

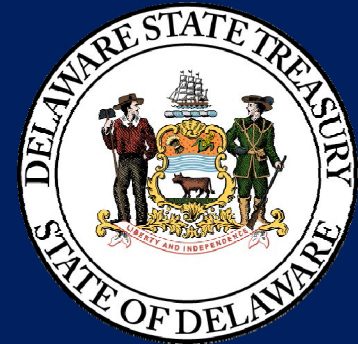
INVESTMENT PERFORMANCE SUMMARY QUARTER ENDING SEPTEMBER 30, 2019

OFFICE OF THE STATE TREASURER & CASH MANAGEMENT POLICY BOARD

September 30, 2019

John Krimmel, CPA, CFA, Partner

Kevin M. Leonard, Partner



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

MARKET ENVIRONMENT

NEPC, LLC

MARKET ENVIRONMENT

- **Introduction**

As we look back at the extended string of impressive wins scored by capital markets in 2019, the past three years, or even the last 10 years, we are left predicting a more subdued outlook for returns in 2020 and beyond. To borrow from Winnie the Pooh's gloomy Eeyore, they're funny things, low returns. You never have them till you're having them. This sobering realization comes with some tough choices for investors: take on more risk, rebalance, or get used to the lower returns.

That said, we want to remind investors to take comfort from the prolonged spate of robust investment gains—going back as far as a decade—so far. Portfolios have benefited even in the face of anemic economic growth as low interest rates emboldened investors to pay more for a dollar of future earnings. Case in point: Through the third quarter of this year, the S&P 500 Index had posted returns of 20%.

Not to be left behind, bonds, which carry a lower risk profile, have also kept up. The Bloomberg Barclays US Aggregate Bond Index has earned over 8% for the year, while high-yield debt has gained over 11%. The biggest surprise of all: long-Treasury bonds have posted equity-like returns of nearly 20%. Naively optimistic, Winnie the Pooh often asks his pal, Eeyore, "Lovely day, isn't it?" Like Eeyore, we wish we could say yes, these gains will persist, but we can't. These successes create new future challenges. For investors, this period of strong gains will likely be followed by a period of more modest returns as it is increasingly unlikely that the forces driving equity returns can carry on indefinitely.

As the curtain falls on 2019, we feel the need to foreshadow our scaled down return assumptions for capital markets that we will unveil in the new year. We forecast returns of less than 5% for US large-cap stocks, the largest allocation in most portfolios; this estimate will likely create structural challenges for the portfolios of investors whose return objectives exceed 7%. Our five-to-seven-year return forecast—based on yield movements in 2019—was 3.0% this



MARKET ENVIRONMENT

- **Introduction (continued)**

year for the US Aggregate Bond Index; our five-to-seven-year return assumption, as of the end of the third quarter, is nearly 70 basis points lower at 2.3%. Our return forecast for 2020 for US equities over a similar period is potentially bleaker and could be more than 100 basis points lower than our 2019 assumption due to strong returns, heightened valuations, and high profit margins. Challenging times call for challenging decisions. At NEPC, we see three potential courses of action:

1. Investors can seek higher returns by taking on more risk in the portfolio or shift to markets that have lagged in recent years, potentially offering a higher risk premium. Drawing on Eeyore's despondent wisdom, a little consideration, a little thought for other asset classes, can make all the difference. Emerging market equities and debt can offer greater gains but require a tolerance for more volatility and a willingness to replace high-performing assets, such as developed market equities, to fund a larger allocation to emerging markets.
2. Investors should be prepared to rebalance their portfolios when markets sell off. With the US economy in the later stages of its market cycle, we expect higher levels of volatility, as described in one of our key market themes, Late Cycle Dynamics. These pockets of volatility, such as the one from December 2018, can serve as attractive entry points for investors to add to assets.
3. Investors can **accept** the prospect of lower investment returns, working within their organization to structure goals, cashflows and outcomes within a framework of lower returns relative to the last 30 years. We know this is easier said than done but we are standing by to help: we view part of our mandate to assist investors in setting appropriate long-term objectives, while also seeking ways to improve the efficiency of their portfolios.



MARKET ENVIRONMENT

- **Global Equities**

US equities were a mixed bag in the third quarter with the S&P 500 Index gaining 1.7% and the small-cap Russell 2000 Index losing 2.4%. There was a sharp reversal of growth and value strategies across the capital spectrum in the final month of the quarter with value outperforming growth by 3.6% and 5.9% across large and small caps, respectively. The reversal fueled losses in technology and healthcare hedge fund strategies of 1.5% and 2.5%, respectively. NEPC continues to recommend a balanced equity exposure across value and growth strategies globally.

International stocks were increasingly volatile for the three months ended September 30 amid concerns around the global fallout from the ongoing trade war between the United States and China. The MSCI EAFE Index posted a modest loss of 1.1% as gains from defensive sectors, such as utilities and consumer staples, offset losses from cyclical sectors such as energy and materials. Japanese equities recorded gains of 3.1%, while European stocks were in the red at 1.8%; emerging market equities and China were harder hit, losing 4.2% and 4.7%, respectively.

In private equity, fundraising totaled \$168 billion in the third quarter, exceeding the amounts raised in the previous two quarters and the quarterly three- and five-year averages, according to Preqin. During the same period, US buyout activity slowed, totaling \$150 billion, compared to a quarterly average of \$190 billion in the prior four quarters, according to PitchBook. Venture capital deal activity also slowed to \$28 billion in the three months ended September 30; however, as of the third quarter, VC deal value had already surpassed the annual totals of 2009 through 2017, which average \$51 billion per year. Venture capital exit activity totaled \$35 billion, above historical quarterly averages, but far short of the \$141 billion of exit value in the second quarter fueled by a spate of large and high-profile IPOs.



MARKET ENVIRONMENT

- **Global Fixed Income**

In this late stage of the US economic cycle, investors are favoring higher-quality credit and safe-haven fixed income assets. Long-only high-yield and levered-loan funds continued to see net outflows, while investment-grade funds witnessed net inflows in the third quarter.

US bond markets were in the black for the quarter with the Bloomberg Barclays Aggregate posting gains of 2.3%, the Bloomberg Barclays High Yield up 1.3%, and S&P LSTA Leveraged Loan Index returning 1.3%; the Bloomberg Barclays US Long Treasury gained 7.9% in the third quarter underscoring the demand for safe-haven investments. Issuance so far this year in the high-yield market has surpassed that of 2018, with nearly 50% of the new issuance in double-B-rated bonds. To this end, we advocate caution in this segment given the tight spread and high issuance levels.

Within hedge funds, performing credit was positive with the HFRI ED: Credit Arbitrage Index gaining 1.4%, but distressed credit was in the red with the HFRI ED: Distressed/Restructuring Index down 1.6% due to the volatility in the energy sector.

Outside the US, emerging market debt (EMD) posted mixed results in the third quarter. Local currency-denominated debt posted losses related to currency weakness but was in the black for the trailing twelve-month period. External EMD sovereign debt and corporate bonds were up during the quarter. The fundamentals for emerging markets are still favorable, but volatility remains elevated.



MARKET ENVIRONMENT

- **Global Fixed Income (continued)**

The significant growth of credit markets since the financial crisis, accompanied by deteriorating credit quality and increasing amounts of leverage, may eventually attract investors of distressed debt. Niche lending emerging market debt (local) and investment-grade collateralized loan obligations offer the potential for risk-compensation, given their structural nuances and the opportunity for credit selection.

- **Final Thoughts**

The robust run of assets in equities, interest-rate markets and credit is impressive, but its longevity is uncertain. Investment returns of the last decade are unlikely to be duplicated in the next one. Given the decline in interest rates and slowing inflation trends, we expect our forecast for capital markets to be meaningfully lower than a year ago for both the near-term and long-term assumptions. Those taking the time to position not only their investment portfolio, but also their organization will be best prepared to successfully navigate a future of lower returns. While we would prefer to offer up a more exuberant message, we are prepared to help our clients develop resilient but efficient portfolios to manage through periods of volatility and capture asset returns where available. To end with Eeyore lamenting his imperfect tail, it's not much of a market, but we are all sort of attached to it.



CALENDAR YEAR INDEX PERFORMANCE

	2013	2014	2015	2016	2017	2018	Q1	Q2	Q3	YTD	5yr	10yr
Reserve Custom Index	0.12%	1.10%	0.86%	1.15%	1.00%	1.88%	2.19%	2.71%	1.48%	6.51%	2.33%	1.96%
Endowment Custom Index	14.46%	5.43%	-0.07%	5.71%	14.52%	-5.07%	8.63%	3.75%	1.26%	14.13%	5.84%	7.12%
3-Month Treasury Bill	0.05%	0.03%	0.03%	0.27%	0.84%	1.86%	0.60%	0.61%	0.57%	1.79%	0.96%	0.52%
6-Month Treasury Bill	0.10%	0.06%	0.10%	0.40%	0.88%	1.91%	0.61%	0.63%	0.60%	1.86%	1.03%	0.58%
BAML 1-3 Yr Govt/Credit A+	0.55%	0.72%	0.66%	1.06%	0.70%	1.65%	1.10%	1.47%	0.66%	3.26%	1.50%	1.42%
BAML 1-5 Yr Govt/Credit A+	0.10%	1.42%	1.07%	1.30%	1.02%	1.50%	1.41%	1.86%	0.83%	4.16%	1.90%	1.97%
BAML 5-10 Yr Govt/Credit A+	-3.82%	6.61%	1.95%	1.95%	2.98%	0.59%	3.13%	3.75%	2.21%	9.36%	3.77%	4.41%
BBrg Barclays US Aggregate	-2.02%	5.97%	0.55%	2.65%	3.54%	0.01%	2.94%	3.08%	2.27%	8.52%	3.38%	3.75%
BC Municipal Bond	-2.55%	9.05%	3.30%	0.25%	5.45%	1.28%	2.90%	2.14%	1.58%	6.75%	3.66%	4.16%
BC US Corp High Yield	7.44%	2.45%	-4.47%	17.13%	7.50%	-2.08%	7.26%	2.50%	1.33%	11.41%	5.37%	7.94%
BC Long Treasuries	-12.66%	25.07%	-1.21%	1.33%	8.53%	-1.84%	4.67%	6.03%	7.92%	19.77%	6.77%	6.87%
BC US Long Credit	-6.62%	16.39%	-4.56%	10.22%	12.21%	-6.76%	7.86%	7.02%	5.62%	21.92%	6.90%	7.78%
MSCI World Index	26.68%	4.94%	-0.87%	7.51%	22.40%	-8.71%	12.48%	4.00%	0.53%	17.60%	7.18%	9.01%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One



EXECUTIVE SUMMARY

NEPC, LLC

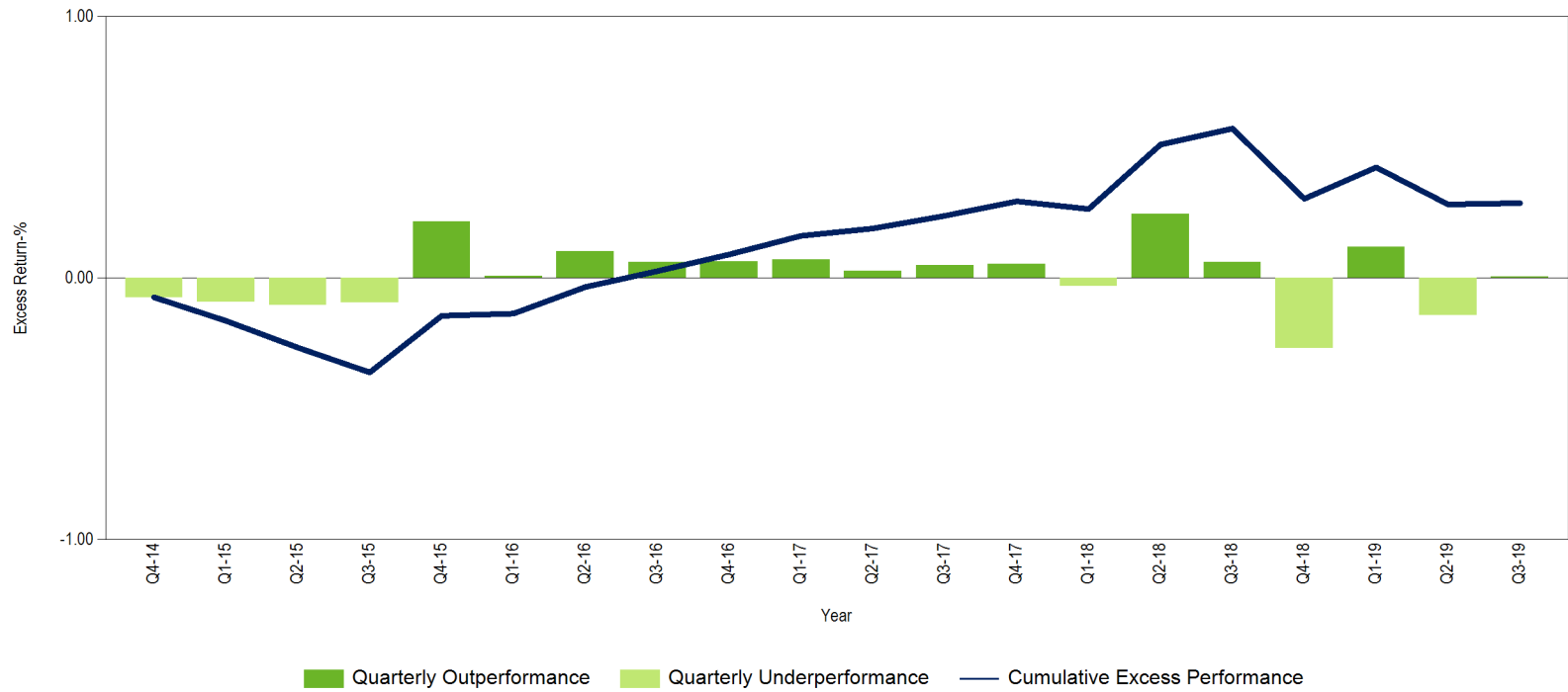
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	Inception	Inception Date
Delaware Total Consolidation	\$2,462,975,738	1.27%	5.22%	6.24%	2.74%	2.10%	2.16%	Jan-05
Total Liquidity & Reserve	\$2,391,441,634	1.30%	4.96%	6.33%	--	--	2.63%	Nov-16
Total Liquidity	\$540,487,347	0.66%	2.37%	3.02%	1.86%	1.39%	1.82%	Jan-05
<i>eV US Cash Management Net Median</i>		<i>0.56%</i>	<i>1.85%</i>	<i>2.41%</i>	<i>1.68%</i>	<i>1.13%</i>	<i>1.50%</i>	<i>Jan-05</i>
Total Reserve	\$1,850,954,288	1.48%	6.49%	8.42%	2.93%	2.39%	2.53%	Jan-05
<i>Reserve Custom Index</i>		<i>1.48%</i>	<i>6.51%</i>	<i>8.72%</i>	<i>2.84%</i>	<i>2.33%</i>	<i>2.72%</i>	<i>Jan-05</i>
<i>eV US Interm Duration Fixed Inc Net Median</i>		<i>1.37%</i>	<i>6.37%</i>	<i>7.81%</i>	<i>2.43%</i>	<i>2.65%</i>	<i>3.86%</i>	<i>Jan-05</i>
Total Endowment	\$71,534,104	0.09%	13.22%	4.31%	7.10%	--	5.61%	Aug-15
<i>Endowment Custom Index</i>		<i>1.26%</i>	<i>14.13%</i>	<i>5.54%</i>	<i>7.43%</i>	<i>5.84%</i>	<i>5.96%</i>	<i>Aug-15</i>
<i>eV Global Balanced Net Median</i>		<i>1.00%</i>	<i>12.05%</i>	<i>4.04%</i>	<i>7.28%</i>	<i>5.34%</i>	<i>5.50%</i>	<i>Aug-15</i>



