



Quarterly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: September 30, 2021





Memorandum

To	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis – Summary of Contents
Date	September 30, 2021

To assist in your review of the Investment Performance Analysis for the quarter ended September 30, 2021, we have provided below an outline and summary of the information contained within each section of this report.

MEMORANDUM – Investment Performance Analysis Commentary

- This memo provides a written summary of significant observations regarding performance of the State's Funds and an overview of performance during the quarter for each of the State's asset classes.

TAB 1 – Market Environment

- This section is intended to review capital markets in general (i.e. not specific to Wyoming), and includes a written summary of events during the quarter, including economic influences and review of equity and bond markets as a whole. This section also includes various charts and exhibits displaying key characteristics of major market indices representing the broad range of available asset classes, including alternative investments such as absolute return and real estate. Also included is an asset class summary that describes the structure of each of the State's composites. Lastly, this section includes a review of the benchmarks referenced within the quarterly report.

TAB 2 – Total Fund

- This section provides an overview of all of the State's investments, both permanent and non-permanent. Exhibits include an outline of the aggregate asset allocation – by manager, by investment fund, by asset class, and compared to peers. This section also includes Total Fund performance compared to other plan sponsors and highlights the risk and return profile of the State.

TAB 3 – Investment Funds

- This section details the asset allocation versus target of each of the State's investment funds. In addition, a summary page highlighting the performance of each fund compared to the respective total fund index is included.

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TAB 4 – Total Equity

- This section summarizes the State's allocation to traditional equity managers – both domestic and international – and details the performance of each manager versus both their corresponding benchmark as well as their direct peer universe. Attribution pages are also incorporated, which outline the allocation by sector (or region) for each sub-composite and the corresponding performance.

TAB 5 – Alternative Assets

- This section includes allocation and performance information for the State's alternative investments, which include real estate, absolute return, and private equity strategies.

TAB 6 – Total Fixed Income

- Similar to the equity section, this section summarizes the allocation to and performance of each of the State's fixed income managers, including the internally managed portfolio. Characteristics pages are also included for each sub-composite.

TAB 7 – Cash and Cash Equivalents

- This two-page summary outlines the performance of the State's cash portfolios compared to current T-Bill rates and a custom blended index for JP Morgan.

Tab 8 – Investment Manager Profile Pages

- This section contains a number of portfolio characteristic pages for the State's investment managers, including historical strategy performance prior to the State's investment. These pages include such characteristics as risk, upside/downside capture, market capitalization, allocation by sector and more.

TAB 9 – Investment Policy Objective Review

- The section provides a compliance check for the Total Fund, and for each individual manager portfolio, versus the guidelines and expectations outlined in the State's Master Investment Policy and Sub-Policies.

APPENDIX

- The appendix includes a glossary, providing definitions and other information on data included throughout the report, including financial terms and ratios, indices, and peers groups. The addendum page in the appendix includes important comments specific to Wyoming regarding market value, performance, and allocation information provided throughout the report.

WYOMING STATE TREASURER’S OFFICE

Third QUARTER 2021

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Memorandum

To	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis Commentary
Date	September 30, 2021

Outlined below please find a summary of significant observations regarding performance of the State's Funds for the period ended September 30, 2021. We hope this summary will facilitate your review of our Investment Performance Analysis Report.

The Total Fund returned 0.5% net of fees during the third quarter as real estate, large-cap equity, and hedge funds produced positive returns. Long-term performance for the Total Fund remains strong, with the State earning returns of 5.4% and 5.9% per annum over the trailing seven- and ten-year periods.

Absolute results were positive for most of the State's investment pools, with each pool keeping pace with, or modestly outperforming, their respective benchmarks during the quarter. The State's non-permanent funds with larger strategic allocations to fixed income investments generated lower returns on an absolute basis, but similar returns on a relative basis, compared to the State's permanent funds.

The Bloomberg US Aggregate Bond Index returned 0.1% in the quarter, as treasury yields rose slightly this quarter. Diversification away from core US bonds had mixed results as bank loans outperformed the broad market, while EMD, long duration, and low duration underperformed. The State's core fixed income managers outperformed the broad market index, collectively returning 0.1%. EMD and low duration outperformed their respective benchmarks, while long duration and bank loans modestly underperformed their respective benchmarks during the quarter.

US equity markets were mixed across market capitalizations and styles during the third quarter. Major US equity indices were mixed, with S&P 500 Index slightly positive, while the Russell 3000 Index was negative for the quarter. The State's All Cap equity composite had positive returns, but the Small Cap US equity composite had negative returns during the third quarter. Both kept pace with, or modestly underperformed, their respective indices.

Developed international markets outperformed emerging markets during the quarter, with the MSCI EAFE Index returning -0.5% and the MSCI Emerging Markets Index returning -8.1%. The State's international equity composite

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returned -2.1% during the quarter, outperforming the MSCI ACW Ex US Index by 0.9%. Passively managed strategies within the State's international equity portfolio kept pace with their respective benchmarks, while Arrowstreet outperformed its respective benchmark by 2.5%. Harding Loevner had outperformance of 0.2%.

Mixed assets, including preferred stock and MLPs, generated mixed absolute returns during the quarter. Cohen & Steers returned 1.2% in the quarter, and outperformed its benchmark by 0.6%. MLPs had negative absolute performance as Harvest Active and Harvest Passive returned -0.4% and -3.4%, respectively, but both outperformed the index.

Core real estate generated a positive return during the quarter, with capital appreciation outpacing income. The State's core real estate composite earned 5.9% in the quarter, underperforming the NCREIF ODCE Index. Clarion earned 5.9%, while UBS returned 6.0%. MS Prime also had a positive return of 5.8%.

Diversified hedge funds returned 1.6% during the quarter, outperforming the HFRI FOF Composite Index by 0.9%. Grosvenor Diversified Hedge Funds and Internal Diversified Hedge Funds returned 1.8% and 1.5%, respectively.

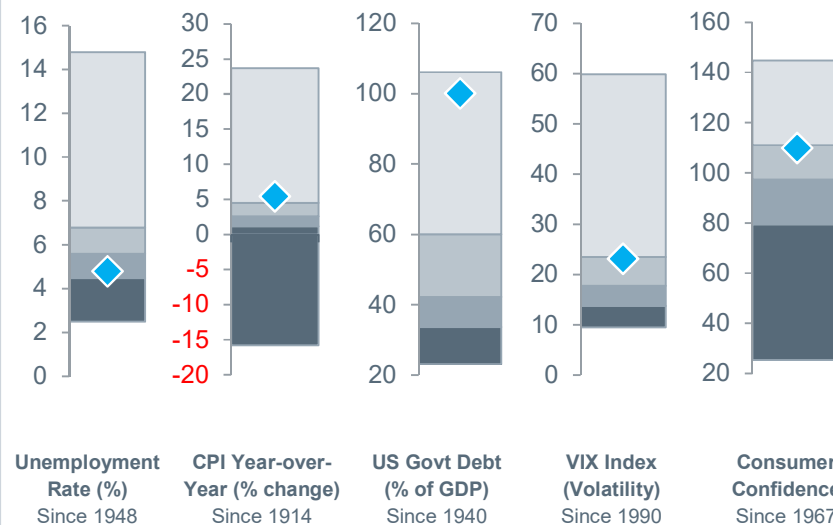
Capital Markets Review



Third Quarter Economic Environment

Persistent inflationary pressures, disrupted supply chains, stalled fiscal negotiations, and the continued spread of the delta variant, all contributed to a quarter of mixed results for risk assets. In addition, heightened concerns over an increasingly stringent regulatory regime in China, combined with the debt restructuring of its second-largest property developer, led to a down quarter for emerging markets with volatility spreading to other regions as well. US markets outperformed on average, though were roughly flat. Investor sentiment was aided by a strong corporate earnings environment amid continued support from the Federal Reserve, along with improvement in some economic fundamentals. Globally, an uneven economic recovery continued, evidenced by labor market conditions and inflation readings showing mixed indications of progress. The September US non-farm payrolls report indicated a weaker than anticipated 194,000 added jobs, although past months were revised higher. The unemployment rate dropped to 4.8%, compared to 5.9% at the start of the quarter, but this decrease was largely driven by a declining labor force participation rate. The core PCE price index, the Federal Reserve's preferred measure for inflation, ran at a 30 year high based on the reading in August. Wage growth similarly rose higher in September with average hourly pay increasing 4.6% year-over-year. Overall, global growth forecasts remained relatively consistent with recent quarters.

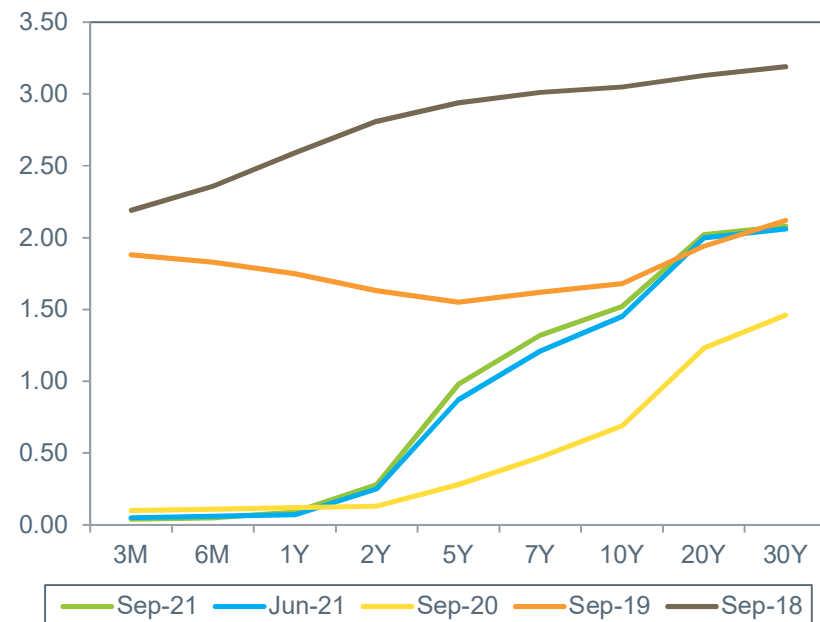
Key Economic Indicators



Economic Indicators	Sep-21	Jun-21	Sep-20	Sep-18	20 Yr
Federal Funds Rate (%)	0.06 ▼	0.08	0.09	2.18	1.33
Breakeven Infl. - 5 Yr (%)	2.53 ▲	2.50	1.49	2.03	1.84
Breakeven Infl. - 10 Yr (%)	2.38 ▲	2.34	1.63	2.14	2.03
CPI YoY (Headline) (%)	5.4 —	5.4	1.4	2.3	2.1
Unemployment Rate (%)	4.8 ▼	5.9	7.8	3.7	6.1
Real GDP YoY (%)	4.9 ▼	12.2	-2.9	3.1	1.9
PMI - Manufacturing	61.1 ▲	60.6	55.7	59.5	53.3
USD Total Wtd Idx	114.99 ▲	112.85	117.26	113.81	103.15
WTI Crude Oil per Barrel (\$)	75.0 ▲	73.5	40.2	73.3	63.7
Gold Spot per Oz (\$)	1,757 ▼	1,770	1,886	1,191	1,067

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	0.58	15.92	30.00	16.90	16.63
Russell 2000	-4.36	12.41	47.68	13.45	14.63
MSCI EAFE (Net)	-0.45	8.35	25.73	8.81	8.10
MSCI EAFE SC (Net)	0.90	10.02	29.02	10.38	10.73
MSCI Emg Mkts (Net)	-8.09	-1.25	18.20	9.23	6.09
Bloomberg US Agg Bond	0.05	-1.56	-0.90	2.94	3.01
ICE BofAML 3 Mo US T-Bill	0.02	0.04	0.07	1.16	0.63
NCREIF ODCE (Gross)	6.63	13.15	14.63	7.51	9.92
FTSE NAREIT Eq REIT (TR)	0.98	23.15	37.39	6.83	11.27
HFRI FOF Comp	0.73	5.72	14.30	5.80	4.46
Bloomberg Cmdty (TR)	6.59	29.13	42.29	4.54	-2.66

Treasury Yield Curve (%)



Third Quarter Review

Broad Market

US equity markets cooled off in Q3, compared to recent quarters, as the S&P 500 finished relatively flat. The spread of the Delta variant throughout the country slowed consumer spending, although the overall recovery remained on course. Concerns over inflation, due to continued stimulus from the Fed and supply chain disruptions, continue to be a major theme in the US contributing to moderated investor sentiment.

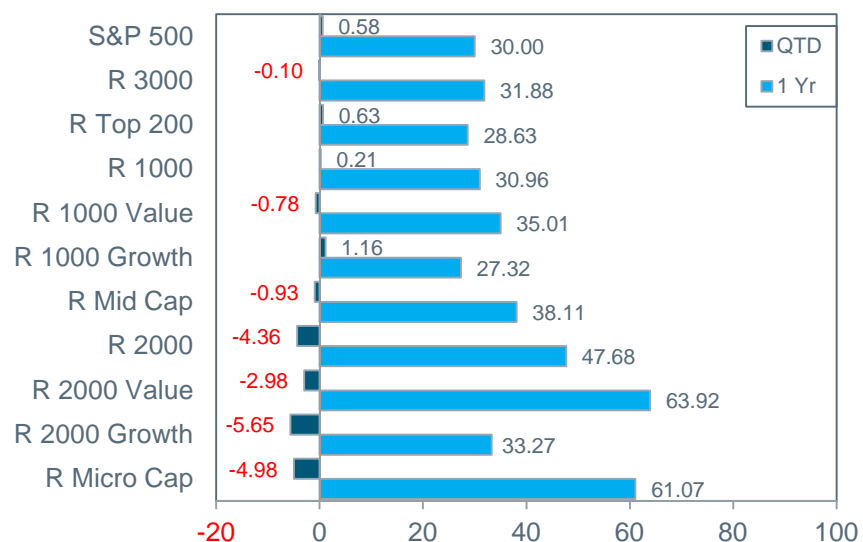
Market Cap

Large-cap stocks significantly outperformed their smaller-cap counterparts. The Russell 2000 Index returned -4.4% compared to 0.6% for the S&P 500.

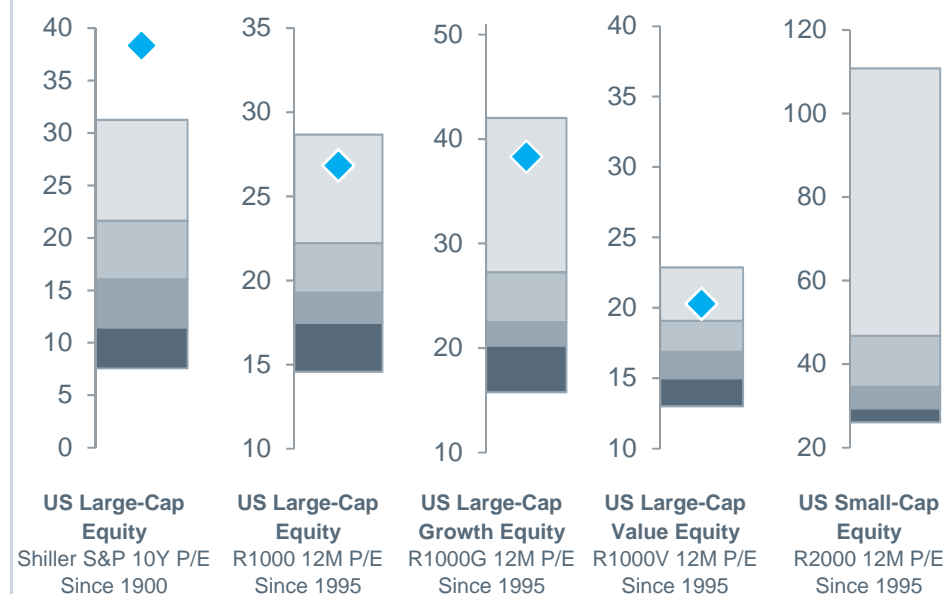
Style and Sector

Large-cap growth turned in modestly positive returns in Q3 while small-cap and value stocks generally struggled. The Russell 1000 Growth Index returned 1.2% vs. -0.8% for the Russell 1000 Value Index. The Russell 2000 Value Index returned -3.0% vs. -5.7% for the Russell 2000 Growth Index.

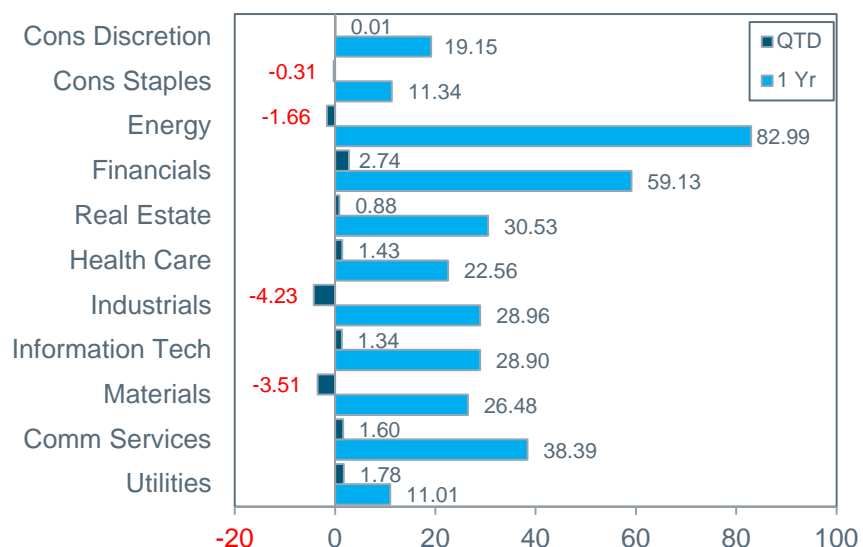
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



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.

Current R2000 P/E is unavailable due to negative earnings per share as of 9/30/2021.

Third Quarter Review

Developed Markets

In similar fashion to the US equity market, developed international market returns were muted. The MSCI EAFE Index was slightly negative for Q3 with growth stocks outperforming value, although value stocks are still ahead year-to-date. Small cap stocks outperformed their larger counterparts.

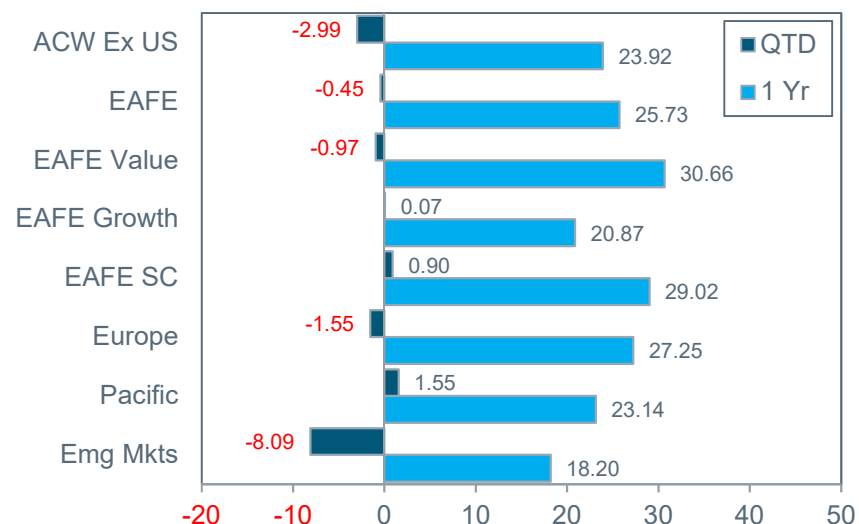
Emerging Markets

Unlike developed markets, emerging markets experienced significant negative absolute returns in Q3 driven by market volatility in China. Subsequently, value stocks outperformed growth and small cap stocks outperformed large.

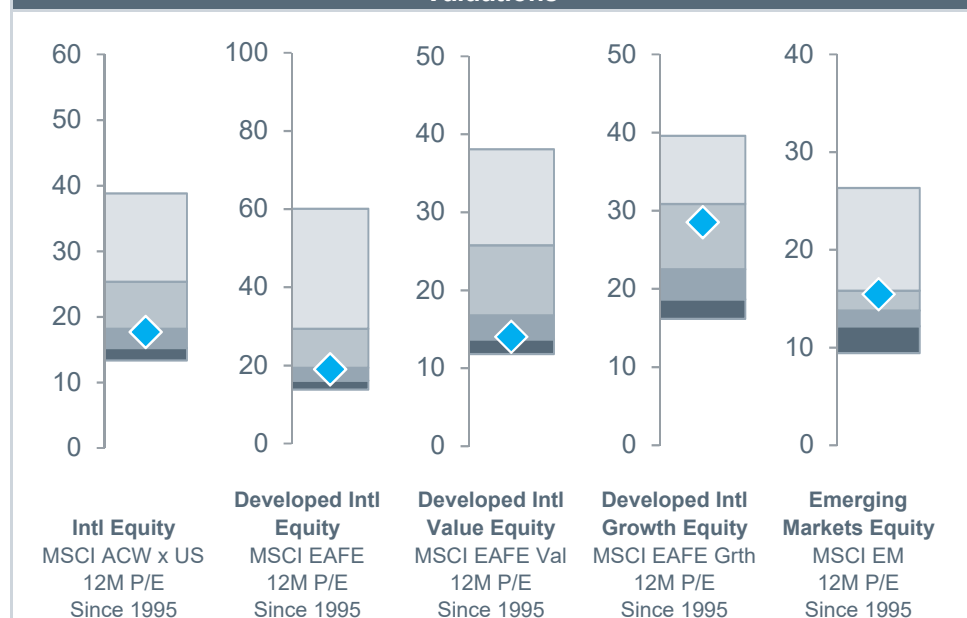
Market Cap & Style

In international markets, growth stocks outperformed value, while small-cap stocks outperformed large-cap. In emerging markets, value stocks outperformed growth, while small-cap stocks outperformed large-cap.

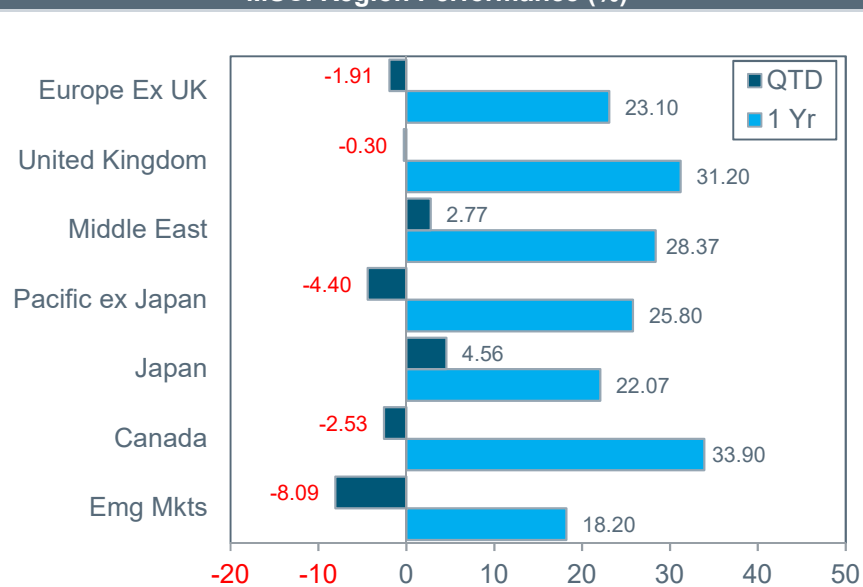
MSCI Style and Capitalization Market Performance (%)



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.

Third Quarter Review

Broad Market

The Bloomberg US Aggregate Index was flat, finishing with returns of 0.1% in Q3, while remaining down -1.6% year-to-date. Treasury yields rose in Q3 in light of inflation concerns sparked by supply chain constraints and sustained economic growth. Speculation over the timing of Federal Reserve tapering was also a contributing factor to the slight move in rates.

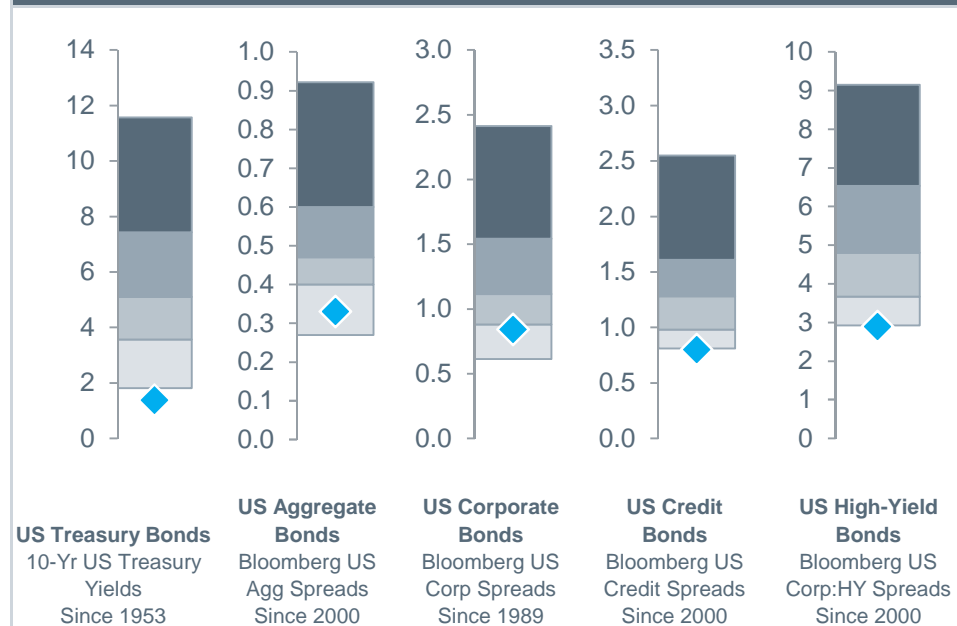
Credit Market

Low-rated debt remained a source of outperformance in a market starved for yield. The Bloomberg US Credit Index was flat, returning 0.0% QTD with BBB-rated debt marginally outperforming higher-rated debt. In contrast, the Bloomberg US High Yield Index returned 0.9% in Q3 with the Credit Suisse Leveraged Loan Index returned 1.1%.

Emerging Market Debt

Emerging markets corporate debt continued to outpace local currency and hard currency sovereign debt, with local currency being a laggard in part due to a strengthening US dollar.

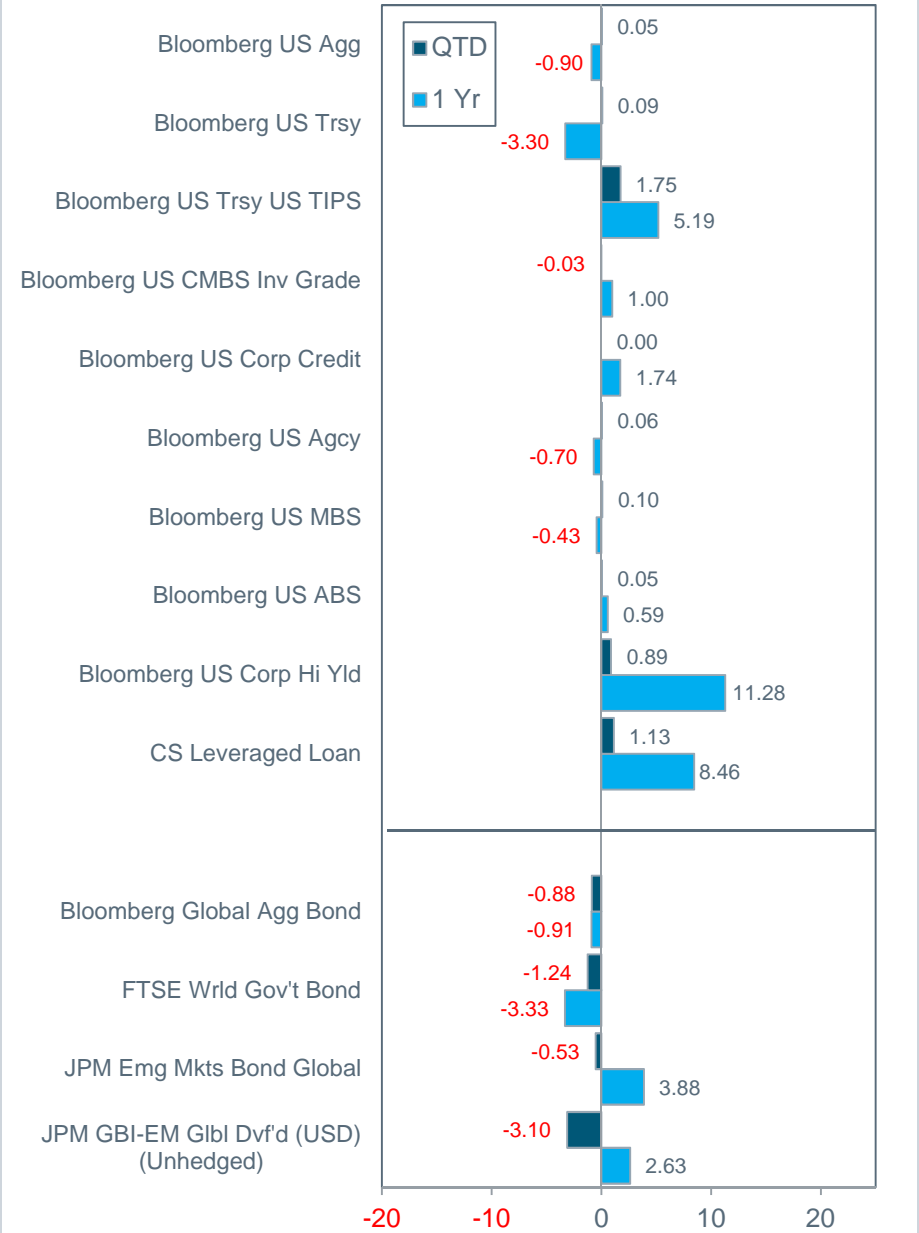
Valuations



Valuation data courtesy of Bloomberg Professional Service.

Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.

Fixed Income Performance (%)



Third Quarter Review - Absolute Return

General Market - Hedge Funds

After a strong first half of the year, hedge fund returns moderated during Q3, with the HFRI Fund Weighted Composite Index finishing the quarter roughly flat. The Asset Weighted composite, which relies far less heavily on directional long/short equity strategies, produced a modest gain of 0.03% in Q3. Hedged equity strategies, which had led the way in the first half of 2021, captured some of the downside, finishing the quarter with a -0.9% return according to the HFRI Equity Hedge Index.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation strategies that RVK follows closely generated disparate results in Q3. The top performing long-biased GTAA strategies incorporated inflation protection subcomponents, particularly in energy commodities, which continued to reward investors. These long-biased strategies also produced differentiated results compared to the modest performance of a less diversified blended benchmark of 60% US equity and 40% US fixed income.

Third Quarter Review - Real Assets

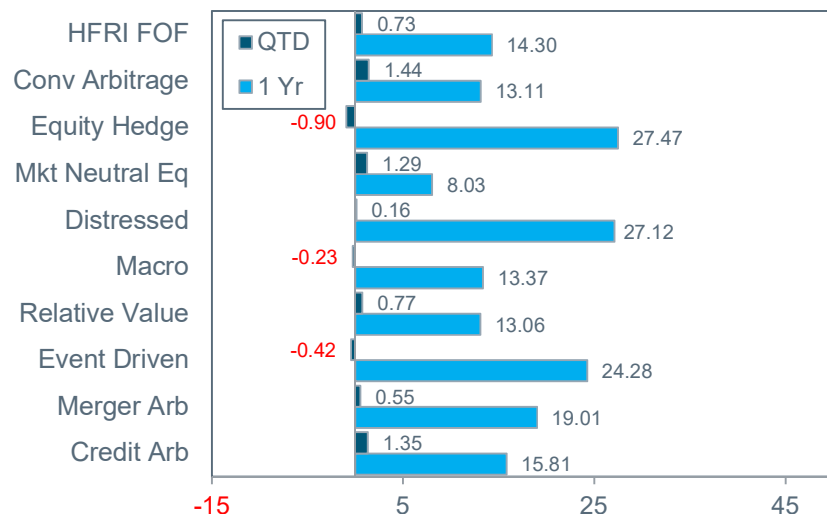
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies that RVK follows closely continued to generate strong positive absolute performance. Managers with higher commodities and TIPS exposures posted the strongest positive absolute returns. Commodities led the way, with the Bloomberg Commodity Index posting a 6.6% return, largely driven by gains in energy. Inflation, as measured by the year-over-year change in Headline CPI, was reported as 5.4% for September, a significant increase from 2.6% at the end of Q1.

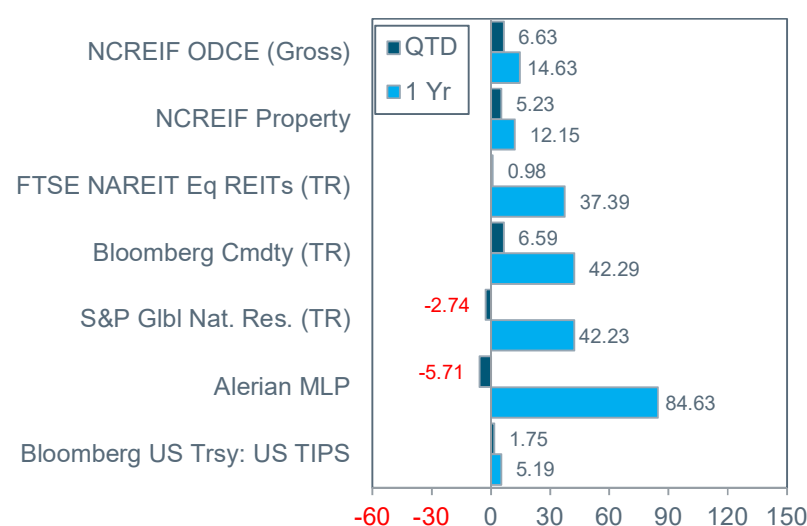
General Market - Real Estate

Core private real estate generated a positive 6.6% return in Q3, as reported by the NFI-ODCE Index, with the total return comprising of 1.0% income and 5.6% price appreciation. While the income return continues to trend in line with historical levels, price appreciation exceeded expectations and previous levels, such as the 2.6% return recorded in Q2. Investors in publicly traded real estate underperformed their private market counterparts.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.

The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.

The Bank Loans Custom Index consists of S&P LSTA Lvgd Loan Index through 06/30/2021, and the S&P LSTA US Lvgd Loan 100 Index thereafter.

The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.

The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return.

The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.

ASSET CLASS SUMMARY

US Equity: The **US Equity** structure employs a core-satellite approach, which gains passive, low-cost beta exposure at its core. The core component of the portfolio utilizes passive management intended to replicate a broad market index. The Small Cap investment managers include active management intended to provide alpha. Similarly, the asset class recently added internally managed portfolios within large cap and small cap, which draw upon staff expertise in managing equity portfolios.

International Equity: The **International Equity** structure follows an ACWI Ex US approach, which offers coverage of the broad international equity market, including developed and emerging markets. The International Equity portfolio is comprised of both passive and active management styles. The mix of passive and active management helps to minimize costs, while striving to maximize the probability of alpha generation at a similar absolute risk level.

Private Equity: The **Private Equity** asset class has primarily been accessed through fund of funds and customized fund of one structures. Investments also include exposure to direct co-investments and secondaries. Recent commitments within this asset class have added global diversification to the portfolio.

Real Estate: The **Real Estate** portfolio currently consists of Core and Non-Core Real Estate investments. The overall asset class structure has remained relatively conservative with regard to asset types and the use of financial leverage. Core Real Estate has historically been focused on diversified US markets, lower leverage and higher occupancy rates, while Non-Core Real Estate investments allow for greater investment flexibility.

Diversified Hedge Funds: The **Diversified Hedge Funds** structure historically consisted of multi-Hedge Fund of Fund investments. In 2015, the portfolio began a transition to a core-satellite approach, utilizing a single Fund of Fund manager and satellite direct Hedge Funds. Initial funding was completed in July 2018 for a custom fund of one, consisting of a discretionary multi-strategy FoF portfolio and a non-discretionary portfolio of direct hedge funds managed by the Treasurer's Office. An increase in the use of direct Hedge Funds is anticipated to lower external management expenses and allow for greater control over the program.

Opportunistic: The **Opportunistic Investment** sleeve is currently comprised of a single specialized investment fund. Opportunistic investments are episodic in nature and are intended to capitalize on market dislocations or rare investment opportunities.

Preferred Stock: The **Preferred Stock** portfolio consists of a single, specialized preferred stock investment manager. The portfolio invests in a diversified portfolio of preferred securities including exchange-traded and over-the-counter preferreds and contingent convertibles (CoCos). The investment team seeks to take advantage of the various term structures of preferreds in order to optimize the yield and interest rate sensitivity of the portfolio.

