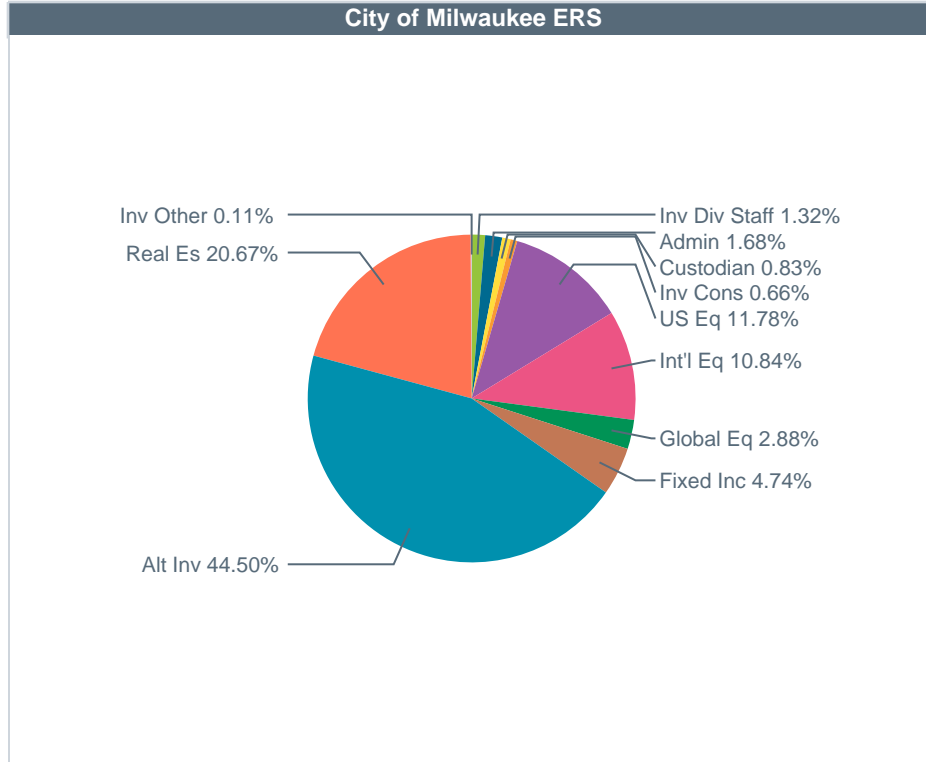




Funds that did not provide data will not appear in the chart.



Total Administrative and Investment Fees
City of Milwaukee ERS vs. All Funds



Allocations shown may not sum up to 100% exactly due to rounding.



Fund Number: 105

As of June 30, 2016

Total Fund Fee Summary in Basis Points

City of Milwaukee ERS vs. Average by Asset Range

55 of 73 funds provided fee data for this time period

Administrative Expenses	City of Milwaukee ERS	Under \$500 Million	\$500mm - \$1 Billion	\$1 - \$5 Billion	\$5 - \$10 Billion	\$10 - \$20 Billion	Over \$20 Billion
Internal Inv. Div. Staff	1.01	2.16	0.00	2.16	0.74	0.77	1.92
Actuary	0.32	2.49	1.05	0.59	0.24	0.12	0.12
Legal	0.22	1.68	1.06	0.84	0.27	0.25	0.15
Consultant	0.00	0.15	0.00	0.21	0.09	0.09	0.13
Audit	0.22	0.87	0.43	0.23	0.10	0.06	0.08
Other Professional	0.14	0.00	0.46	0.25	0.07	0.17	0.54
General Administrative	0.39	22.93	7.93	7.84	4.78	4.69	3.20
Total Administrative Expenses	2.29	30.28	10.94	12.12	6.29	6.15	6.15
Investment Expenses	City of Milwaukee ERS	Under \$500 Million	\$500mm - \$1 Billion	\$1 - \$5 Billion	\$5 - \$10 Billion	\$10 - \$20 Billion	Over \$20 Billion
Custodial	0.63	0.53	3.90	1.31	0.49	0.52	0.31
Investment Consulting	0.50	3.41	2.11	2.07	0.60	0.74	0.45
US Equity	8.97	0.26	9.62	8.83	6.31	2.84	2.70
International Equity	8.26	3.86	8.55	6.37	6.31	5.54	4.09
Global Equity	2.19	0.00	0.00	1.76	5.73	1.73	1.40
Fixed Income	3.61	0.00	5.99	5.19	4.17	3.64	3.45
Real Estate	15.74	0.00	8.07	6.86	8.01	4.60	7.15
Other Investment Management	0.08	0.00	0.00	1.16	1.03	1.01	0.80
Total Investment Expenses (ex. Alt Inv)	39.99	8.07	38.24	33.55	32.66	20.63	20.36
Alternative Investments	33.89	0.00	3.25	16.34	14.34	17.45	22.29
Total Investment Expenses	73.88	8.07	41.49	49.89	47.00	38.07	42.65
Total Expenses	76.17	38.35	52.43	62.01	53.30	44.22	48.80

Expressed in basis points on total fund assets. Funds that did not provide fee data will not appear in the table.



Miscellaneous Comments

- Performance shown is gross of fees, with the exception of the following:
 - **Funds 31, 49, 350, and 351:** Performance shown is net of fees.
 - **Funds 5 and 20:** Performance shown is net of fees, except for Total Fund performance.
- Performance shown is calculated using quarterly performance provided by participating public funds.
- Performance shown may differ from a fund's actual performance due to rounding.
- Net Assets Available for Benefit includes funding percentage valuation as of dates between June 2015 and June 2016.
- Allocations shown reflect dedicated managers/mandates rather than actual exposure, with the exception of the following:
 - **Funds 1, 29, and 119:** Performance shown for Global Fixed Income includes US and Non-US exposure.
 - **Funds 4, 42, and 64:** Performance shown for US Fixed Income includes US and Non-US exposure.

Glossary of Terms

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Return - Compounded rate of return for the period.

%Return - The time-weighted rate of return of a portfolio for a specified time period.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index), divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period. Calculation is based on quarterly periodicity.

PORTLAND

CHICAGO

NEW YORK

Disclaimer of Warranties and Limitation of Liability - This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources as directed by the client or as we believe necessary or appropriate. RVK has taken reasonable care to ensure the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document is provided for the client's internal use only and does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.