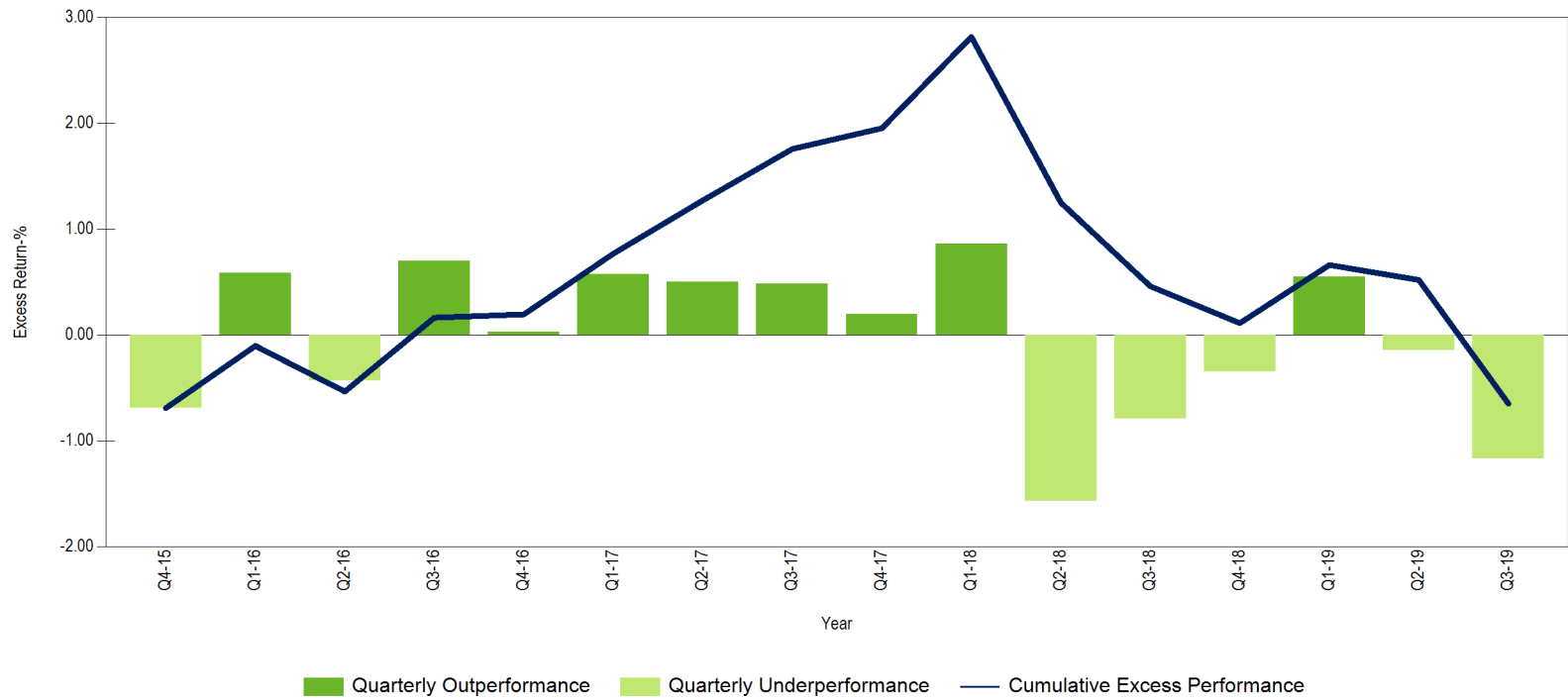
TOTAL FUND PERFORMANCE SUMMARY

Quarterly and Cumulative Excess Performance
Total Reserve vs. Reserve Custom Index



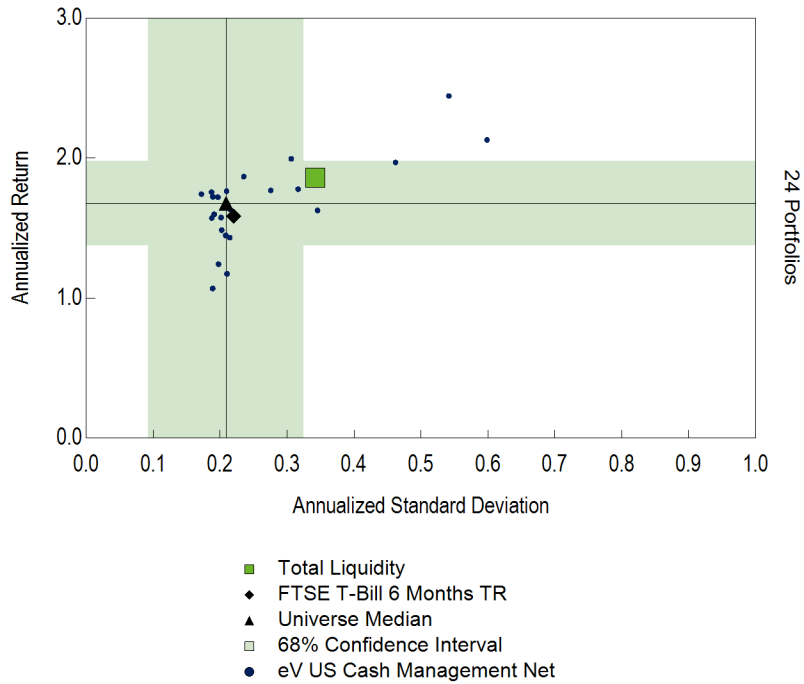
TOTAL FUND PERFORMANCE SUMMARY

Quarterly and Cumulative Excess Performance
Total Endowment vs. Endowment Custom Index

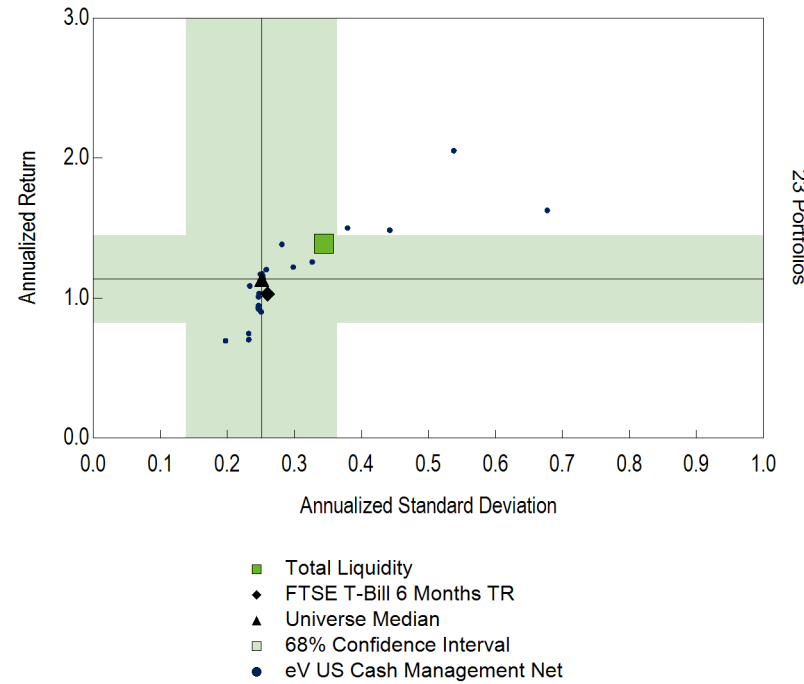


LIQUIDITY RISK/RETURN - 3 & 5 YEARS

3 Years Ending September 30, 2019



5 Years Ending September 30, 2019



3 Years Ending September 30, 2019

	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Liquidity	1.86%	0.34%	0.92

Total Liquidity	1.86%	0.34%	0.92
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5 Years Ending September 30, 2019

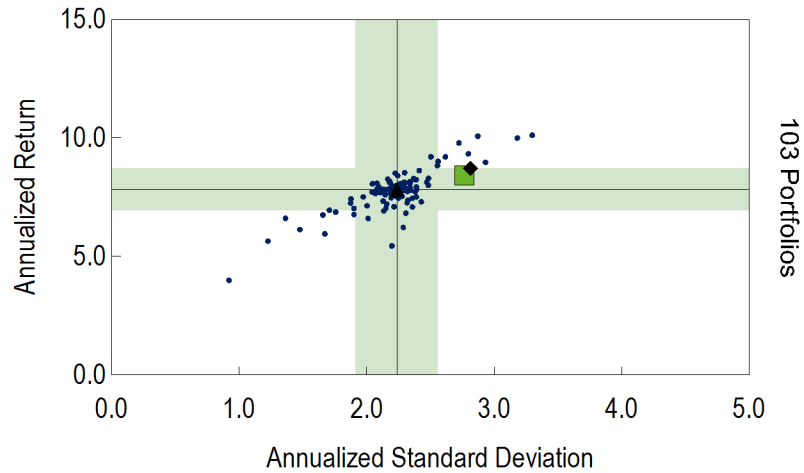
	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Liquidity	1.39%	0.34%	1.20

Total Liquidity	1.39%	0.34%	1.20
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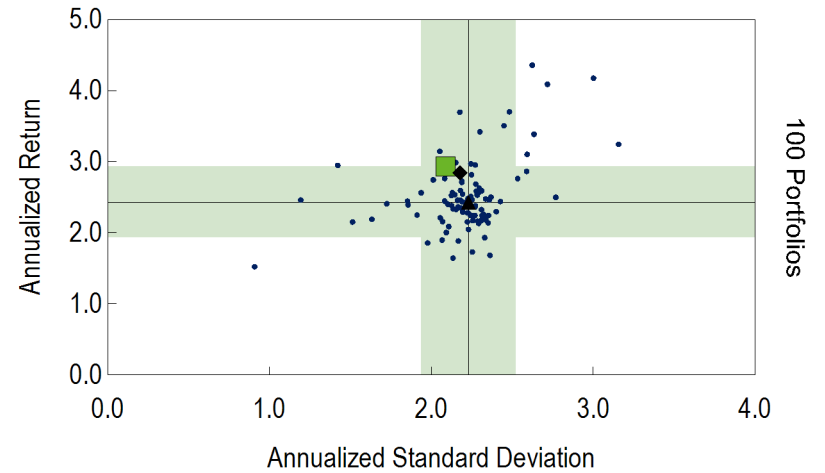
RESERVE RISK/RETURN - 1 & 3 YEARS

1 Year Ending September 30, 2019



- Total Reserve
- ◆ Reserve Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- eV US Interm Duration Fixed Inc Net

3 Years Ending September 30, 2019



- Total Reserve
- ◆ Reserve Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- eV US Interm Duration Fixed Inc Net

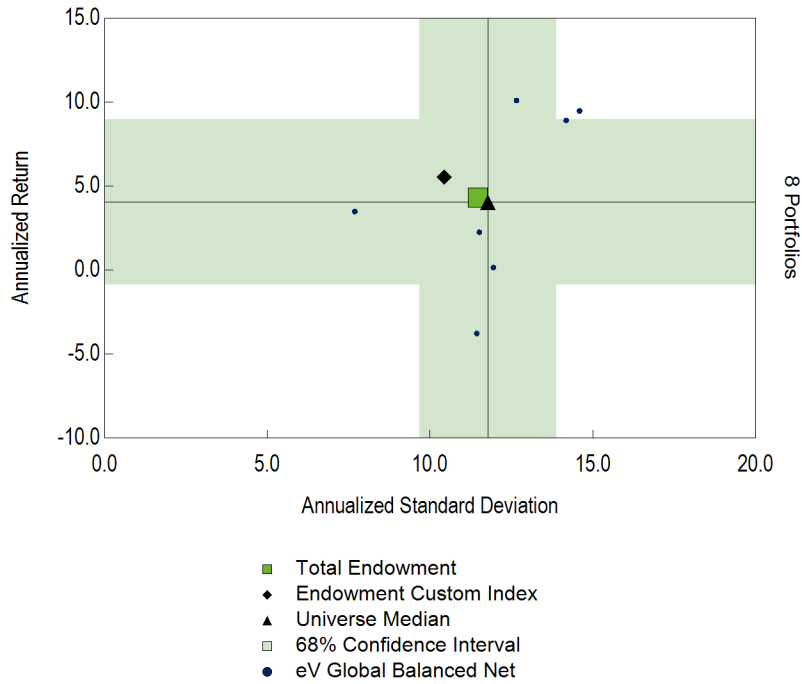
1 Year Ending September 30, 2019			
	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Reserve	8.42%	2.77%	2.20
Reserve Custom Index	8.72%	2.81%	2.27