MLPs: The **MLPs** portfolio consists of two portfolios with a specialized investment manager. The passive strategy is designed to replicate the market index, whereas the active strategy investment objective is to deliver both high yield and stable growth through the disciplined application of its fundamental bottom-up analysis as well as its trading strategies and investments in MLP and energy infrastructure assets.

Fixed Income: The **Fixed Income** portfolio employs a core-satellite approach. Serving as "the anchor" to the portfolio, Core Fixed Income aims to preserve capital, by providing relatively "safe" investments and stable income. Core Fixed Income has disaggregated segments comprised of investment grade corporate, MBS, and government. The Internally Managed Portfolio also provides liquidity and safety of capital. The satellite portfolios serve as dedicated specialists. Bank Loans provide diversification from traditional fixed income investments and the potential for enhanced return. Investments in Emerging Market Debt diversify US Dollar exposure and provide opportunities to capitalize on global growth trends. Opportunistic Fixed Income is employed to capitalize on market dislocations, such as European Debt.

INDEX GLOSSARY

MSCI ACW: The **MSCI All Country World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The index consists of the 23 developed countries that make up the MSCI World Index as well as the following emerging market countries: *Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.*

Russell 3000: The **Russell 3000 Index** is a market-capitalization weighted index of 3,000 widely held equity securities designed to measure performance of the entire US stock market.

State Street All Cap Custom Index: The **State Street All Cap Custom Index** consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter.

S&P 500: The **S&P 500 Index (Cap Wtd)** is a commonly recognized, market-capitalization weighted index of 500 widely held equity securities designed to measure broad US equity performance.

All Cap US Equity Custom Index: The **All Cap US Equity Custom Index** consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter.

Russell 2000: The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity market. It includes approximately 2,000 of the smallest securities by market cap from the Russell 3000 Index.

International Equity Custom Index: The **International Equity Custom Index** consists of the MSCI EAFE Index through July 2010 and the MSCI ACW Ex US Index thereafter.

MSCI EAFE: The **MSCI EAFE (Europe, Australasia, Far East) Index** is designed to measure equity market performance of 21 developed countries, excluding the US & Canada: *Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.*

MSCI ACW Ex US: The **MSCI ACW (All Country World) Ex US Index** consists of large cap and mid cap representation within the same countries that comprise the MSCI ACW Index, excluding the United States.

MSCI ACW Ex US IM: The **MSCI ACW (All Country World) Ex US Investable Market Index** consists of large cap, mid cap, and small cap representation within the same countries that comprise the MSCI ACW Index, excluding the United States.

S&P US Preferred Stock: The **S&P US Preferred Stock Index** covers the US market of capital stock that pays dividends at a specified rate and has a preference over common stock in the payment of dividends and the liquidation of assets.

Preferred Stock Custom Index: The **Preferred Stock Custom Index** consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

S&P MLP: The **S&P MLP Index** is a float-adjusted, cap-weighted index of energy MLPs and publicly traded limited liability companies, which have a similar legal structure to MLPs and share the same tax benefits. Constituents must have a minimum float-adjusted market cap of USD 300 million.

MLP Custom Index: The **MLP Custom Index** consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.

Alerian MLP Index: The **Alerian MLP Index** is an index of energy infrastructure Master Limited Partnerships (MLPs). It is a capped, float-adjusted, capitalization-weighted index, whose constituents represent approximately 85% of the total float-adjusted market capitalization.

Alerian Midstream Energy Index: The **Alerian Midstream Energy Index** is an index of energy infrastructure Master Limited Partnerships (MLPs), whose constituents earn the majority of their cash flow from midstream activities involving energy commodities.

NCREIF ODCE: The **NCREIF ODCE (Open End Diversified Core) Index** is an index of investment returns reporting on both a historical and current basis the results of 38 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NCREIF ODCE Index is capitalization-weighted and performance is time-weighted.

NCREIF Property: The **NCREIF Property Index** prepared by the National Council of Real Estate Investment Fiduciaries is a quarterly time series composite return measure for over 6,000 individual commercial real estate properties acquired in the private market for investment purposes. Total performance represents returns from appreciation and income, and includes multi-family, office, retail, and industrial properties.

HFRI FOF Comp Index: The **HFRI FOF (Fund of Funds) Comp Index** average is created by Hedge Fund Research, Inc. and contains over 800 funds of hedge funds that are each invested in multiple investment strategies.

Bloomberg US Agg Bond: The **Bloomberg US Aggregate Bond Index** covers the US dollar-denominated, investment-grade, fixed-rate, taxable bond market of SEC-registered securities: US Treasury and agency bonds, domestic corporate debt, and mortgage-backed securities.

Bloomberg US Agg Int Index: The **Bloomberg US Aggregate Intermediate Index** covers the sub-section of the Bloomberg US Aggregate Bond Index with remaining maturities between one and ten years.

PIMCO Custom Index: The **PIMCO Custom Index** consists of the Bloomberg US Agg Bond Index through February 2018, the Bloomberg US Agg Int Index through June 2019, the Bloomberg US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the Bloomberg US Agg Bond Index thereafter.

Payden & Rygel Custom Index: The **Payden & Rygel Custom Index** consists of the Bloomberg US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and Bloomberg US Corp Inv Grade Index thereafter.

Internal Intermediate Govt Fixed Income Portfolio Index: The **Internal Intermediate Govt Fixed Income Portfolio Index** currently consists of the Bloomberg US Treasury Index. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.

S&P/LSTA Leveraged Loan: The **S&P/LSTA Leveraged Loan Index** reflects the market-weighted performance of institutional leveraged loans in the US loan market.

Bank Loans Custom Index: The **Bank Loans Custom Index** consists of S&P LSTA Lvkd Loan Index through 06/30/2021, and the S&P LSTA US Lvkd Loan 100 Index thereafter.

CS Western European Hi Yld: The **Credit Suisse Western European High Yield Index** is designed to mirror the investable universe of the Western European high yield debt market. The index includes issues denominated in \$US and Western European currencies.

EMD Custom Index: The **EMD Custom Index** consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.

JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50: The **JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50** consists of 50% JPM GBI-EM Gbl Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI Gbl Dvf'd Index.

Goldman Sachs Index: The **Goldman Sachs Index** consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.

JP Morgan GBI-EM Gbl Dvf'd: The **JPMorgan GBI-EM Global Diversified Total Return Index (Unhedged)** is a global emerging markets index that consists of regularly traded, liquid fixed-rate, domestic currency government bonds.

JP Morgan CEMBI Broad Diversified Index: The **JP Morgan CEMBI Broad Diversified Index** is an index that is comprised of the corporate segment of emerging markets debt.

JP Morgan Emerging Markets Bond Global Diversified Index: The **JP Morgan Global Diversified Index** is an index comprised of the hard currency segment of emerging markets debt.

Bloomberg US Govt/Credit: Long Trm Bond: The **Bloomberg US Gov't/Credit Long Term Bond Index** covers the non-securitized component of the US Aggregate Index, with maturities of 10 years or more. It includes investment grade, US dollar-denominated, fixed-rate Treasuries, government-related and corporate securities.

Bloomberg US Govt: Long Trm Bond: The **Bloomberg US Gov't Long Term Bond Index** covers public US government obligations with remaining maturities of ten years or more.

Bloomberg US Credit: Long Trm Bond: The **Bloomberg US Credit Long Term Bond Index** covers public US investment grade corporate bonds with remaining maturities of ten years or more.

Bloomberg US Govt: Int Trm Bond: The **Bloomberg US Gov't Intermediate Term Bond Index** covers public US government obligations with remaining maturities between one and ten years.

Bloomberg US Corp Int Trm Bond: The **Bloomberg US Corporate Intermediate Term Bond Index** covers US investment grade corporate bonds with remaining maturities between one and ten years.

Bloomberg US Gov't/Credit 1-3 Yr Bond Index: The **Bloomberg US Gov't/Credit 1-3 Year Bond Index** covers all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities of between one and three years and are publicly issued.

Bloomberg US Gov't 1-3 Yr Bond Index: The **Bloomberg US Gov't 1-3 Year Bond Index** covers public US government obligations with remaining maturities between one and three years.

Bloomberg US Credit 1-3 Yr Bond Index: The **Bloomberg US Credit 1-3 Year Bond Index** covers public investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities of between one and three years.

Bloomberg US MBS Index: The **Bloomberg US MBS Index** covers the public U.S. mortgage backed securities market.

Bloomberg US Corp Inv Grade Index: The **Bloomberg US Corp Inv Grade Index** covers the public U.S. investment grade corporate bond market.

Low Duration Fixed Income Custom Index: The **Low Duration Fixed Income Custom Index** consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.

Opportunistic Investments Index: The **Opportunistic Investments Index** is the weighted average of the permanent funds' target allocation indices, excluding the opportunistic allocation.

JP Morgan Cash Custom Index: The **JP Morgan Cash Custom Index** is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.

JP Morgan Blended Index: The **JP Morgan Blended Index** consists of an equal-weighted allocation to the ICE BofAML 1-3 Year US Treasury Index, ICE BofAML 1-3 Year Agencies Index, and ICE BofAML 0-3 Year Weighted Average Life Mortgage Index.

Total Fund



Wyoming State Treasurer's Office
Asset Allocation, Performance & Schedule of Investable Assets

As of September 30, 2021

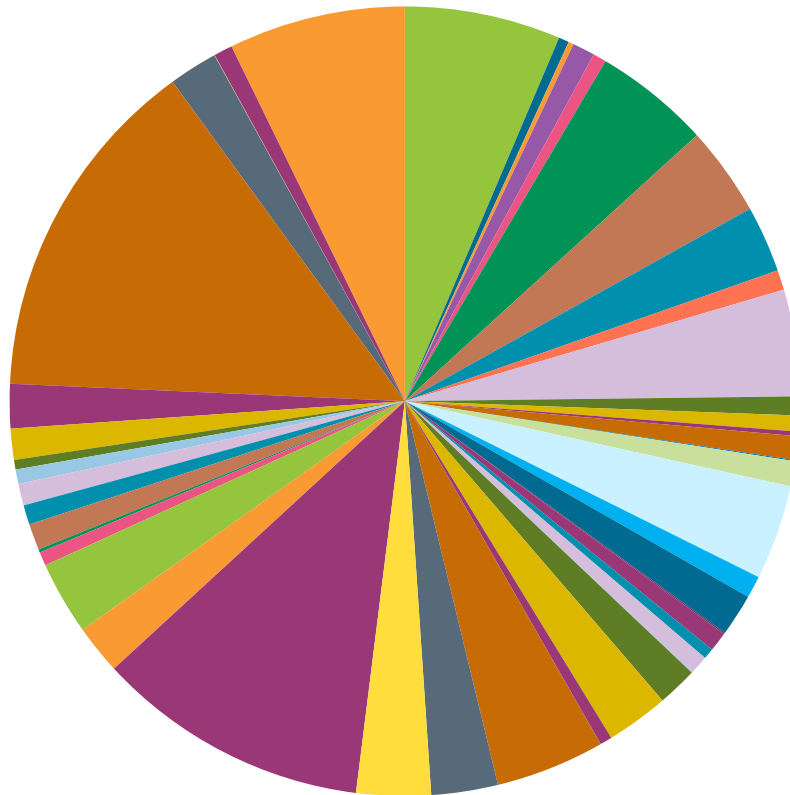
Asset Allocation & Performance			
	Allocation		Performance (%)
	Market Value (\$)	%	FYTD
Total Fund	24,957,420,569	100.00	0.45
All Cap US Equity Composite	1,697,894,584	6.80	0.51
State Street All Cap	1,593,829,472	6.39	0.57
Domestic Equity Quantamental	52,738,537	0.21	-0.98
Domestic Equity Quantitative	51,326,575	0.21	0.24
UW Portfolio Mgmt Program	1,877,851	0.01	0.95
Small Cap US Equity Composite	416,629,665	1.67	-2.15
Van Berkum	228,611,811	0.92	-0.53
BlackRock Small Cap	136,178,327	0.55	-4.46
Small Cap Equity Quantamental	51,794,865	0.21	-2.24
Small Cap Equity Quantitative	44,662	0.00	N/A
Int'l Equity Composite	2,782,716,181	11.15	-2.07
Northern Trust	1,186,931,150	4.76	-3.12
Arrowstreet	915,232,151	3.67	-0.03
Harding Loevner	680,552,880	2.73	-2.76
Preferred Stock Composite	203,087,110	0.81	1.18
Cohen & Steers Preferred Stock	203,087,110	0.81	1.18
MLPs Composite	1,085,468,611	4.35	-1.91
Harvest Fund Advisors	546,795,792	2.19	-0.42
Harvest Fund Advisors Passive	538,672,819	2.16	-3.36
Private Equity Composite	915,403,397	3.67	N/A
Access Venture Partners II	3,008,425	0.01	N/A
Cheyenne Equity Capital Fund, L.P.	193,021,510	0.77	N/A
Hamilton Lane Nowood Fund, L.P.	163,857,644	0.66	N/A
Neuberger Berman Sauger Fund, L.P.	241,846,325	0.97	N/A
BlackRock LTPC, L.P.	257,102,601	1.03	N/A
Valor Equity Partners V LP	45,904,330	0.18	N/A
GTCR Fund XIII	10,634,110	0.04	N/A
Nautic Partners X	28,451	0.00	N/A
Real Estate Composite	2,147,564,670	8.60	N/A
Clarion Lion	971,539,317	3.89	5.94
UBS Trumbull	224,788,461	0.90	6.02
MS Prime	430,148,380	1.72	5.83
SC Capital	112,480,266	0.45	N/A
Realterm	189,162,641	0.76	N/A
M&G	15,245,957	0.06	N/A
Northwood	195,666,061	0.78	N/A
WestRiver	8,533,587	0.03	N/A

Asset Allocation & Performance			
	Allocation		Performance (%)
	Market Value (\$)	%	FYTD
Diversified Hedge Funds Composite	1,047,885,806	4.20	1.60
PAAMCO - Jackalope Fund	2,805,749	0.01	N/A
Grosvenor Diversified Hedge Funds	406,979,177	1.63	1.80
Internal Diversified Hedge Funds	638,100,880	2.56	1.51
Core Fixed Income Composite	5,342,714,887	21.41	0.13
Internal Intermediate Gov't Fixed Income	1,113,352,920	4.46	-0.04
Payden & Rygel IGC	679,919,104	2.72	-0.12
JP Morgan MBS	759,278,875	3.04	0.13
PIMCO	2,790,163,987	11.18	0.09
Laddered Treasury Composite	3,567,608,185	14.29	0.02
Internal Ladder Portfolio	3,567,608,185	14.29	0.02
Bank Loans Composite	1,392,781,829	5.58	0.87
Credit Suisse	501,960,097	2.01	0.91
Octagon	750,706,965	3.01	0.94
KKR	140,114,767	0.56	N/A
Emerging Market Debt Composite	935,312,779	3.75	-0.91
Global Evolution	98,644,692	0.40	-2.77
Global Evolution Hard	169,142,485	0.68	-1.14
Goldman Sachs	222,534,316	0.89	0.11
Eaton Vance	199,927,859	0.80	0.54
Finisterre	148,175,877	0.59	-1.74
Wellington	96,887,550	0.39	N/A
Long Duration Fixed Income Composite	770,391,384	3.09	0.02
Internal Long Duration Fixed Income	318,267,924	1.28	0.20
Metlife	452,123,460	1.81	-0.09
Low Duration Fixed Income Composite	497,839,849	1.99	0.09
Internal Low Duration Fixed Income	497,839,849	1.99	0.09
Grosvenor Silvery Lupine Fund	32,966,975	0.13	1.17
Grosvenor Opportunistic Class D	123,771,001	0.50	1.91
Cash Equivalents	1,805,803,428	7.24	0.01
Fisher Investments	756,097	0.00	N/A
State Street Low Duration	29,699	0.00	N/A
Allianz Global Investors	36,297	0.00	N/A
Neuberger Berman Credit	574,056	0.00	N/A
Cornerstone	2,354	0.00	N/A
TA Associates Realty	26,117	0.00	N/A
Seix	1,520	0.00	N/A
Internal Equity Russell 2000	1,095	0.00	N/A
Public Purpose Investments	189,702,377	0.76	N/A

Schedule of Investable Assets - Total Fund Composite Ex Public Purpose Investments					
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	Unit Value
FYTD	24,784,672,429	-121,820,798	104,866,560	24,767,718,192	100.42

Allocations may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Market value shown for Public Purpose Investments (PPIs) is as of 9/30/2021. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th. Fiscal year begins 7/1/2021.

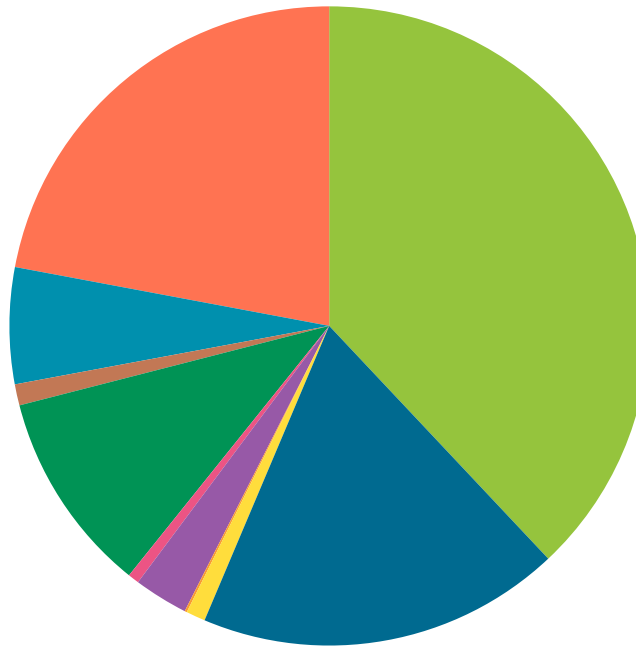
September 30, 2021 : \$24,957,420,569



	Market Value (\$)	Allocation (%)
State Street All Cap	1,593,829,472	6.39
Domestic Equity Combined	104,065,112	0.42
UW Portfolio Mgmt Program	1,877,851	0.01
Small Cap Equity Combined	51,839,527	0.21
Van Berkum Small Cap	228,611,811	0.92
BlackRock Small Cap	136,178,327	0.55
Northern Trust	1,186,931,150	4.76
Arrowstreet	915,232,151	3.67
Harding Loevner	680,552,880	2.73
Cohen & Steers	203,087,110	0.81
Harvest Combined	1,085,468,611	4.35
Access Venture Partners II	3,008,425	0.01
Cheyenne Equity Capital Fund, L.P.	193,021,510	0.77
Hamilton Lane Nowood Fund, L.P.	163,857,644	0.66
Valor Equity Partners V LP	45,904,330	0.18
Neuberger Berman Sauger Fund, L.P.	241,846,325	0.97
GTCR Fund XIII	10,634,110	0.04
Nautic Partners X	28,451	0.00
BlackRock LTPC	257,102,601	1.03
Clarion Lion	971,539,317	3.89
UBS Trumbull	224,788,461	0.90
MS Prime	430,148,380	1.72
M&G	15,245,957	0.06
Northwood	195,666,061	0.78
SC Capital	112,480,266	0.45
Realterm	189,162,641	0.76
WestRiver	8,533,587	0.03
Grosvenor Diversified Hedge Funds	406,979,177	1.63
Internal Diversified Hedge Funds	638,100,880	2.56
Grosvenor Silvery Lupine Fund Class D	123,771,001	0.50
Internal Intermediate Govt Fixed Income Portfolio	1,113,352,920	4.46
Payden & Rygel	679,919,104	2.72
JP Morgan MBS	759,278,875	3.04
PIMCO Core	2,790,163,987	11.18
Credit Suisse	501,960,097	2.01
Octagon	750,706,965	3.01
KKR	140,114,767	0.56
Grosvenor Silvery Lupine Fund	32,966,975	0.13
Global Evolution EMD Combined	267,787,177	1.07
Eaton Vance	199,927,859	0.80
Goldman Sachs	222,534,316	0.89
Finisterre	148,175,877	0.59
Wellington	96,887,550	0.39
Internal Long Duration Fixed Income Portfolio	318,267,924	1.28
Metlife	452,123,460	1.81
Internal Ladder Portfolio	3,567,608,185	14.29
Internal Low Duration Fixed Income Portfolio	497,839,849	1.99
Liquidated Managers	4,232,985	0.02
Public Purpose Investments	189,702,377	0.76
JP Morgan Cash Composite	1,804,376,193	7.23

Allocations shown may not sum up to 100% exactly due to rounding. Paamco, Seix, Fisher, Allianz, Internal Equity Russell 2000, TA Realty, Cornerstone, NB Credit and State Street Low Duration are combined because the page shown only allows 50 managers to be included.

September 30, 2021 : \$24,957,420,569

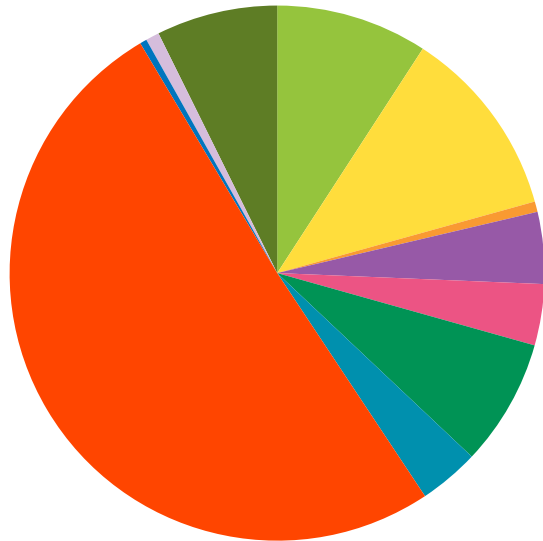


	Market Value (\$)	Allocation (%)
Permanent Mineral Trust	9,480,343,898	37.99
Common School PLF	4,587,309,344	18.38
Permanent Land Fund	244,658,982	0.98
University Permanent Land Fund	28,273,627	0.11
Hathaway Scholarship	683,218,403	2.74
Higher Education	139,664,160	0.56
Workers Compensation Fund	2,556,887,406	10.24
Pool A	267,578,911	1.07
LSRA	1,466,770,475	5.88
State Agency Pool	5,502,715,363	22.05

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

Asset Allocation by Asset Class - Prior Quarter

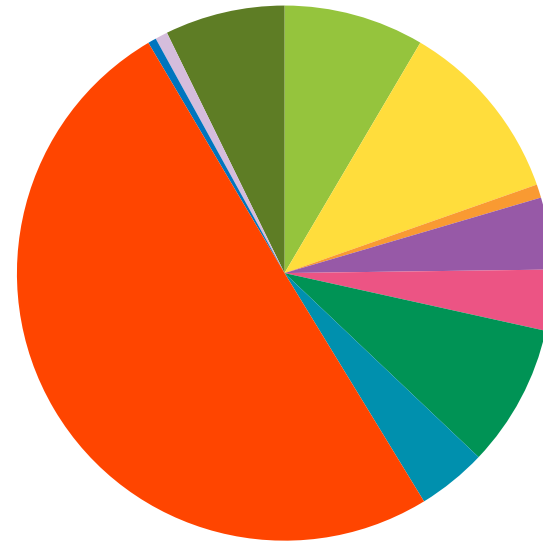
June 30, 2021 : \$24,987,283,259



	Market Value (\$)	Allocation (%)
US Equity	2,290,646,089	9.17
International Equity	2,878,590,529	11.52
Preferred Stock	158,206,393	0.63
MLPs	1,082,494,375	4.33
Private Equity	923,376,185	3.70
Real Estate	1,919,427,462	7.68
Diversified Hedge Funds	910,641,643	3.64
Fixed Income	12,687,360,714	50.78
Opportunistic Investments	105,020,541	0.42
Public Purpose Investments	202,610,830	0.81
Cash	1,828,908,498	7.32

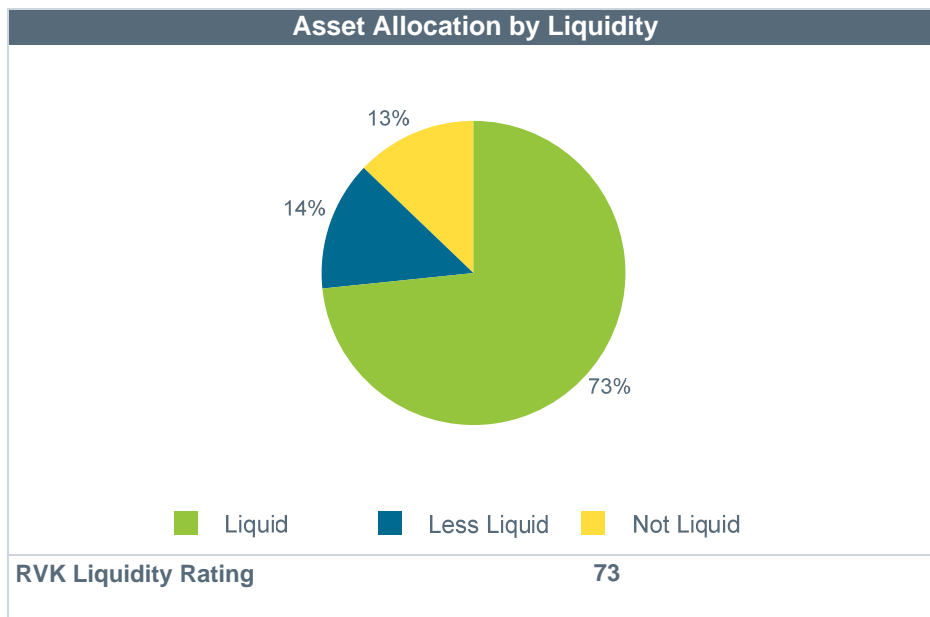
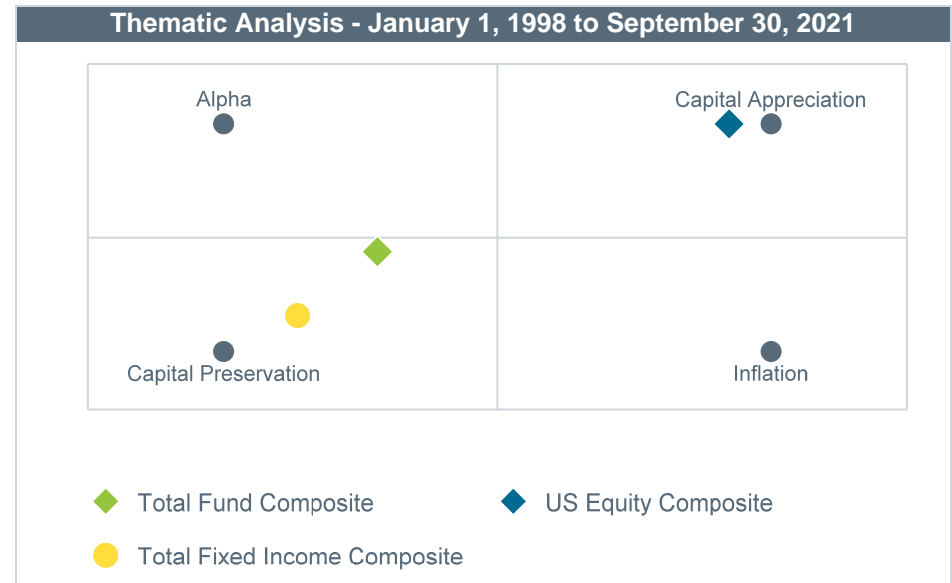
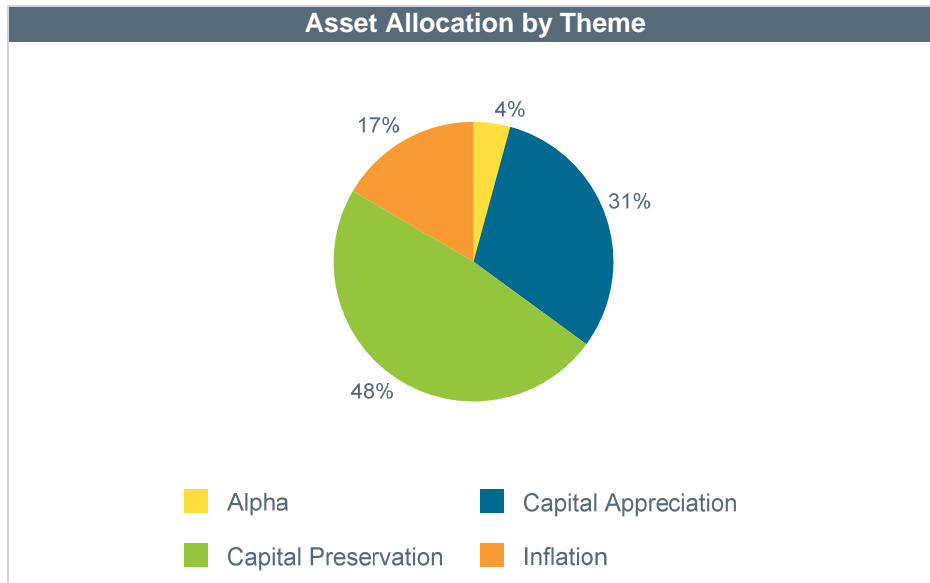
Asset Allocation by Asset Class - Current Quarter

September 30, 2021 : \$24,957,420,569



	Market Value (\$)	Allocation (%)
US Equity	2,116,402,100	8.48
International Equity	2,782,716,181	11.15
Preferred Stock	203,087,110	0.81
MLPs	1,085,468,611	4.35
Private Equity	915,403,397	3.67
Real Estate	2,147,564,670	8.60
Diversified Hedge Funds	1,047,885,806	4.20
Fixed Income	12,539,615,888	50.24
Opportunistic Investments	123,771,001	0.50
Public Purpose Investments	189,702,377	0.76
Cash	1,805,803,428	7.24

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



Correlation Matrix - 10 Years

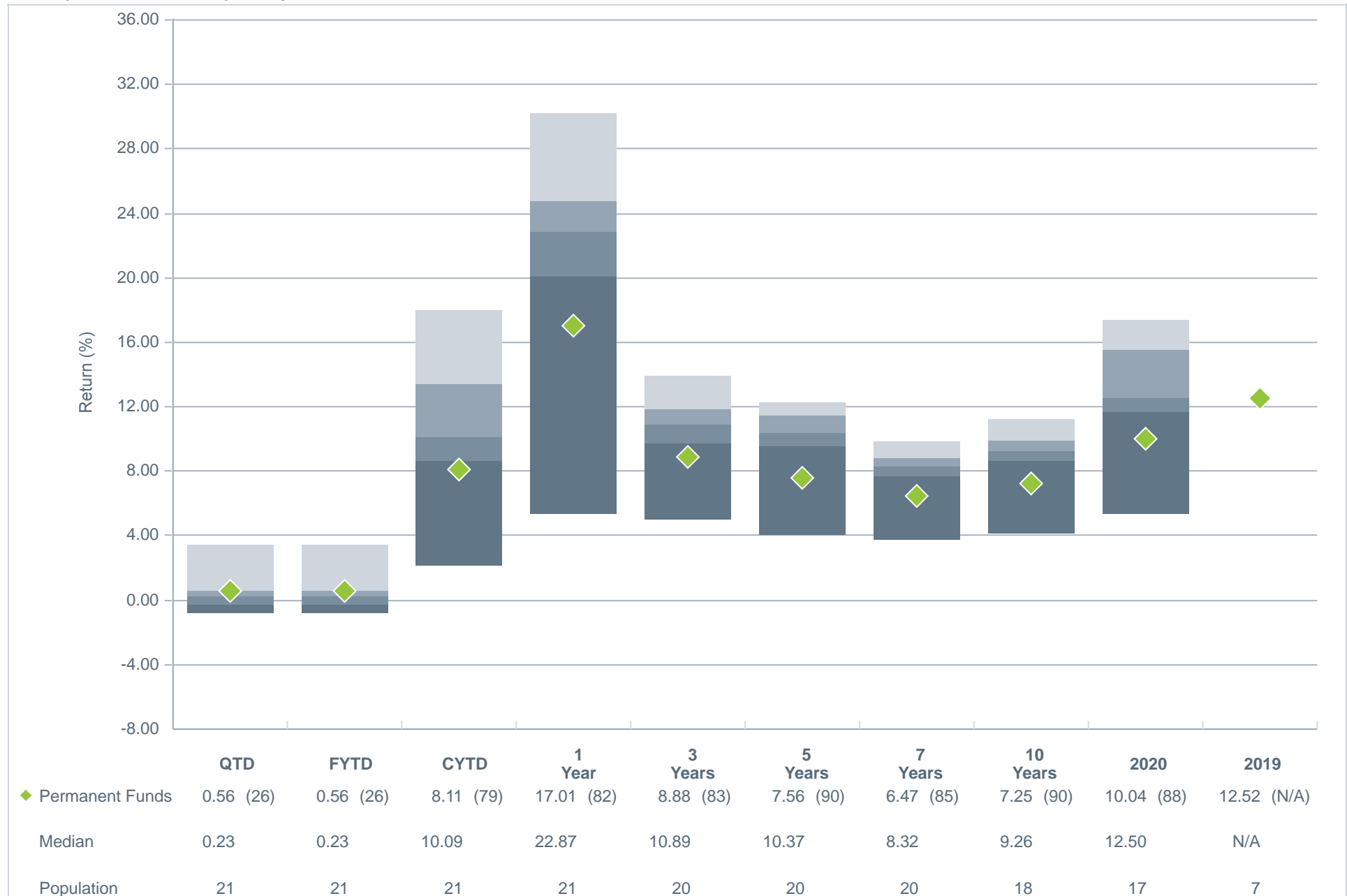
	A	B	C	D
A	1.00			
B	0.66	1.00		
C	-0.18	-0.32	1.00	
D	0.59	0.78	-0.06	1.00

A = HFRI EH: Equity Market Neutral Index (Alpha)
 B = MSCI ACW Index (USD) (Gross) (Capital Appreciation)
 C = Bloomberg US Gov't Bond Index (Capital Preservation)
 D = Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding these metrics. Allocations may not sum to 100% exactly due to rounding.

Wyoming State Treasurer's Office
All Endowment & Foundation > \$1B-Total Fund
Plan Sponsor Peer Group Analysis

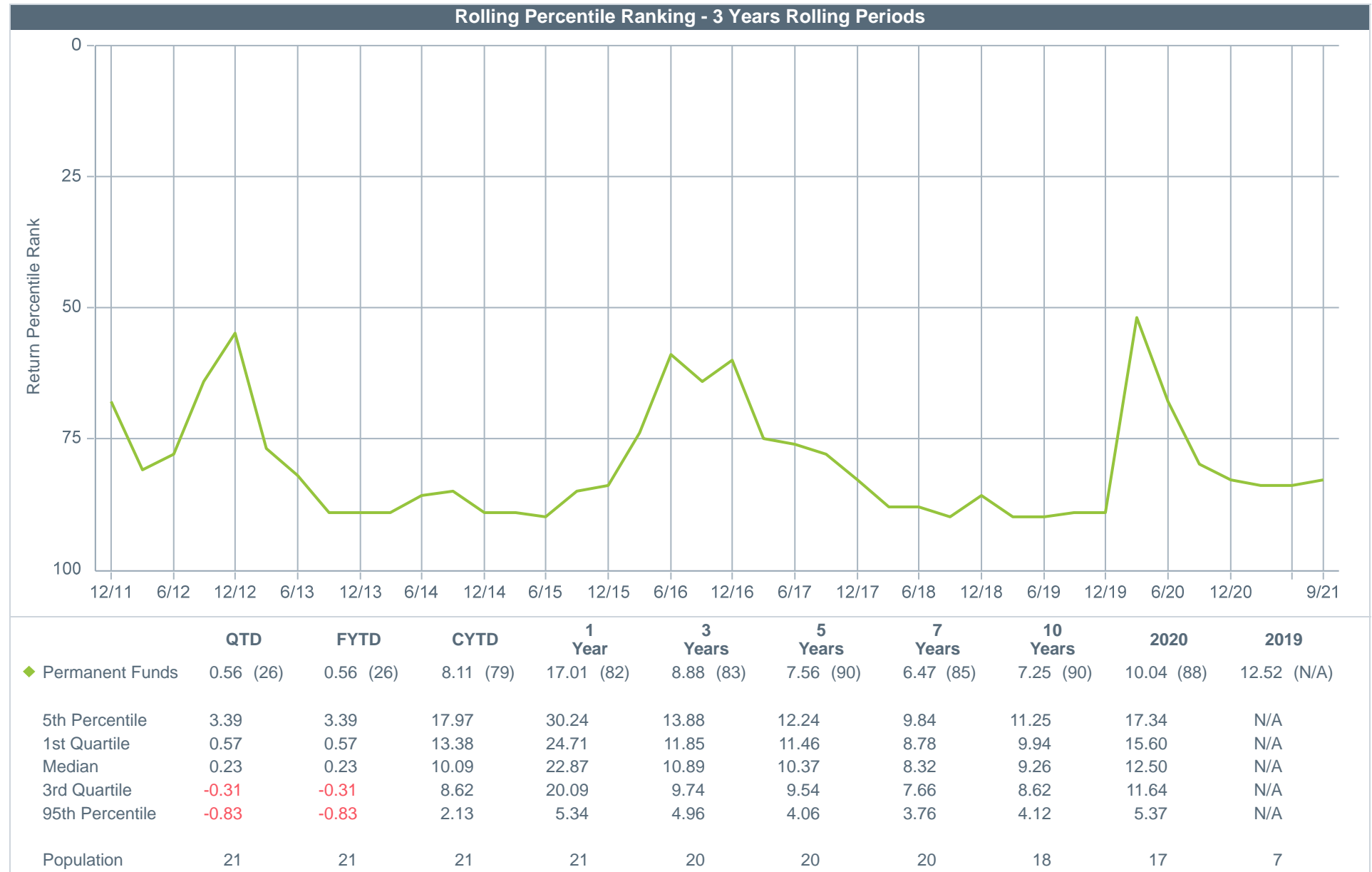
As of September 30, 2021



Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.
Wyoming State Treasurer's Office fiscal year ends on June 30th.