3 Years Ending September 30, 2019			
	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Reserve	2.93%	2.09%	0.70
Reserve Custom Index	2.84%	2.18%	0.63

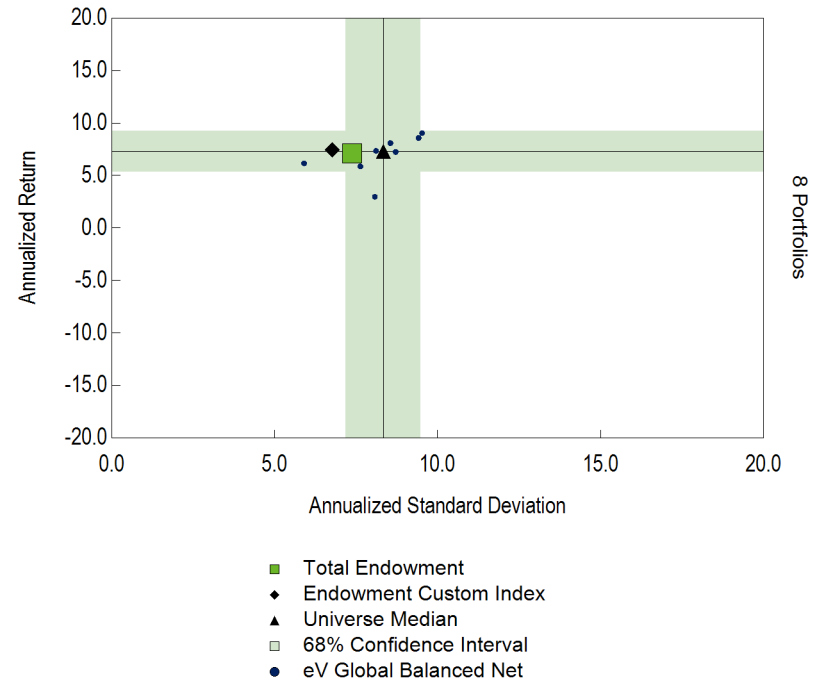


ENDOWMENT RISK/RETURN - 1 YEAR & 3 YEAR

1 Year Ending September 30, 2019



3 Years Ending September 30, 2019



1 Year Ending September 30, 2019			
	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Endowment	4.31%	11.47%	0.18
Endowment Custom Index	5.54%	10.43%	0.31

3 Years Ending September 30, 2019			
	Anlzd Ret	Anlzd Std Dev	Sharpe Ratio
Total Endowment	7.10%	7.38%	0.75
Endowment Custom Index	7.43%	6.77%	0.87



TOTAL FUND PERFORMANCE DETAIL - NET OF FEES

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Delaware Total Consolidation	2,462,975,738	100.00	1.27	--	5.22	--	6.24	--	2.74	--	2.10	--	2.16	Jan-05
Total Liquidity & Reserve	2,391,441,634	97.10	1.30	--	4.96	--	6.33	--	--	--	--	--	2.63	Nov-16
Total Liquidity	540,487,347	21.94	0.66	12	2.37	14	3.02	11	1.86	18	1.39	19	1.82	Jan-05
<i>eV US Cash Management Net Median</i>			0.56		1.85		2.41		1.68		1.13		1.50	Jan-05
PFM Asset Management	271,366,991	11.02	0.66	12	2.32	15	2.91	12	1.89	17	1.44	16	1.25	Jun-13
Wilmington Liquidity	269,120,355	10.93	0.66	12	2.40	13	3.11	11	1.77	27	1.34	20	4.18	Jan-85
Total Reserve	1,850,954,288	75.15	1.48	22	6.49	40	8.42	13	2.93	15	2.39	82	2.53	Jan-05
<i>Reserve Custom Index</i>			1.48	22	6.51	40	8.72	10	2.84	16	2.33	86	2.72	Jan-05
<i>eV US Interm Duration Fixed Inc Net Median</i>			1.37		6.37		7.81		2.43		2.65		3.86	Jan-05
JPM Intermediate	449,237,145	18.24	0.67	82	3.48	67	4.59	53	1.80	74	1.73	59	1.52	Jun-13
<i>J.P. Morgan Custom Index</i>			0.66	87	3.26	78	4.54	56	1.68	83	1.64	69	1.42	Jun-13
Blackrock Financial Mangement	454,464,220	18.45	0.90	23	4.33	23	5.77	8	--	--	--	--	4.15	Mar-18
<i>Blackrock Custom Index</i>			0.83	37	4.16	31	5.81	8	2.02	49	1.84	48	4.02	Mar-18
Chandler Asset Management	475,321,447	19.30	2.06	86	8.83	52	11.27	5	3.74	9	2.98	--	2.49	Jun-13
Lazard Financial Management	471,931,476	19.16	2.26	60	9.31	23	12.07	2	--	--	--	--	7.57	Mar-18
<i>Chandler/Lazard Custom Index</i>			2.21	73	9.36	22	12.35	1	3.84	6	2.92	93	7.56	Mar-18
Total Endowment	71,534,104	2.90	0.09	57	13.22	42	4.31	47	7.10	59	--	--	5.61	Aug-15
<i>Endowment Custom Index</i>			1.26	49	14.13	40	5.54	40	7.43	42	5.84	41	5.96	Aug-15
<i>eV Global Balanced Net Median</i>			1.00		12.05		4.04		7.28		5.34		5.50	Aug-15
SEI Funds	24,811,115	1.01	0.65	53	14.04	40	4.40	46	7.66	37	--	--	6.65	Aug-15
MSIFT Global Strategist	22,931,764	0.93	-0.57	80	11.24	73	3.76	54	6.49	67	--	--	4.84	Aug-15
JP Morgan Diversified	23,790,806	0.97	0.15	57	14.34	40	4.05	50	7.59	38	--	--	5.87	Aug-15
Cash Account	419	0.00	0.48	92	1.63	90	1.97	98	1.24	92	--	--	0.95	Aug-15

Notes: Net of Fees. Results for periods longer than one year are annualized.

Performance history through 12/2015 is from BNY Mellon. NEPC Performance start date is January 2016. Fiscal Year end is June 30.

Reserve Custom Index consists of 25% ICE BofAML 1-5 Yrs AAA-A US Corp & Govt TR / 25% ICE BofAML 1-3 Yrs AAA-A US Corp & Govt / 50% ICE BofA ML US Gov/Credit 5-10 Yrs A Rated and Above, as of 4/1/2018. Prior to this, the index comprised 75% ICE BofAML 1-5 Yrs AAA-A US Corp & Govt TR / 25% ICE BofAML 6 Months US T-Bills TR.

Endowment Custom Index consists of 60% MSCI World Index/40% BBgBarc US Aggregate.

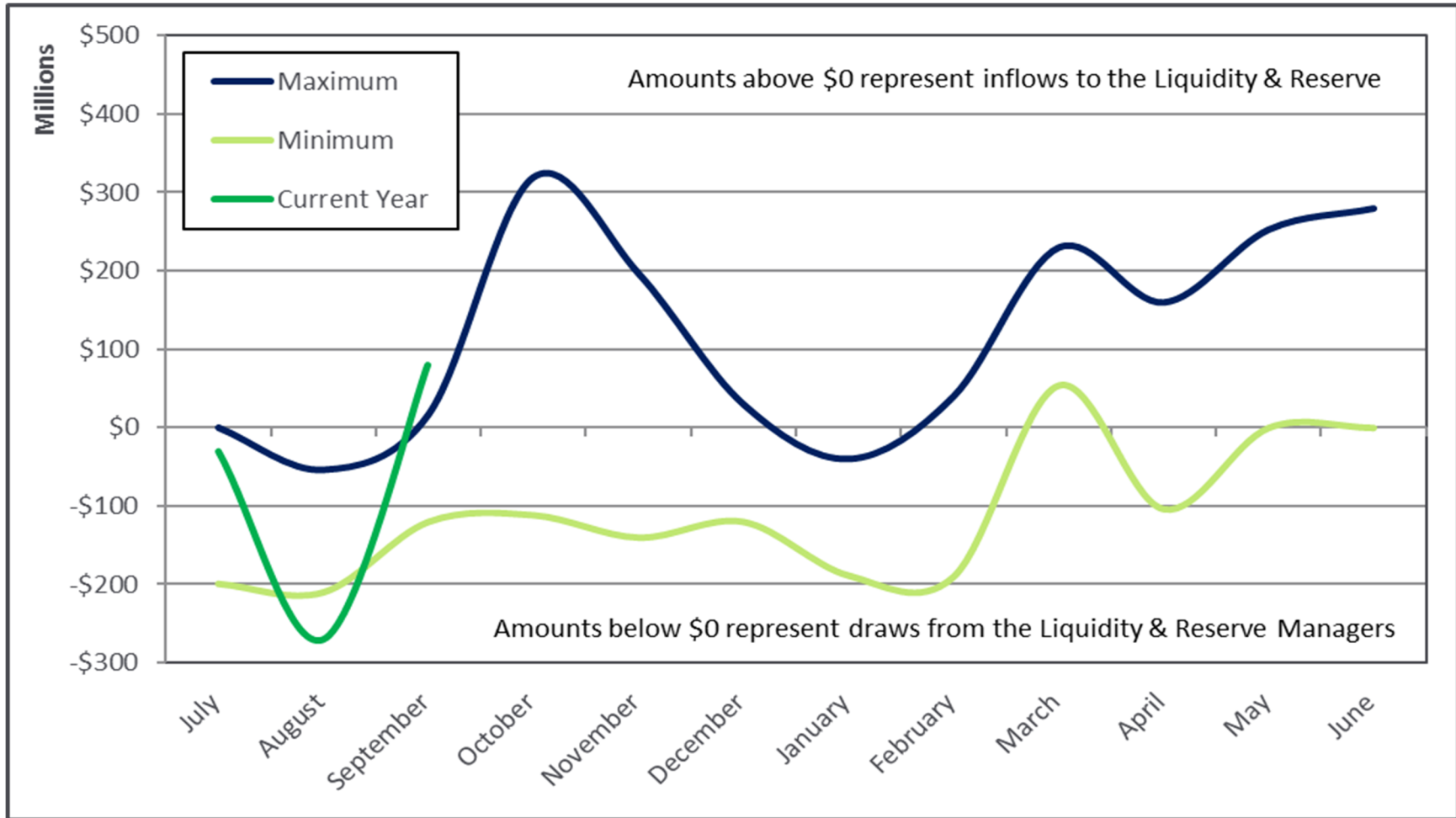
BlackRock Custom Index consists of 100% ICE BofAML 1-5 Yrs AAA-A US Corp & Govt TR.

J.P. Morgan Custom Index consists of 100% ICE BofAML 1-3 Yrs AAA-A US Corp & Govt.

Chandler/Lazard Custom Index consists of ICE BofAML US Gov/Credit 5-10 Yrs A Rated and Above.



CASH FLOWS – FISCAL YEAR 2020



MONTH ENDED JUNE 30, 2019

Change in Market Value Month Ending June 30, 2019										
	Beginning Market Value	Contributions	Withdrawals	Fees	Income	Unrealized Gain (Loss)	Realized Gain (Loss)	Amortization / Accretion	Ending Market Value	
Liquidity Managers										
PFM Asset Management	\$ 498,160,522	\$ -	\$ (120,000,000)	\$ -	\$ 849,322	\$ 322,810	\$ 72,443	\$ 54,764	\$ 379,459,861	
Wilmington Liquidity	\$ 495,896,065	\$ -	\$ (120,000,000)	\$ -	\$ 693,088	\$ 455,073	\$ 90,564	\$ 163,318	\$ 377,298,107	
Total Liquidity Managers	\$ 994,056,587	\$ -	\$ (240,000,000)	\$ -	\$ 1,542,410	\$ 777,884	\$ 163,006	\$ 218,081	\$ 756,757,968	
Reserve Managers										
BlackRock Financial Management	\$ 367,560,802	\$ 80,000,000	\$ -	\$ -	\$ 817,736	\$ 1,800,961	\$ 225,100	\$ (2,435)	\$ 450,402,164	
Chandler Asset Management	\$ 379,869,957	\$ 80,000,000	\$ -	\$ -	\$ 893,204	\$ 4,881,442	\$ -	\$ 80,461	\$ 465,725,064	
JPM Intermediate	\$ 364,046,748	\$ 80,000,000	\$ -	\$ -	\$ 817,155	\$ 892,644	\$ 443,630	\$ 32,347	\$ 446,232,523	
Lazard Asset Management	\$ 375,182,222	\$ 80,000,000	\$ -	\$ -	\$ 875,056	\$ 4,822,942	\$ 552,892	\$ 80,047	\$ 461,513,160	
Total Reserve Managers	\$ 1,486,659,729	\$ 320,000,000	\$ -	\$ -	\$ 3,403,151	\$ 12,397,989	\$ 1,221,622	\$ 190,420	\$ 1,823,872,911	
Total Liquidity & Reserve Managers	\$ 2,480,716,316	\$ 320,000,000	\$ (240,000,000)	\$ -	\$ 4,945,561	\$ 13,175,872	\$ 1,384,628	\$ 408,502	\$ 2,580,630,879	
Land & Water Endowment										
SEI Funds	\$ 23,537,479	\$ -	\$ -	\$ -	\$ 22,759	\$ 1,005,207	\$ 101,152	\$ -	\$ 24,666,596	
MSIFT Global Strategist	\$ 22,041,041	\$ -	\$ -	\$ -	\$ 497	\$ 1,039,074	\$ -	\$ -	\$ 23,080,612	
JP Morgan Diversified	\$ 22,693,795	\$ -	\$ -	\$ -	\$ 169,242	\$ 909,438	\$ -	\$ -	\$ 23,772,475	
Cash Account	\$ 413	\$ -	\$ -	\$ -	\$ 1	\$ -	\$ -	\$ -	\$ 413	
Total Land & Water Endowment	\$ 68,272,728	\$ -	\$ -	\$ -	\$ 192,499	\$ 2,953,719	\$ 101,152	\$ -	\$ 71,520,096	
Total	\$ 2,548,989,044	\$ 320,000,000	\$ (240,000,000)	\$ -	\$ 5,138,060	\$ 16,129,591	\$ 1,485,780	\$ 408,502	\$ 2,652,150,975	

Footnotes:

Values provided by Northern Trust and are reconciled to the audited custodian reports.

Income is a product of income received during the month plus accrued income.

Numbers may not add due to rounding.



FISCAL YEAR TO DATE

	Change in Market Value Fiscal Year-to-Date Through June 30, 2019									Ending Market Value
	Beginning Market Value	Contributions	Withdrawals	Fees	Income	Unrealized Gain (Loss)	Realized Gain (Loss)	Amortization / Accretion		
Liquidity Managers										
PFM Asset Management	\$ 492,906,444	\$ 390,000,000	\$ (515,013,748)	\$ (306,286)	\$ 8,433,242	\$ 1,344,840	\$ 260,679	\$ 1,834,689	\$ 379,459,861	
Wilmington Liquidity	\$ 489,669,700	\$ 488,885,000	\$ (613,885,000)	\$ (314,417)	\$ 7,429,413	\$ 2,700,054	\$ 313,201	\$ 2,500,157	\$ 377,298,107	
Total Liquidity Managers	\$ 982,576,144	\$ 878,885,000	\$ (1,128,898,748)	\$ (620,703)	\$ 15,862,656	\$ 4,044,894	\$ 573,879	\$ 4,334,846	\$ 756,757,968	
Reserve Managers										
BlackRock Financial Management	\$ 304,178,445	\$ 130,000,000	\$ -	\$ (233,742)	\$ 7,294,867	\$ 9,450,677	\$ (757,052)	\$ 468,968	\$ 450,402,164	
Chandler Asset Management	\$ 306,602,083	\$ 130,000,000	\$ -	\$ (234,665)	\$ 8,402,814	\$ 20,048,986	\$ (223,336)	\$ 1,129,183	\$ 465,725,064	
JPM Intermediate	\$ 302,598,195	\$ 130,000,000	\$ -	\$ (299,344)	\$ 7,400,834	\$ 6,949,721	\$ (1,003,023)	\$ 586,139	\$ 446,232,523	
Lazard Asset Management	\$ 301,883,237	\$ 130,000,314	\$ -	\$ (363,960)	\$ 8,207,042	\$ 18,755,882	\$ 1,705,859	\$ 1,324,787	\$ 461,513,160	
Total Reserve Managers	\$ 1,215,261,960	\$ 520,000,314	\$ -	\$ (1,131,711)	\$ 31,305,557	\$ 55,205,266	\$ (277,552)	\$ 3,509,077	\$ 1,823,872,911	
Total Liquidity & Reserve Managers	\$ 2,197,838,104	\$ 1,398,885,314	\$ (1,128,898,748)	\$ (1,752,414)	\$ 47,168,213	\$ 59,250,160	\$ 296,327	\$ 7,843,923	\$ 2,580,630,879	
Land & Water Endowment										
SEI Funds	\$ 22,673,974	\$ 1,272,105	\$ (783,310)	\$ (80,596)	\$ 578,751	\$ 368,657	\$ 637,016	\$ -	\$ 24,666,596	
MSIFT Global Strategist	\$ 21,282,497	\$ 1,197,411	\$ (763,184)	\$ -	\$ 781,930	\$ (1,331,481)	\$ 1,913,439	\$ -	\$ 23,080,612	
JP Morgan Diversified	\$ 21,816,446	\$ 1,225,484	\$ (784,269)	\$ -	\$ 541,727	\$ (701,991)	\$ 1,675,080	\$ -	\$ 23,772,475	
Cash Account	\$ 3,571,583	\$ 2,359,591	\$ (5,957,999)	\$ -	\$ 27,239	\$ -	\$ -	\$ -	\$ 413	
Total Land & Water Endowment	\$ 69,344,500	\$ 6,054,591	\$ (8,288,762)	\$ (80,596)	\$ 1,929,647	\$ (1,664,816)	\$ 4,225,535	\$ -	\$ 71,520,096	
Total	\$ 2,267,182,604	\$ 1,404,939,905	\$ (1,137,187,510)	\$ (1,833,010)	\$ 49,097,860	\$ 57,585,345	\$ 4,521,862	\$ 7,843,923	\$ 2,652,150,975	

Footnotes:

Values provided by Northern Trust and are reconciled to the audited custodian reports.

Income is a product of income received during the month plus accrued income.

Numbers may not add due to rounding.



YIELD AND DURATION POSITIONING

Liquidity Portfolio Yield and Duration Analysis								
Portfolio					Benchmark			
	Portfolio Value	% of Assets	Yield	Duration		Yield	Duration	
PFM \$	379,459,861	14.7%	2.33%	0.55	6-Month Treasury Bill	2.05%	0.45	
Wilmington Trust \$	377,298,107	14.6%	2.26%	0.79	6-Month Treasury Bill	2.05%	0.45	
Total Liquidity \$	756,757,968	29.3%	2.30%	0.67	6-Month Treasury Bill	2.05%	0.45	

Reserve Portfolio Yield and Duration Analysis								
Portfolio					Benchmark			
	Portfolio Value	% of Assets	Yield	Duration		Yield	Duration	
JP Morgan \$	446,232,523	17.3%	2.06%	1.81	BAML 1-3 Yr Govt/Credit A+	1.99%	1.84	
BlackRock \$	450,402,164	17.5%	1.97%	2.77	BAML 1-5 Yr Govt/Credit A+	1.99%	2.57	
Chandler \$	465,725,064	18.0%	2.22%	5.87	BAML 5-10 Yr Govt/Credit A+	2.25%	6.35	
Lazard \$	461,513,160	17.9%	2.12%	6.27	BAML 5-10 Yr Govt/Credit A+	2.25%	6.35	
Total Reserve \$	1,823,872,911	70.7%	2.09%	4.21	Custom Reserve Benchmark	2.12%	4.28	

Total Liquidity & Reserve Portfolio Yield and Duration Analysis								
Portfolio					Benchmark			
	Portfolio Value		Yield	Duration		Yield	Duration	
Total Liquidity & Reserve \$	2,580,630,879	100.0%	2.15%	3.17	Weighted Average	2.11%	3.51	

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One

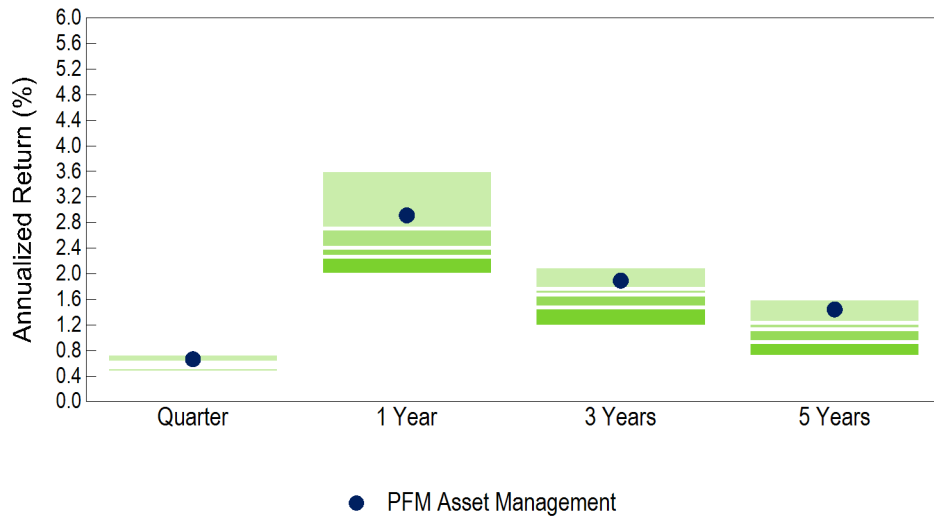


LIQUIDITY MANAGER REVIEW

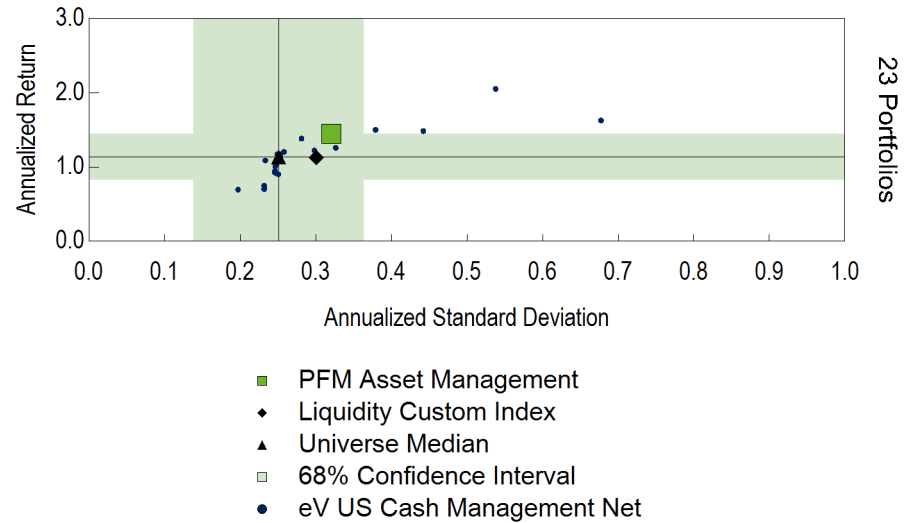
NEPC, LLC

PFM ASSET MANAGEMENT

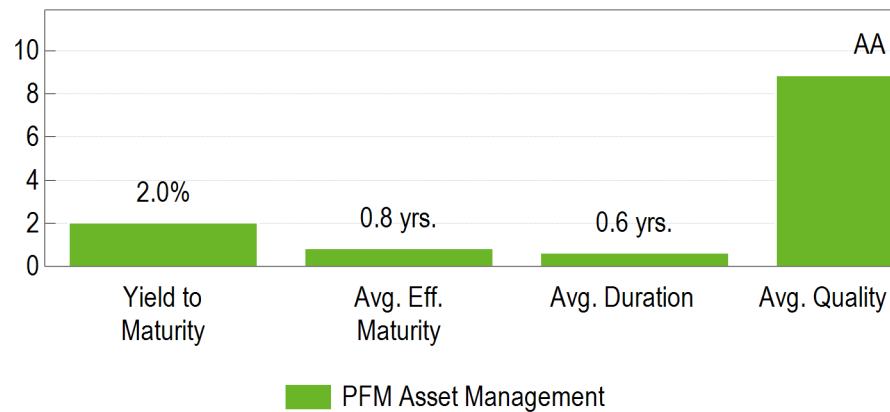
eV US Cash Management Net Return Comparison



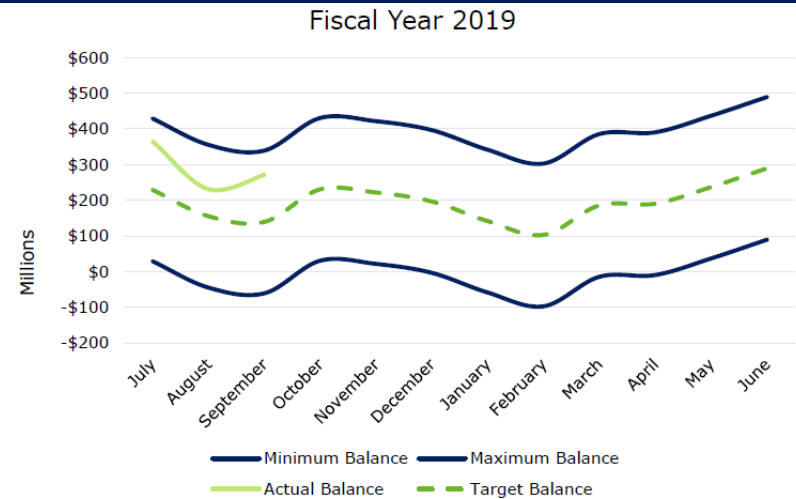
5 Year Risk Return



Characteristics



Manager Balance to Target

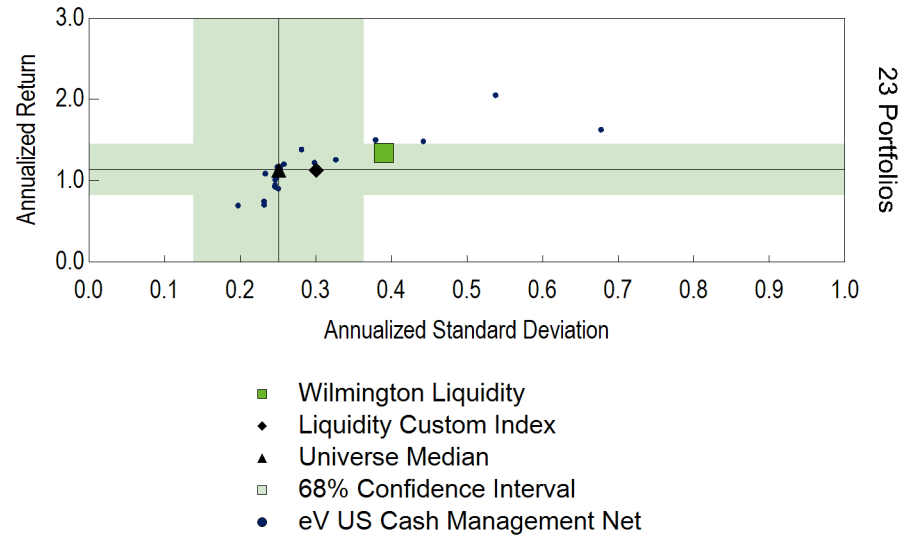


WILMINGTON LIQUIDITY

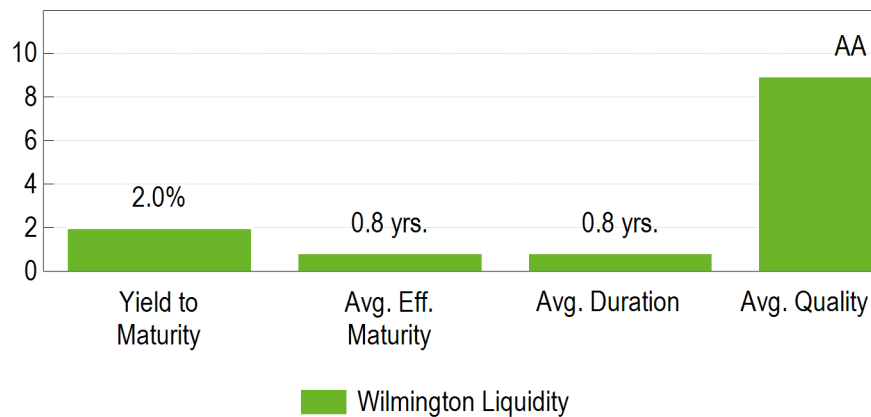
eV US Cash Management Net Return Comparison