Wyoming State Treasurer's Office
All Endowment & Foundation > \$1B-Total Fund
Rolling Percentile Ranking and Plan Sponsor Peer Group Analysis

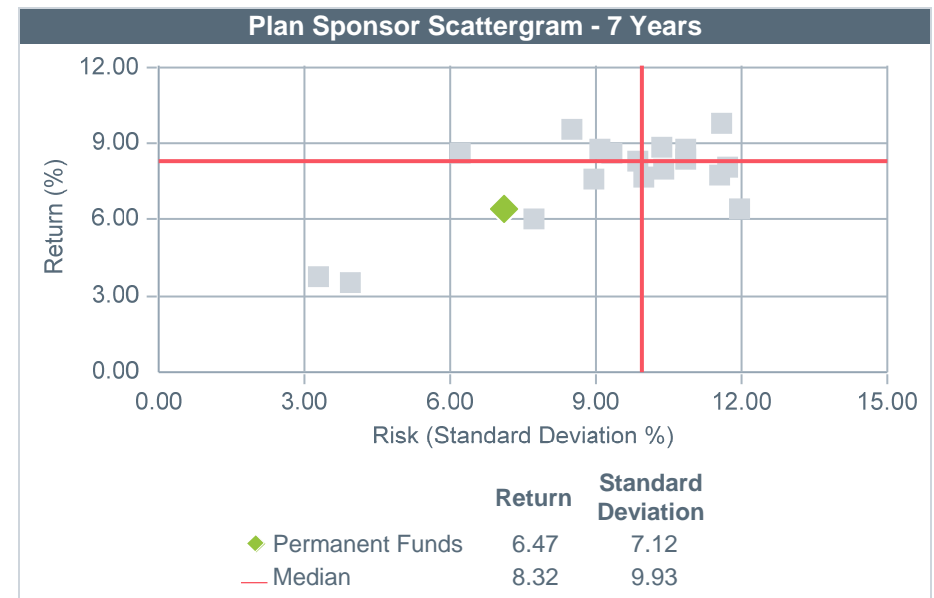
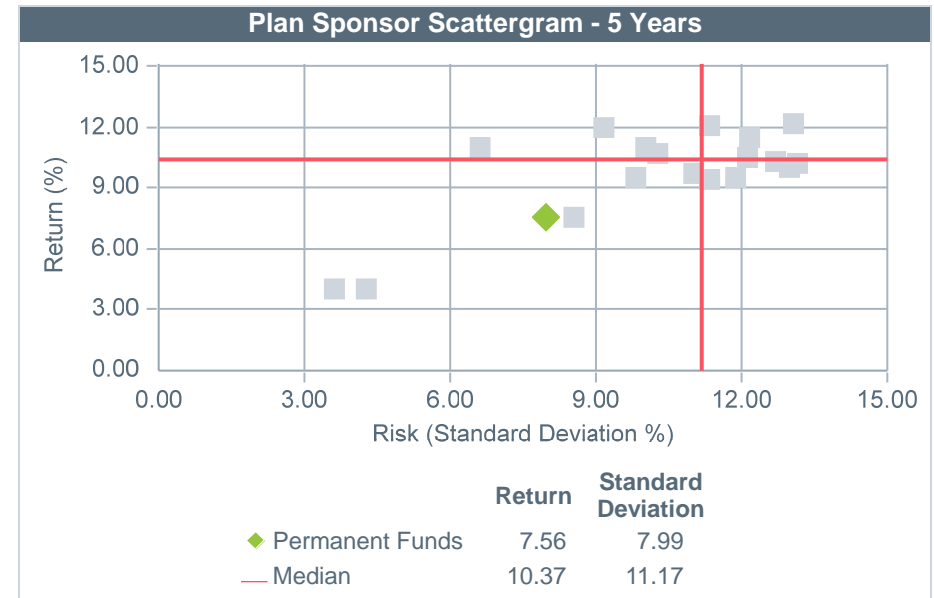
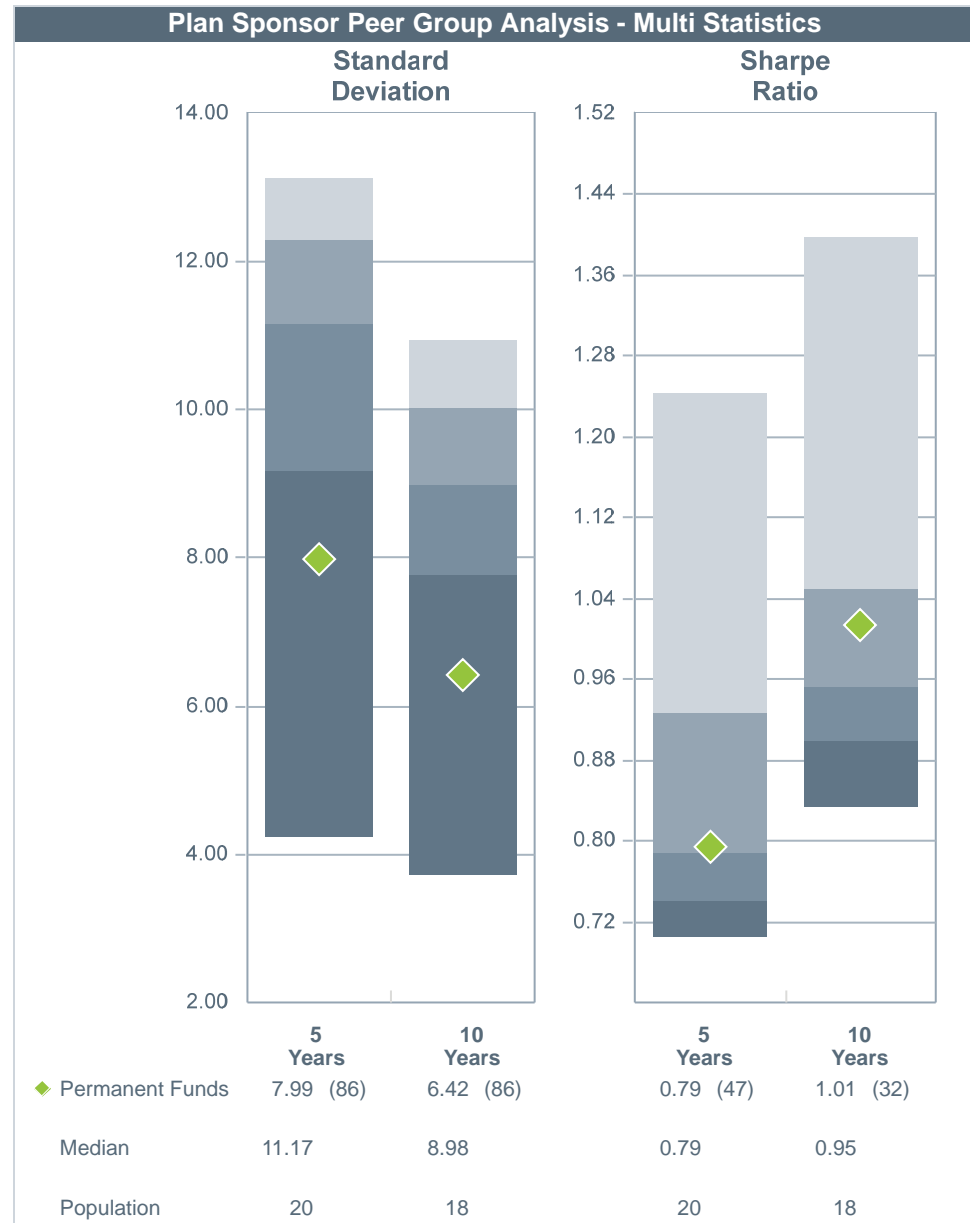
As of September 30, 2021



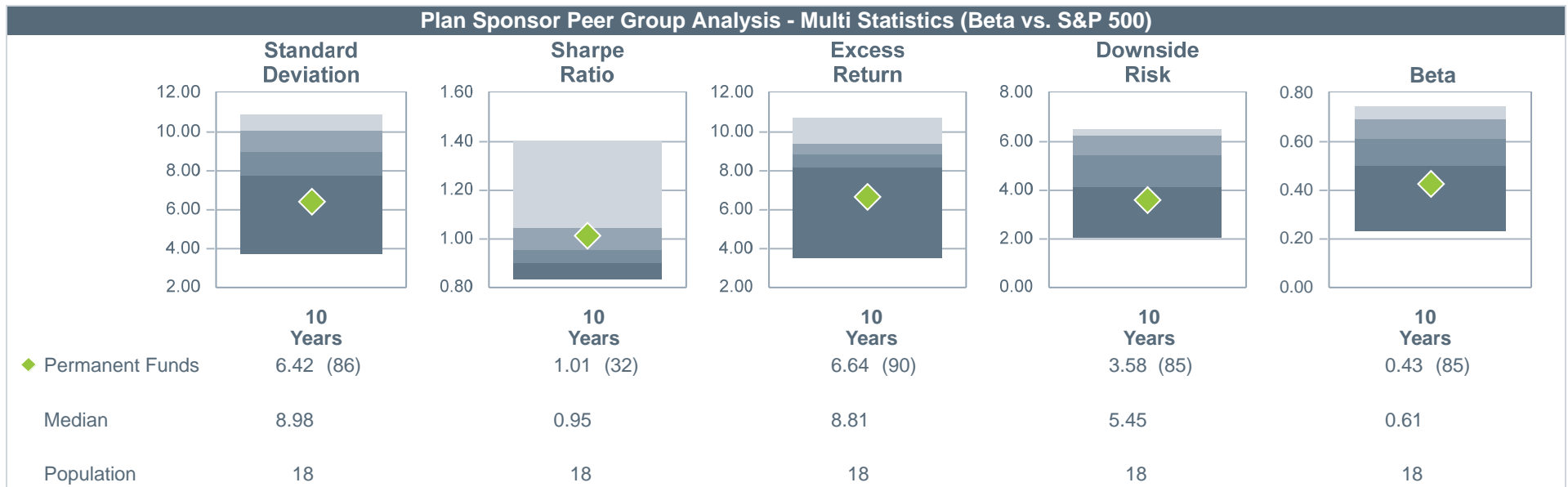
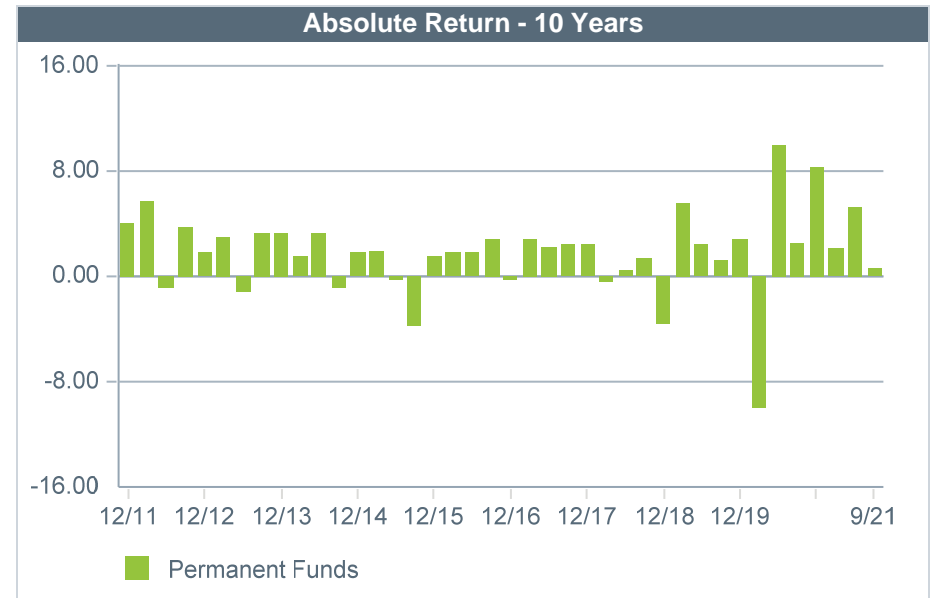
Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.
Wyoming State Treasurer's Office fiscal year ends on June 30th.

Wyoming State Treasurer's Office
 Permanent Funds vs. All Endowment & Foundation > \$1B-Total Fund
 Plan Sponsor Peer Group Scattergram and Multi Statistics

As of September 30, 2021



Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



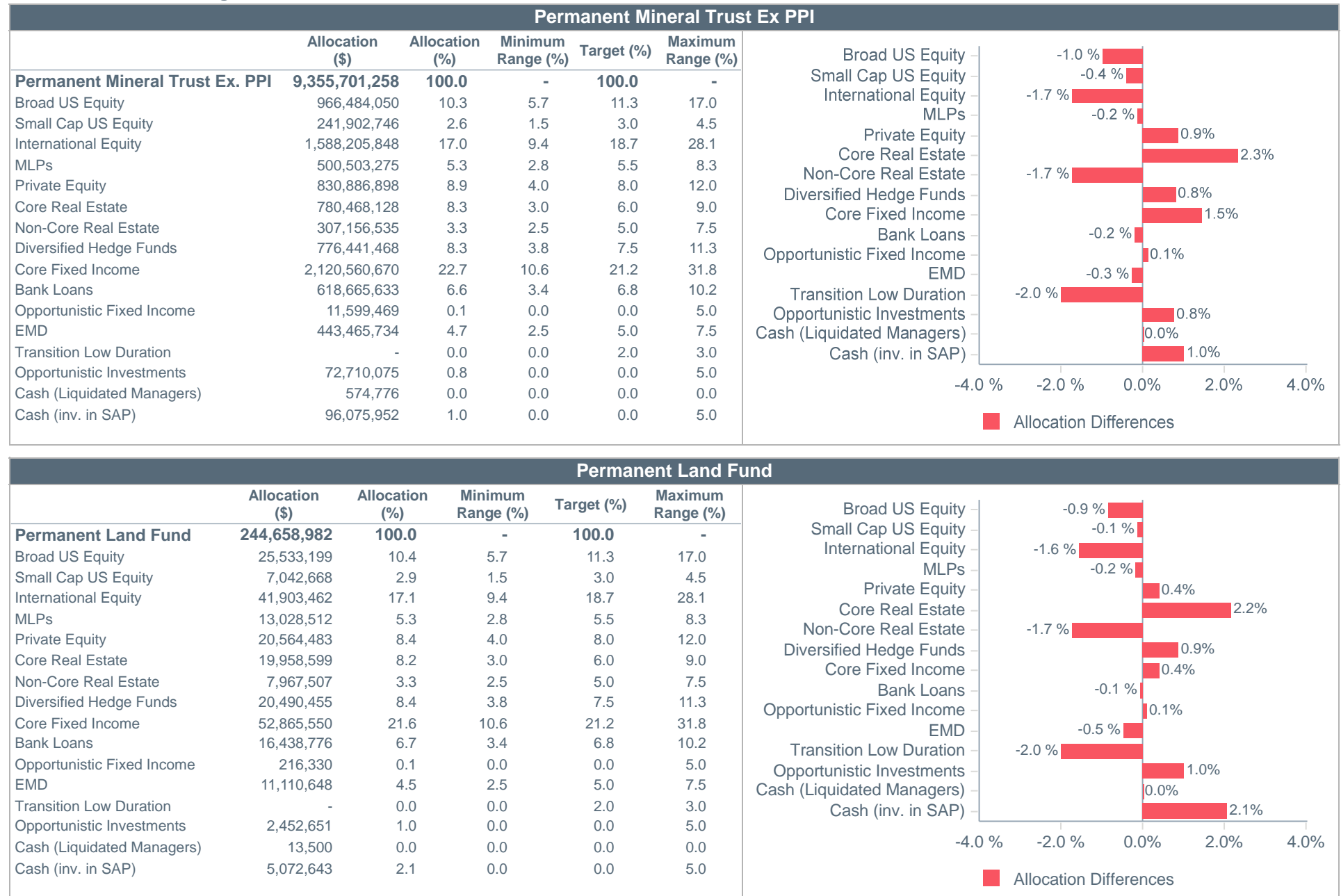
Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

Investment Profile					Target Allocation								
<p>Fund Type: Permanent Fund</p> <p>Main Objective: Produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity.</p> <p>Primary Investment Goals: Capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals.</p> <p>Current Long-Term Target Equity Allocation: 65%</p> <p>Spending Policy</p> <ul style="list-style-type: none">• Permanent Mineral Trust Fund: 5% of the five-year trailing average market value, calculated on the first day of the fiscal year. In fiscal year 2023, the spending rate will be 4.75%. In fiscal year 2024 and thereafter, the spending rate will be 4.5%.• Hathaway Scholarship: The amount necessary to fully fund scholarships awarded under W.S. 21-16-1301 <i>et seq.</i>					Minimum Range (%)	Target (%)	Maximum Range (%)						
					Permanent Mineral Trust - 100.00 -								
					Broad US Equity	5.65	11.30	16.95					
					Small Cap US Equity	1.50	3.00	4.50					
					International Equity	9.35	18.70	28.05					
					MLPs	2.75	5.50	8.25					
					Private Equity	4.00	8.00	12.00					
					Core Real Estate	3.00	6.00	9.00					
					Non-Core Real Estate	2.50	5.00	7.50					
					Diversified Hedge Funds	3.75	7.50	11.25					
					Core Fixed Income	10.60	21.20	31.80					
					Bank Loans	3.40	6.80	10.20					
					Opportunistic Fixed Income	0.00	0.00	5.00					
					EMD	2.50	5.00	7.50					
					Transition Low Duration	0.00	2.00	3.00					
					Opportunistic Investments	0.00	0.00	5.00					
					Cash (inv. in SAP)	0.00	0.00	5.00					
Thematic Allocation					Risk Metrics								
					5 Years				10 Years				
						PMTF	PLF	UPLF	Hath	PMTF	PLF	UPLF	Hath
					Sharpe Ratio	0.8	0.8	0.7	0.7	1.0	1.0	0.9	0.9
					Standard Deviation	8.9	8.5	9.9	8.8	7.1	6.8	7.7	6.9
					Beta	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5
Comparative Performance													
Allocation					Performance (%)								
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years				
Permanent Mineral Trust	9,480,343,898	0.6	0.6	9.7	20.2	9.4	8.1	6.8	7.6				
PMTF - Total Fund Index		0.5	0.5	9.6	20.0	9.2	7.9	6.7	7.5				
Difference		0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1				
Permanent Land Fund	244,658,982	0.7	0.7	9.4	19.7	9.4	7.9	6.7	7.5				
PLF - Total Fund Index		0.5	0.5	9.6	20.0	9.2	7.8	6.7	7.3				
Difference		0.2	0.2	-0.2	-0.3	0.2	0.1	0.0	0.2				
University Permanent Land Fund	28,273,627	0.9	0.9	9.6	19.8	9.3	8.4	7.1	7.8				
UPLF - Total Fund Index		0.5	0.5	9.6	20.0	9.1	8.3	7.0	7.6				
Difference		0.4	0.4	0.0	-0.2	0.2	0.1	0.1	0.2				
Hathaway Scholarship	683,218,403	0.7	0.7	9.8	20.0	9.4	7.6	6.5	7.1				
Hathaway - Total Fund Index		0.5	0.5	9.6	20.0	9.2	7.5	6.5	6.9				
Difference		0.2	0.2	0.2	0.0	0.2	0.1	0.0	0.2				

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Thematic Allocation shown represents the Permanent Mineral Trust. Asset class targets shown represent 9/1/2021 interim targets.

Wyoming State Treasurer's Office
Permanent Funds - Total Return Focus
Asset Allocation vs. Target

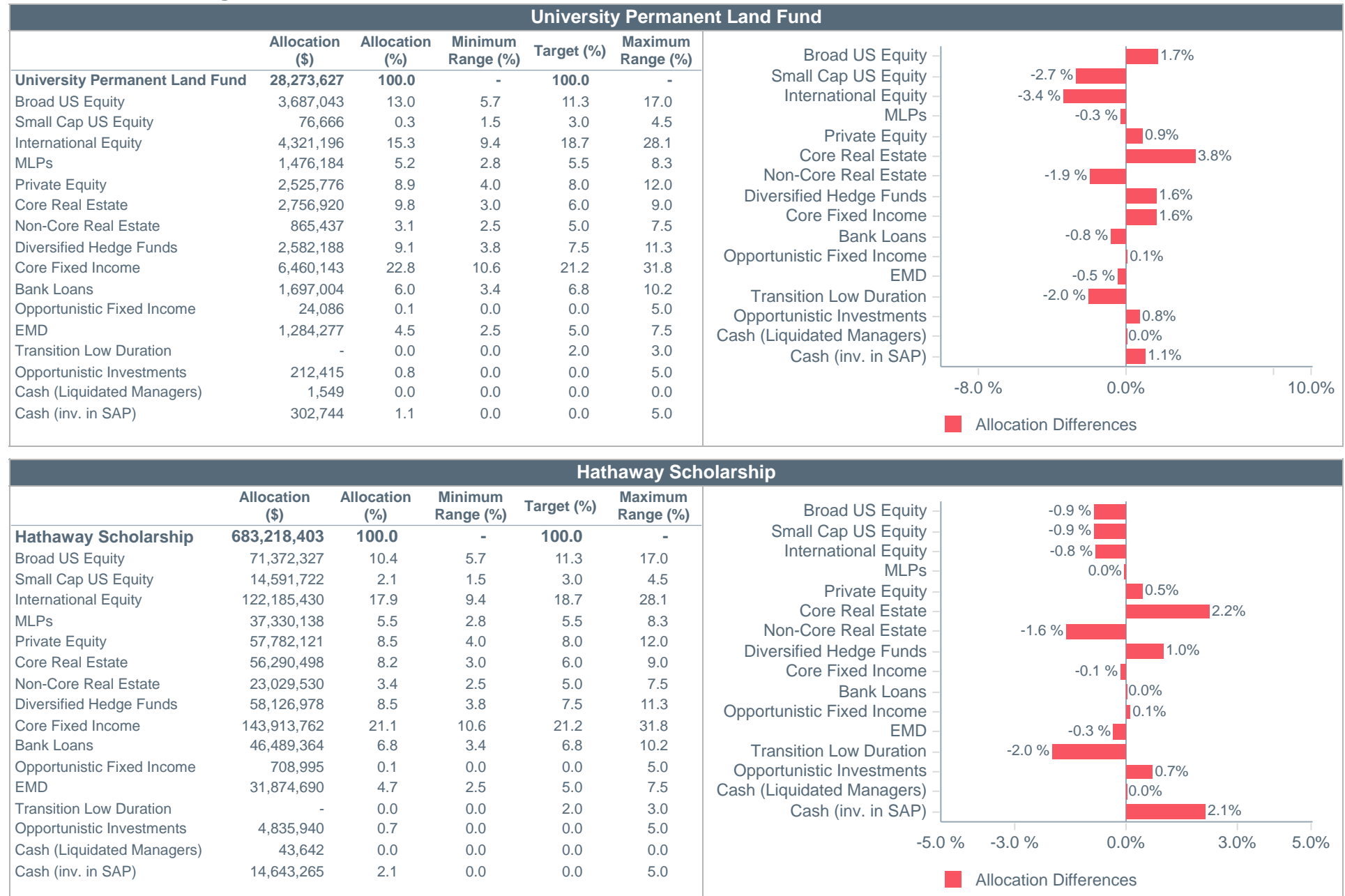
As of September 30, 2021



Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for PMTF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 9/1/2021 interim targets. Pool allocations shown are based on 9/30/2021 allocations.

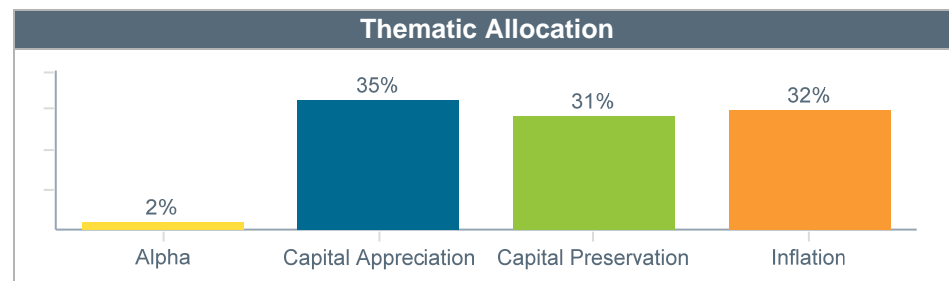
Wyoming State Treasurer's Office
Permanent Funds - Total Return Focus
Asset Allocation vs. Target

As of September 30, 2021



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2021 interim targets. Pool allocations shown are based on 9/30/2021 allocations.

Investment Profile
Fund Type: Permanent Fund Main Objective: Produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity. Primary Investment Goals: Income generation, capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals. Current Long-Term Target Equity Allocation: 48%
Spending Policy <ul style="list-style-type: none"> • Common School Permanent Land Fund: 5% of the five-year trailing average market value, calculated on the first day of the fiscal year. In fiscal year 2025, the spending rate will be 4.75%. In fiscal year 2026 and thereafter, the spending rate will be 4.5%. • Higher Education: 4.75% of the five-year trailing average market value, calculated on the first day of the fiscal year.



Comparative Performance									
	Allocation	Performance (%)							
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Common School Perm Land Fund	4,587,309,344	0.6	0.6	7.0	14.5	7.4	6.9	6.0	7.1
CSPLF - Total Fund Index		0.4	0.4	6.5	13.9	6.9	6.5	5.8	6.8
Difference		0.2	0.2	0.5	0.6	0.5	0.4	0.2	0.3
Higher Education	139,664,160	0.5	0.5	6.9	14.4	7.1	6.3	5.5	6.4
Higher Education - Total Fund Index		0.4	0.4	6.5	13.9	7.0	6.1	5.5	6.2
Difference		0.1	0.1	0.4	0.5	0.1	0.2	0.0	0.2

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Thematic Allocation shown represents the Common School Permanent Land Fund. Asset class targets shown represent 9/1/2021 interim targets.

Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF	-	100.00	-
Broad US Equity	4.00	8.00	12.00
Small Cap US Equity	1.00	2.00	3.00
International Equity	6.50	13.00	19.50
Preferred Stock	2.00	4.00	6.00
MLPs	3.50	7.00	10.50
Core Real Estate	5.50	11.00	16.50
Non-Core Real Estate	1.50	3.00	4.50
Core Fixed Income	15.50	30.00	45.00
Bank Loans	6.60	13.20	19.80
Opportunistic Fixed Income	0.00	0.00	5.00
EMD	3.50	7.00	10.50
Transition Low Duration	0.00	1.80	2.70
Opportunistic Investments	0.00	0.00	5.00
Cash (inv. in SAP)	0.00	0.00	5.00

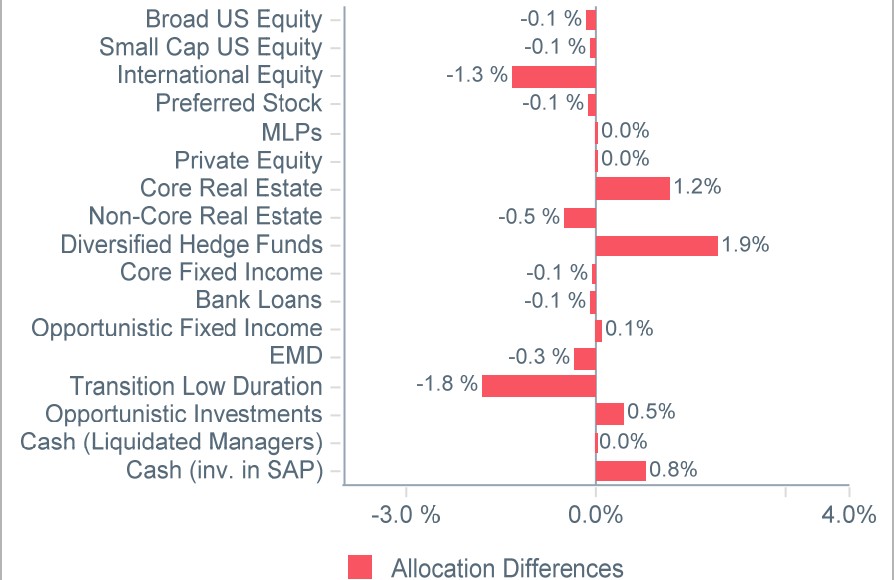
	5 Years		10 Years	
	CSPLF	HiEd	CSPLF	HiEd
Sharpe Ratio	0.7	0.7	1.0	0.9
Standard Deviation	7.8	7.9	6.4	6.3
Beta	0.4	0.4	0.4	0.4

Wyoming State Treasurer's Office
Permanent Funds - Income Focus
Asset Allocation vs. Target

As of September 30, 2021

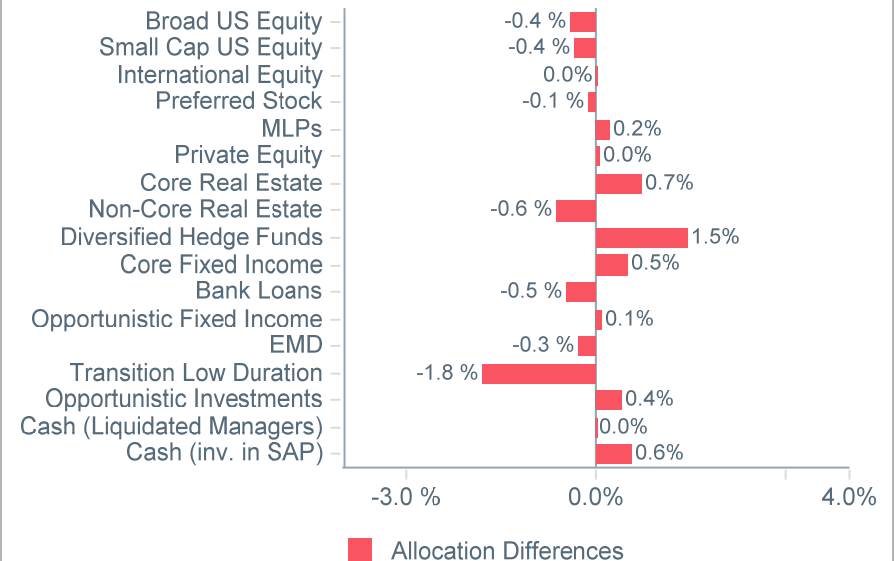
Common School PLF Ex. PPI

	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF Ex. PPI	4,568,949,606	100.0	-	100.0	-
Broad US Equity	358,816,779	7.9	4.0	8.0	12.0
Small Cap US Equity	87,629,116	1.9	1.0	2.0	3.0
International Equity	533,050,960	11.7	6.5	13.0	19.5
Preferred Stock	177,414,561	3.9	2.0	4.0	6.0
MLPs	320,709,794	7.0	3.5	7.0	10.5
Private Equity	1,793,995	0.0	0.0	0.0	0.0
Core Real Estate	556,667,088	12.2	5.5	11.0	16.5
Non-Core Real Estate	113,393,496	2.5	1.5	3.0	4.5
Diversified Hedge Funds	87,589,443	1.9	0.0	0.0	0.0
Core Fixed Income	1,368,043,965	29.9	15.0	30.0	45.0
Bank Loans	598,630,284	13.1	6.6	13.2	19.8
Opportunistic Fixed Income	4,401,202	0.1	0.0	0.0	5.0
EMD	304,304,496	6.7	3.5	7.0	10.5
Transition Low Duration	-	0.0	0.0	1.8	2.7
Opportunistic Investments	20,769,414	0.5	0.0	0.0	5.0
Cash (Liquidated Managers)	276,958	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	35,458,055	0.8	0.0	0.0	5.0



Higher Education

	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Higher Education	139,664,160	100.0	-	100.0	-
Broad US Equity	10,609,585	7.6	4.0	8.0	12.0
Small Cap US Equity	2,298,872	1.6	1.0	2.0	3.0
International Equity	18,135,305	13.0	6.5	13.0	19.5
Preferred Stock	5,411,618	3.9	2.0	4.0	6.0
MLPs	10,104,774	7.2	3.5	7.0	10.5
Private Equity	67,705	0.0	0.0	0.0	0.0
Core Real Estate	16,394,773	11.7	5.5	11.0	16.5
Non-Core Real Estate	3,319,623	2.4	1.5	3.0	4.5
Diversified Hedge Funds	2,034,641	1.5	0.0	0.0	0.0
Core Fixed Income	42,585,668	30.5	15.0	30.0	45.0
Bank Loans	17,773,764	12.7	6.6	13.2	19.8
Opportunistic Fixed Income	146,439	0.1	0.0	0.0	5.0
EMD	9,392,720	6.7	3.5	7.0	10.5
Transition Low Duration	-	0.0	0.0	1.8	2.7
Opportunistic Investments	568,662	0.4	0.0	0.0	5.0
Cash (Liquidated Managers)	8,972	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	811,039	0.6	0.0	0.0	5.0

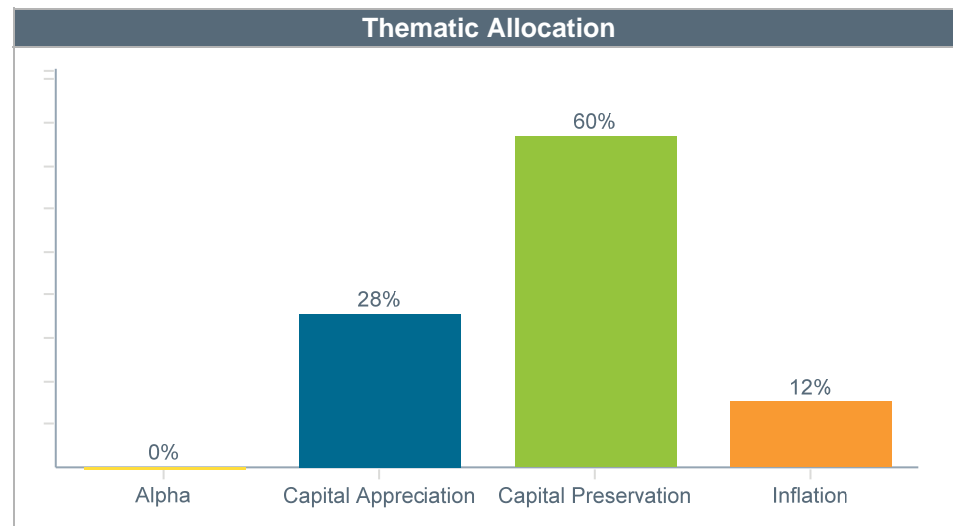


Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for CSPLF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 9/1/2021 interim targets. Pool allocations shown are based on 9/30/2021 allocations.

Wyoming State Treasurer's Office
Permanent Funds - Workers' Compensation Fund

As of September 30, 2021

Investment Profile
Fund Type: Permanent Fund Main Objective: Provide a return that assures the Workers' Compensation Fund will be self-funding or nearly self-funding in order to substantially reduce or eliminate the need for employer contributions. Primary Investment Goals: Long-term return, safety of capital, yield and capital appreciation. Current Long-Term Target Equity Allocation: 28.4% Actuarial Discount Rate: 2.5%* Funded Status: >100%* Duration of Liabilities: 11.4 years*
*As of the most recent report.



Comparative Performance									
	Allocation	Performance (%)							
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Workers' Compensation Fund	2,556,887,406	0.2	0.2	3.9	9.8	9.5	7.0	6.0	6.2
WC - Total Fund Index		0.3	0.3	3.3	9.4	9.0	6.6	5.8	5.9
Difference		-0.1	-0.1	0.6	0.4	0.5	0.4	0.2	0.3

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2021 interim targets.

Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
Workers Compensation Fund	-	100.00	-
Broad US Equity	3.00	6.00	9.00
Small Cap US Equity	0.00	0.00	0.00
International Equity	4.50	9.00	13.50
MLPs	2.35	4.70	7.05
Core Real Estate	2.35	4.70	7.05
Non-Core Real Estate	2.00	4.00	6.00
Liability Driven Fixed Income	29.30	58.60	87.90
Opportunistic Fixed Income	0.00	0.00	5.00
EMD	2.50	5.00	7.50
Transition Low Duration	0.00	8.00	12.00
Opportunistic Investments	0.00	0.00	5.00
Cash (inv. in SAP)	0.00	0.00	5.00

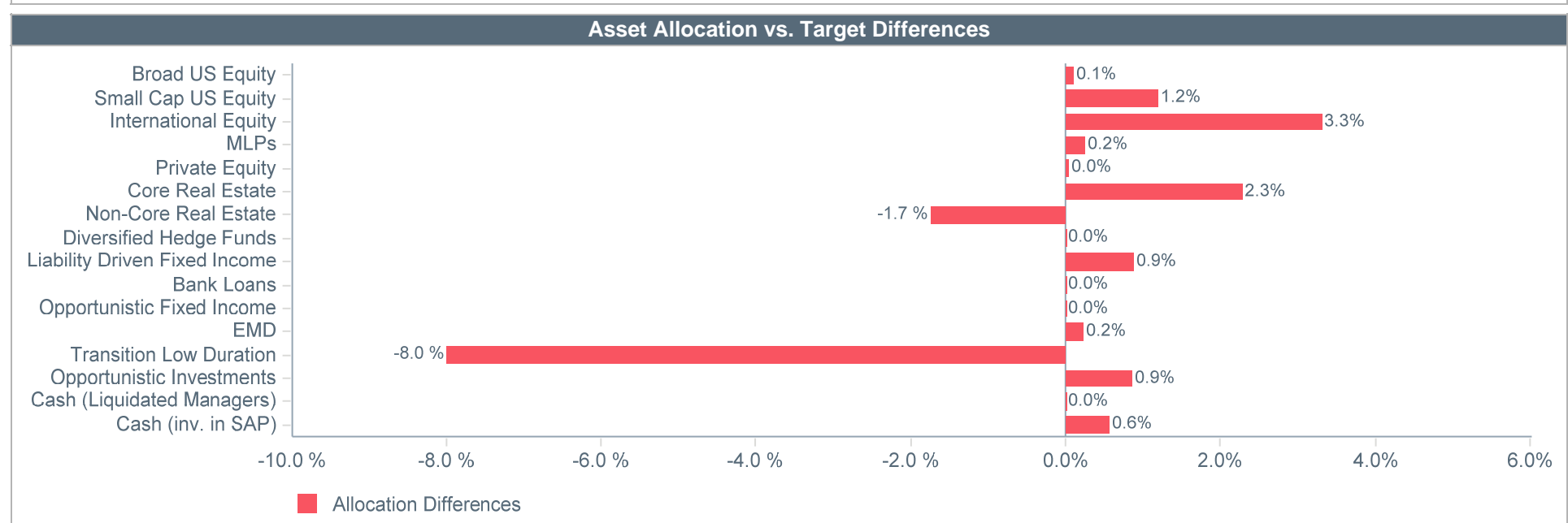
Fixed Income Characteristics vs. BB US Agg Bond Index		
	Portfolio	Benchmark
Effective Duration	10.7	6.7
Avg. Quality	A1	Aa1/Aa2
Yield To Maturity (%)	2.4	1.6
Coupon Rate (%)	3.0	2.5

Risk Metrics		
	5 Years	10 Years
Sharpe Ratio	1.0	1.2
Standard Deviation	5.7	4.6
Beta	0.3	0.3

Wyoming State Treasurer's Office
Permanent Funds - Workers' Compensation Fund
Asset Allocation vs. Target

As of September 30, 2021

Asset Allocation vs. Target					
	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Workers Compensation Fund	2,556,887,406	100.00	-	100.00	-
Broad US Equity	156,054,883	6.10	3.00	6.00	9.00
Small Cap US Equity	30,792,328	1.20	0.00	0.00	0.00
International Equity	314,686,921	12.31	4.50	9.00	13.50
MLPs	126,514,246	4.95	2.35	4.70	7.05
Private Equity	1,172,186	0.05	0.00	0.00	0.00
Core Real Estate	178,802,472	6.99	2.35	4.70	7.05
Non-Core Real Estate	57,558,202	2.25	2.00	4.00	6.00
Diversified Hedge Funds	-	0.00	0.00	0.00	0.00
Liability Driven Fixed Income	1,520,645,412	59.47	29.30	58.60	87.90
Bank Loans	-	0.00	0.00	0.00	0.00
Opportunistic Fixed Income	13,076	0.00	0.00	0.00	5.00
EMD	133,880,213	5.24	2.50	5.00	7.50
Transition Low Duration	-	0.00	0.00	8.00	12.00
Opportunistic Investments	22,221,844	0.87	0.00	0.00	5.00
Cash (Liquidated Managers)	106,923	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	14,438,701	0.56	0.00	0.00	5.00



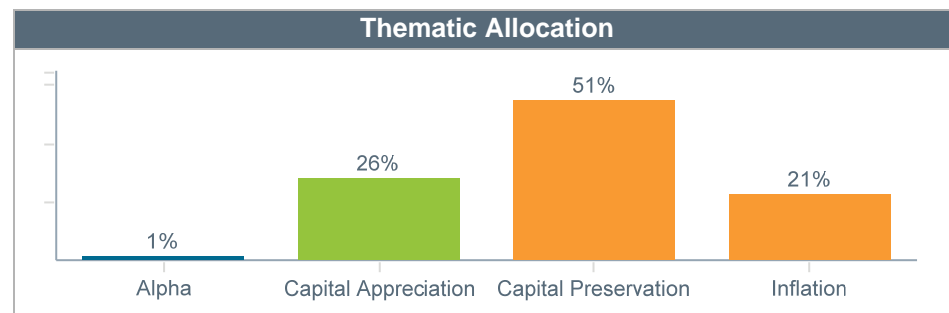
Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2021 interim targets. Pool allocations shown are based on 9/30/2021 allocations.

Wyoming State Treasurer's Office
Pool A Investment Account

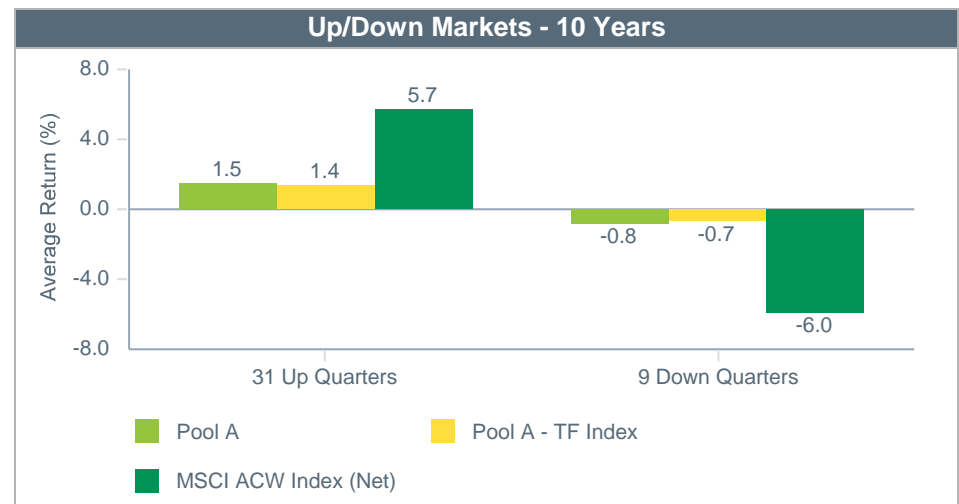
As of September 30, 2021

Investment Profile
Fund Type: Non-Permanent Fund Main Objective: Provide a diverse array of securities including equities, while maintaining adequate liquidity, stability, and return on investment. Primary Investment Goal: Pool A is intended to be moderately liquid and safely invested but also be invested for return and growth. Current Target Equity Allocation: 36% Participating Funds: <ul style="list-style-type: none"> • Tobacco Settlement Trust Fund • Wildlife and Natural Resource Trust Account • Cultural Trust Fund • Public Television Matching Fund Account • Game and Fish Fund Trust Account

Risk Metrics	5 Years	10 Years
Sharpe Ratio	0.6	0.8
Standard Deviation	5.5	4.4
Beta	0.3	0.2



Target Allocation	Minimum Range (%)	Target (%)	Maximum Range (%)
Pool A	-	100.00	-
Broad US Equity	3.35	6.68	10.05
Small Cap US Equity	0.65	1.33	1.95
International Equity	4.15	8.33	12.45
Preferred Stock	3.50	7.00	10.50
MLPs	2.50	5.00	7.50
Core Real Estate	2.00	4.00	6.00
Non-Core Real Estate	2.00	4.00	6.00
Core Fixed Income	22.50	45.00	67.50
Bank Loans	5.40	10.83	16.20
Transition Low Duration	0.00	2.83	4.20
Opportunistic Investments	0.00	0.00	5.00
Cash (inv. in SAP)	2.50	5.00	7.50



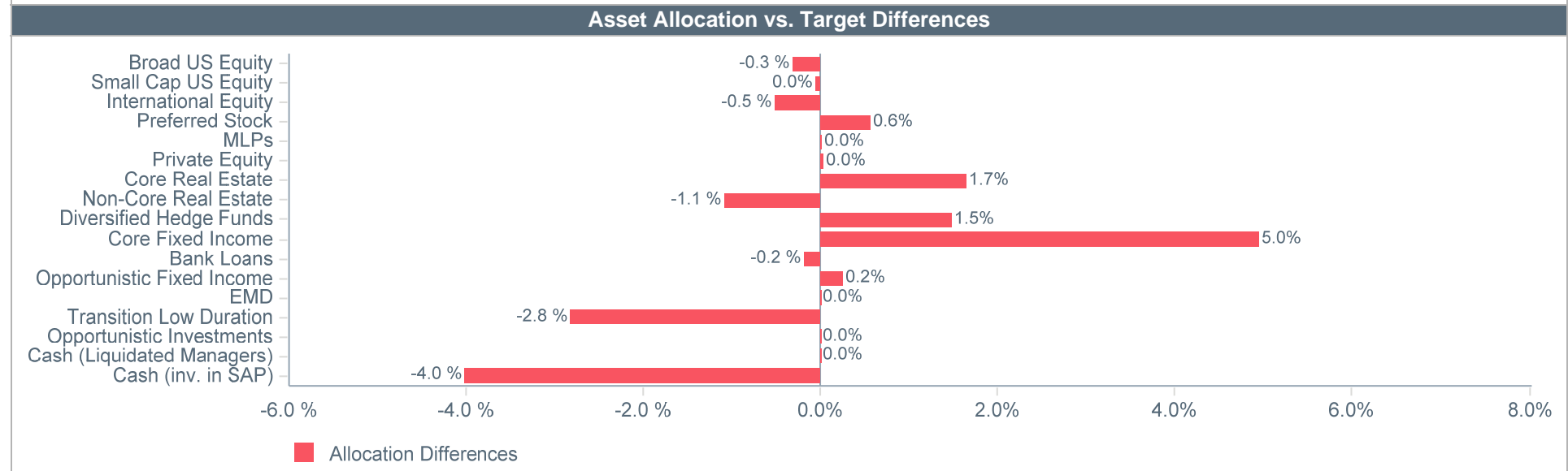
Comparative Performance									
	Allocation	Performance (%)							
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Pool A	267,578,911	0.5	0.5	5.2	10.7	7.4	4.7	4.4	4.0
Pool A - Total Fund Index		0.4	0.4	4.6	9.9	6.9	4.0	4.0	3.6
Difference		0.1	0.1	0.6	0.8	0.5	0.7	0.4	0.4

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2021 interim targets.

Wyoming State Treasurer's Office
Non-Permanent Funds - Pool A Investment Account
Asset Allocation vs. Target

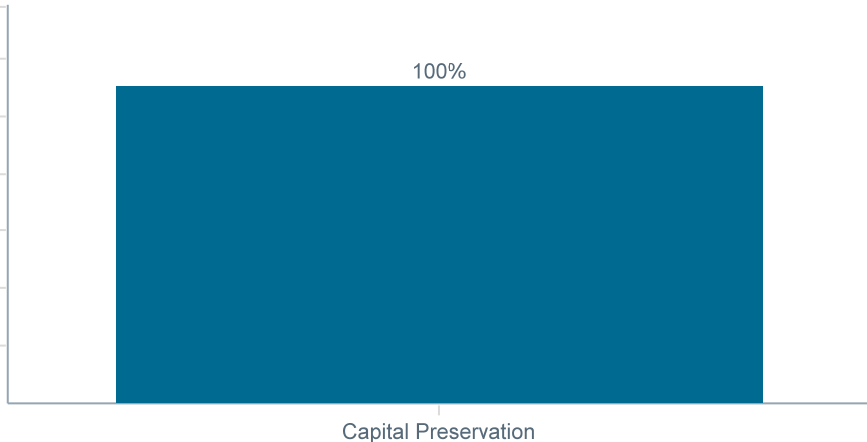
As of September 30, 2021

Asset Allocation vs. Target					
	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Pool A	267,578,911	100.00	-	100.00	-
Broad US Equity	17,041,496	6.37	3.35	6.68	10.05
Small Cap US Equity	3,430,450	1.28	0.65	1.33	1.95
International Equity	20,908,271	7.81	4.15	8.33	12.45
Preferred Stock	20,260,931	7.57	3.50	7.00	10.50
MLPs	13,451,491	5.03	2.50	5.00	7.50
Private Equity	86,714	0.03	0.00	0.00	0.00
Core Real Estate	15,137,679	5.66	2.00	4.00	6.00
Non-Core Real Estate	7,798,182	2.91	2.00	4.00	6.00
Diversified Hedge Funds	3,993,764	1.49	0.00	0.00	0.00
Core Fixed Income	133,659,443	49.95	22.50	45.00	67.50
Bank Loans	28,483,342	10.64	5.40	10.83	16.20
Opportunistic Fixed Income	663,713	0.25	0.00	0.00	5.00
EMD	-	0.00	0.00	0.00	0.00
Transition Low Duration	-	0.00	0.00	2.83	4.20
Opportunistic Investments	-	0.00	0.00	0.00	5.00
Cash (Liquidated Managers)	677	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	2,662,759	1.00	2.50	5.00	7.50



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2021 interim targets. Pool allocations shown are based on 9/30/2021 allocations.

Investment Profile				
Fund Type: Non-Permanent Fund Main Objective: Produce an investment return so that State agencies have the advantage of better income from their invested funds, while maintaining stability. Primary Investment Goal: Capital preservation, yield, and liquidity Liquidity Constraints: The Fund must meet the day-to-day cash flow needs of the State Maximum Equity Allocation: 0% Current Target Equity Allocation: 0%				
Target Allocation				
	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	
State Agency Pool Excluding PPI				
Laddered Short-Term Treasury	100.00	100.00		100.00
Core Fixed Income	0.00	0.00		0.00
Low Duration Fixed Income	0.00	0.00		0.00
Bank Loans	0.00	0.00		0.00
Opportunistic Fixed Income	0.00	0.00		0.00
EMD	0.00	0.00		0.00
Cash Equivalents	0.00	0.00		0.00

Thematic Allocation	
	

Fixed Income Characteristics vs. BB US Agg Bond Index		
	Portfolio	Benchmark
Effective Duration	1.9	6.7
Avg. Quality	Aa1	Aa1/Aa2
Yield To Maturity (%)	0.3	1.6
Coupon Rate (%)	0.9	2.5

Risk Metrics		
	5 Years	10 Years
Sharpe Ratio	0.5	0.8
Standard Deviation	1.8	2.1
Beta	-0.0	0.0

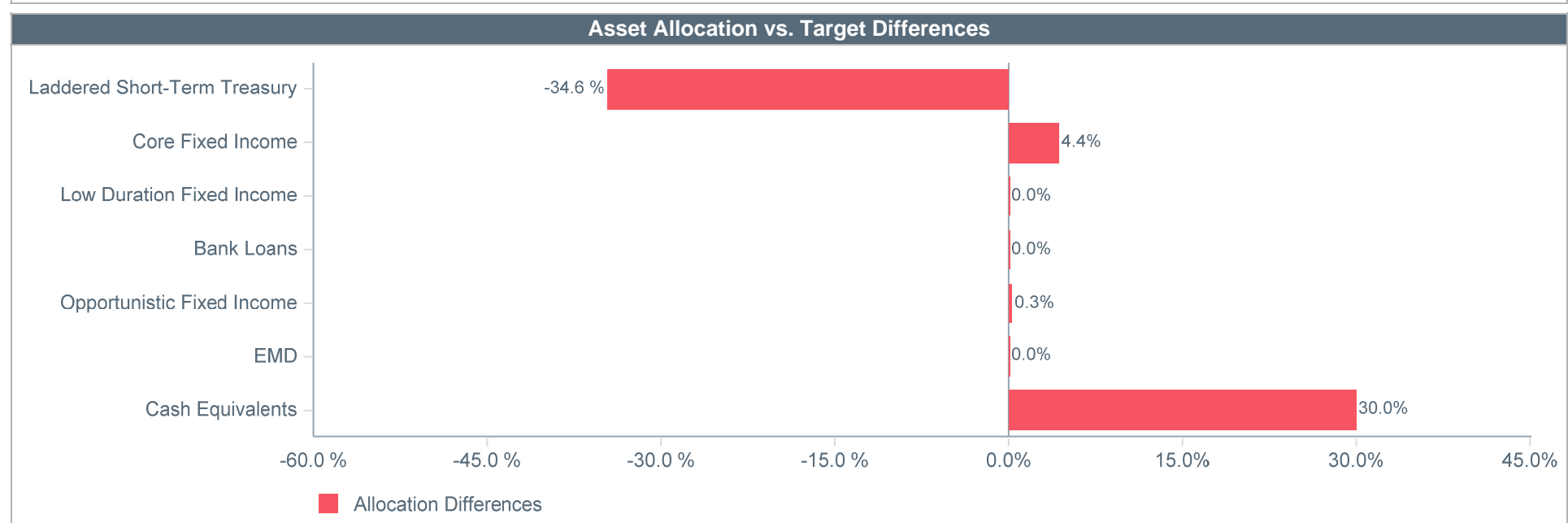
Comparative Performance									
	Allocation	Performance (%)							
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
State Agency Pool	5,502,715,363	0.0	0.0	-0.0	0.1	2.6	1.9	2.2	2.4
State Agency Pool - Actual Allocation Index		0.0	0.0	-0.0	0.1	2.7	1.7	2.2	2.2
Difference		0.0	0.0	0.0	0.0	-0.1	0.2	0.0	0.2

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Wyoming State Treasurer's Office
Non-Permanent Funds - State Agency Pool
Asset Allocation vs. Target

As of September 30, 2021

Asset Allocation vs. Target					
	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
State Agency Pool Excluding PPI	5,456,015,363	100.00	-	100.00	-
Laddered Short-Term Treasury	3,567,608,185	65.39	100.00	100.00	100.00
Core Fixed Income	238,126,761	4.36	0.00	0.00	0.00
Low Duration Fixed Income	59,900	0.00	0.00	0.00	0.00
Bank Loans	-	0.00	0.00	0.00	0.00
Opportunistic Fixed Income	15,193,665	0.28	0.00	0.00	0.00
EMD	-	0.00	0.00	0.00	0.00
Cash Equivalents	1,635,026,851	29.97	0.00	0.00	0.00



Allocations shown may not sum up to 100% exactly due to rounding. Market value shown excludes Public Purpose Investments (PPIs). Pool allocations shown are based on 9/30/2021 allocations.

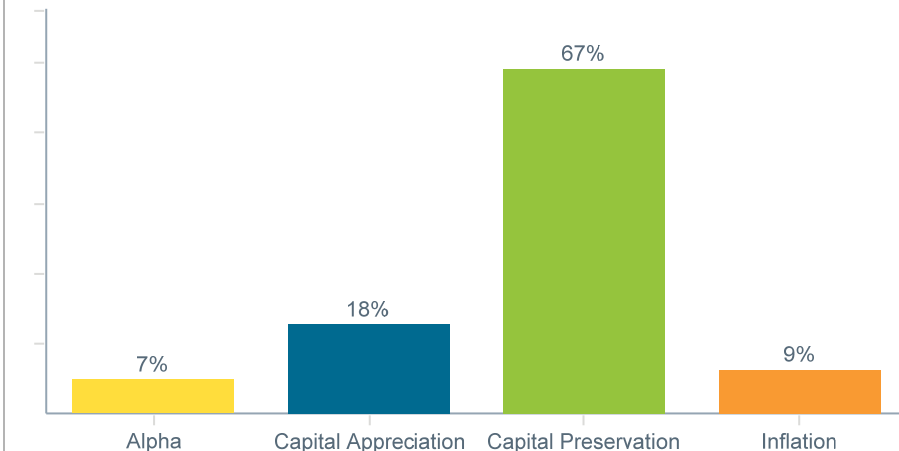
Target Allocation

- Long Term Reserve
- Intermediate Term Reserve
- Short Term Reserve

Maximum
Range (%)

LSRA Long Term Reserve	-	100.00	-
Broad US Equity	17.00	22.00	27.00
Small Cap US Equity	4.00	6.00	8.00
International Equity	21.00	28.00	35.00
Bank Loans	10.00	12.50	15.00
Private Equity	0.00	0.00	0.00
MLPs	10.00	12.50	15.00
Diversified Hedge Funds	15.00	19.00	23.00
Opportunistic Investments	0.00	0.00	0.00
Cash (inv. in SAP)	0.00	0.00	0.00

Risk Metrics



Inception Date

Standard Deviation	7.4	07/01/2019
Beta	0.3	
Sharpe Ratio	0.6	

Comparative Performance

	Allocation	Performance (%)							
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
LSRA	1,466,770,475	0.0	0.0	3.6	8.7	N/A	N/A	N/A	N/A
LSRA - Total Fund Index		-0.4	-0.4	3.3	8.5	N/A	N/A	N/A	N/A
Difference		0.4	0.4	0.3	0.2	N/A	N/A	N/A	N/A



Wyoming State Treasurer's Office
Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)
LSRA	1,466,770,475	100.00
Broad US Equity	90,173,074	6.15
Small Cap US Equity	28,865,096	1.97
International Equity	139,318,788	9.50
Core Fixed Income	486,244,898	33.15
Bank Loans	64,603,663	4.40
Low Duration Fixed Income	497,779,949	33.94
Private Equity	523,520	0.04
MLPs	62,350,197	4.25
Diversified Hedge Funds	96,626,868	6.59
Opportunistic Investments	-	0.00
Cash (inv. in SAP)	284,424	0.02

Allocations shown may not sum up to 100% exactly due to rounding. The Total LSRA pool has no target allocation.

Wyoming State Treasurer's Office
Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Long Term Reserve	482,745,629	100.00	-	100.00	-
Broad US Equity	90,173,074	18.68	17.00	22.00	27.00
Small Cap US Equity	28,865,096	5.98	4.00	6.00	8.00
International Equity	139,318,788	28.86	21.00	28.00	35.00
Bank Loans	64,603,663	13.38	10.00	12.50	15.00
Private Equity	523,520	0.11	0.00	0.00	0.00
MLPs	62,350,197	12.92	10.00	12.50	15.00
Diversified Hedge Funds	96,626,868	20.02	15.00	19.00	23.00
Opportunistic Investments	-	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	284,424	0.06	0.00	0.00	0.00

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

Wyoming State Treasurer's Office
Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Intermediate Term Reserve	486,244,898	100.00	-	100.00	-
Core Fixed Income	486,244,898	100.00	100.00	100.00	100.00

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

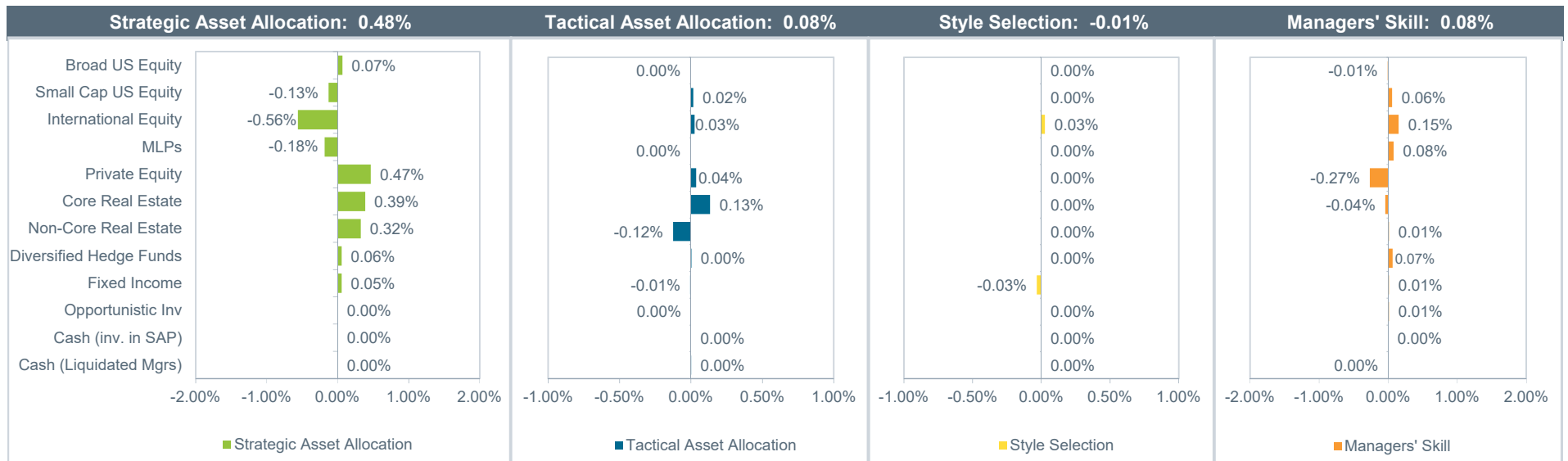
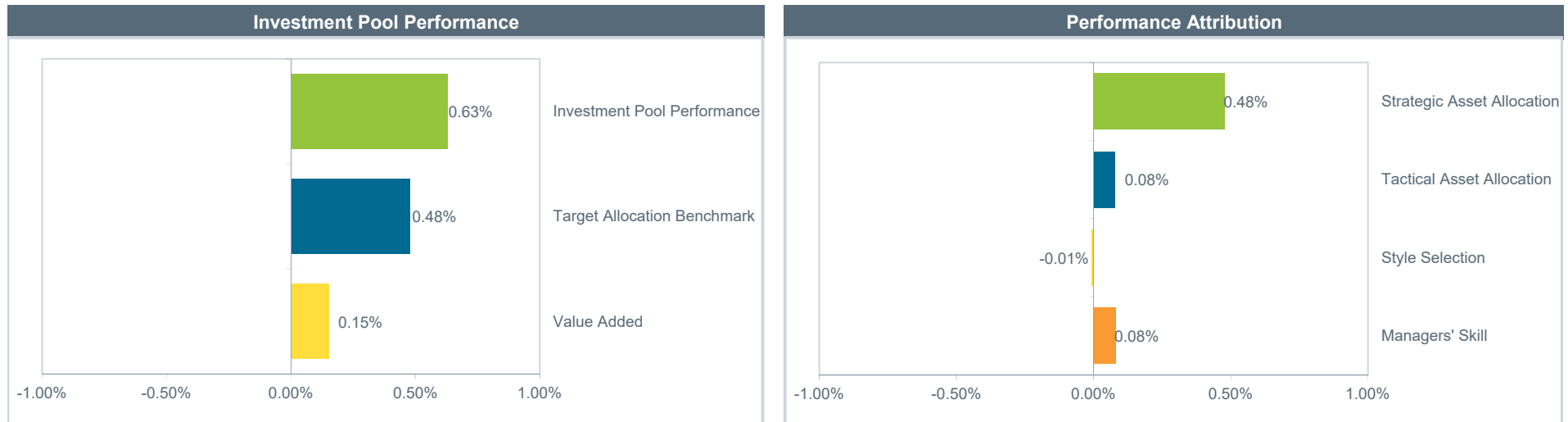
Wyoming State Treasurer's Office
Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Short Term Reserve	497,779,949	100.00	-	100.00	-
Low Duration Fixed Income	497,779,949	100.00	100.00	100.00	100.00

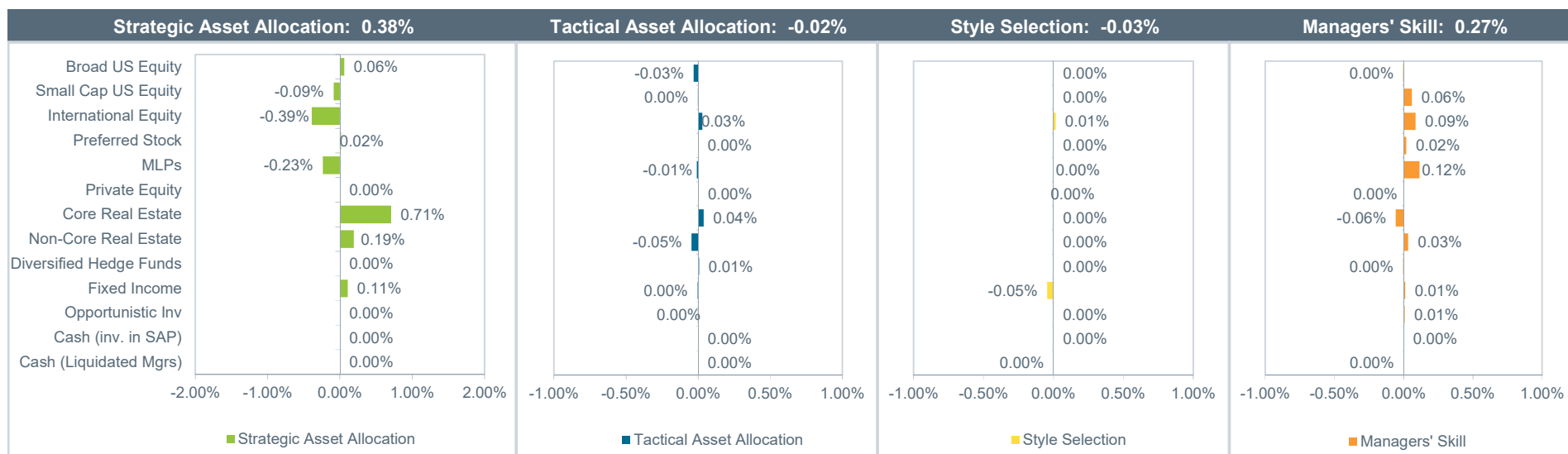
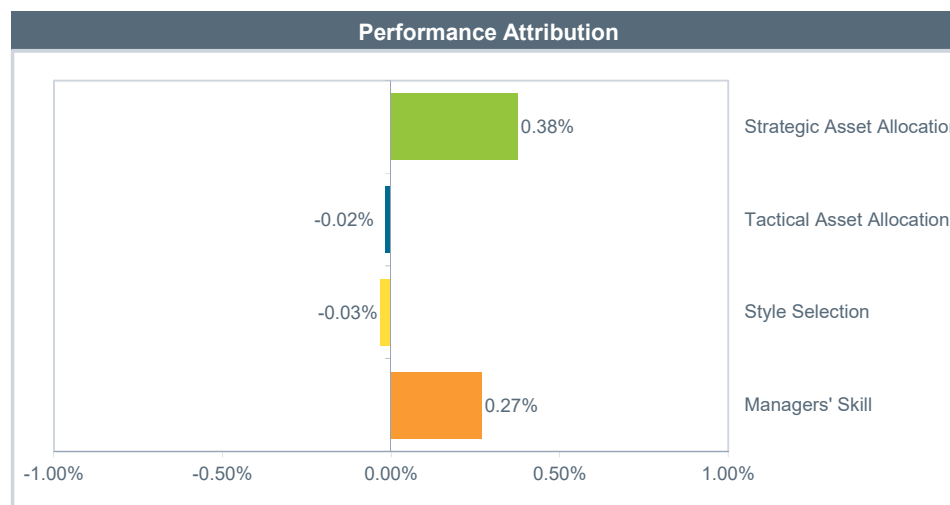
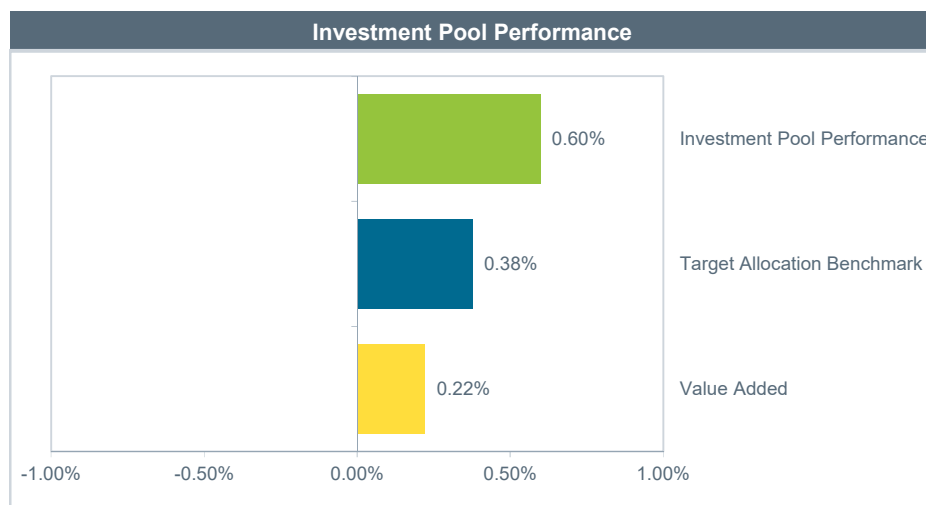
Allocations shown may not sum up to 100% exactly due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Mineral Trust Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