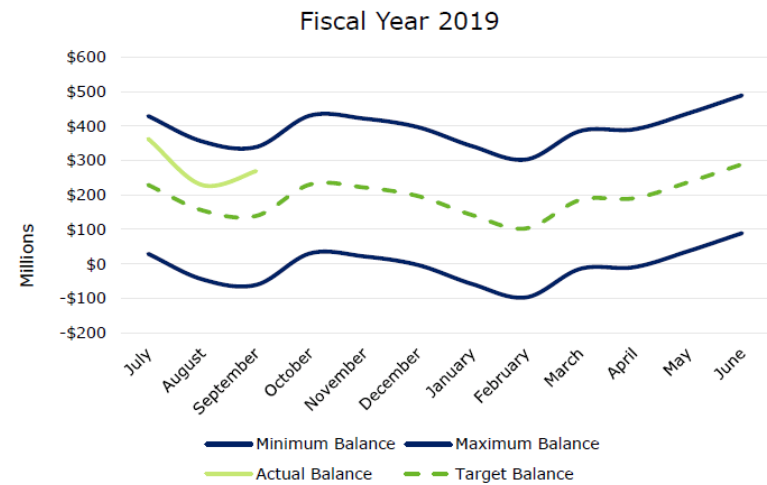
5 Year Risk Return



Characteristics



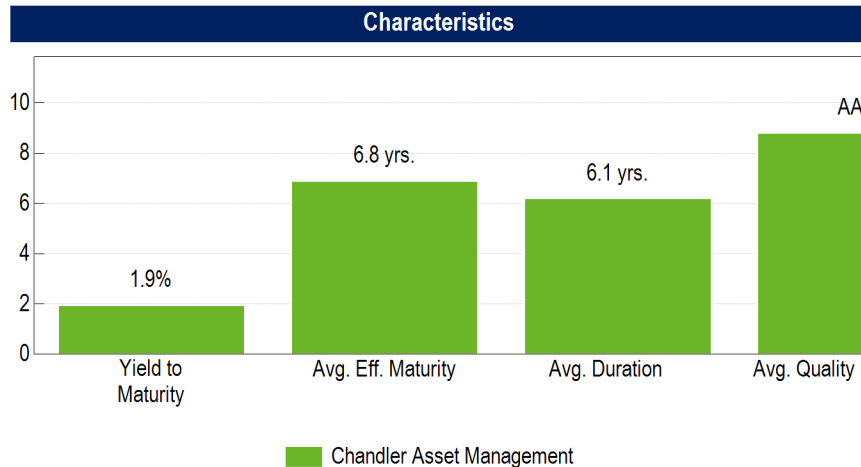
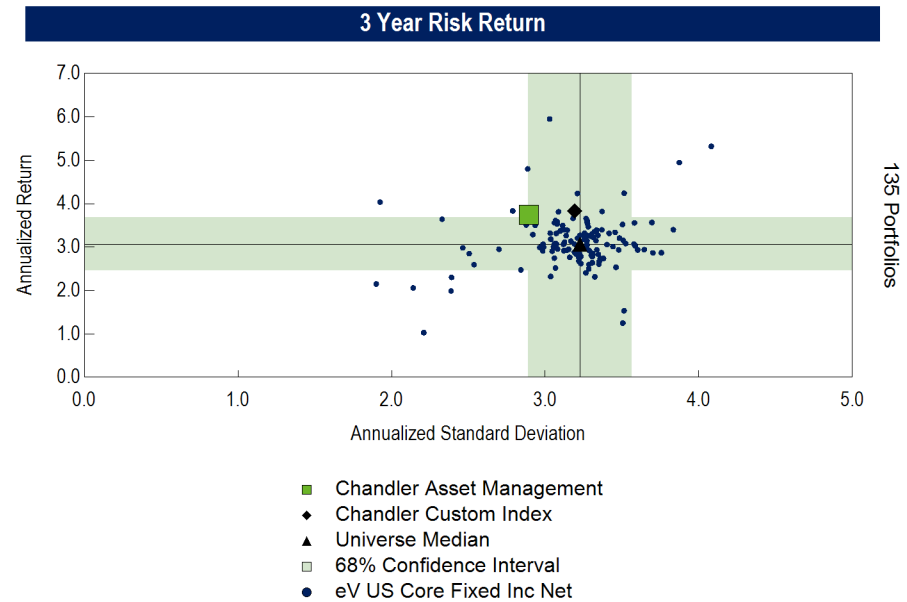
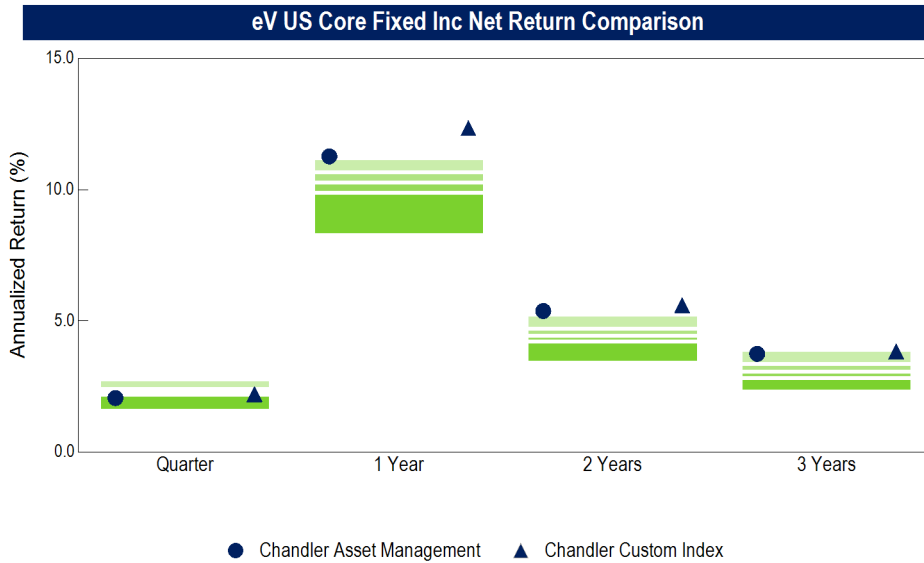
Manager Balance to Target



RESERVE MANAGER REVIEW

NEPC, LLC

CHANDLER ASSET MANAGEMENT



Qualitative Attribution

Duration and Yield Positioning: The duration of the portfolio increased to 5.96 during the quarter compared to 5.87 as of June 30, 2019 but remains modestly below the benchmark duration.

Result: Value detracted due to shortened relative duration and interest rates moving lower throughout the quarter.

Credit Positioning: The portfolio remained defensively positioned with overweighting Corporates and underweighting sovereign debt.

Result: Value was neutral relative to the benchmark due to the positive overweight to Corporates.

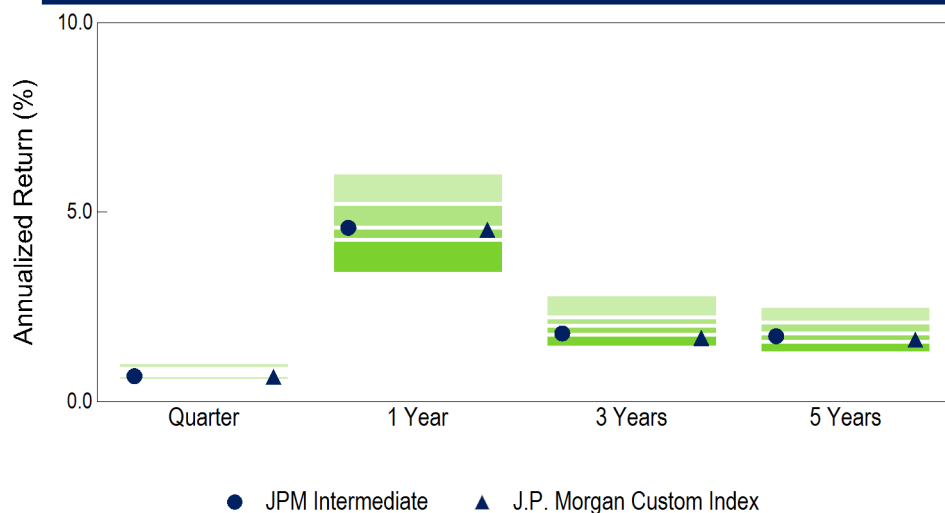
Other Positioning: The team added to the regional banking sector out the curve to mitigate the duration mismatch of the overall portfolio. Chandler expects treasury yields between the five to ten year portion of the yield curve to increase during the fourth quarter as the US/China trade impasse dissipates and US domestic economic data remains sound.



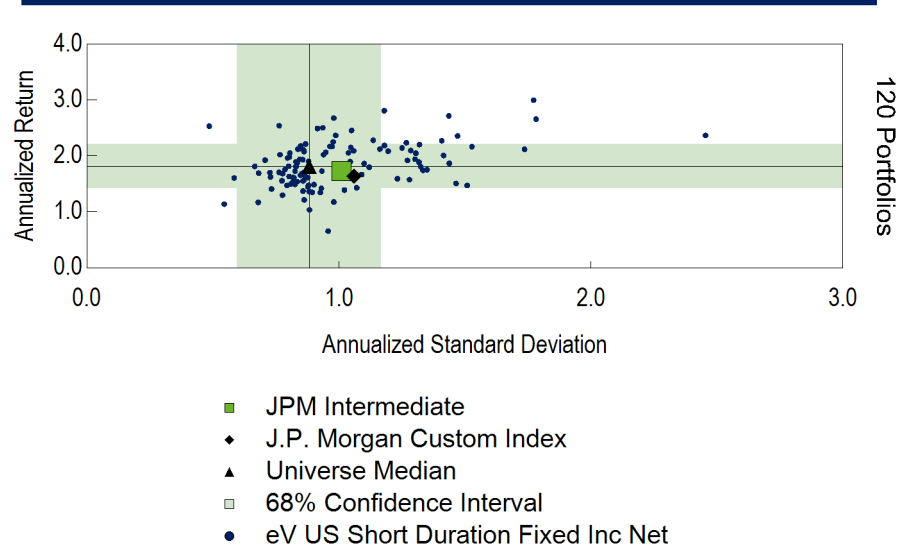
Delaware Office of the State Treasurer

JPM INTERMEDIATE

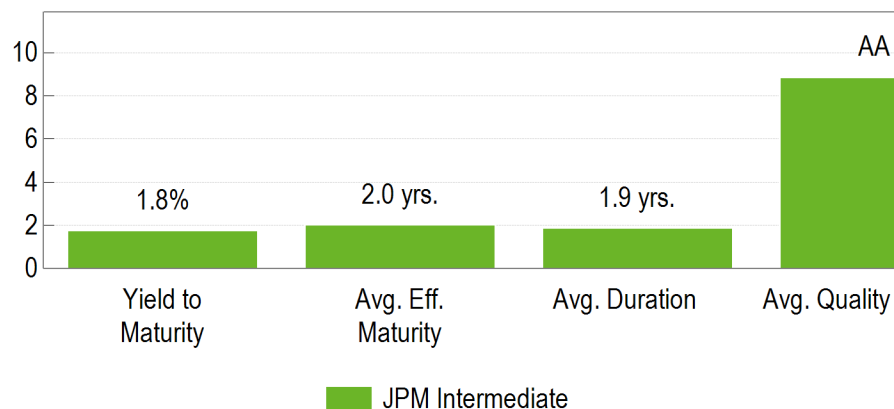
eV US Short Duration Fixed Inc Net Return Comparison



5 Year Risk Return



Characteristics



Qualitative Attribution

Duration and Yield Positioning: The portfolio was positioned with a slightly longer duration bias versus the benchmark, as the economic news in the US deteriorated and it appeared that the global slowdown was starting to impact US growth prospects.

Result: Value increased due to longer relative duration and interest rates moving lower throughout the quarter (2-year treasury yields dropped 17bps in the quarter).

Credit Positioning: The portfolio was overweight to corporate credit in the financial sector.

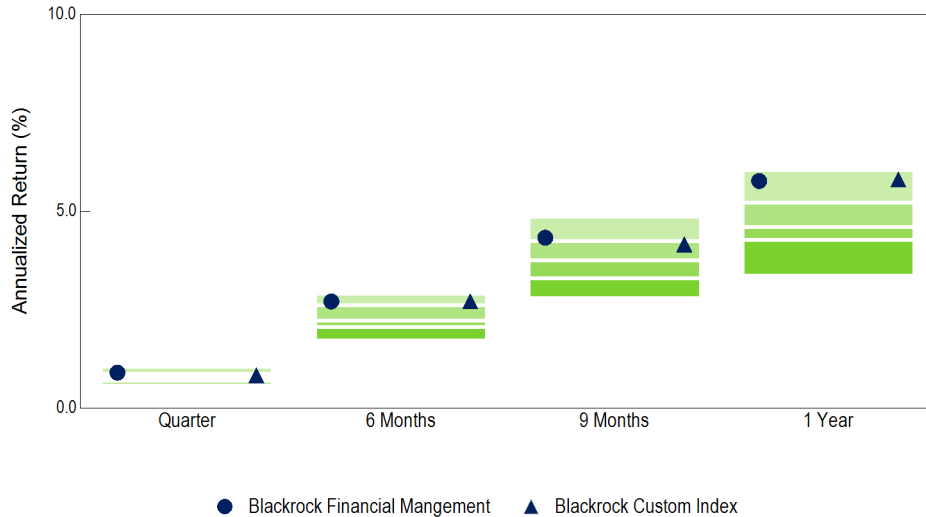
Result: Corporates performed very well during the quarter and as their spreads narrowed to Treasuries JP Morgan reduced their exposure by selling positions (mostly industrials) that they felt were over-priced.

Other Positioning: Going forward JP Morgan's portfolio is positioned for lower interest rates but has reduced their corporate exposure as spreads have tightened. The overall risk position in the portfolio is similar to that of the benchmark and they are waiting for an opportunity to add back risk should corporate spreads widen.

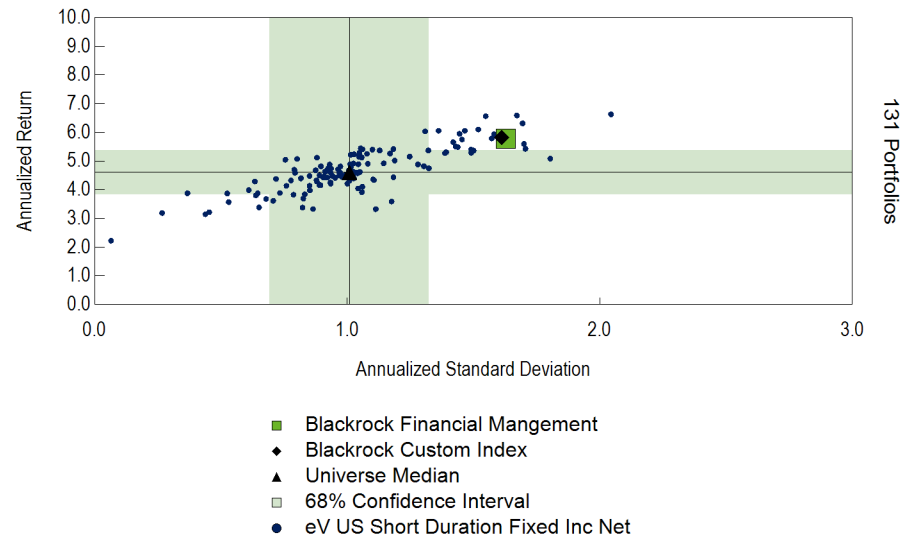


BLACKROCK FINANCIAL MANAGEMENT

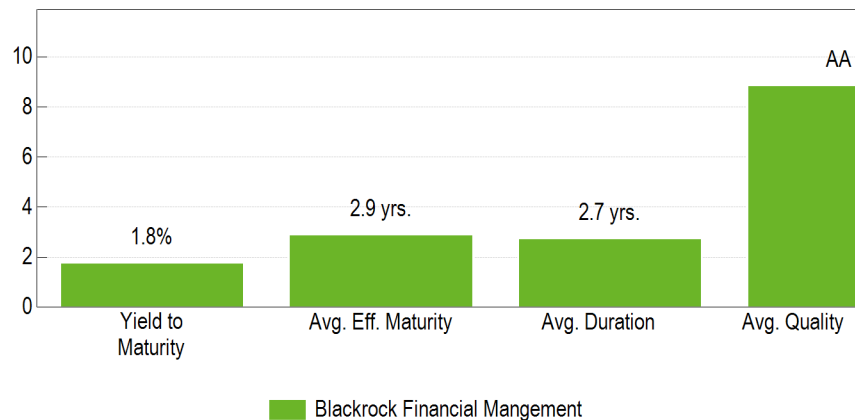
eV US Short Duration Fixed Inc Net Return Comparison



1 Year Risk Return



Characteristics



Qualitative Attribution

Duration and Yield Positioning: At the beginning of the quarter the portfolio was positioned with a longer duration bias versus the benchmark, as market expectations for a rate cut started to meaningfully increase after the Federal Reserve’s March meeting.

Result: Neutral added due to duration and yield positioning for the quarter.

Credit Positioning: The portfolio was overweight Corporates and Securitized securities for the quarter and underweight Government Related and Treasury securities, respectively.

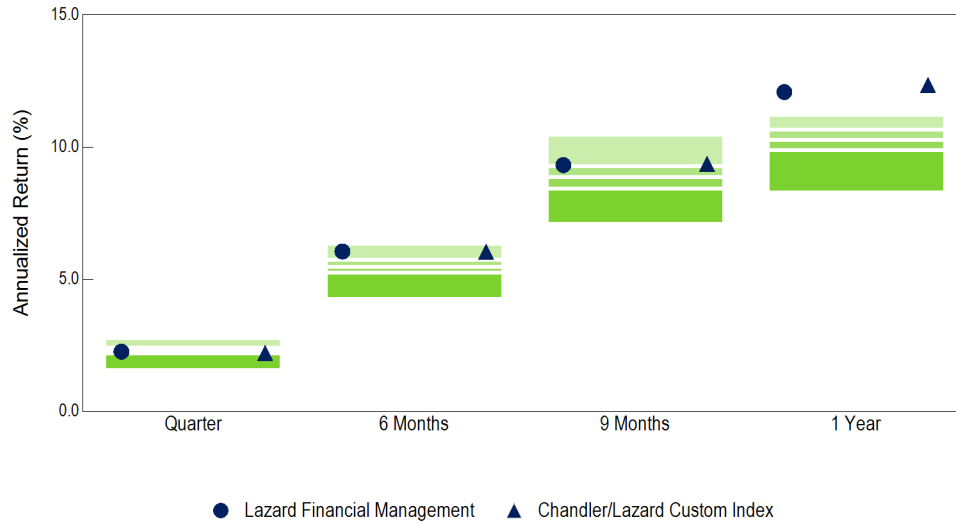
Result: Value added via overweight to corporate credit supported by exposure to ABS and mortgages.

Other Positioning: The largest contributor to returns was the portfolio’s overweight to corporate credit. The allocations to ABS and mortgages also supported returns. The largest detractor to returns was the portfolio’s underweight to sovereign paper and US treasuries. Most short duration assets produced positive excess returns versus duration adjusted Treasuries during the third quarter.

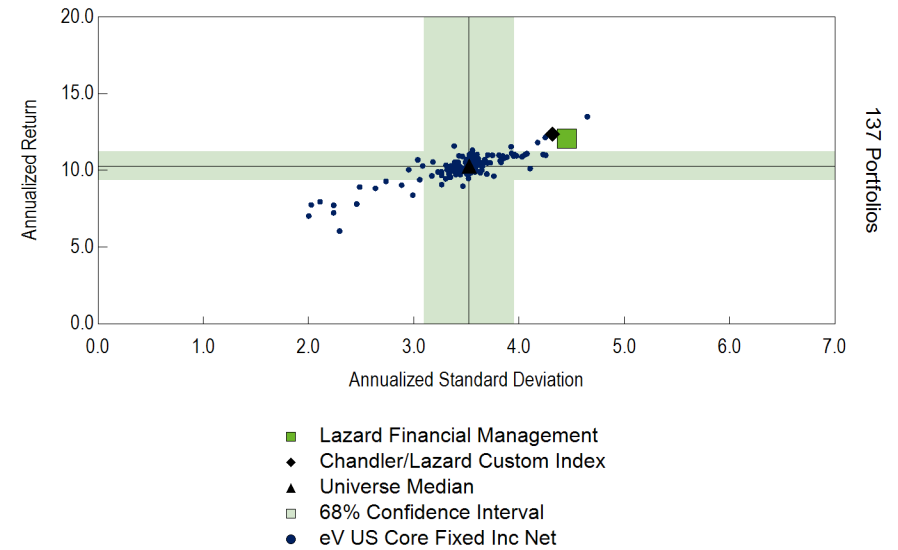


LAZARD FINANCIAL MANAGEMENT

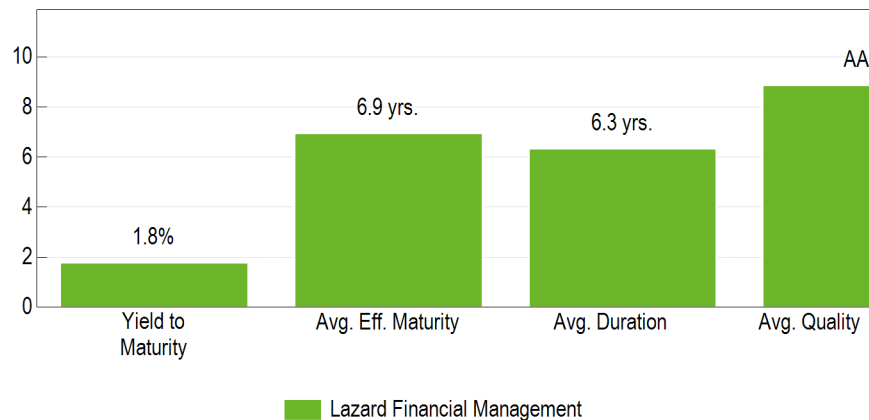
eV US Core Fixed Inc Net Return Comparison



1 Year Risk Return



Characteristics



Qualitative Attribution

Duration and Yield Positioning: In terms of relative interest rate exposure, the portfolio was positioned for a curve flattening scenario going into the 3rd quarter, initially carrying an underweight to the 5-year point on the curve spectrum but maintaining a neutral overall duration position relative to the 5-10 year custom benchmark.

Result: This interest rate position had a modestly positive impact on relative performance, as the applicable portion of the US Treasury curve (5s-10s) flattened.

Credit Positioning: The portfolio remained defensively positioned carrying an underweight to both Corporate and Non-US Treasury credit risk.

Result: The mandate's built-in underweight to BBB-rated Corporates hurt relative performance, as Corporate credit posted positive excess returns versus US Treasuries during the 3rd quarter.

Other Positioning: Lazard continues to search for attractively priced A-rated corporate positions with little success. In the meantime, the portfolio continues to hold high-quality, short duration asset backed securities, which have added value relative to Treasury positions.

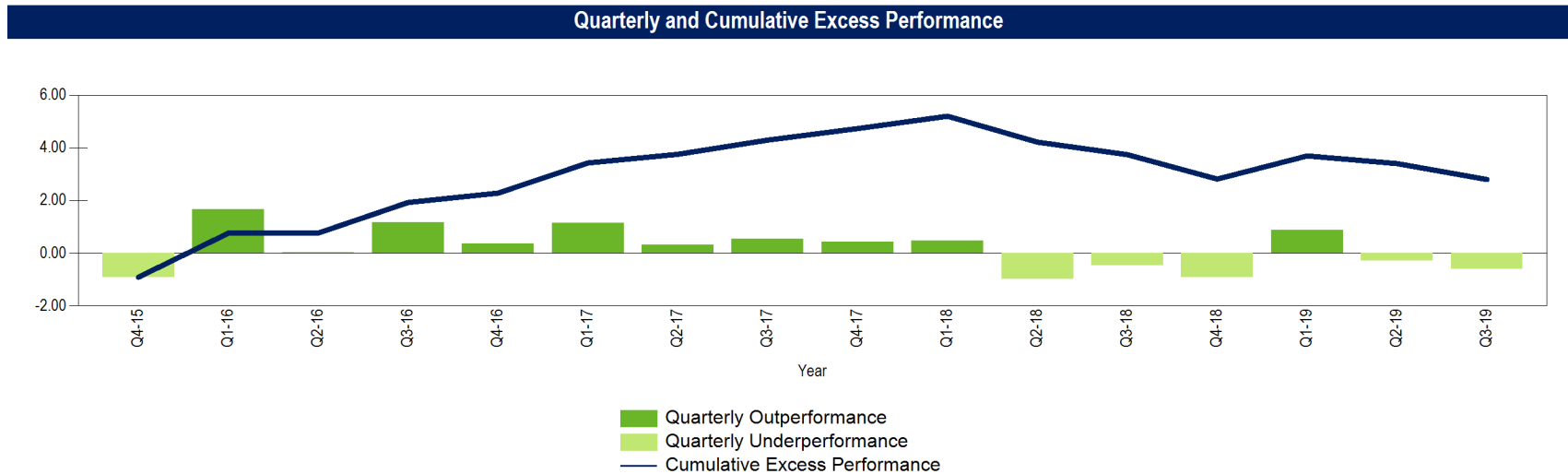
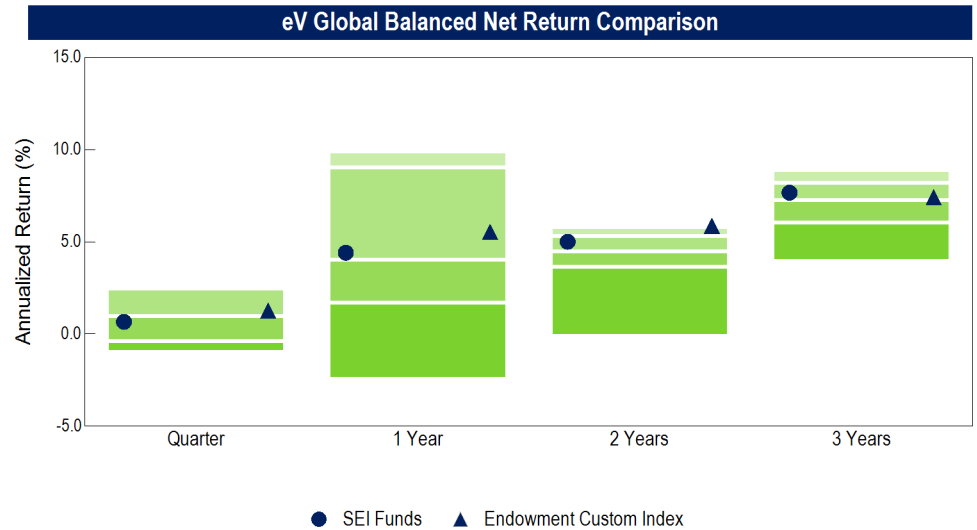


ENDOWMENT MANAGER REVIEW

NEPC, LLC

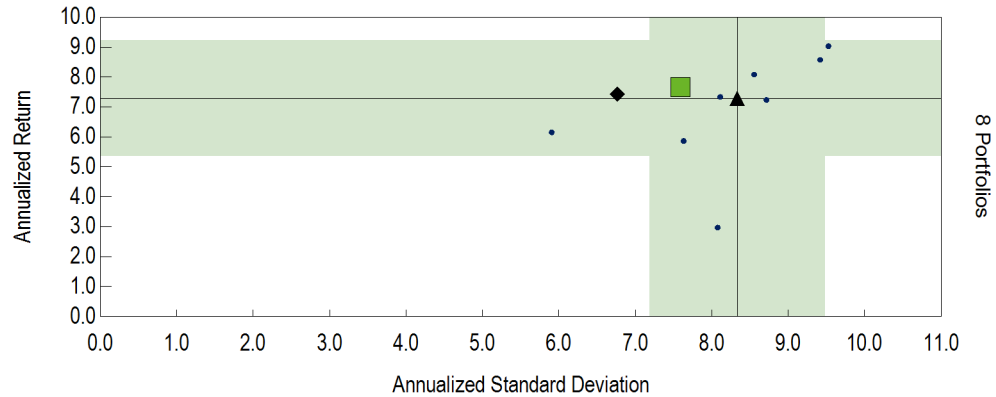
SEI FUNDS

SEI Funds manages a multi-asset class portfolio subject to a 60% target equity allocation which will be held in a range of 45% to 75%, with international equities not to exceed 35% of the equity allocation. A combination of fixed income, alternative investments, and cash will account for the remaining 40% target allocation. Funds will be managed by the following SEI strategies: SEI US Managed Volatility Strategy, SEI S&P 500 Index Strategy, SEI Extended Markets Index Strategy, SEI Small Cap II Equity Strategy, SEI World Equity ex-US Strategy, SEI Core Fixed Income Strategy, SEI High Yield Strategy, and SEI Emerging Markets Debt Strategy.