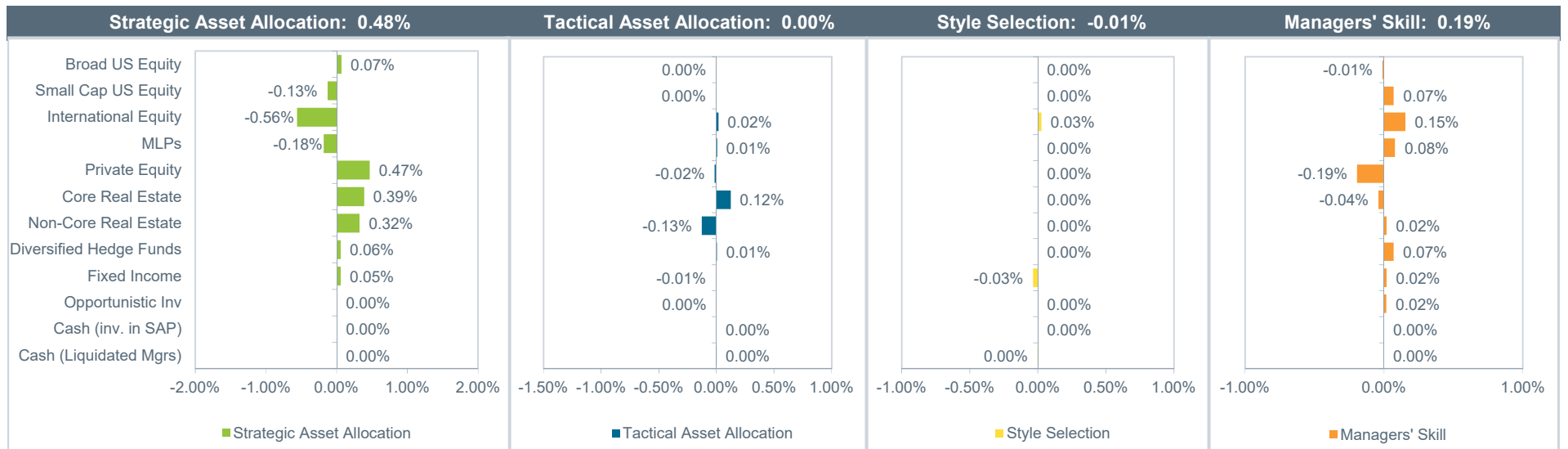
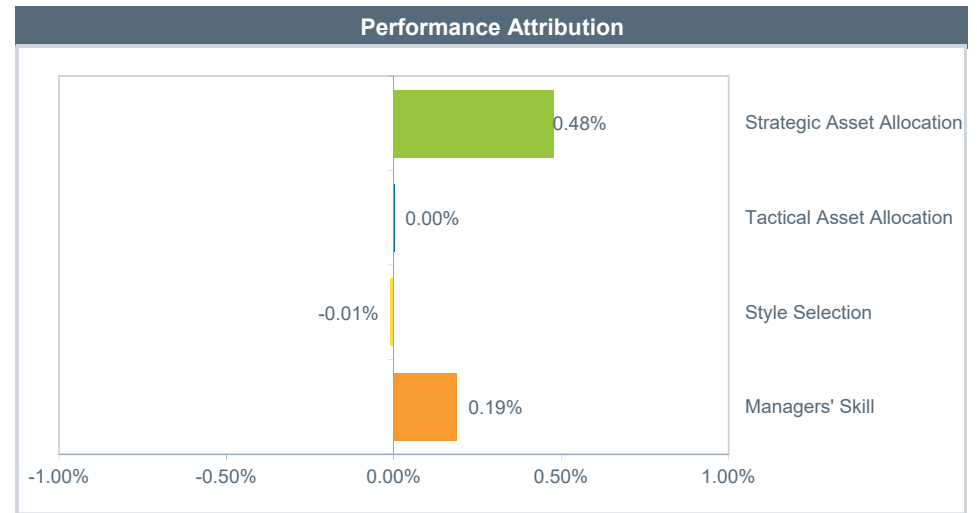
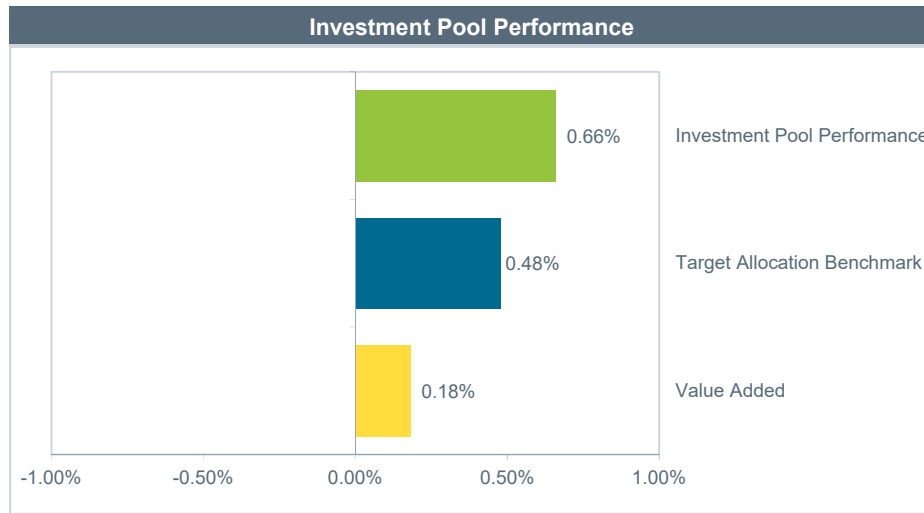
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Common School Permanent Land Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



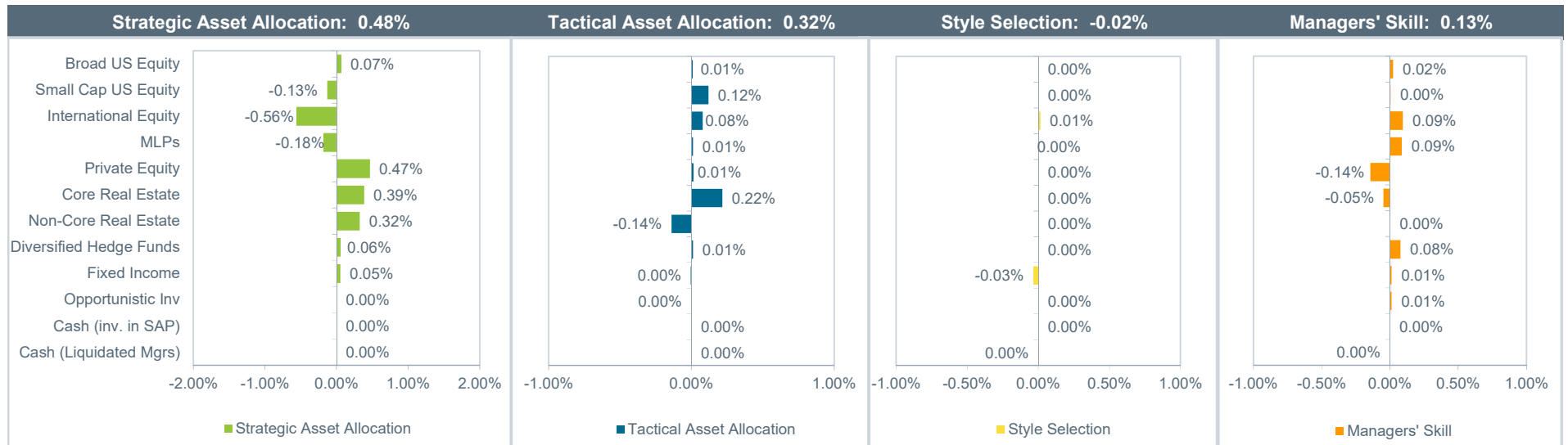
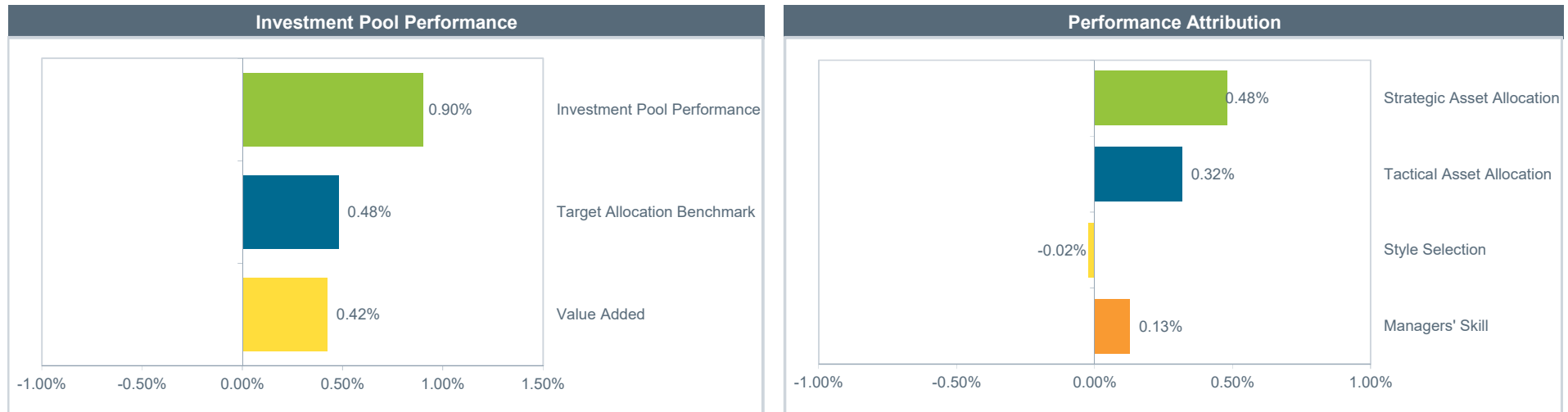
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Land Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



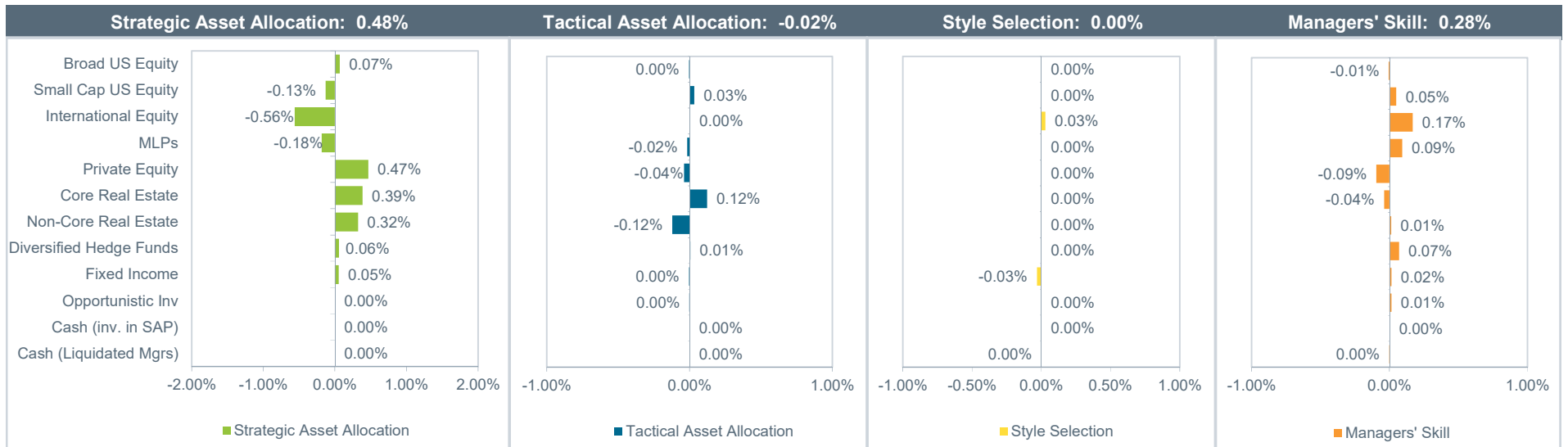
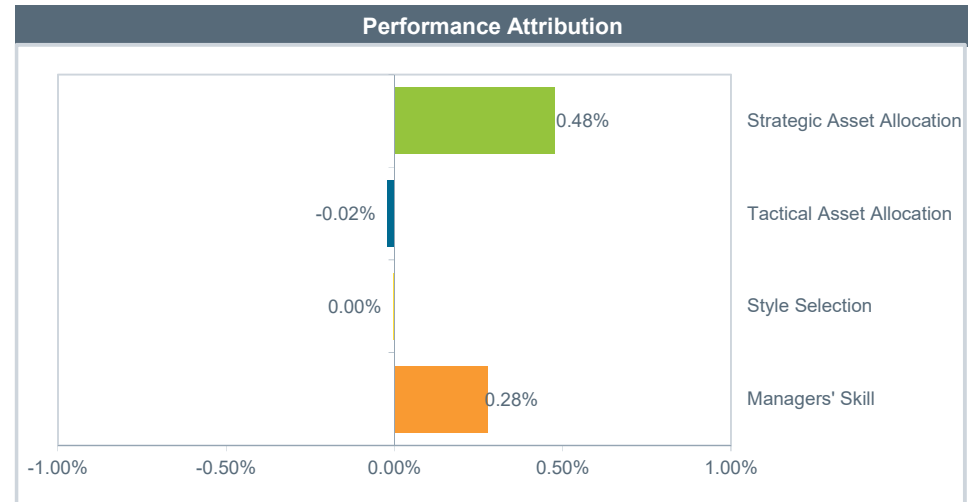
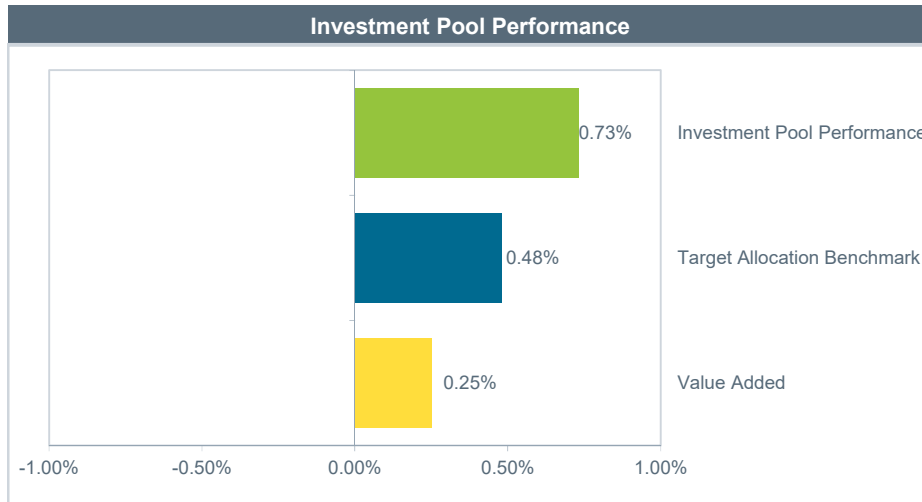
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
University Permanent Land Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



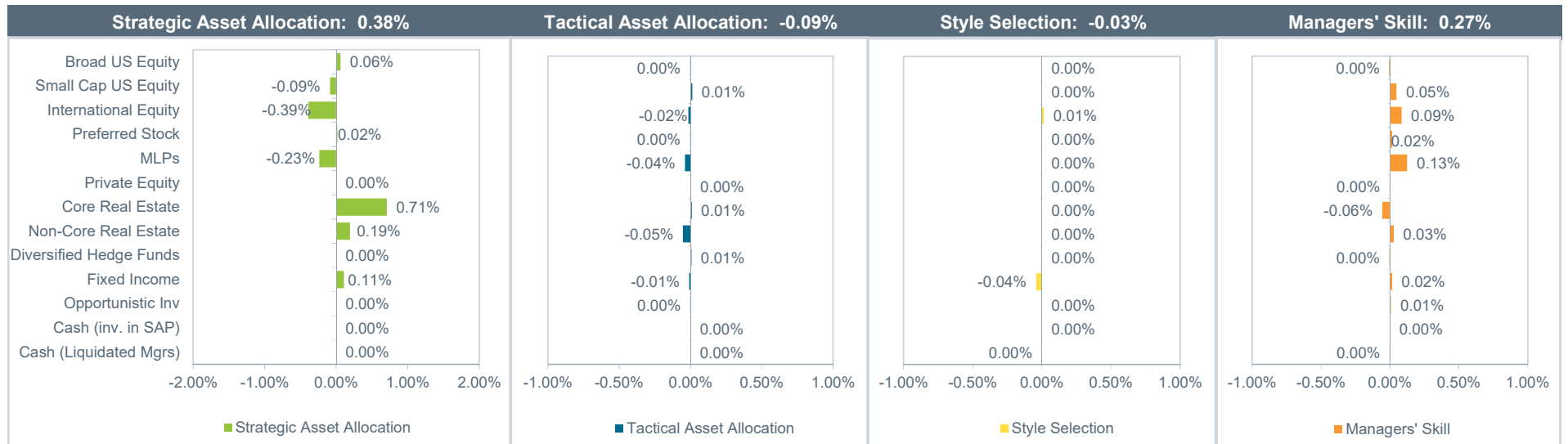
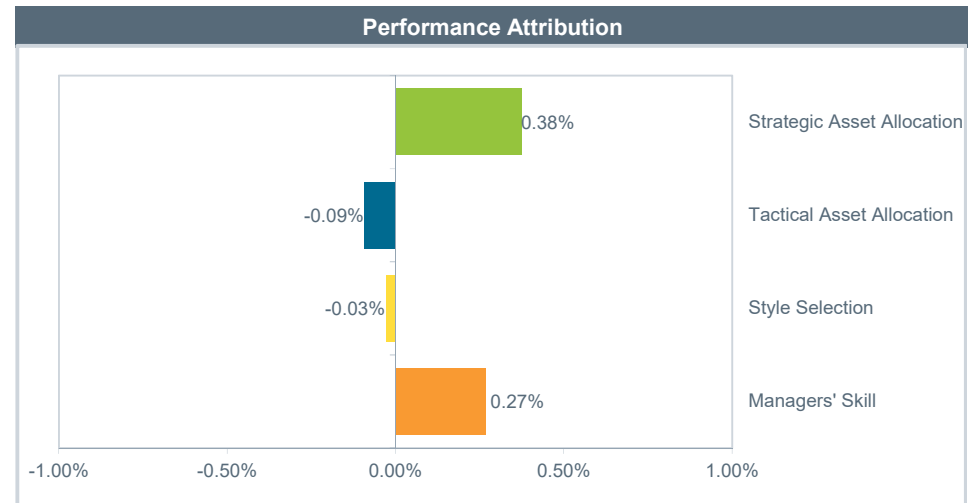
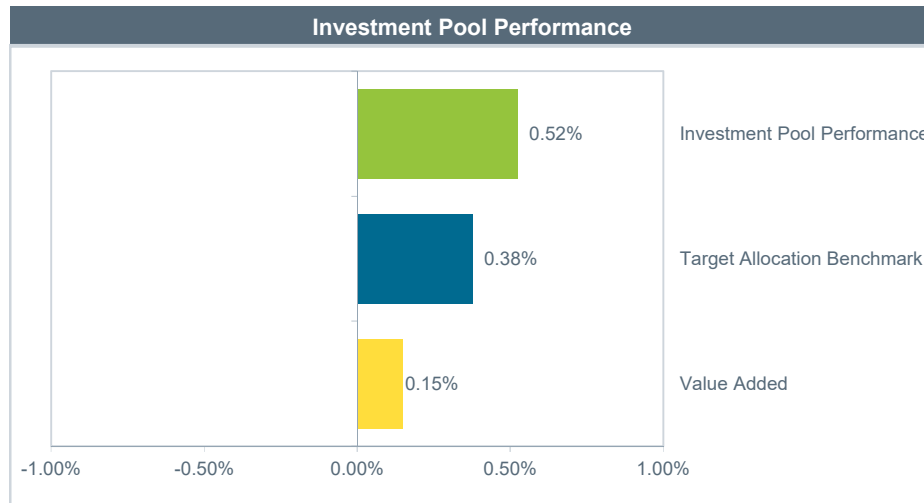
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Hathaway Scholarship Endowment Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



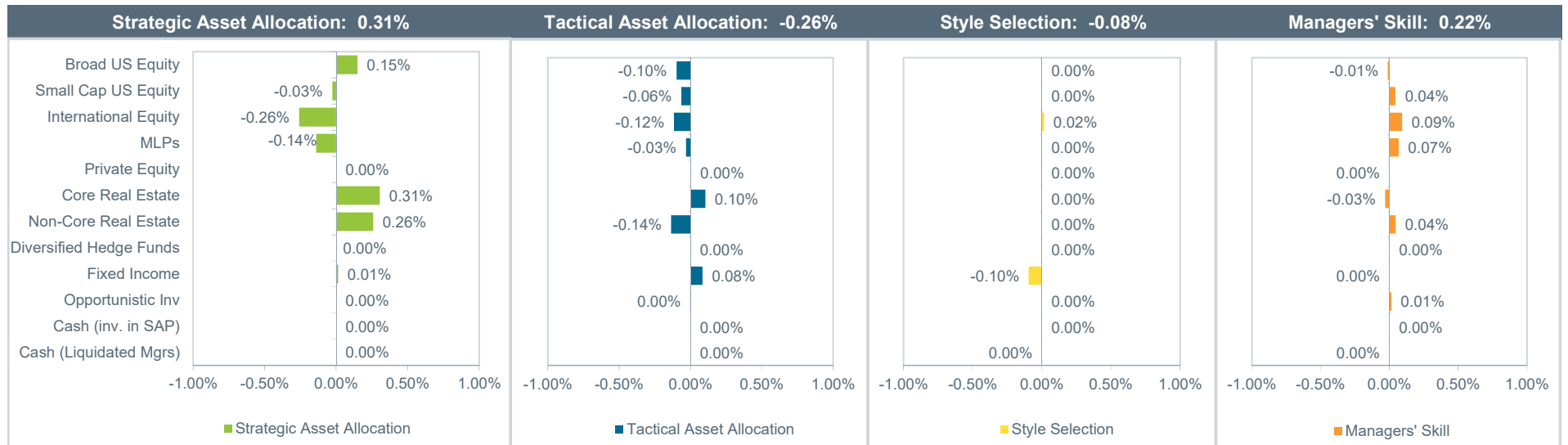
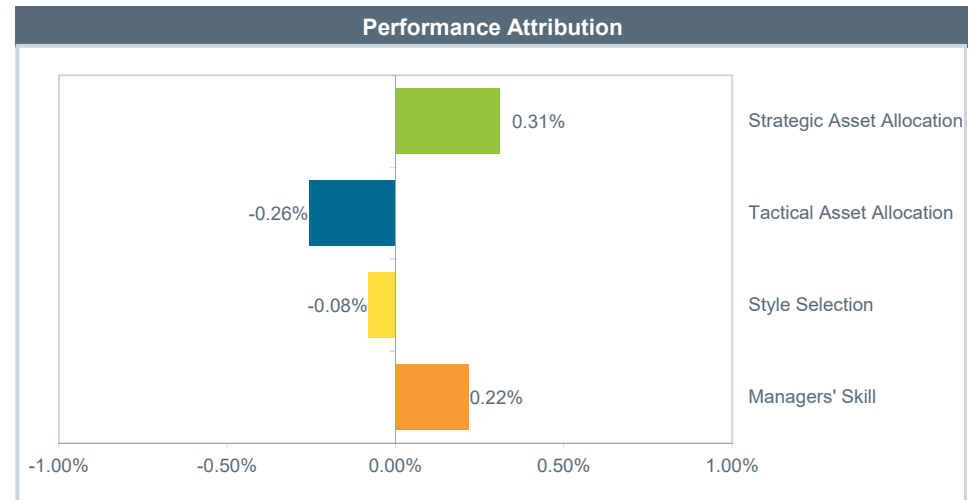
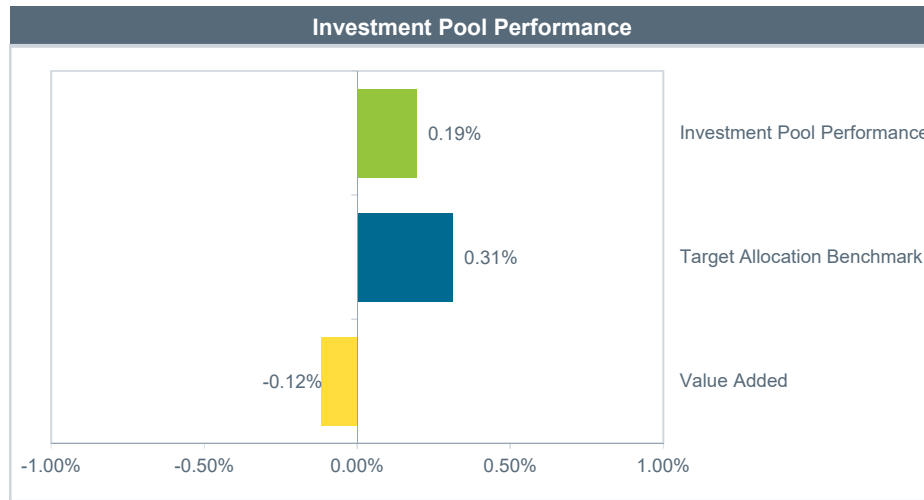
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Higher Education Endowment Fund vs. Target Allocation Index
FYTD Ending September 30, 2021



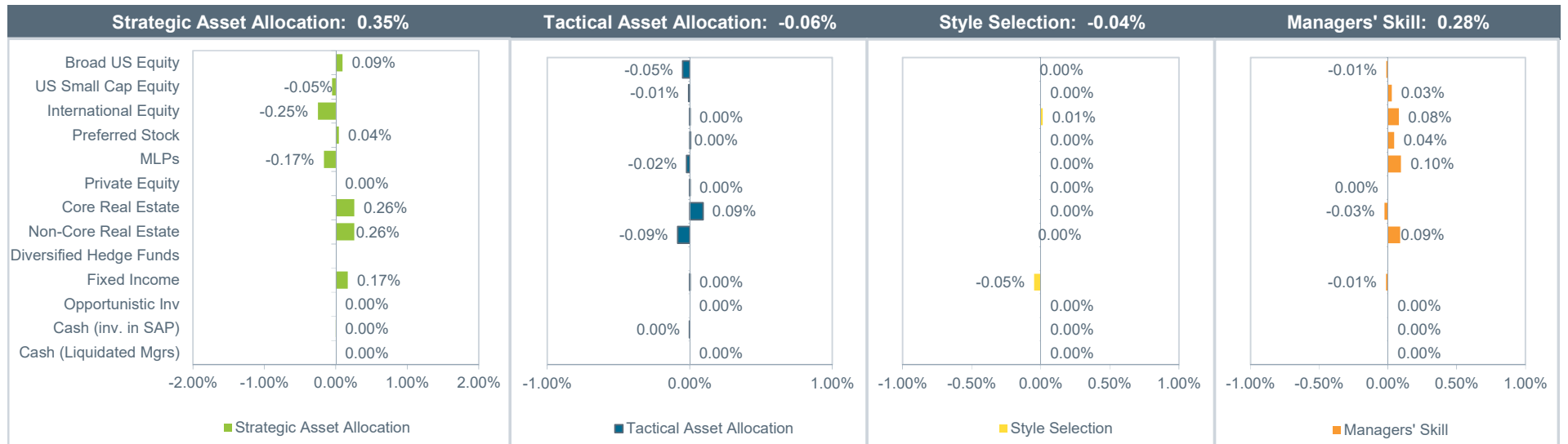
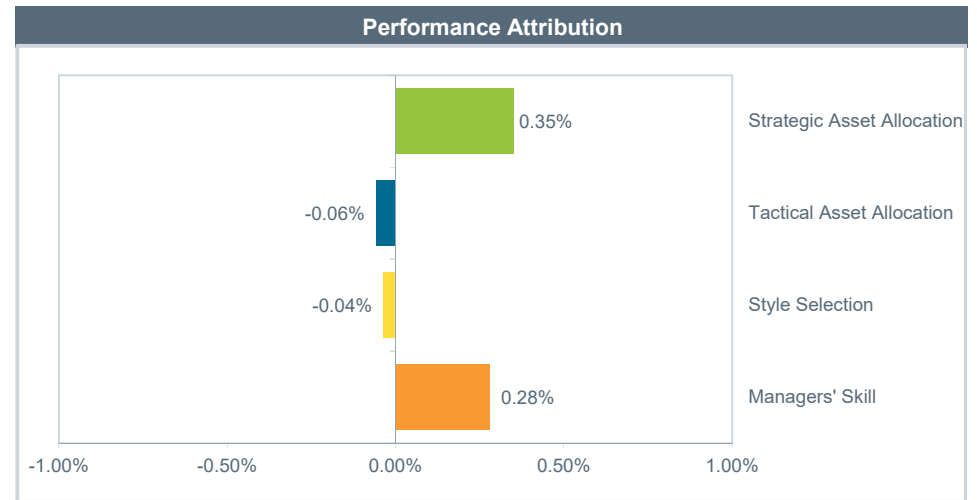
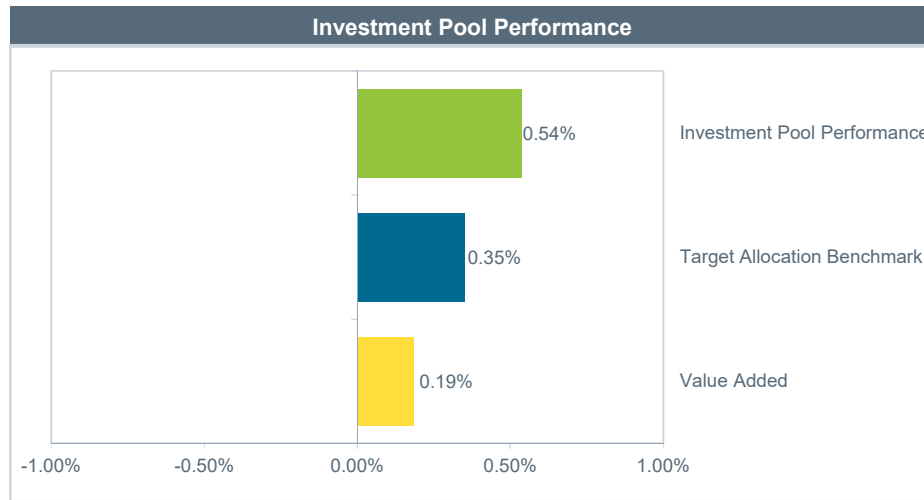
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

**Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Workers Compensation Fund vs. Target Allocation Index
FYTD Ending September 30, 2021**



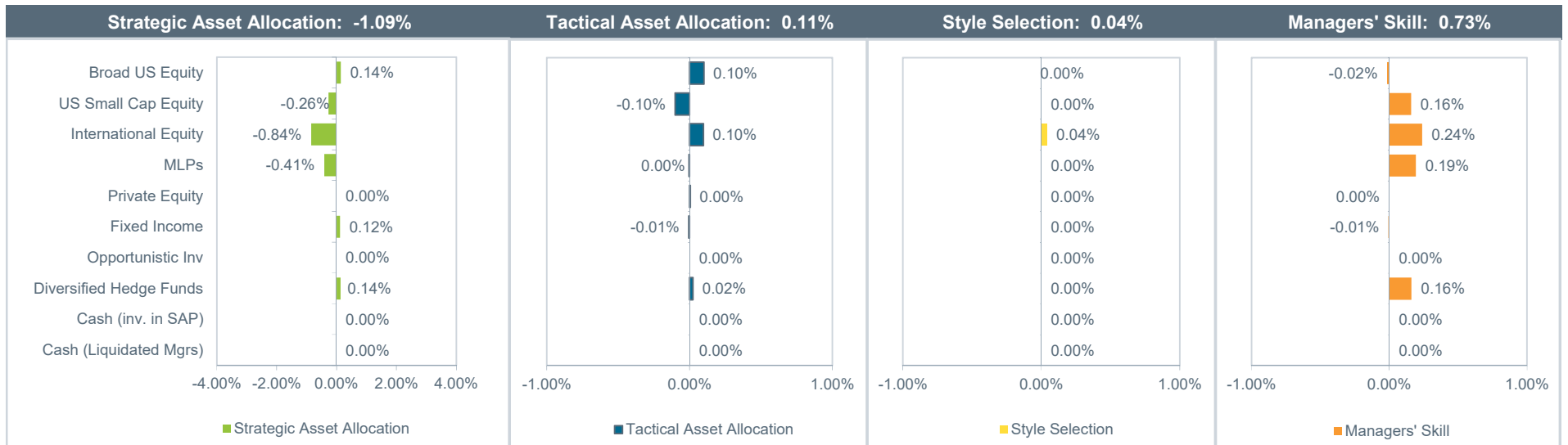
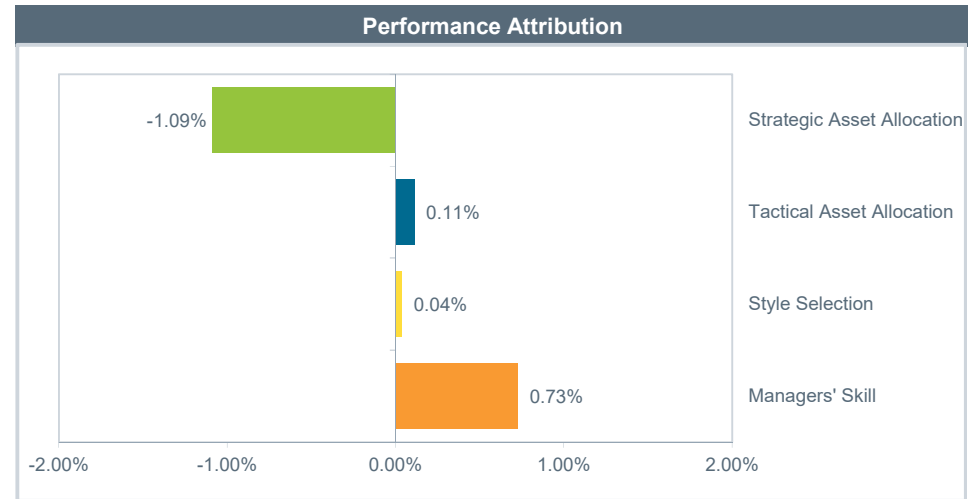
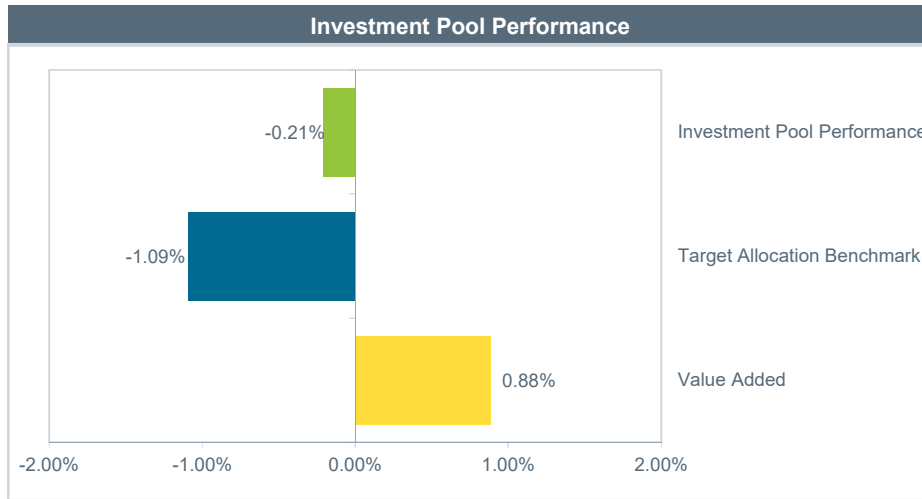
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Pool A vs. Target Allocation Index
FYTD Ending September 30, 2021



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

**Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
LSRA LT Reserve vs. Target Allocation Index
FYTD Ending September 30, 2021**



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

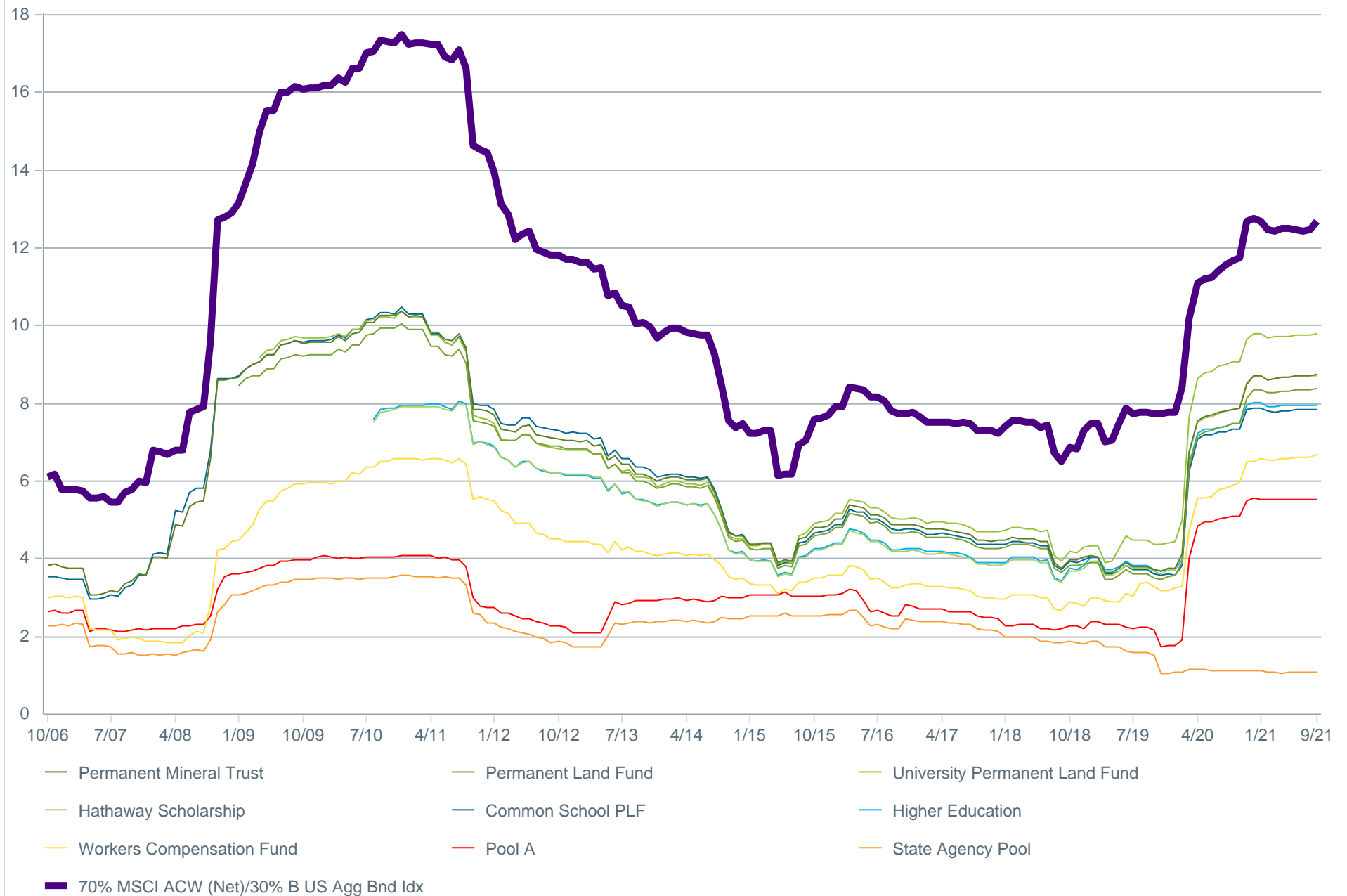
Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