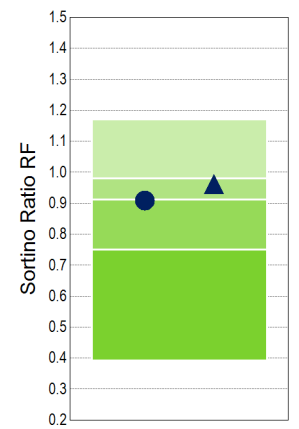
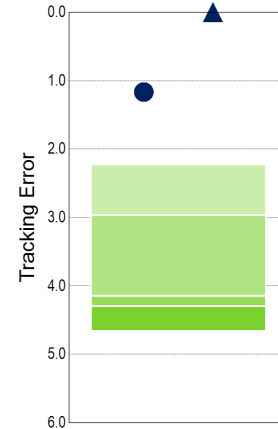
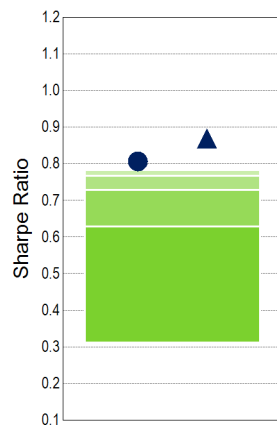
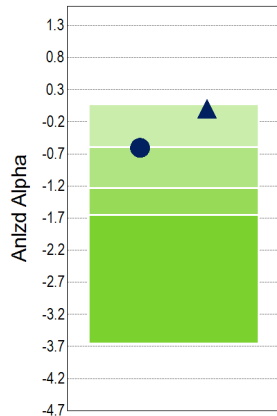
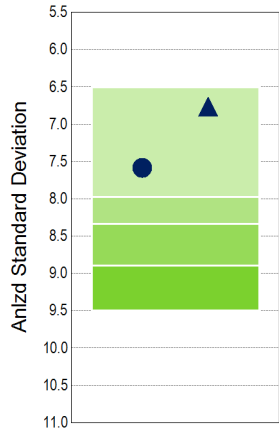
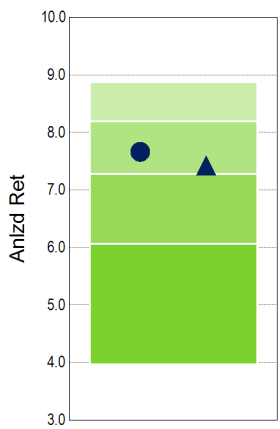


SEI FUNDS

3 Year Risk Return



- SEI Funds
- ◆ Endowment Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- eV Global Balanced Net

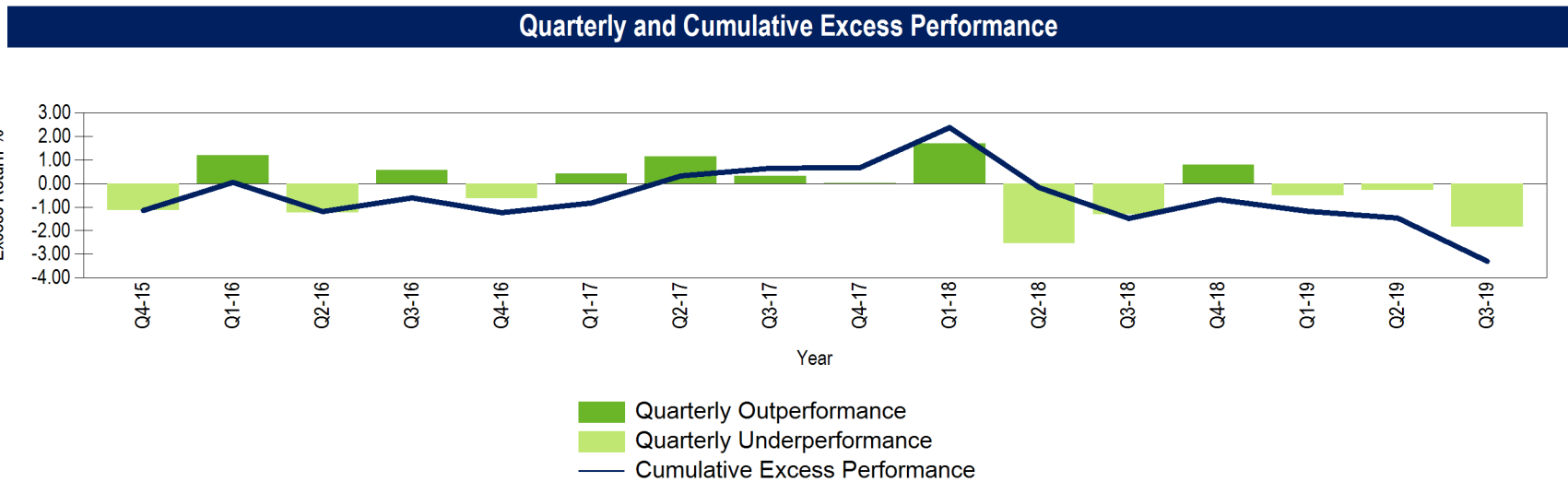
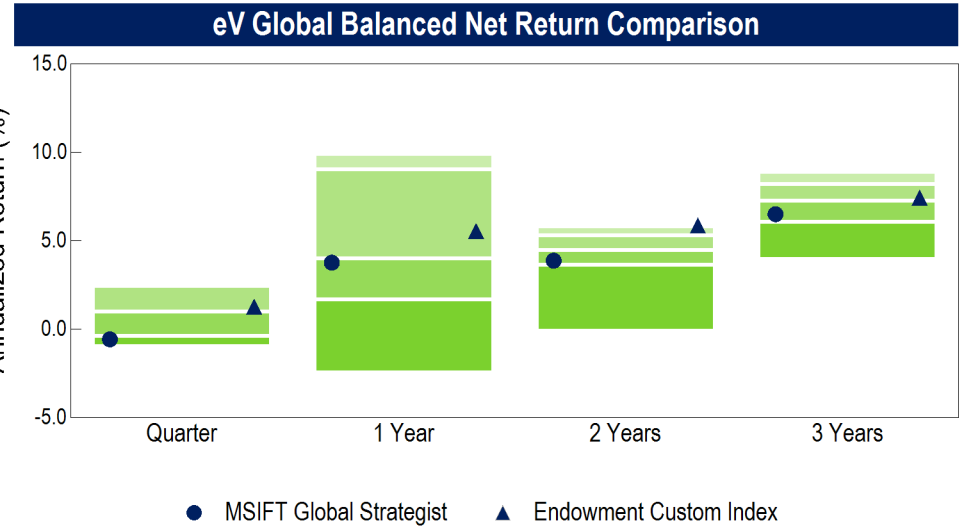


- SEI Funds
- ▲ Endowment Custom Index
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile

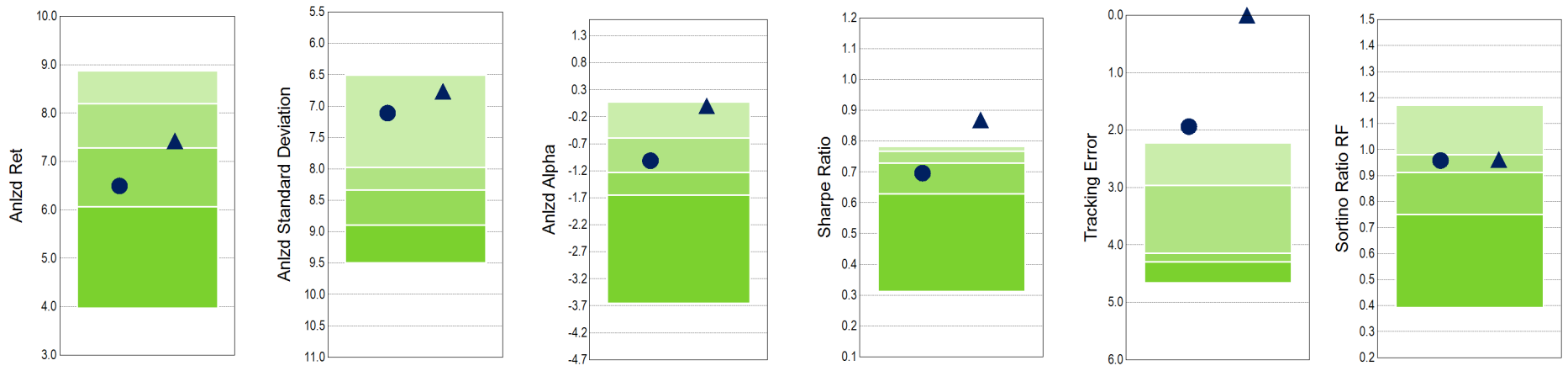
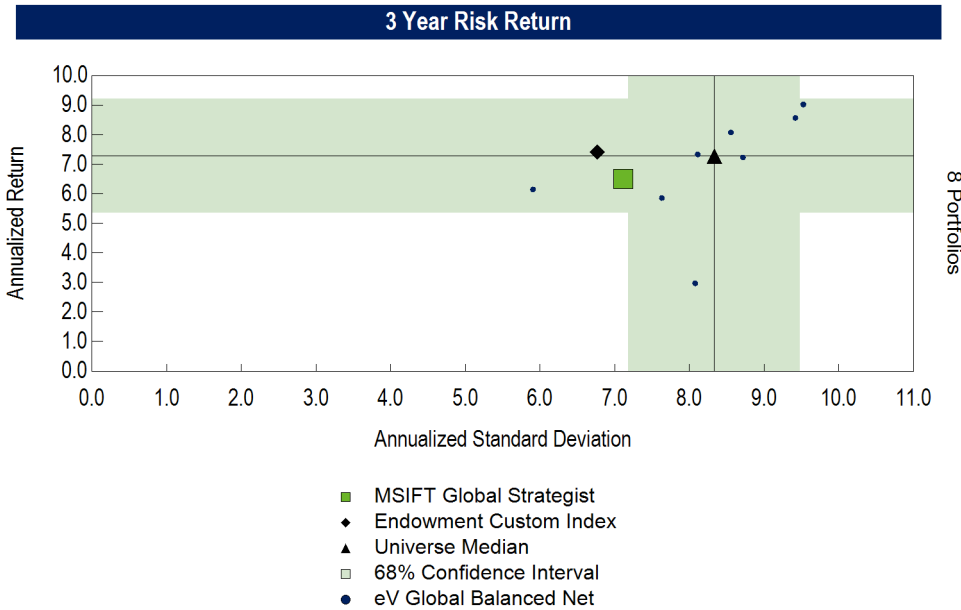


MSIFT GLOBAL STRATEGIST

Morgan Stanley manages a multi-asset class portfolio. The portfolio seeks to achieve its investment objective by investing primarily in a blend of equity and fixed income securities of U.S. and non-U.S. issuers. The equity portfolio will be diversified by types of securities (i.e. common and preferred shares of equity), issuer, industry and sectors. The fixed income portfolio will be diversified by security types (i.e government, agency and corporate bonds), issuer, duration and yield characteristics.