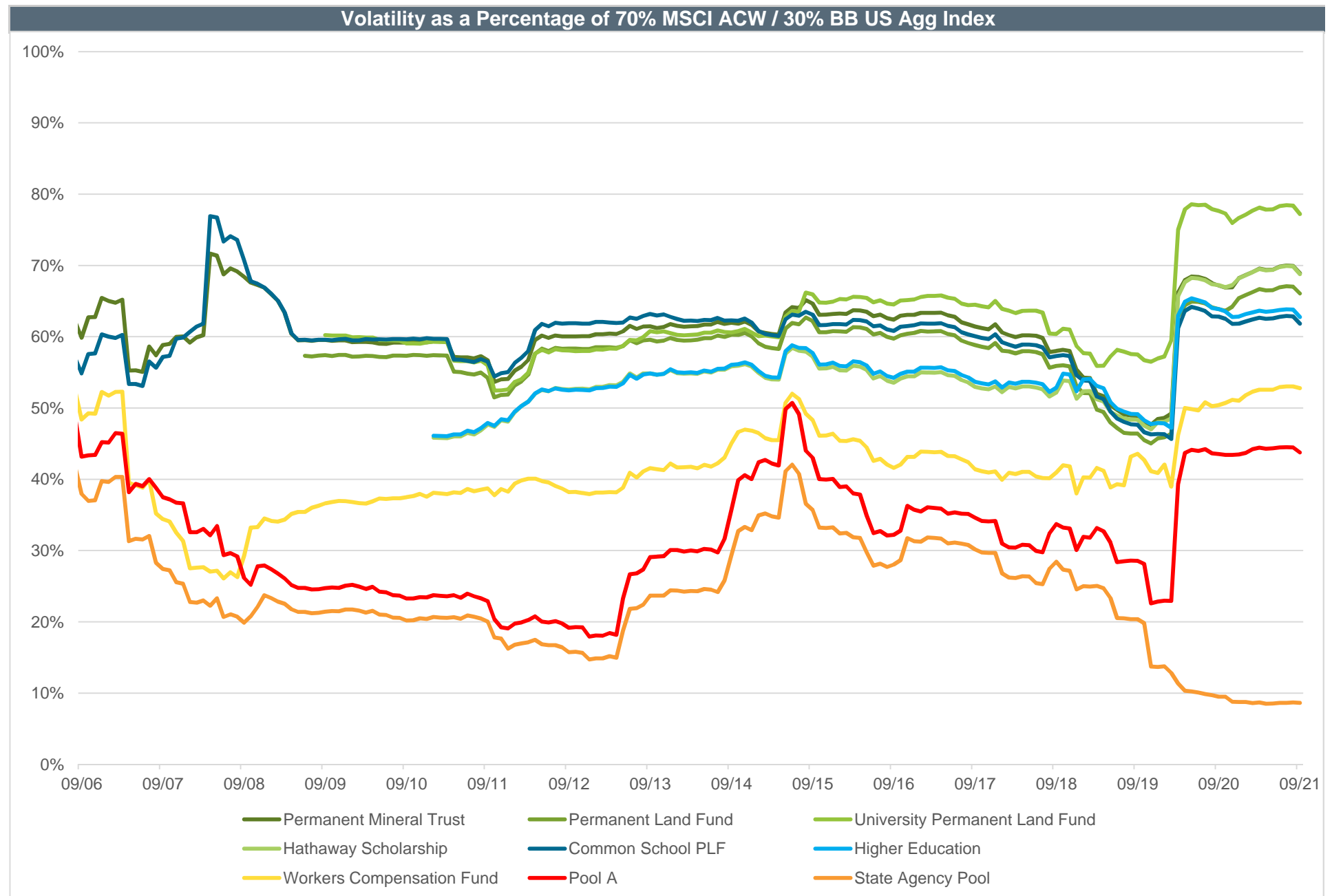
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Permanent Funds	17,720,355,819	71.0	0.6	0.6	8.1	17.0	8.9	7.6	6.5	7.3	6.5	07/01/2002
Permanent Mineral Trust	9,480,343,898	38.0	0.6	0.6	9.7	20.2	9.4	8.1	6.8	7.6	6.5	06/01/2001
PMTF - Total Fund Index			0.5	0.5	9.6	20.0	9.2	7.9	6.7	7.5	6.0	
Difference			0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.5	
Common School Permanent Land Fund	4,587,309,344	18.4	0.6	0.6	7.0	14.5	7.4	6.9	6.0	7.1	6.4	06/01/2001
Common School - Total Fund Index			0.4	0.4	6.5	13.9	6.9	6.5	5.8	6.8	5.6	
Difference			0.2	0.2	0.5	0.6	0.5	0.4	0.2	0.3	0.8	
Permanent Land Fund	244,658,982	1.0	0.7	0.7	9.4	19.7	9.4	7.9	6.7	7.5	6.1	02/01/2006
PLF - Total Fund Index			0.5	0.5	9.6	20.0	9.2	7.8	6.7	7.3	5.7	
Difference			0.2	0.2	-0.2	-0.3	0.2	0.1	0.0	0.2	0.4	
University Permanent Land Fund	28,273,627	0.1	0.9	0.9	9.6	19.8	9.3	8.4	7.1	7.8	6.0	05/01/2006
University PLF - Total Fund Index			0.5	0.5	9.6	20.0	9.1	8.3	7.0	7.6	5.9	
Difference			0.4	0.4	0.0	-0.2	0.2	0.1	0.1	0.2	0.1	
Hathaway Scholarship	683,218,403	2.7	0.7	0.7	9.8	20.0	9.4	7.6	6.5	7.1	6.2	09/01/2007
Hathaway - Total Fund Index			0.5	0.5	9.6	20.0	9.2	7.5	6.5	6.9	5.9	
Difference			0.2	0.2	0.2	0.0	0.2	0.1	0.0	0.2	0.3	
Higher Education	139,664,160	0.6	0.5	0.5	6.9	14.4	7.1	6.3	5.5	6.4	5.7	09/01/2007
Higher Education - Total Fund Index			0.4	0.4	6.5	13.9	7.0	6.1	5.5	6.2	5.4	
Difference			0.1	0.1	0.4	0.5	0.1	0.2	0.0	0.2	0.3	
Workers Compensation Fund	2,556,887,406	10.2	0.2	0.2	3.9	9.8	9.5	7.0	6.0	6.2	6.0	06/01/2001
Workers Comp - Total Fund Index			0.3	0.3	3.3	9.4	9.0	6.6	5.8	5.9	5.6	
Difference			-0.1	-0.1	0.6	0.4	0.5	0.4	0.2	0.3	0.4	
Non-Permanent Funds	7,237,064,749	29.0	0.0	0.0	1.2	2.8	3.4	2.4	2.6	2.6	3.7	07/01/2002
Pool A	267,578,911	1.1	0.5	0.5	5.2	10.7	7.4	4.7	4.4	4.0	4.6	01/01/2000
Pool A - Total Fund Index			0.4	0.4	4.6	9.9	6.9	4.0	4.0	3.6	5.1	
Difference			0.1	0.1	0.6	0.8	0.5	0.7	0.4	0.4	-0.5	
LSRA	1,466,770,475	5.9	0.0	0.0	3.6	8.7	N/A	N/A	N/A	N/A	5.3	07/01/2019
LSRA - Total Fund Index			-0.4	-0.4	3.3	8.5	N/A	N/A	N/A	N/A	5.2	
Difference			0.4	0.4	0.3	0.2	N/A	N/A	N/A	N/A	0.1	
LSRA Long Term Reserve	482,745,629	1.9	-0.2	-0.2	12.6	28.8	N/A	N/A	N/A	N/A	10.9	07/01/2019
LSRA Long Term Reserve - Total Fund Index			-1.1	-1.1	12.2	28.5	N/A	N/A	N/A	N/A	11.2	
Difference			0.9	0.9	0.4	0.3	N/A	N/A	N/A	N/A	-0.3	
LSRA Intermediate Term Reserve	486,244,898	1.9	0.1	0.1	-1.5	-0.8	N/A	N/A	N/A	N/A	4.4	08/01/2019
LSRA Int Term Reserve - Total Fund Index			0.1	0.1	-1.6	-0.9	N/A	N/A	N/A	N/A	3.7	
Difference			0.0	0.0	0.1	0.1	N/A	N/A	N/A	N/A	0.7	
LSRA Short Term Reserve	497,779,949	2.0	0.1	0.1	0.2	0.2	N/A	N/A	N/A	N/A	1.9	01/01/2020
LSRA Short Term Reserve - Total Fund Index			0.1	0.1	0.0	0.0	N/A	N/A	N/A	N/A	1.8	
Difference			0.0	0.0	0.2	0.2	N/A	N/A	N/A	N/A	0.1	
State Agency Pool	5,502,715,363	22.0	0.0	0.0	0.0	0.1	2.6	1.9	2.2	2.4	3.7	06/01/2001
State Agency Pool - Actual Allocation Index			0.0	0.0	0.0	0.1	2.7	1.7	2.2	2.2	3.6	
Difference			0.0	0.0	0.0	0.0	-0.1	0.2	0.0	0.2	0.1	
Total Fund	24,957,420,569	100.0	0.5	0.5	6.4	13.1	7.3	6.2	5.4	5.9	5.7	10/01/1996
Wyoming State Total Fund Index			0.3	0.3	6.2	13.0	7.3	5.9	5.3	5.7	5.6	
Difference			0.2	0.2	0.2	0.1	0.0	0.3	0.1	0.2	0.1	

Performance shown is net of fees and excludes PPIs and operational cash. Wyoming State Treasurer's Office fiscal year ends on June 30th.

Standard Deviation

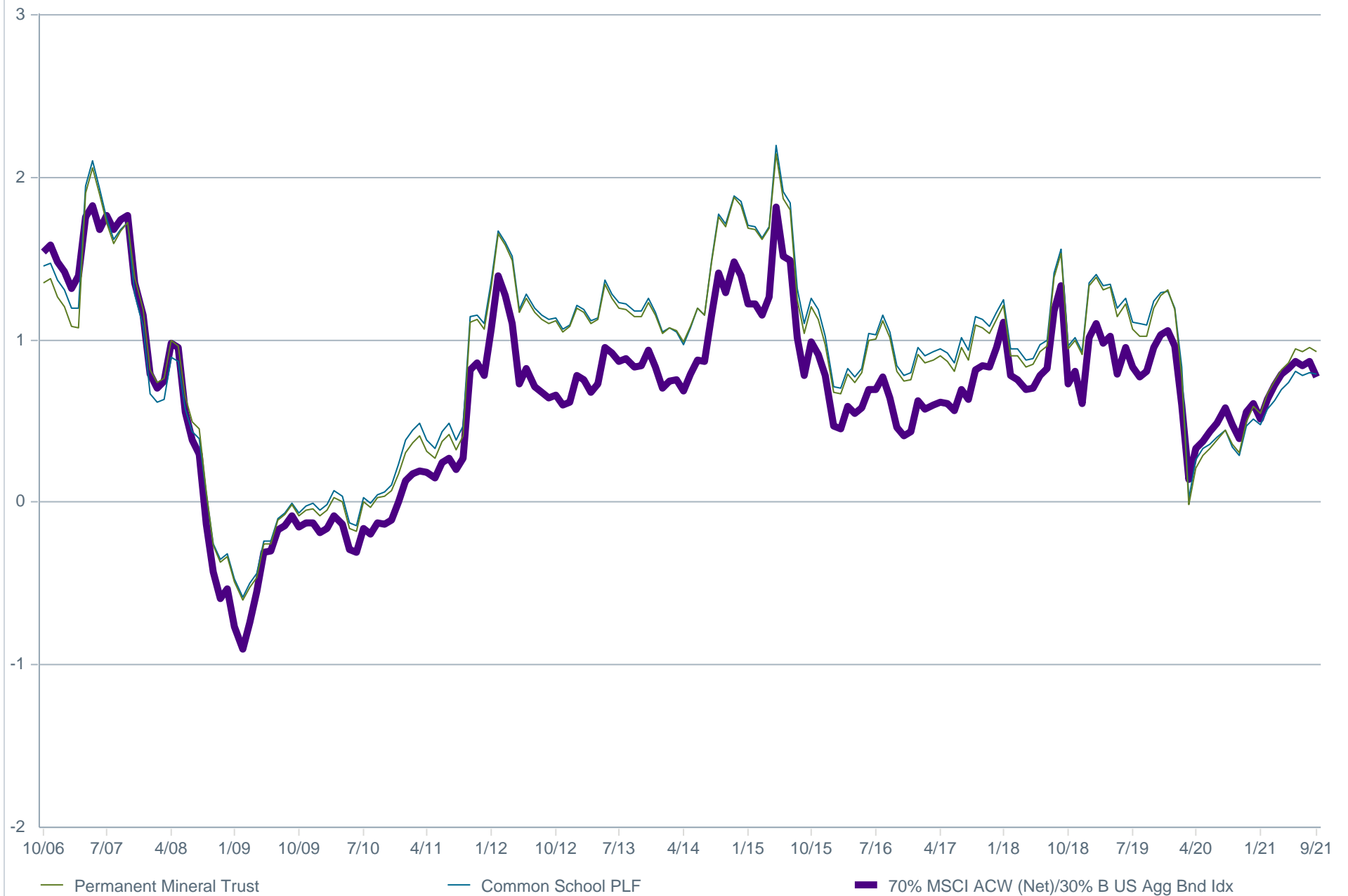


Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Calculation is based on monthly periodicity.



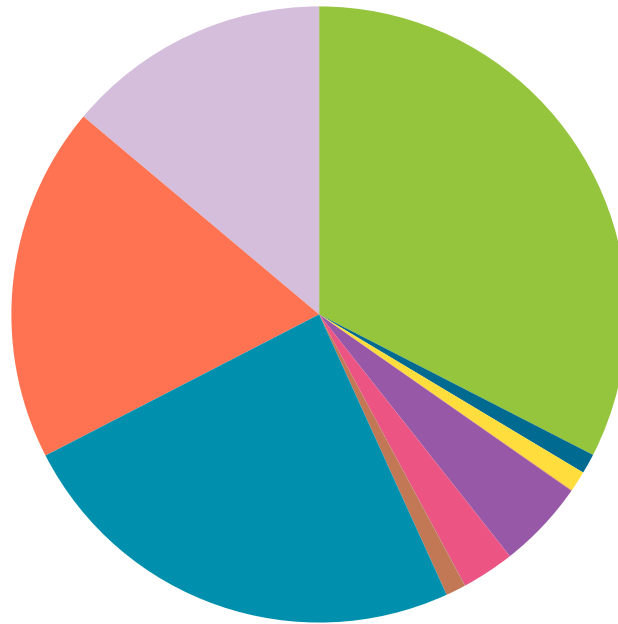
Performance shown is net of fees and excludes PPIs and operational cash. Calculation is based on monthly periodicity.

Sharpe Ratio



Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Calculation is based on monthly periodicity.

September 30, 2021 : \$4,899,118,281



	Market Value (\$)	Allocation (%)
State Street All Cap	1,593,829,472	32.53
Domestic Equity Quantitative	51,326,575	1.05
Domestic Equity Quantamental	52,738,537	1.08
UW Portfolio Mgmt Program	1,877,851	0.04
Van Berkorn	228,611,811	4.67
BlackRock Small Cap	136,178,327	2.78
Small Cap Equity Quantitative	44,662	0.00
Small Cap Equity Quantamental	51,794,865	1.06
Northern Trust	1,186,931,150	24.23
Arrowstreet	915,232,151	18.68
Harding Loevner	680,552,880	13.89

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

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
All Cap US Equity Composite	1,697,894,584	34.66	0.51	0.51	15.76	29.82	15.17	15.50	N/A	N/A	17.54	13.72	11/01/2014
All Cap US Equity Custom Index			0.58	0.58	15.92	30.00	15.50	16.55	13.72	16.45	18.37	13.45	
Difference			-0.07	-0.07	-0.16	-0.18	-0.33	-1.05	N/A	N/A	-0.83	0.27	
State Street All Cap	1,593,829,472	32.53	0.57	0.57	15.88	29.95	15.35	16.06	N/A	N/A	17.54	13.05	01/01/2015
State Street All Cap Custom Index			0.58	0.58	15.92	30.00	15.25	16.03	13.40	16.22	17.65	13.05	
Difference			-0.01	-0.01	-0.04	-0.05	0.10	0.03	N/A	N/A	-0.11	0.00	
Domestic Equity Quantamental	52,738,537	1.08	-0.98	-0.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.35	04/01/2021
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	9.18	
Difference			-1.56	-1.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17	
Domestic Equity Quantitative	51,326,575	1.05	0.24	0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.80	06/01/2021
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	2.93	
Difference			-0.34	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.13	
UW Portfolio Mgmt Program	1,877,851	0.04	0.95	0.95	12.88	26.79	10.98	13.42	11.48	12.32	14.73	6.73	04/01/2006
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	10.30	
Difference			0.37	0.37	-3.04	-3.21	-5.01	-3.48	-2.53	-4.31	-3.67	-3.57	
Small Cap US Equity Composite	416,629,665	8.50	-2.15	-2.15	12.98	46.23	8.97	10.11	N/A	N/A	14.53	8.41	11/01/2014
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	11.02	
Difference			2.21	2.21	0.57	-1.45	-1.57	-3.34	N/A	N/A	-5.43	-2.61	
Van Berkomp	228,611,811	4.67	-0.53	-0.53	10.34	40.59	N/A	N/A	N/A	N/A	N/A	21.55	03/01/2020
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	30.34	
Difference			3.83	3.83	-2.07	-7.09	N/A	N/A	N/A	N/A	N/A	-8.79	
BlackRock Small Cap	136,178,327	2.78	-4.46	-4.46	12.57	47.97	N/A	N/A	N/A	N/A	N/A	42.94	08/01/2020
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	42.19	
Difference			-0.10	-0.10	0.16	0.29	N/A	N/A	N/A	N/A	N/A	0.75	
Small Cap Equity Quantamental	51,794,865	1.06	-2.24	-2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.63	06/01/2021
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	-2.51	
Difference			2.12	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.14	

Performance shown is net of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter. SSGA Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										Inception Date
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	
Small Cap Equity Quantitative	44,662	0.00											
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	0.75	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Performance shown is net of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter. SSGA Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Int'l Equity Composite	2,782,716,181	56.80	-2.07	-2.07	7.64	27.93	10.89	10.64	7.07	8.57	16.88	6.65	01/01/2004
International Equity Custom Index			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	5.86	
Difference			0.92	0.92	1.74	4.01	2.86	1.70	1.39	1.09	6.23	0.79	
Northern Trust	1,186,931,150	24.23	-3.12	-3.12	5.75	23.68	8.06	9.04	5.76	7.61	10.66	6.32	08/01/2010
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	6.22	
Difference			-0.13	-0.13	-0.15	-0.24	0.03	0.10	0.08	0.13	0.01	0.10	
Arrowstreet	915,232,151	18.68	-0.03	-0.03	13.84	40.18	14.19	N/A	N/A	N/A	22.78	10.64	03/01/2018
MSCI ACW Ex US IM Index (USD) (Net)			-2.56	-2.56	6.77	25.16	8.34	9.13	6.02	7.74	11.12	5.77	
Difference			2.53	2.53	7.07	15.02	5.85	N/A	N/A	N/A	11.66	4.87	
Harding Loevner	680,552,880	13.89	-2.76	-2.76	2.83	19.95	N/A	N/A	N/A	N/A	20.31	12.93	01/01/2020
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	9.48	
Difference			0.23	0.23	-3.07	-3.97	N/A	N/A	N/A	N/A	9.66	3.45	

Performance shown is net of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter. SSGA Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
All Cap US Equity Composite	1,697,894,584	34.66	0.52	0.52	15.80	29.87	15.23	15.60	N/A	N/A	17.58	13.85	11/01/2014
All Cap US Equity Custom Index			0.58	0.58	15.92	30.00	15.50	16.55	13.72	16.45	18.37	13.45	
Difference			-0.06	-0.06	-0.12	-0.13	-0.27	-0.95	N/A	N/A	-0.79	0.40	
State Street All Cap	1,593,829,472	32.53	0.58	0.58	15.91	30.00	15.39	16.11	N/A	N/A	17.58	13.09	01/01/2015
State Street All Cap Custom Index			0.58	0.58	15.92	30.00	15.25	16.03	13.40	16.22	17.65	13.05	
Difference			0.00	0.00	-0.01	0.00	0.14	0.08	N/A	N/A	-0.07	0.04	
IM U.S. All Cap Equity (SA+CF) Median			-0.20	-0.20	15.91	34.31	15.08	15.96	12.81	16.13	16.18	12.78	
State Street All Cap Rank			29	29	50	65	48	50	N/A	N/A	48	47	
Domestic Equity Quantamental	52,738,537	1.08	-0.98	-0.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.35	04/01/2021
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	9.18	
Difference			-1.56	-1.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17	
IM U.S. All Cap Equity (SA+CF) Median			-0.20	-0.20	15.91	34.31	15.08	15.96	12.81	16.13	16.18	6.54	
Domestic Equity Quantamental Rank			68	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27	
Domestic Equity Quantitative	51,326,575	1.05	0.24	0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.80	06/01/2021
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	2.93	
Difference			-0.34	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.13	
IM U.S. All Cap Equity (SA+CF) Median			-0.20	-0.20	15.91	34.31	15.08	15.96	12.81	16.13	16.18	0.73	
Domestic Equity Quantitative Rank			37	37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	41	
UW Portfolio Mgmt Program	1,877,851	0.04	0.95	0.95	12.88	26.79	10.98	13.42	11.48	12.32	14.73	6.73	04/01/2006
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	10.30	
Difference			0.37	0.37	-3.04	-3.21	-5.01	-3.48	-2.53	-4.31	-3.67	-3.57	
IM U.S. Large Cap Core Equity (SA+CF) Median			0.11	0.11	15.91	30.58	15.16	16.54	13.63	16.54	17.19	10.41	
UW Portfolio Mgmt Program Rank			17	17	82	76	87	82	82	91	59	99	

Performance shown is gross of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter. SSGA Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Small Cap US Equity Composite	416,629,665	8.50	-2.01	-2.01	13.47	47.08	9.35	10.59	N/A	N/A	14.96	8.94	11/01/2014
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	11.02	
Difference			2.35	2.35	1.06	-0.60	-1.19	-2.86	N/A	N/A	-5.00	-2.08	
Van Berkomp	228,611,811	4.67	-0.34	-0.34	11.04	41.75	N/A	N/A	N/A	N/A	N/A	22.51	03/01/2020
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	30.34	
Difference			4.02	4.02	-1.37	-5.93	N/A	N/A	N/A	N/A	N/A	-7.83	
IM U.S. Small Cap Core Equity (SA+CF) Median			-1.36	-1.36	18.29	51.69	11.85	14.87	13.18	16.11	17.85	32.18	
Van Berkomp Rank			37	37	88	84	N/A	N/A	N/A	N/A	N/A	96	
BlackRock Small Cap	136,178,327	2.78	-4.35	-4.35	12.93	48.62	N/A	N/A	N/A	N/A	N/A	43.58	08/01/2020
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	42.19	
Difference			0.01	0.01	0.52	0.94	N/A	N/A	N/A	N/A	N/A	1.39	
IM U.S. Small Cap Core Equity (SA+CF) Median			-1.36	-1.36	18.29	51.69	11.85	14.87	13.18	16.11	17.85	42.82	
BlackRock Small Cap Rank			93	93	83	63	N/A	N/A	N/A	N/A	N/A	45	
Small Cap Equity Quantamental	51,794,865	1.06	-2.24	-2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.64	06/01/2021
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	-2.51	
Difference			2.12	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.15	
IM U.S. Small Cap Core Equity (SA+CF) Median			-1.36	-1.36	18.29	51.69	11.85	14.87	13.18	16.11	17.85	-0.97	
Small Cap Equity Quantamental Rank			69	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32	
Small Cap Equity Quantitative	44,662	0.00											
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	0.75	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Small Cap Core Equity (SA+CF) Median			-1.36	-1.36	18.29	51.69	11.85	14.87	13.18	16.11	17.85	6.44	
Small Cap Equity Quantitative Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Int'l Equity Composite	2,782,716,181	56.80	-2.01	-2.01	7.84	28.25	11.13	10.87	7.31	8.83	17.18	6.85	01/01/2004
International Equity Custom Index			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	5.86	
Difference			0.98	0.98	1.94	4.33	3.10	1.93	1.63	1.35	6.53	0.99	
Northern Trust	1,186,931,150	24.23	-3.12	-3.12	5.77	23.72	8.09	9.08	5.80	7.65	10.69	6.36	08/01/2010
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	6.22	
Difference			-0.13	-0.13	-0.13	-0.20	0.06	0.14	0.12	0.17	0.04	0.14	
Arrowstreet	915,232,151	18.68	0.07	0.07	14.18	40.74	14.67	N/A	N/A	N/A	23.28	11.11	03/01/2018
MSCI ACW Ex US IM Index (USD) (Net)			-2.56	-2.56	6.77	25.16	8.34	9.13	6.02	7.74	11.12	5.77	
Difference			2.63	2.63	7.41	15.58	6.33	N/A	N/A	N/A	12.16	5.34	
IM All ACWI Ex US (SA+CF) Median			-1.87	-1.87	7.12	25.30	10.27	10.68	7.37	9.71	14.71	7.70	
Arrowstreet Rank			19	19	2	3	18	N/A	N/A	N/A	22	22	
Harding Loevner	680,552,880	13.89	-2.65	-2.65	3.15	20.45	N/A	N/A	N/A	N/A	20.86	13.43	01/01/2020
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	9.48	
Difference			0.34	0.34	-2.75	-3.47	N/A	N/A	N/A	N/A	10.21	3.95	
IM All ACWI Ex US (SA+CF) Median			-1.87	-1.87	7.12	25.30	10.27	10.68	7.37	9.71	14.71	12.59	
Harding Loevner Rank			70	70	88	81	N/A	N/A	N/A	N/A	32	46	

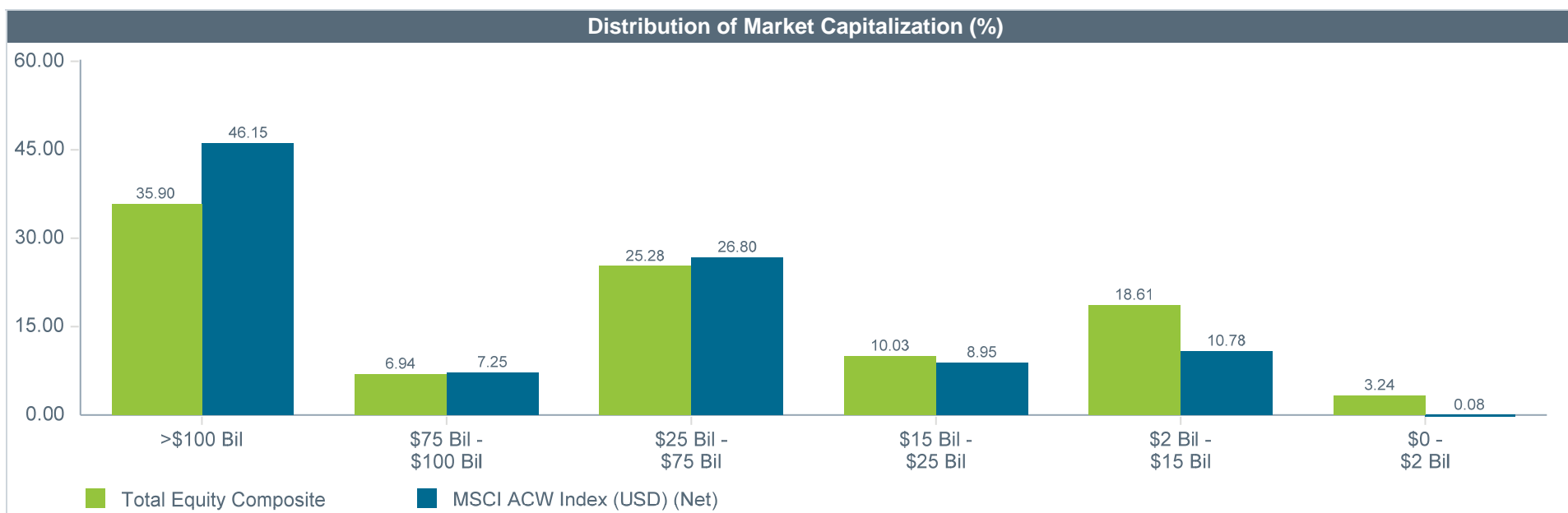
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Wyoming State Treasurer's Office
Total Equity Composite vs. MSCI ACW Index (USD) (Net)
Portfolio Characteristics

As of September 30, 2021

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	2.05	3.07	-1.02	4.27
Apple Inc	2.01	3.59	-1.58	3.47
Amazon.com Inc	1.29	2.27	-0.98	-4.51
Taiwan Semiconductor Mfg (ADR)	1.11	0.78	0.33	-6.70
ASML Holding NV	1.00	0.48	0.52	8.97
Roche Holding AG	0.94	0.39	0.55	-2.80
Tencent Holdings LTD	0.89	0.52	0.37	-21.19
Meta Platforms Inc	0.80	1.24	-0.44	-2.39
Alphabet Inc	0.77	1.22	-0.45	9.49
Alphabet Inc	0.75	1.18	-0.43	6.34
% of Portfolio	11.61	14.74	-3.13	

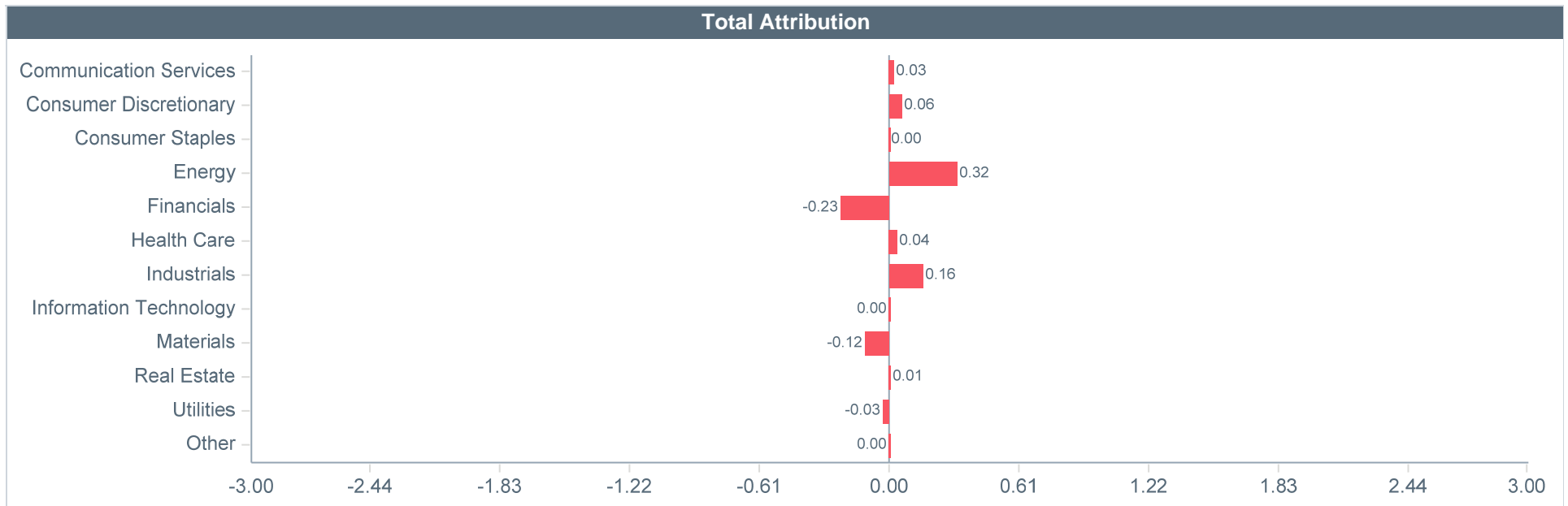
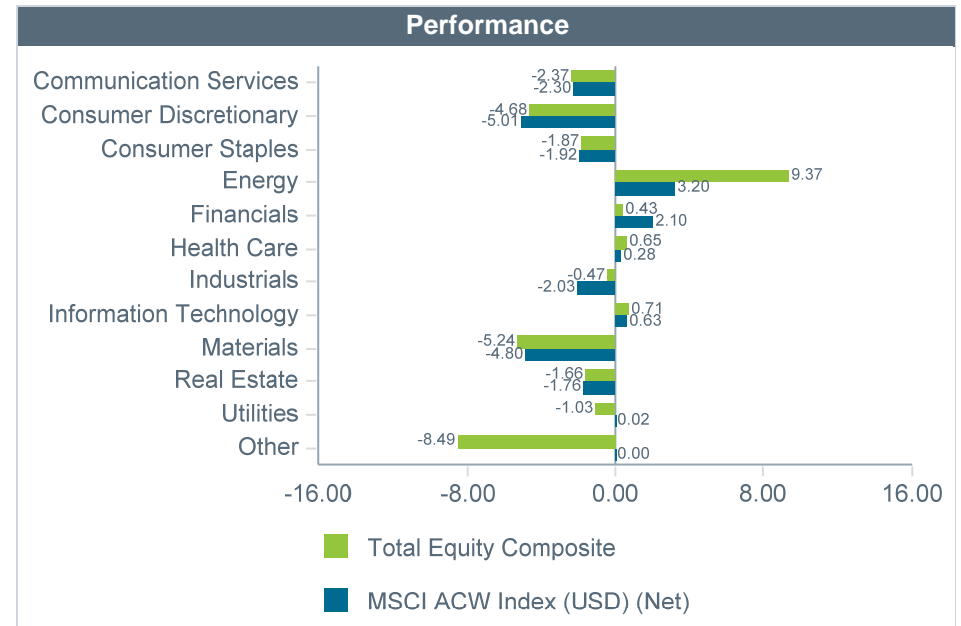
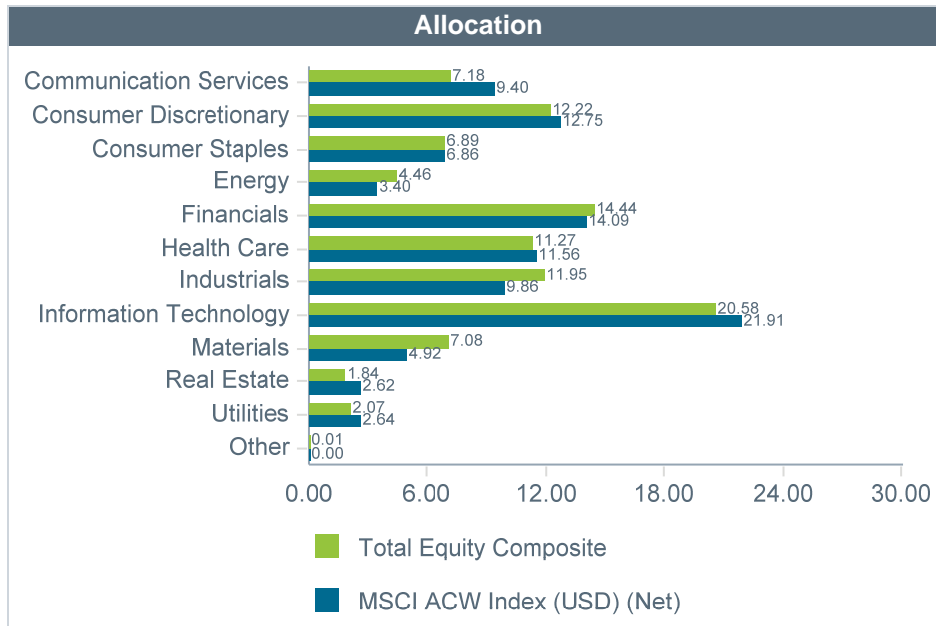
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	244,768	349,156
Median Mkt. Cap (\$M)	2,483	13,570
Price/Earnings Ratio	18.11	19.83
Price/Book Ratio	3.32	3.67
5 Yr. EPS Growth Rate (%)	17.21	17.71
Current Yield (%)	2.15	1.88
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	8,474	2,971



A stock with multiple share classes may be shown twice in the Top Ten Equity Holdings.

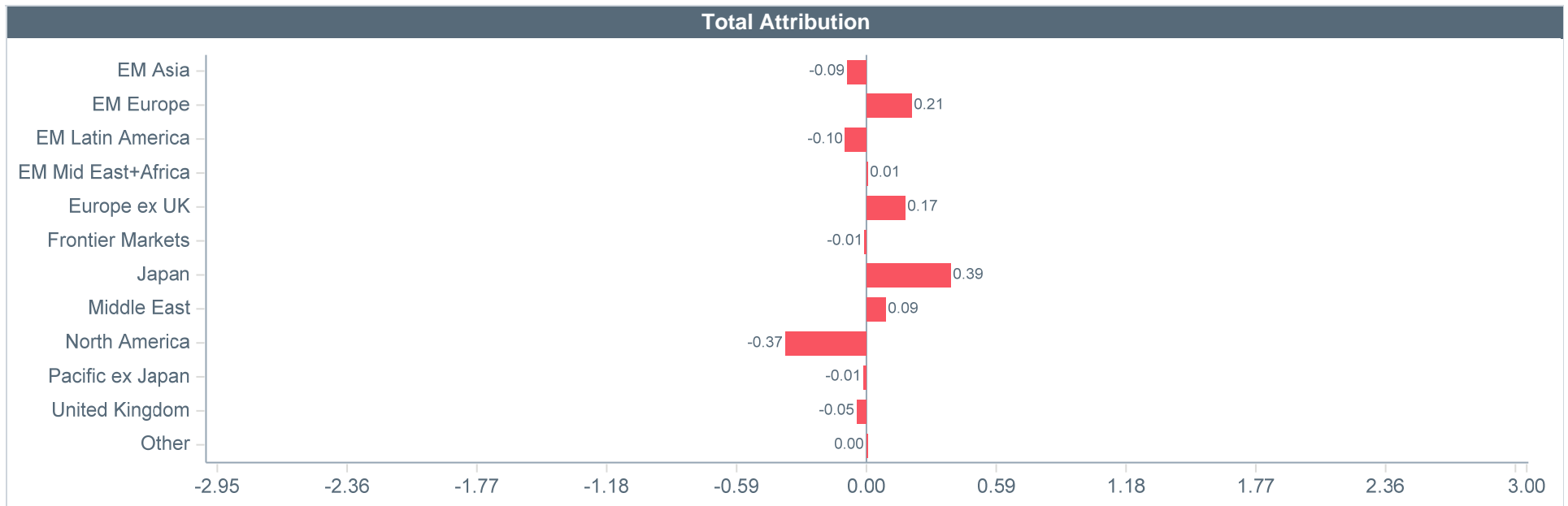
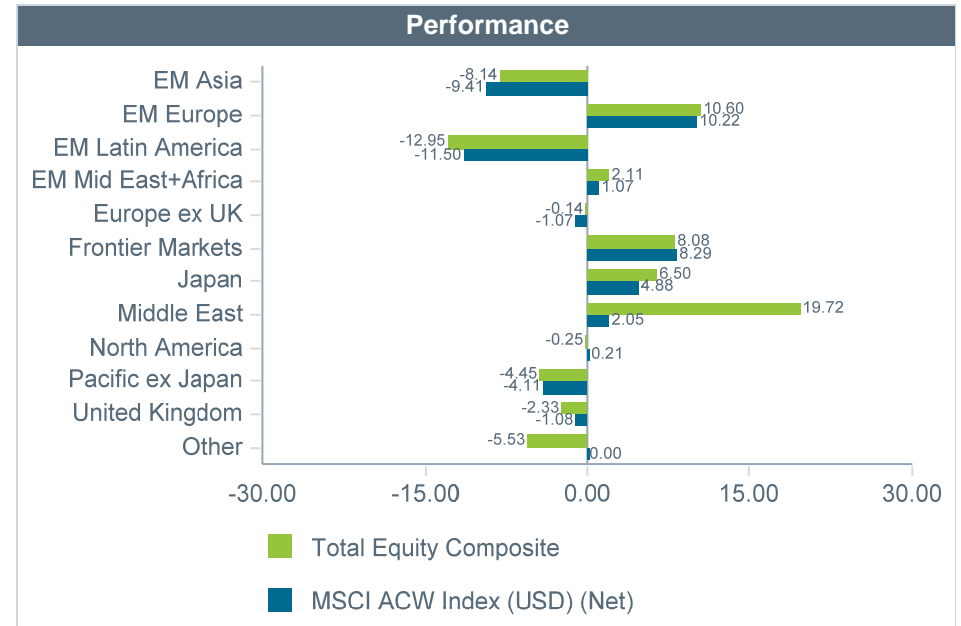
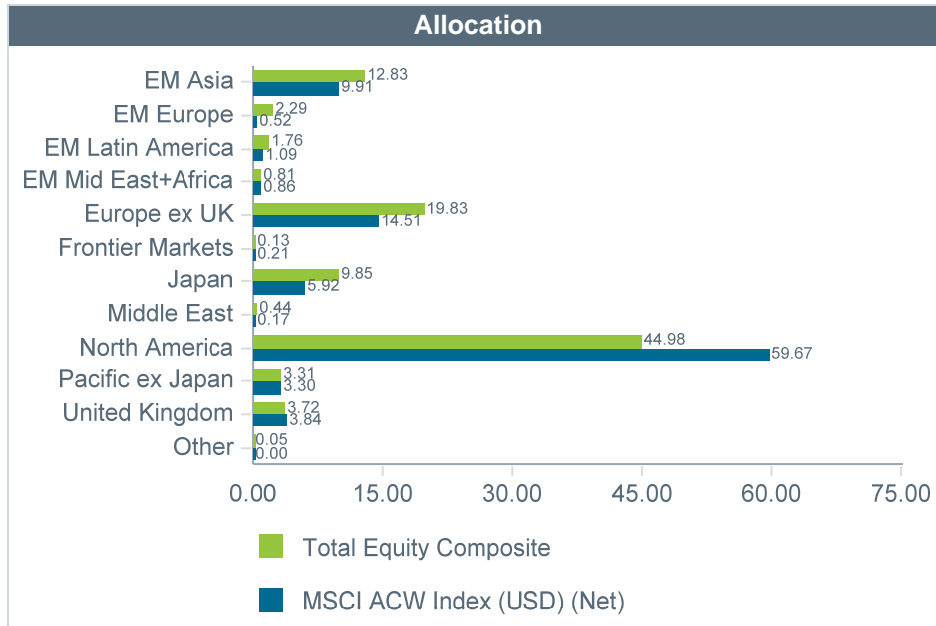
Wyoming State Treasurer's Office
Total Equity Composite vs. MSCI ACW Index (USD) (Net)
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2021



Wyoming State Treasurer's Office
Total Equity Composite vs. MSCI ACW Index (USD) (Net)
Buy and Hold Region Attribution Graph

1 Quarter Ending September 30, 2021

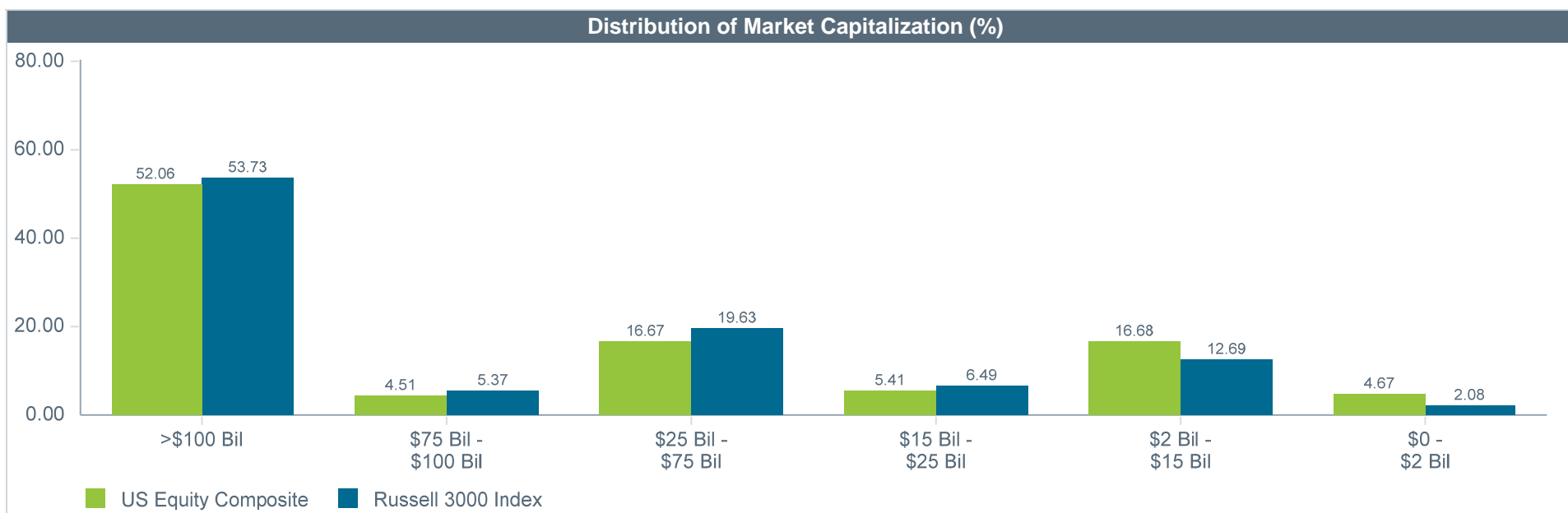


Wyoming State Treasurer's Office
US Equity Composite vs. Russell 3000 Index
Portfolio Characteristics

As of September 30, 2021

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	4.77	4.83	-0.06	4.27
Apple Inc	4.68	5.05	-0.37	3.47
Amazon.com Inc	3.01	3.24	-0.23	-4.51
Meta Platforms Inc	1.86	1.85	0.01	-2.39
Alphabet Inc	1.79	1.83	-0.04	9.49
Alphabet Inc	1.74	1.70	0.04	6.34
Tesla Inc	1.38	1.40	-0.02	14.09
NVIDIA Corporation	1.14	1.13	0.01	3.59
JPMorgan Chase & Co	1.08	1.10	-0.02	5.85
Berkshire Hathaway Inc	1.07	1.15	-0.08	-1.79
% of Portfolio	22.52	23.28	-0.76	

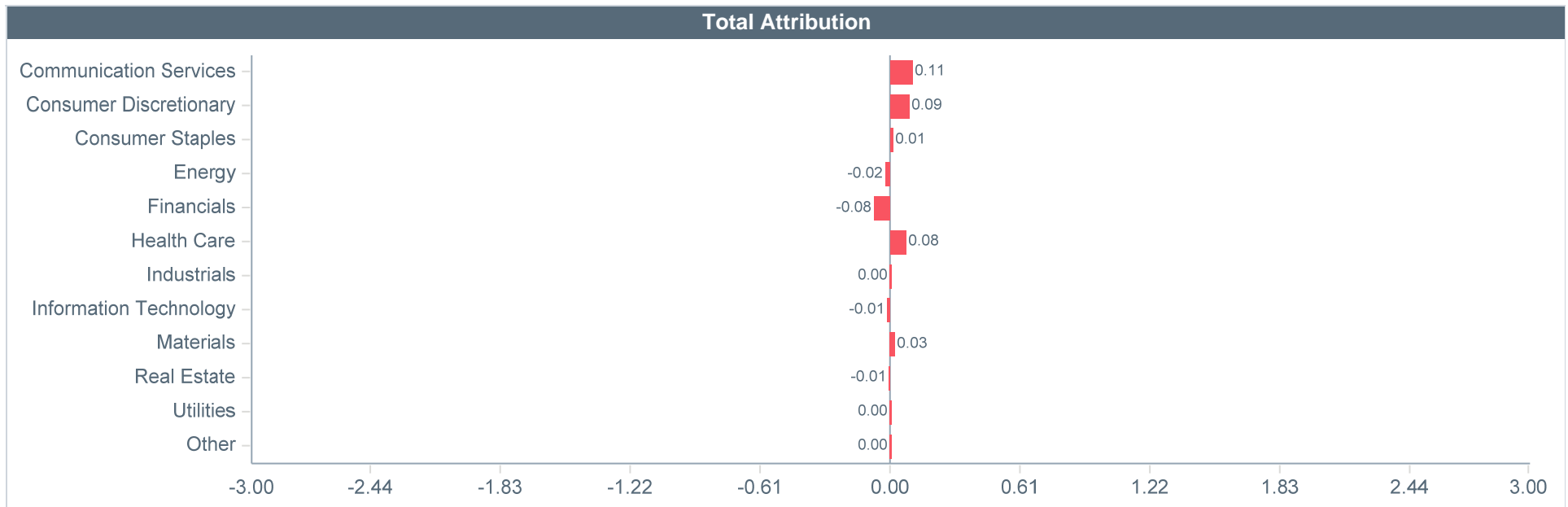
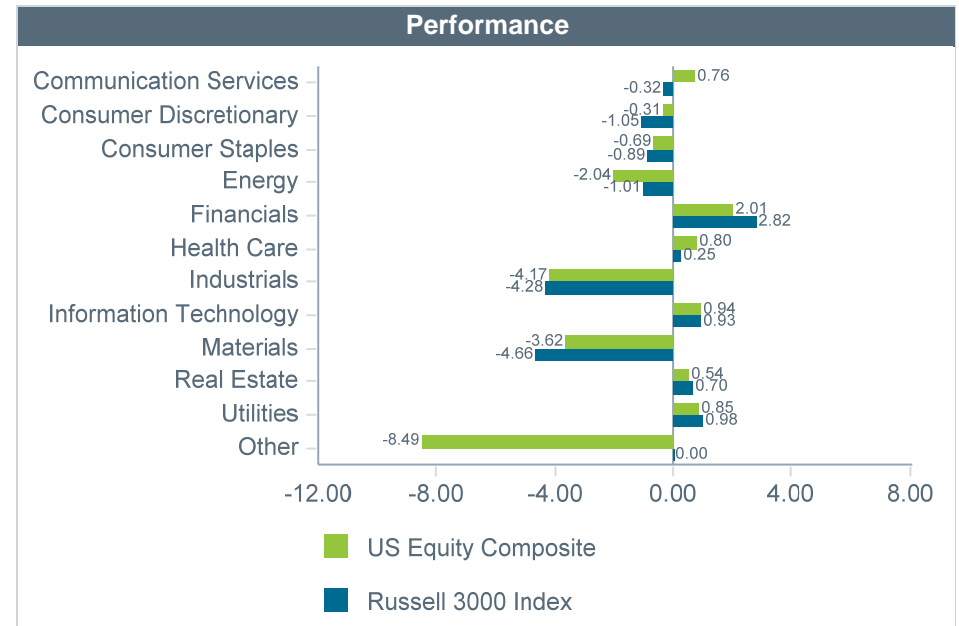
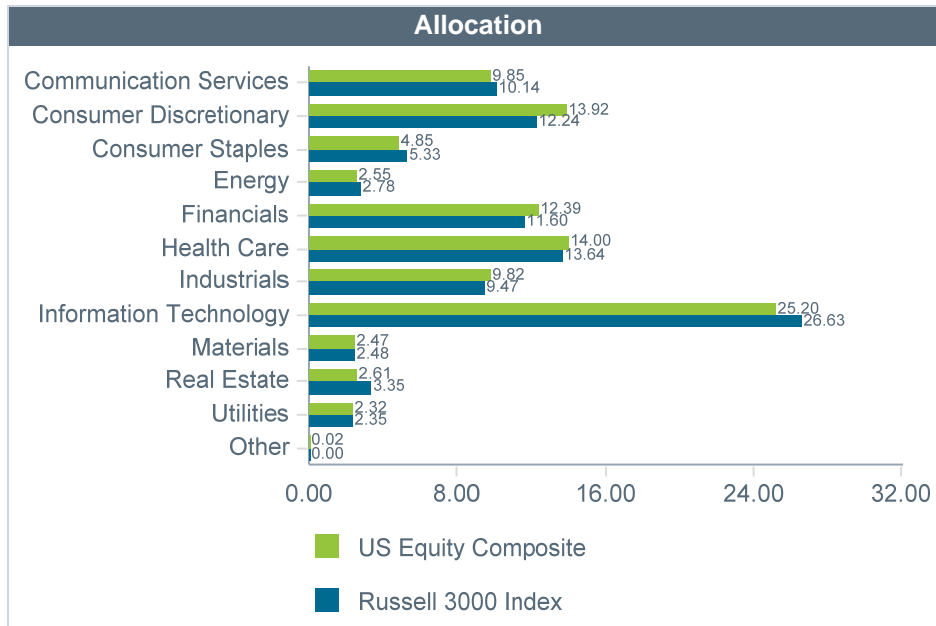
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	443,063	461,435
Median Mkt. Cap (\$M)	2,083	2,481
Price/Earnings Ratio	23.15	23.75
Price/Book Ratio	4.10	4.30
5 Yr. EPS Growth Rate (%)	19.71	20.13
Current Yield (%)	1.28	1.33
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	3,133	3,052



A stock with multiple share classes may be shown twice in the Top Ten Equity Holdings.

Wyoming State Treasurer's Office
US Equity Composite vs. Russell 3000 Index
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2021

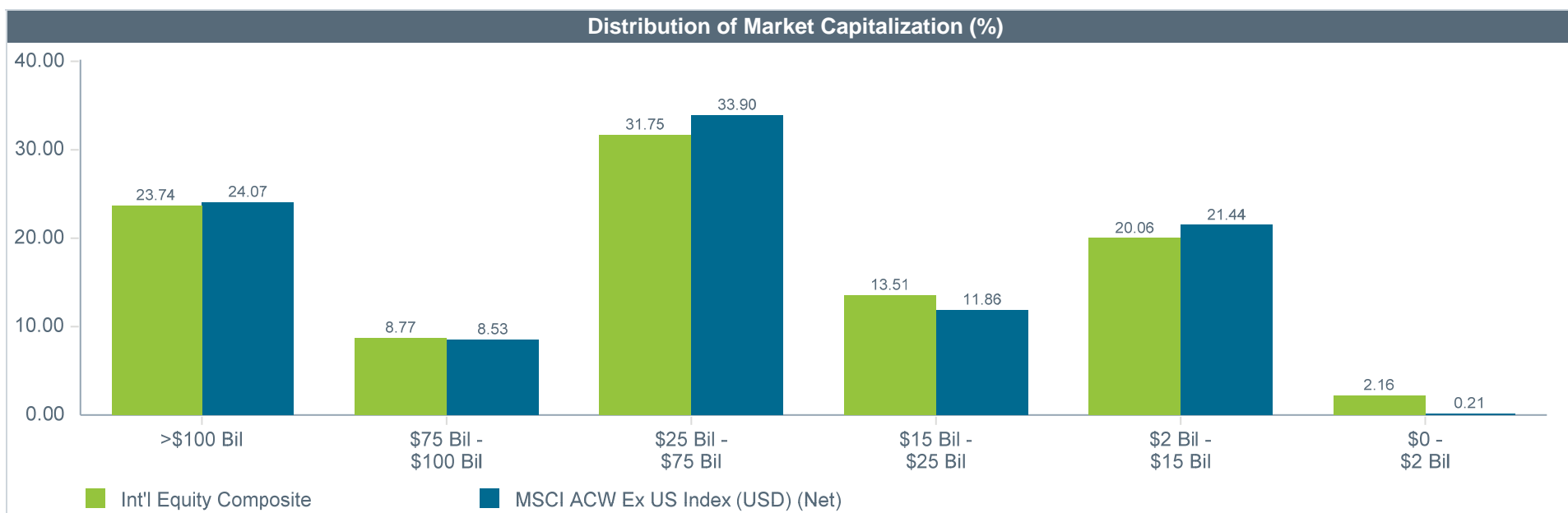


Wyoming State Treasurer's Office
Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net)
Portfolio Characteristics

As of September 30, 2021

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Taiwan Semiconductor Mfg (ADR)	1.95	1.93	0.02	-6.70
ASML Holding NV	1.74	1.18	0.56	8.97
Roche Holding AG	1.65	0.97	0.68	-2.80
Tencent Holdings LTD	1.56	1.28	0.28	-21.19
Samsung Electronics Co Ltd	1.30	1.13	0.17	-11.74
Royal Dutch Shell PLC	1.06	0.31	0.75	16.65
Adyen N.V	0.99	0.21	0.78	14.57
L'Oreal S.A., Paris	0.97	0.39	0.58	-7.18
Atlas Copco AB	0.94	0.15	0.79	-0.68
Infineon Technologies AG	0.86	0.20	0.66	2.68
% of Portfolio	13.02	7.75	5.27	

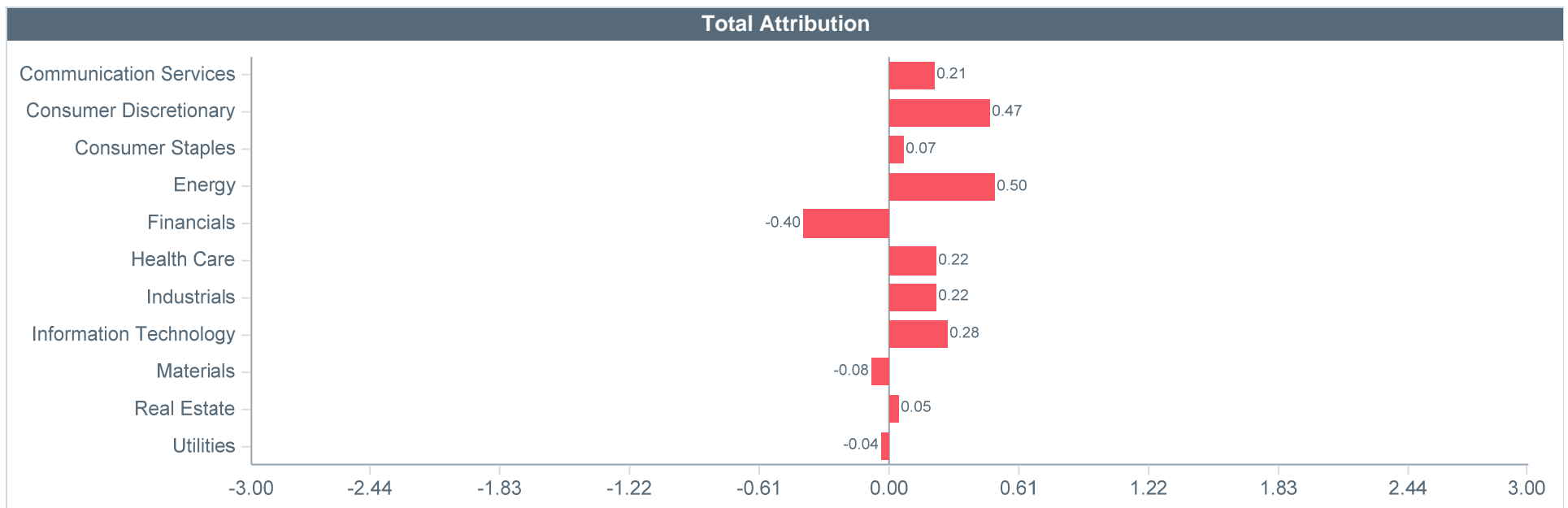
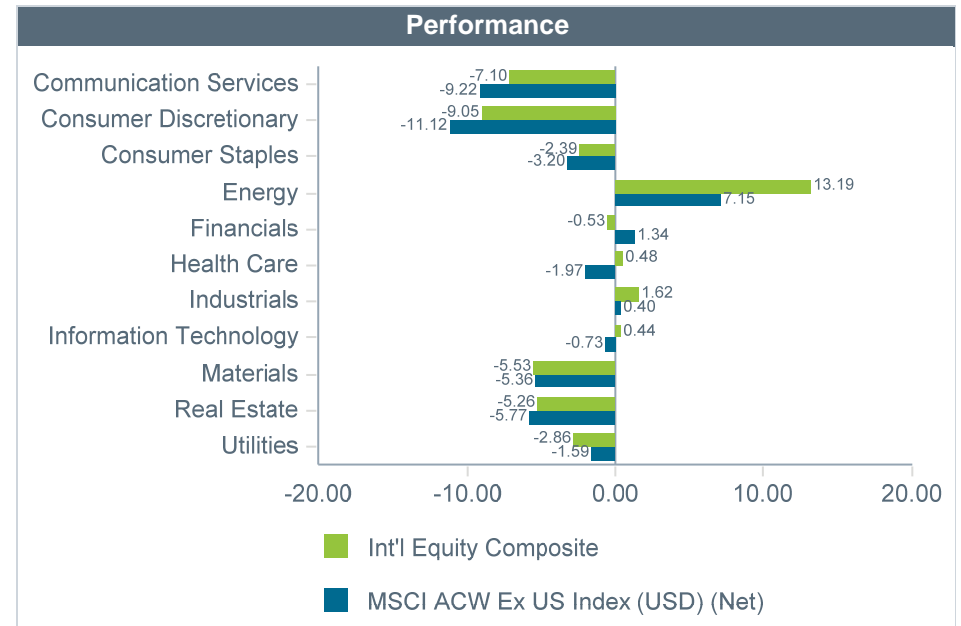
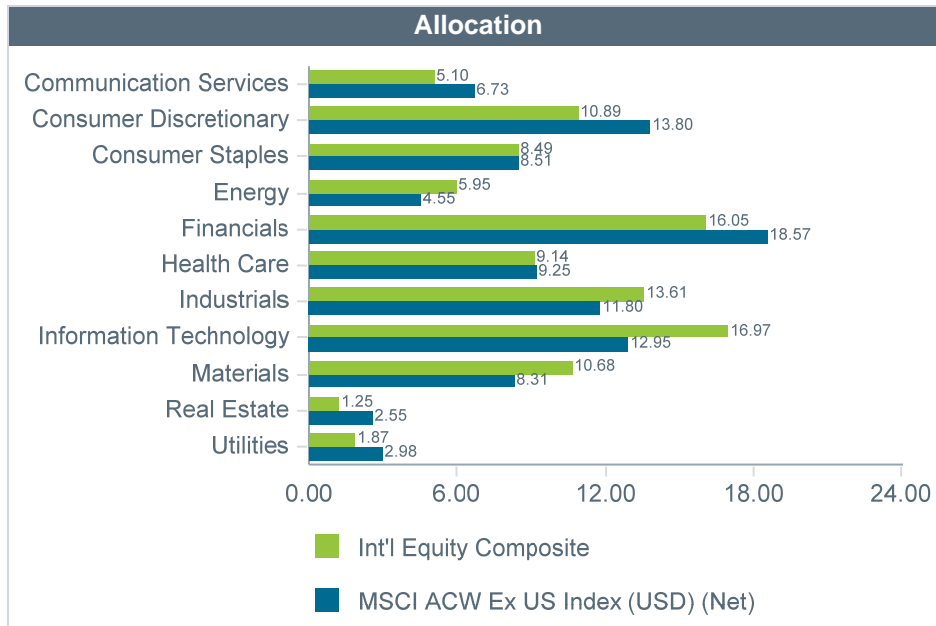
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	95,608	91,439
Median Mkt. Cap (\$M)	2,826	10,100
Price/Earnings Ratio	15.35	15.06
Price/Book Ratio	2.80	2.69
5 Yr. EPS Growth Rate (%)	15.10	13.36
Current Yield (%)	2.80	2.64
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	5,397	2,348



The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).

Wyoming State Treasurer's Office
 Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net)
 Buy and Hold Sector Attribution Graph

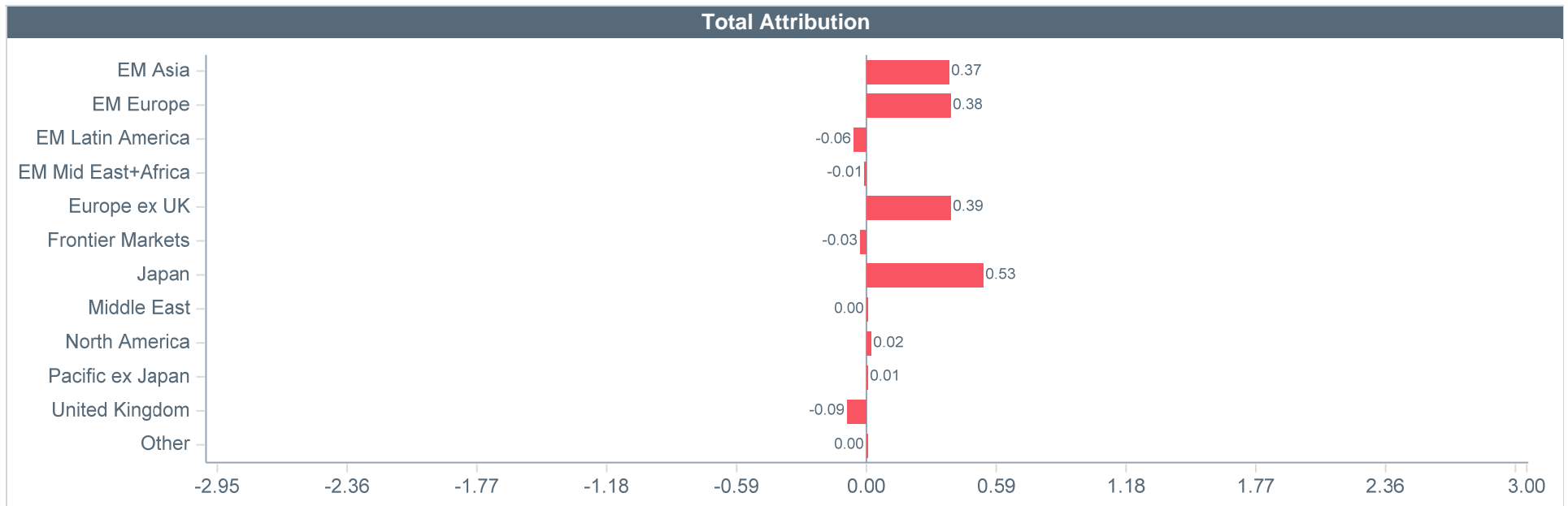
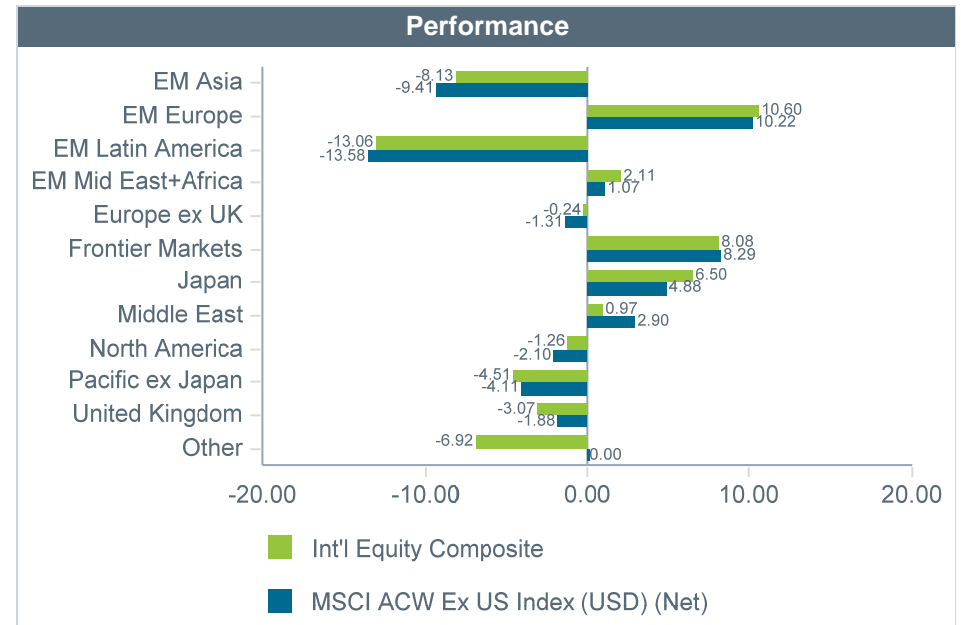
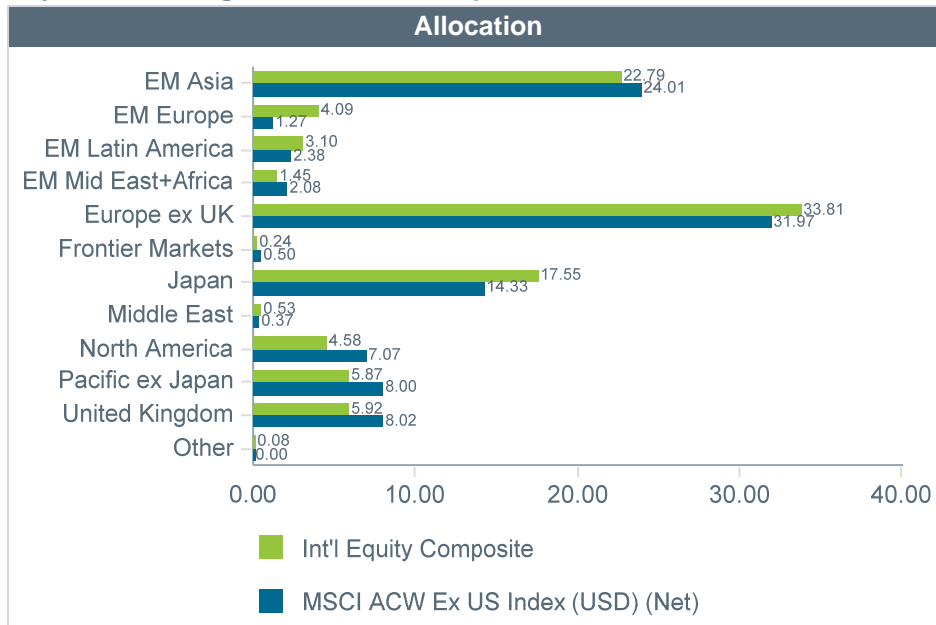
1 Quarter Ending September 30, 2021



The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).

Wyoming State Treasurer's Office
 Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net)
 Buy and Hold Region Attribution Graph

1 Quarter Ending September 30, 2021



The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).