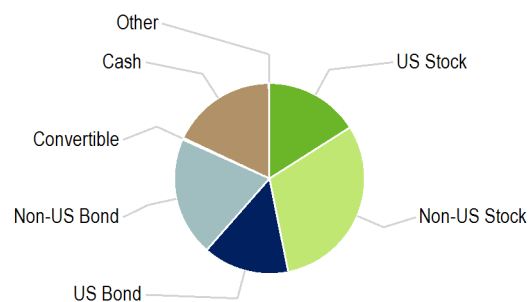


MSIFT GLOBAL STRATEGIST



MSIFT GLOBAL STRATEGIST

Mutual Fund Allocation as of June 30, 2019



Portfolio Fund Information as of June 30, 2019

Ticker	MPBAX
Morningstar Category	World Allocation
Average Market Cap (\$mm)	47,155.35
Net Assets (\$mm)	59.79
% Assets in Top 10 Holdings	43.08
Total Number of Holdings	1,570
Manager Name	Mark A. Bavoso
Manager Tenure	9
Expense Ratio	0.74%
Closed to New Investors	No

Fund Characteristics as of June 30, 2019

Sharpe Ratio (3 Year)	0.93
Average Market Cap (\$mm)	47,155.35
Price/Earnings	14.64
Price/Book	1.84
Price/Sales	1.31
Price/Cash Flow	6.73
Dividend Yield	3.25
Number of Equity Holdings	1,248
R-Squared (3 Year)	0.93
Alpha (3 Year)	0.00%

Top Holdings as of June 30, 2019

S+P500 EMINI FUT SEP19 XCME 20190920	10.91%
AUSTRALIA 3 YEAR BOND SEPT19	6.01%
MS INST. FUND TRUST GLBL STRATEGIST CAYMAN POR LTD	4.90%
1265771 TRS USD P V 03MLIBOR II1758120190123 EQUITYTRS	4.25%
1265771 TRS USD R E II1760260190123 EQUITYTRS	4.15%
US 10YR NOTE (CBT)SEP19 XCBT 20190919	3.11%
1265804 TRS USD P V 03MLIBOR II2081480190206 EQUITYTRS	2.90%
1265804 TRS USD R E II2084320190206 EQUITYTRS	2.90%
MSCI EMGMKT SEP19 IFUS 20190920	2.01%
EURO BUND FUTURE SEPT19	1.94%

Sector Allocation as of June 30, 2019

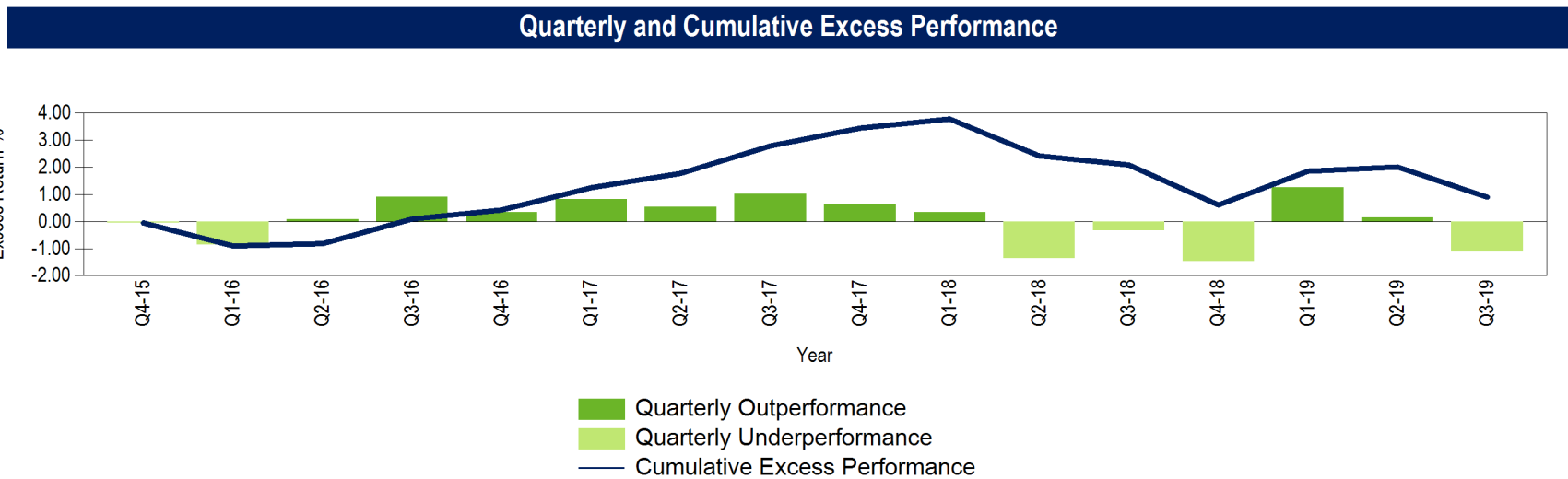
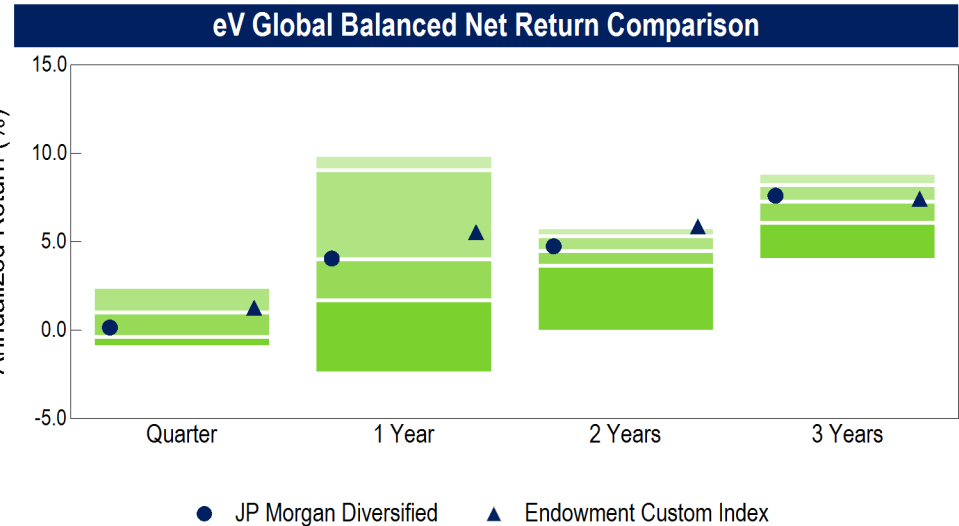
BASIC MATERIALS	5.20%
COMMUNICATION SERVICES	4.58%
CONSUMER CYCLICAL	10.00%
CONSUMER DEFENSIVE	9.16%
ENERGY	7.37%
FINANCIAL SERVICES	19.08%
HEALTHCARE	9.26%
INDUSTRIALS	15.56%
REAL ESTATE	5.54%
TECHNOLOGY	10.71%
UTILITIES	3.55%

Characteristics have not yet been released for the third quarter.



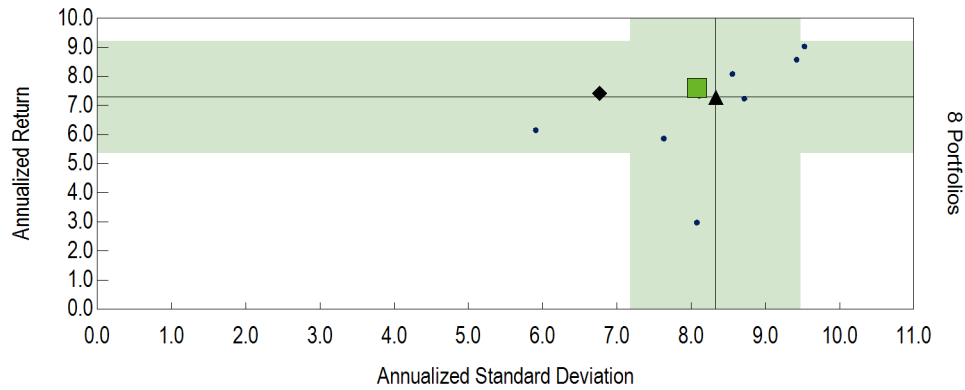
JP MORGAN DIVERSIFIED

J.P Morgan manages a diversified mutli-asset class portfolio. The strategy seeks to provide a high total return from a diversified portfolio of equity and fixed income investments based on a model allocation. JP Morgan may periodically increase or decrease the Fund's actual asset allocation according to the relative attractiveness of each asset class. Within its equity allocations, the Fund primarily invests in the common stock and convertible securities of U.S. and foreign companies. Within its fixed income allocations, the Fund primarily invests in corporate bonds, mortgage-backed securities, mortgage "dollar rolls" and U.S. government securities.

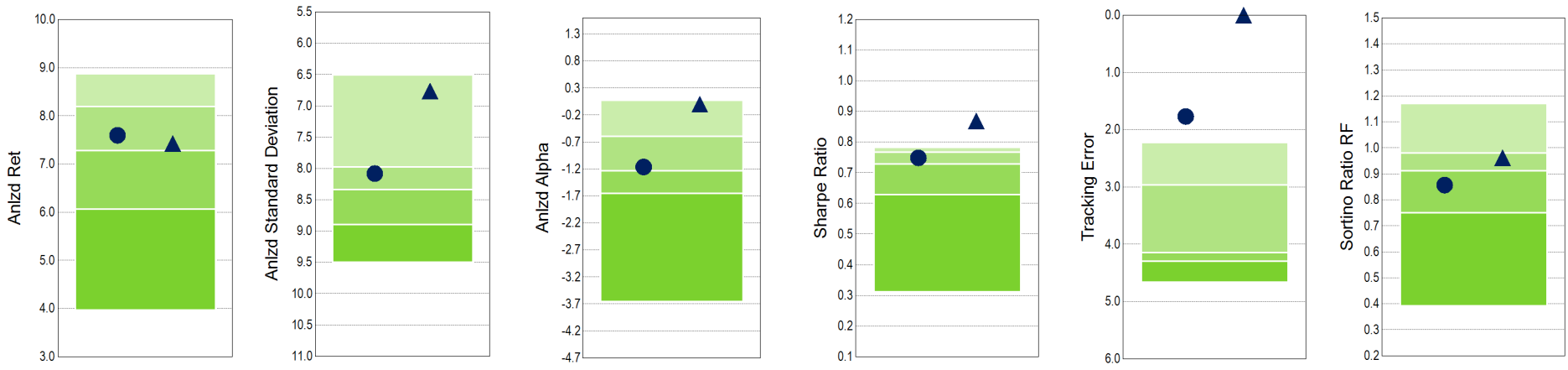


JP MORGAN DIVERSIFIED

3 Year Risk Return



- JP Morgan Diversified
- ◆ Endowment Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- eV Global Balanced Net

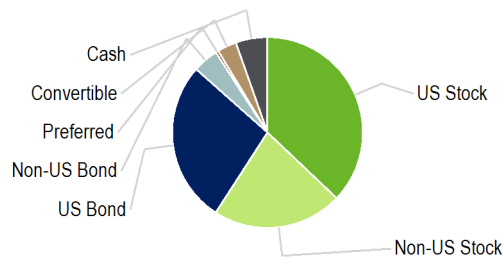


- JP Morgan Diversified
- ▲ Endowment Custom Index
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



JP MORGAN DIVERSIFIED

Mutual Fund Allocation as of September 30, 2019



Portfolio Fund Information as of September 30, 2019

Ticker	JPDVX
Morningstar Category	Allocation--50% to 70% Equity
Average Market Cap (\$mm)	51,782.21
Net Assets (\$mm)	214.68
% Assets in Top 10 Holdings	10.66
Total Number of Holdings	3,468
Manager Name	Jeffrey A. Geller
Manager Tenure	1
Expense Ratio	0.66%
Closed to New Investors	No

Fund Characteristics as of September 30, 2019

Sharpe Ratio (3 Year)	0.75
Average Market Cap (\$mm)	51,782.21
Price/Earnings	17.63
Price/Book	2.41
Price/Sales	1.87
Price/Cash Flow	8.82
Dividend Yield	2.31
Number of Equity Holdings	1,849
R-Squared (3 Year)	0.97
Alpha (3 Year)	-0.09%

Top Holdings as of September 30, 2019

JPMORGAN EMERGING MARKETS DEBT R6	1.79%
MICROSOFT CORP	1.55%
JPMORGAN EMERGING MARKETS STRAT DBT R6	1.19%
UNITED STATES TREASURY NOTES 2%	1.15%
AMAZON.COM INC	1.03%
UNITED STATES TREASURY NOTES 2.75%	0.99%
APPLE INC	0.86%
ALPHABET INC CLASS C	0.76%
UNITED STATES TREASURY NOTES 2.25%	0.73%
MASTERCARD INC A	0.60%

Sector Allocation as of September 30, 2019

BASIC MATERIALS	3.00%
COMMUNICATION SERVICES	2.58%
CONSUMER CYCLICAL	13.41%
CONSUMER DEFENSIVE	6.62%
ENERGY	4.28%
FINANCIAL SERVICES	19.53%
HEALTHCARE	10.50%
INDUSTRIALS	11.25%
REAL ESTATE	7.25%
TECHNOLOGY	18.70%
UTILITIES	2.89%



APPENDIX

NEPC, LLC

GLOSSARY OF INVESTMENT TERMINOLOGY

Of Portfolios/Observations¹ - The total number of data points that make up a specified universe

Allocation Index³ - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

Asset Allocation Effect² - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

Agency Bonds (Agencies)³ - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Asset Backed Securities (ABS)³ - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

Attribution³ - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions.

Average Effective Maturity⁴ - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

Batting Average¹ - A measurement representing an investment manager's ability to meet or beat an index.

Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.

Brinson Fachler (BF) Attribution¹ - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

Brinson Hood Beebower (BHB) Attribution¹ - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

Corporate Bond (Corp)⁴ - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

Correlation¹ - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



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Coupon⁴ – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

Currency Effect¹ – Is the effect that changes in currency exchange rates over time affect excess performance.

Derivative Instrument² – A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

Downside Deviation¹ – Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

Formula:

Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

Duration³ – Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

Equity/Debt/Cash Ratio¹ – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

Foreign Bond³ – A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

Hard Hurdle⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

High-Water Mark⁴ – The highest peak in value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Hurdle Rate⁴ – The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

Interaction Effects² – The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

Median³ – The value (rate of return, market sensitivity, etc.) that exceeds one-half of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

Modified Duration³ – The percentage change in the price of a fixed income security that results from a change in yield.

Mortgage Backed Securities (MBS)³ – Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Municipal Bond (Muni)⁴ – A debt security issued by a state, municipality or county to finance its capital expenditures.

Net Investment Change¹ – Is the change in an investment after accounting for all Net Cash Flows.

Performance Fee⁴ – A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



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Policy Index³ - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

Price to Book (P/B)⁴ - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

Price to Earnings (P/E)³ - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

Price to Sales (P/S)⁴ - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

Return on Equity (ROE)⁴ - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect² - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

Soft Hurdle rate⁵ - is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

Tiered Fee¹ - A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

Total Effects² - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

Total Return¹ - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe³ - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation¹ - Standard Deviation of Positive Returns

Weighted Avg. Market Cap.⁴ - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)³ - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity³ - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



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