September 30, 2021 : \$1,288,555,721



	Market Value (\$)	Allocation (%)
Cohen & Steers Preferred Stock	203,087,110	15.76
Harvest Fund Advisors	546,795,792	42.43
Harvest Fund Advisors Passive	538,672,819	41.80

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

Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Cohen & Steers Preferred Stock	1.18	1.18	4.34	10.38	8.96	N/A	N/A	N/A	7.68	8.76	07/01/2018
Preferred Stock Custom Index	0.60	0.60	6.01	13.36	8.31	6.25	6.41	7.61	7.97	7.71	
Difference	0.58	0.58	-1.67	-2.98	0.65	N/A	N/A	N/A	-0.29	1.05	
MLP Composite	-1.91	-1.91	39.55	73.50	-1.86	N/A	N/A	N/A	-24.38	-1.99	08/01/2018
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	-2.68	
Difference	1.59	1.59	0.37	-2.16	1.04	N/A	N/A	N/A	1.22	0.69	
Harvest Fund Advisors	-0.42	-0.42	39.40	70.96	-1.90	N/A	N/A	N/A	-24.38	-2.03	08/01/2018
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	-2.68	
Difference	3.08	3.08	0.22	-4.70	1.00	N/A	N/A	N/A	1.22	0.65	
Harvest Fund Advisors Passive	-3.36	-3.36	39.62	76.10	N/A	N/A	N/A	N/A	N/A	5.39	02/01/2020
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	4.85	
Difference	0.14	0.14	0.44	0.44	N/A	N/A	N/A	N/A	N/A	0.54	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends June 30th. Since Inception date shown represents the first full month following initial funding. The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter. The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

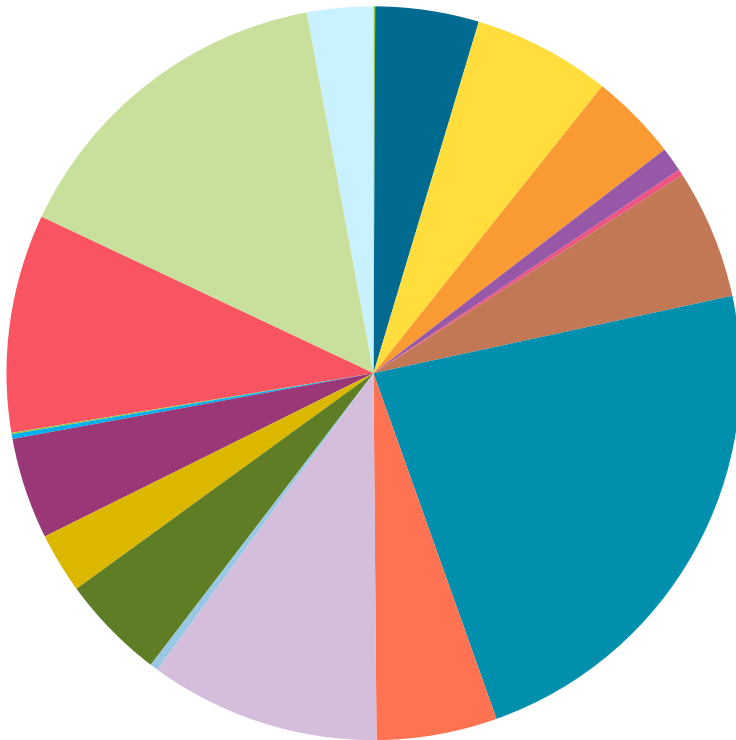
Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Cohen & Steers Preferred Stock	1.26	1.26	4.57	10.71	9.29	N/A	N/A	N/A	8.01	9.09	07/01/2018
Preferred Stock Custom Index	0.60	0.60	6.01	13.36	8.31	6.25	6.41	7.61	7.97	7.71	
Difference	0.66	0.66	-1.44	-2.65	0.98	N/A	N/A	N/A	0.04	1.38	
MLP Composite	-1.83	-1.83	39.86	74.02	-1.43	N/A	N/A	N/A	-24.16	-1.55	08/01/2018
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	-2.68	
Difference	1.67	1.67	0.68	-1.64	1.47	N/A	N/A	N/A	1.44	1.13	
Harvest Fund Advisors	-0.26	-0.26	40.03	71.97	-1.30	N/A	N/A	N/A	-23.94	-1.43	08/01/2018
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	-2.68	
Difference	3.24	3.24	0.85	-3.69	1.60	N/A	N/A	N/A	1.66	1.25	
Harvest Fund Advisors Passive	-3.36	-3.36	39.62	76.11	N/A	N/A	N/A	N/A	N/A	5.40	02/01/2020
MLP Custom Index	-3.50	-3.50	39.18	75.66	-2.90	-0.82	-6.03	2.29	-25.60	4.85	
Difference	0.14	0.14	0.44	0.45	N/A	N/A	N/A	N/A	N/A	0.55	

Performance shown is gross of fees. Wyoming State Treasurer's Office fiscal year ends June 30th. Since Inception date shown represents the first full month following initial funding. The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter. The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

September 30, 2021 : \$4,234,624,874



	Market Value (\$)	Allocation (%)
Access Venture Partners II	3,008,425	0.07
Cheyenne Equity Capital Fund, L.P.	193,021,510	4.56
BlackRock Long Term Private Capital	257,102,601	6.07
Hamilton Lane Nowood Fund, L.P.	163,857,644	3.87
Valor Equity Partners V LP	45,904,330	1.08
GTCR Fund XIII	10,634,110	0.25
Nautic Partners X	28,451	0.00
Neuberger Berman Sauger Fund, L.P.	241,846,325	5.71
Clarion Lion	971,539,317	22.94
UBS Trumbull	224,788,461	5.31
MS Prime	430,148,380	10.16
M&G	15,245,957	0.36
Northwood	195,666,061	4.62
SC Capital	112,480,266	2.66
Realterm	189,162,641	4.47
WestRiver	8,533,587	0.20
PAAMCO - Jackalope Fund	2,805,749	0.07
Grosvenor Diversified Hedge Funds	406,979,177	9.61
Internal Diversified Hedge Funds	638,100,880	15.07
Grosvenor Silvery Lupine Fund Class D	123,771,001	2.92

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

Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Real Estate Composite	5.91	5.91	12.85	14.18	5.81	6.32	7.85	8.56	0.51	5.83	01/01/2006
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	5.98	
Difference	-0.50	-0.50	0.44	0.54	-0.32	-0.24	-0.08	-0.36	0.17	-0.15	
Clarion Lion	5.94	5.94	13.99	16.13	7.96	8.10	9.50	9.92	1.67	5.92	01/01/2006
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	5.98	
Difference	-0.47	-0.47	1.58	2.49	1.83	1.54	1.57	1.00	1.33	-0.06	
UBS Trumbull	6.02	6.02	10.05	7.77	1.14	2.91	4.83	6.17	-4.74	4.69	07/01/2006
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	5.68	
Difference	-0.39	-0.39	-2.36	-5.87	-4.99	-3.65	-3.10	-2.75	-5.08	-0.99	
MS Prime	5.83	5.83	10.84	12.48	N/A	N/A	N/A	N/A	N/A	12.48	10/01/2020
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	13.64	
Difference	-0.58	-0.58	-1.57	-1.16	N/A	N/A	N/A	N/A	N/A	-1.16	
Diversified Hedge Funds Composite	1.60	1.60	4.07	11.07	4.16	4.10	2.66	4.29	7.14	2.85	12/01/2007
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	2.27	
Difference	0.87	0.87	-1.65	-3.23	-2.34	-1.70	-1.50	-0.17	-3.74	0.58	
Grosvenor Diversified Hedge Funds	1.80	1.80	4.38	11.04	5.14	N/A	N/A	N/A	9.70	5.00	07/01/2018
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	6.06	
Difference	1.07	1.07	-1.34	-3.26	-1.36	N/A	N/A	N/A	-1.18	-1.06	
Internal Diversified Hedge Funds	1.51	1.51	3.93	11.18	5.28	N/A	N/A	N/A	5.83	5.14	07/01/2018
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	6.06	
Difference	0.78	0.78	-1.79	-3.12	-1.22	N/A	N/A	N/A	-5.05	-0.92	
Grosvenor Opportunistic Class D	1.91	1.91	30.87	64.14	N/A	N/A	N/A	N/A	N/A	52.60	07/01/2020
Grosvenor Opportunistic Class D Custom Benchmark	-0.04	-0.04	6.70	16.17	N/A	N/A	N/A	N/A	N/A	14.81	
Difference	1.95	1.95	24.17	47.97	N/A	N/A	N/A	N/A	N/A	37.79	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends June 30th. Since Inception date shown represents the first full month following initial funding.

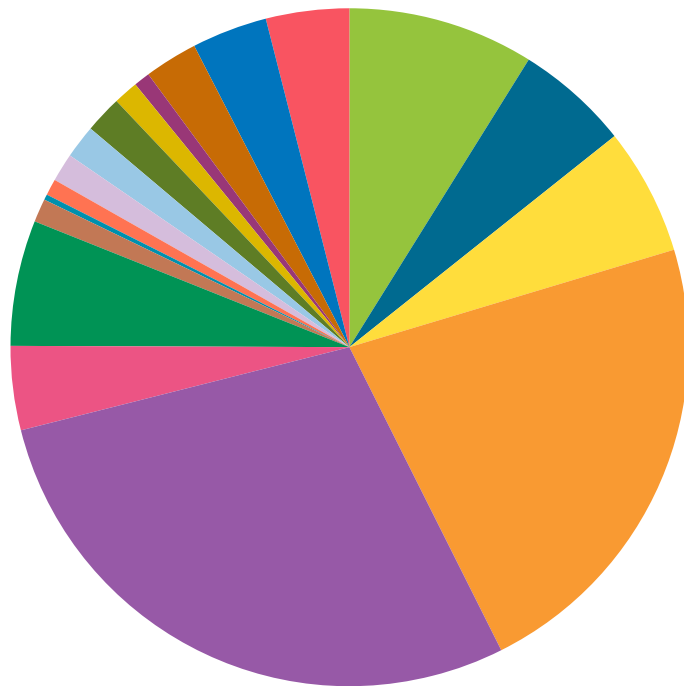
Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Real Estate Composite	6.08	6.08	13.43	14.95	6.49	7.04	8.62	9.39	1.11	6.66	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	6.94	
Difference	-0.55	-0.55	0.28	0.32	-0.57	-0.47	-0.28	-0.53	-0.08	-0.28	
Clarion Lion	6.08	6.08	14.45	16.77	8.59	8.77	10.21	10.68	2.23	6.69	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	6.94	
Difference	-0.55	-0.55	1.30	2.14	1.53	1.26	1.31	0.76	1.04	-0.25	
UBS Trumbull	6.21	6.21	10.64	8.54	1.87	3.70	5.69	7.11	-4.05	5.63	07/01/2006
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	6.65	
Difference	-0.42	-0.42	-2.51	-6.09	-5.19	-3.81	-3.21	-2.81	-5.24	-1.02	
MS Prime	6.04	6.04	11.91	13.80	N/A	N/A	N/A	N/A	N/A	13.80	10/01/2020
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	14.63	
Difference	-0.59	-0.59	-1.24	-0.83	N/A	N/A	N/A	N/A	N/A	-0.83	
Diversified Hedge Funds Composite	1.60	1.60	4.07	11.07	4.16	4.10	2.66	4.29	7.14	2.85	12/01/2007
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	2.27	
Difference	0.87	0.87	-1.65	-3.23	-2.34	-1.70	-1.50	-0.17	-3.74	0.58	
Grosvenor Diversified Hedge Funds	1.80	1.80	4.38	11.04	5.14	N/A	N/A	N/A	9.70	5.00	07/01/2018
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	6.06	
Difference	1.07	1.07	-1.34	-3.26	-1.36	N/A	N/A	N/A	-1.18	-1.06	
Internal Diversified Hedge Funds	1.51	1.51	3.93	11.18	5.28	N/A	N/A	N/A	5.83	5.14	07/01/2018
HFRI FOF Comp Index	0.73	0.73	5.72	14.30	6.50	5.80	4.16	4.46	10.88	6.06	
Difference	0.78	0.78	-1.79	-3.12	-1.22	N/A	N/A	N/A	-5.05	-0.92	
Grosvenor Opportunistic Class D	1.91	1.91	30.87	64.14	N/A	N/A	N/A	N/A	N/A	52.60	07/01/2020
Grosvenor Opportunistic Class D Custom Benchmark	-0.04	-0.04	6.70	16.17	N/A	N/A	N/A	N/A	N/A	14.81	
Difference	1.95	1.95	24.17	47.97	N/A	N/A	N/A	N/A	N/A	37.79	

Performance shown is gross of fees for the Core Real Estate Composite and Core Real Estate managers. Performance shown is net of fees for the Diversified Hedge Funds Composite and managers and opportunistic managers. Wyoming State Treasurer's Office fiscal year ends June 30th. Since Inception date shown represents the first full month following initial funding.

September 30, 2021 : \$12,539,615,888



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

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Fixed Income Composite	5,342,714,887	42.61	0.13	0.13	-1.37	-0.77	5.45	3.14	3.39	N/A	8.40	2.91	01/01/2013
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	2.83	
Difference			0.08	0.08	0.19	0.13	0.10	0.20	0.13	N/A	0.89	0.08	
Internal Aggregate Core Fixed Income	2,552,550,900	20.36	0.02	0.02	-1.42	-0.89	N/A	N/A	N/A	N/A	8.14	3.33	11/01/2019
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	2.94	
Difference			-0.03	-0.03	0.14	0.01	N/A	N/A	N/A	N/A	0.63	0.39	
Internal Intermediate Govt Fixed Income Portfolio	1,113,352,920	8.88	-0.04	-0.04	-2.63	-3.43	3.82	2.38	2.41	2.13	7.85	4.45	10/01/1996
Internal Intermediate Govt Fixed Income Portfolio Index			0.09	0.09	-2.50	-3.30	4.07	2.04	2.24	1.83	8.00	4.45	
Difference			-0.13	-0.13	-0.13	-0.13	-0.25	0.34	0.17	0.30	-0.15	0.00	
Payden & Rygel IGC	679,919,104	5.42	-0.12	-0.12	-1.34	1.32	N/A	N/A	N/A	N/A	10.15	4.68	11/01/2019
Payden & Rygel Custom Index			0.00	0.00	-1.27	1.74	7.14	4.43	4.61	4.78	8.94	4.18	
Difference			-0.12	-0.12	-0.07	-0.42	N/A	N/A	N/A	N/A	1.21	0.50	
JP Morgan MBS	759,278,875	6.06	0.13	0.13	0.04	0.57	N/A	N/A	N/A	N/A	5.64	3.02	11/01/2019
Bloomberg US MBS Index (Unhgd)			0.10	0.10	-0.67	-0.43	3.85	2.17	2.55	2.41	3.87	1.83	
Difference			0.03	0.03	0.71	1.00	N/A	N/A	N/A	N/A	1.77	1.19	
PIMCO Core	2,790,163,987	22.25	0.09	0.09	-1.46	-0.82	5.41	3.22	3.48	N/A	8.82	2.91	01/01/2013
PIMCO Custom Index			0.05	0.05	-1.56	-0.90	5.16	2.86	3.20	2.97	8.14	2.78	
Difference			0.04	0.04	0.10	0.08	0.25	0.36	0.28	N/A	0.68	0.13	
Opportunistic Fixed Income													
Grosvenor Silvery Lupine Fund	32,966,975	0.26	1.17	1.17	1.80	6.03	-0.25	3.31	3.80	N/A	-7.50	3.76	07/01/2014
CS Western Euro Hi Yld Index			0.99	0.99	4.66	10.68	6.27	6.43	6.05	8.37	3.59	5.71	
Difference			0.18	0.18	-2.86	-4.65	-6.52	-3.12	-2.25	N/A	-11.09	-1.95	

Performance shown is net of fees. Fiscal year ends on June 30th. The Internal Int Govt Fixed Income Portfolio Index currently consists of the BB US Treasury Index. Nov 2019 performance consists of the Internal Int Govt Fixed Income Portfolio. Prior to November 2019, the index consists of BB US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the BB US Gov't Crdt Bond Index. The PIMCO Custom Index consists of the BB US Agg Bond Index through February 2018, the BB US Agg Int Index through June 2019, the BB US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the BB US Agg Bond Index thereafter. The Payden & Rygel Custom Index consists of the BB US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and BB US Corp Inv Grade Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Bank Loans	1,392,781,829	11.11	0.87	0.87	4.04	7.66	N/A	N/A	N/A	N/A	3.95	4.88	09/01/2019
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65	
Difference			-0.11	-0.11	-0.25	-0.61	N/A	N/A	N/A	N/A	0.83	0.23	
Credit Suisse	501,960,097	4.00	0.91	0.91	4.22	7.83	N/A	N/A	N/A	N/A	2.82	4.46	09/01/2019
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65	
Difference			-0.07	-0.07	-0.07	-0.44	N/A	N/A	N/A	N/A	-0.30	-0.19	
Octagon	750,706,965	5.99	0.94	0.94	4.04	7.72	N/A	N/A	N/A	N/A	3.27	4.80	09/01/2019
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65	
Difference			-0.04	-0.04	-0.25	-0.55	N/A	N/A	N/A	N/A	0.15	0.15	
KKR	140,114,767	1.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2021
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Emerging Market Debt Fixed Income Composite	935,312,779	7.46	-0.91	-0.91	-1.12	7.04	5.11	2.59	0.50	N/A	2.81	-0.91	04/01/2013
EMD Custom Benchmark			-1.19	-1.19	-2.09	5.18	4.81	2.73	1.03	1.39	1.50	-0.24	
Difference			0.28	0.28	0.97	1.86	0.30	-0.14	-0.53	N/A	1.31	-0.67	
Global Evolution	98,644,692	0.79	-2.77	-2.77	-5.56	4.05	N/A	N/A	N/A	N/A	N/A	-1.21	02/01/2020
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			-3.10	-3.10	-6.38	2.63	3.66	2.06	0.56	1.05	2.69	-1.57	
Difference			0.33	0.33	0.82	1.42	N/A	N/A	N/A	N/A	N/A	0.36	
Goldman Sachs	222,534,316	1.77	0.11	0.11	0.31	6.24	N/A	N/A	N/A	N/A	N/A	4.18	03/01/2020
Goldman Sachs Custom Index			0.25	0.25	1.53	6.20	7.19	5.24	5.30	6.14	7.31	4.56	
Difference			-0.14	-0.14	-1.22	0.04	N/A	N/A	N/A	N/A	N/A	-0.38	
Eaton Vance	199,927,859	1.59	0.54	0.54	3.53	N/A	N/A	N/A	N/A	N/A	N/A	3.53	01/01/2021
JP Morgan EMB (JEMB) Hard/Local 50/50			-1.67	-1.67	-3.17	3.95	5.08	3.36	2.87	3.56	4.49	-3.17	
Difference			2.21	2.21	6.70	N/A	N/A	N/A	N/A	N/A	N/A	6.70	
Global Evolution Hard	169,142,485	1.35	-1.14	-1.14	-2.60	N/A	N/A	N/A	N/A	N/A	N/A	-0.85	12/01/2020
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			-0.91	-0.91	-1.90	3.81	6.00	4.17	5.00	5.79	6.09	-0.15	
Difference			-0.23	-0.23	-0.70	N/A	N/A	N/A	N/A	N/A	N/A	-0.70	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter. The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter. The Bank Loans Custom Index consists of S&P LSTA Lvlgd Loan Index through 06/30/2021, and the S&P LSTA US Lvlgd Loan 100 Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Finisterre	148,175,877	1.18	-1.74	-1.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.22	03/01/2021
Custom EMD Benchmark (1/3 blend)			-1.19	-1.19	-2.09	4.38	5.53	3.77	3.63	4.37	5.07	0.42	
Difference			-0.55	-0.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.64	
Wellington EMD	96,887,550	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.76	09/01/2021
50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div			-1.91	-1.91	-3.88	3.52	4.70	3.02	2.77	3.47	4.02	-2.75	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	
Laddered Treasury Composite	3,567,608,185	28.45	0.02	0.02	-0.04	0.02	N/A	N/A	N/A	N/A	3.20	1.80	10/01/2019
Internal Ladder Portfolio	3,567,608,185	28.45	0.02	0.02	-0.04	0.02	N/A	N/A	N/A	N/A	3.20	1.80	10/01/2019
Long Duration Fixed Income Composite	770,391,384	6.14	0.02	0.02	-4.87	-3.69	N/A	N/A	N/A	N/A	18.08	11.17	01/01/2019
Bloomberg US Gov't Crdt Lng Trm Bond Index			0.07	0.07	-4.57	-2.97	10.12	5.21	6.20	5.76	16.12	10.78	
Difference			-0.05	-0.05	-0.30	-0.72	N/A	N/A	N/A	N/A	1.96	0.39	
Internal Long Duration Govt Fixed Income Portfolio	318,267,924	2.54	0.20	0.20	-7.64	-10.44	N/A	N/A	N/A	N/A	17.06	8.11	01/01/2019
Bloomberg US Gov't Lng Trm Bond Index			0.46	0.46	-7.40	-10.13	9.17	3.34	5.42	4.40	17.55	8.42	
Difference			-0.26	-0.26	-0.24	-0.31	N/A	N/A	N/A	N/A	-0.49	-0.31	
Metlife	452,123,460	3.61	-0.09	-0.09	-2.76	1.37	N/A	N/A	N/A	N/A	16.14	12.84	11/01/2018
Bloomberg US Lng Crdt Index			-0.18	-0.18	-2.66	2.13	10.20	6.14	6.54	6.59	13.32	11.91	
Difference			0.09	0.09	-0.10	-0.76	N/A	N/A	N/A	N/A	2.82	0.93	
Low Duration Fixed Income Composite	497,839,849	3.97	0.09	0.09	0.16	0.21	N/A	N/A	N/A	N/A	3.14	2.80	12/01/2018
Low Duration Fixed Income Custom Index			0.07	0.07	-0.02	0.03	2.71	1.79	1.64	1.42	3.14	2.72	
Difference			0.02	0.02	0.18	0.18	N/A	N/A	N/A	N/A	0.00	0.08	
Internal Low Duration Fixed Income Portfolio	497,839,849	3.97	0.09	0.09	0.16	0.21	2.76	N/A	N/A	N/A	3.14	2.50	03/01/2018
Bloomberg US Gov't 1-3 Yr Bond Index			0.07	0.07	-0.02	0.03	2.67	1.65	1.47	1.18	3.14	2.40	
Difference			0.02	0.02	0.18	0.18	0.09	N/A	N/A	N/A	0.00	0.10	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding. The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)											Inception Date
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.		
Core Fixed Income Composite	5,342,714,887	42.61	0.15	0.15	-1.30	-0.69	5.55	3.25	3.51	N/A	8.50	3.03	01/01/2013	
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	2.83		
Difference			0.10	0.10	0.26	0.21	0.20	0.31	0.25	N/A	0.99	0.20		
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.01	6.03	3.57	3.79	3.65	8.52	3.35		
Core Fixed Income Composite Rank			36	36	62	72	79	74	75	N/A	52	78		
Internal Aggregate Core Fixed Income	2,552,550,900	20.36	0.04	0.04	-1.36	-0.82	N/A	N/A	N/A	N/A	8.23	3.40	11/01/2019	
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	2.94		
Difference			-0.01	-0.01	0.20	0.08	N/A	N/A	N/A	N/A	0.72	0.46		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.01	6.03	3.57	3.79	3.65	8.52	3.81		
Internal Aggregate Core Fixed Income Rank			72	72	67	81	N/A	N/A	N/A	N/A	59	72		
Internal Intermediate Govt Fixed Income Portfolio	1,113,352,920	8.88	-0.04	-0.04	-2.63	-3.43	3.82	2.38	2.41	2.13	7.85	4.45	10/01/1996	
Internal Intermediate Govt Fixed Income Portfolio Index			0.09	0.09	-2.50	-3.30	4.07	2.04	2.24	1.83	8.00	4.45		
Difference			-0.13	-0.13	-0.13	-0.13	-0.25	0.34	0.17	0.30	-0.15	0.00		
IM U.S. Government Bonds (SA+CF) Median			0.08	0.08	-1.79	-2.08	4.51	2.24	2.48	2.00	6.37	4.58		
Internal Intermediate Govt Fixed Income Portfolio Rank			95	95	58	58	73	47	52	46	46	53		
Payden & Rygel IGC	679,919,104	5.42	-0.07	-0.07	-1.20	1.51	N/A	N/A	N/A	N/A	10.37	4.87	11/01/2019	
Payden & Rygel Custom Index			0.00	0.00	-1.27	1.74	7.14	4.43	4.61	4.78	8.94	4.18		
Difference			-0.07	-0.07	0.07	-0.23	N/A	N/A	N/A	N/A	1.43	0.69		
IM U.S. Corporate Bonds (SA+CF) Median			0.10	0.10	-0.82	2.54	8.29	5.39	5.49	5.84	11.35	5.87		
Payden & Rygel IGC Rank			77	77	61	80	N/A	N/A	N/A	N/A	66	73		
JP Morgan MBS	759,278,875	6.06	0.15	0.15	0.10	0.65	N/A	N/A	N/A	N/A	5.73	3.10	11/01/2019	
Bloomberg US MBS Index (Unhgd)			0.10	0.10	-0.67	-0.43	3.85	2.17	2.55	2.41	3.87	1.83		
Difference			0.05	0.05	0.77	1.08	N/A	N/A	N/A	N/A	1.86	1.27		
IM U.S. Mortgage Backed Bonds (SA+CF) Median			0.23	0.23	-0.03	0.62	4.36	2.91	2.98	3.26	4.24	2.54		
JP Morgan MBS Rank			74	74	49	50	N/A	N/A	N/A	N/A	13	29		
PIMCO Core	2,790,163,987	22.25	0.12	0.12	-1.38	-0.71	5.51	3.33	3.61	N/A	8.93	3.05	01/01/2013	
PIMCO Custom Index			0.05	0.05	-1.56	-0.90	5.16	2.86	3.20	2.97	8.14	2.78		
Difference			0.07	0.07	0.18	0.19	0.35	0.47	0.41	N/A	0.79	0.27		
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.01	6.03	3.57	3.79	3.65	8.52	3.35		
PIMCO Core Rank			44	44	67	74	81	70	66	N/A	33	76		

Performance shown is gross of fees. Fiscal year ends on June 30th. The Internal Int Govt Fixed Income Portfolio Index currently consists of the BB US Treasury Index. Nov 2019 performance consists of the Internal Int Govt Fixed Income Portfolio. Prior to November 2019, the index consists of BB US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the BB US Gov't Crdt Bond Index. The PIMCO Custom Index consists of the BB US Agg Bond Index through February 2018, the BB US Agg Int Index through June 2019, the BB US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the BB US Agg Bond Index thereafter. The Payden & Rygel Custom Index consists of the BB US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and BB US Corp Inv Grade Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date	
Opportunistic Fixed Income														
Grosvenor Silvery Lupine Fund	32,966,975	0.26	1.17	1.17	1.80	6.03	-0.25	3.31	3.80	N/A	-7.50	3.76	07/01/2014	
CS Western Euro Hi Yld Index			0.99	0.99	4.66	10.68	6.27	6.43	6.05	8.37	3.59	5.71		
Difference			0.18	0.18	-2.86	-4.65	-6.52	-3.12	-2.25	N/A	-11.09	-1.95		
Bank Loans														
Bank Loans	1,392,781,829	11.11	0.94	0.94	4.26	7.97	N/A	N/A	N/A	N/A	4.29	5.19	09/01/2019	
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65		
Difference			-0.04	-0.04	-0.03	-0.30	N/A	N/A	N/A	N/A	1.17	0.54		
IM U.S. Bank Loans (SA+CF) Median			1.12	1.12	4.50	8.20	4.05	4.59	4.26	5.15	2.47	4.49		
Bank Loans Rank			91	91	57	57	N/A	N/A	N/A	N/A	10	25		
Credit Suisse														
Credit Suisse	501,960,097	4.00	0.98	0.98	4.42	8.09	N/A	N/A	N/A	N/A	3.11	4.70	09/01/2019	
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65		
Difference			0.00	0.00	0.13	-0.18	N/A	N/A	N/A	N/A	-0.01	0.05		
IM U.S. Bank Loans (SA+CF) Median			1.12	1.12	4.50	8.20	4.05	4.59	4.26	5.15	2.47	4.49		
Credit Suisse Rank			82	82	53	55	N/A	N/A	N/A	N/A	28	36		
Octagon														
Octagon	750,706,965	5.99	1.02	1.02	4.27	8.08	N/A	N/A	N/A	N/A	3.72	5.20	09/01/2019	
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	4.65		
Difference			0.04	0.04	-0.02	-0.19	N/A	N/A	N/A	N/A	0.60	0.55		
IM U.S. Bank Loans (SA+CF) Median			1.12	1.12	4.50	8.20	4.05	4.59	4.26	5.15	2.47	4.49		
Octagon Rank			77	77	57	55	N/A	N/A	N/A	N/A	16	25		
KKR														
KKR	140,114,767	1.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2021	
Bank Loans Custom Index			0.98	0.98	4.29	8.27	4.10	4.56	4.16	4.90	3.12	N/A		
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
IM U.S. Bank Loans (SA+CF) Median			1.12	1.12	4.50	8.20	4.05	4.59	4.26	5.15	2.47	N/A		
KKR Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Performance shown is gross of fees with the exception of Grosvenor SLF, which is shown net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding. The Bank Loans Custom Index consists of S&P LSTA Lvlgd Loan Index through 06/30/2021, and the S&P LSTA US Lvlgd Loan 100 Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Emerging Market Debt Fixed Income Composite	935,312,779	7.46	-0.83	-0.83	-0.90	7.42	5.45	3.00	0.97	N/A	3.04	-0.41	04/01/2013
EMD Custom Benchmark			-1.19	-1.19	-2.09	5.18	4.81	2.73	1.03	1.39	1.50	-0.24	
Difference			0.36	0.36	1.19	2.24	0.64	0.27	-0.06	N/A	1.54	-0.17	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	3.96	
Emerging Market Debt Fixed Income Composite Rank			53	53	44	28	62	82	90	N/A	91	94	
Global Evolution	98,644,692	0.79	-2.73	-2.73	-5.45	4.22	N/A	N/A	N/A	N/A	N/A	-1.03	02/01/2020
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			-3.10	-3.10	-6.38	2.63	3.66	2.06	0.56	1.05	2.69	-1.57	
Difference			0.37	0.37	0.93	1.59	N/A	N/A	N/A	N/A	N/A	0.54	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	2.71	
Global Evolution Rank			79	79	78	79	N/A	N/A	N/A	N/A	N/A	90	
Goldman Sachs	222,534,316	1.77	0.16	0.16	0.53	6.62	N/A	N/A	N/A	N/A	N/A	4.41	03/01/2020
Goldman Sachs Custom Index			0.25	0.25	1.53	6.20	7.19	5.24	5.30	6.14	7.31	4.56	
Difference			-0.09	-0.09	-1.00	0.42	N/A	N/A	N/A	N/A	N/A	-0.15	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	3.47	
Goldman Sachs Rank			17	17	28	42	N/A	N/A	N/A	N/A	N/A	31	
Eaton Vance	199,927,859	1.59	0.66	0.66	3.87	N/A	N/A	N/A	N/A	N/A	N/A	3.87	01/01/2021
JP Morgan EMB (JEMB) Hard /Local 50/50			-1.67	-1.67	-3.17	3.95	5.08	3.36	2.87	3.56	4.49	-3.17	
Difference			2.33	2.33	7.04	N/A	N/A	N/A	N/A	N/A	N/A	7.04	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	-1.30	
Eaton Vance Rank			4	4	5	N/A	N/A	N/A	N/A	N/A	N/A	5	
Global Evolution Hard	169,142,485	1.35	-1.08	-1.08	-2.44	N/A	N/A	N/A	N/A	N/A	N/A	-0.68	12/01/2020
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			-0.91	-0.91	-1.90	3.81	6.00	4.17	5.00	5.79	6.09	-0.15	
Difference			-0.17	-0.17	-0.54	N/A	N/A	N/A	N/A	N/A	N/A	-0.53	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	1.26	
Global Evolution Hard Rank			60	60	61	N/A	N/A	N/A	N/A	N/A	N/A	70	
Finisterre	148,175,877	1.18	-1.63	-1.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.97	03/01/2021
Custom EMD Benchmark (1/3 blend)			-1.19	-1.19	-2.09	4.38	5.53	3.77	3.63	4.37	5.07	0.42	
Difference			-0.44	-0.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.39	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	1.21	
Finisterre Rank			65	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73	

Performance shown is gross of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding. The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter. The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Wellington EMD	96,887,550	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.76	09/01/2021
50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div			-1.91	-1.91	-3.88	3.52	4.70	3.02	2.77	3.47	4.02	-2.75	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	
IM Emerging Markets Debt (SA+CF) Median			-0.79	-0.79	-1.30	6.13	5.96	4.28	4.48	5.44	6.71	-2.11	
Wellington EMD Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	66	
Laddered Treasury Composite	3,567,608,185	28.45	0.02	0.02	-0.04	0.02	N/A	N/A	N/A	N/A	3.20	1.80	10/01/2019
Internal Ladder Portfolio	3,567,608,185	28.45	0.02	0.02	-0.04	0.02	N/A	N/A	N/A	N/A	3.20	1.80	10/01/2019
Long Duration Fixed Income Composite	770,391,384	6.14	0.05	0.05	-4.78	-3.57	N/A	N/A	N/A	N/A	18.20	11.29	01/01/2019
Bloomberg US Gov't Crdt Lng Trm Bond Index			0.07	0.07	-4.57	-2.97	10.12	5.21	6.20	5.76	16.12	10.78	
Difference			-0.02	-0.02	-0.21	-0.60	N/A	N/A	N/A	N/A	2.08	0.51	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.88	6.03	6.82	6.63	17.07	11.99	
Long Duration Fixed Income Composite Rank			67	67	97	99	N/A	N/A	N/A	N/A	26	80	
Internal Long Duration Govt Fixed Income Portfolio	318,267,924	2.54	0.20	0.20	-7.64	-10.44	N/A	N/A	N/A	N/A	17.06	8.11	01/01/2019
Bloomberg US Gov't Lng Trm Bond Index			0.46	0.46	-7.40	-10.13	9.17	3.34	5.42	4.40	17.55	8.42	
Difference			-0.26	-0.26	-0.24	-0.31	N/A	N/A	N/A	N/A	-0.49	-0.31	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.88	6.03	6.82	6.63	17.07	11.99	
Internal Long Duration Govt Fixed Income Portfolio Rank			27	27	100	100	N/A	N/A	N/A	N/A	51	99	
Metlife	452,123,460	3.61	-0.04	-0.04	-2.61	1.57	N/A	N/A	N/A	N/A	16.37	13.07	11/01/2018
Bloomberg US Lng Crdt Index			-0.18	-0.18	-2.66	2.13	10.20	6.14	6.54	6.59	13.32	11.91	
Difference			0.14	0.14	0.05	-0.56	N/A	N/A	N/A	N/A	3.05	1.16	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.88	6.03	6.82	6.63	17.07	12.53	
Metlife Rank			76	76	34	27	N/A	N/A	N/A	N/A	58	28	

Performance shown is gross of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2021

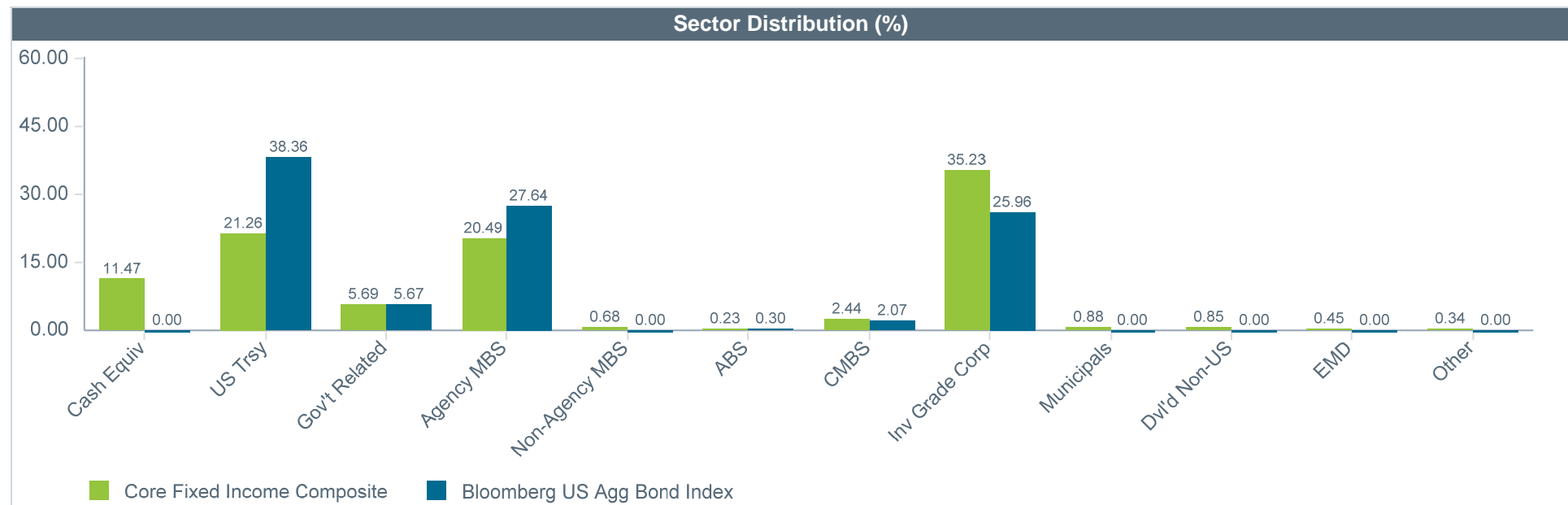
	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Low Duration Fixed Income Composite	497,839,849	3.97	0.09	0.09	0.16	0.21	N/A	N/A	N/A	N/A	3.14	2.80	12/01/2018
Low Duration Fixed Income Custom Index			0.07	0.07	-0.02	0.03	2.71	1.79	1.64	1.42	3.14	2.72	
Difference			0.02	0.02	0.18	0.18	N/A	N/A	N/A	N/A	0.00	0.08	
IM U.S. Short Duration Fixed Income (SA+CF) Median			0.11	0.11	0.25	0.67	3.21	2.27	2.11	1.98	3.88	3.28	
Low Duration Fixed Income Composite Rank			66	66	65	85	N/A	N/A	N/A	N/A	83	81	
Internal Low Duration Fixed Income Portfolio	497,839,849	3.97	0.09	0.09	0.16	0.21	2.76	N/A	N/A	N/A	3.14	2.50	03/01/2018
Bloomberg US Gov't 1-3 Yr Bond Index			0.07	0.07	-0.02	0.03	2.67	1.65	1.47	1.18	3.14	2.40	
Difference			0.02	0.02	0.18	0.18	0.09	N/A	N/A	N/A	0.00	0.10	
IM U.S. Short Duration Fixed Income (SA+CF) Median			0.11	0.11	0.25	0.67	3.21	2.27	2.11	1.98	3.88	2.96	
Internal Low Duration Fixed Income Portfolio Rank			66	66	65	85	83	N/A	N/A	N/A	83	87	

Performance shown is gross of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding. The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.

Wyoming State Treasurer's Office
Core Fixed Income Composite vs. Bloomberg US Agg Bond Index
Portfolio Characteristics

As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.08	6.71
Convexity	1.55	0.33
Avg. Maturity	7.17	8.63
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	1.65	1.57
Coupon Rate (%)	2.36	2.48
Current Yield (%)	2.37	N/A

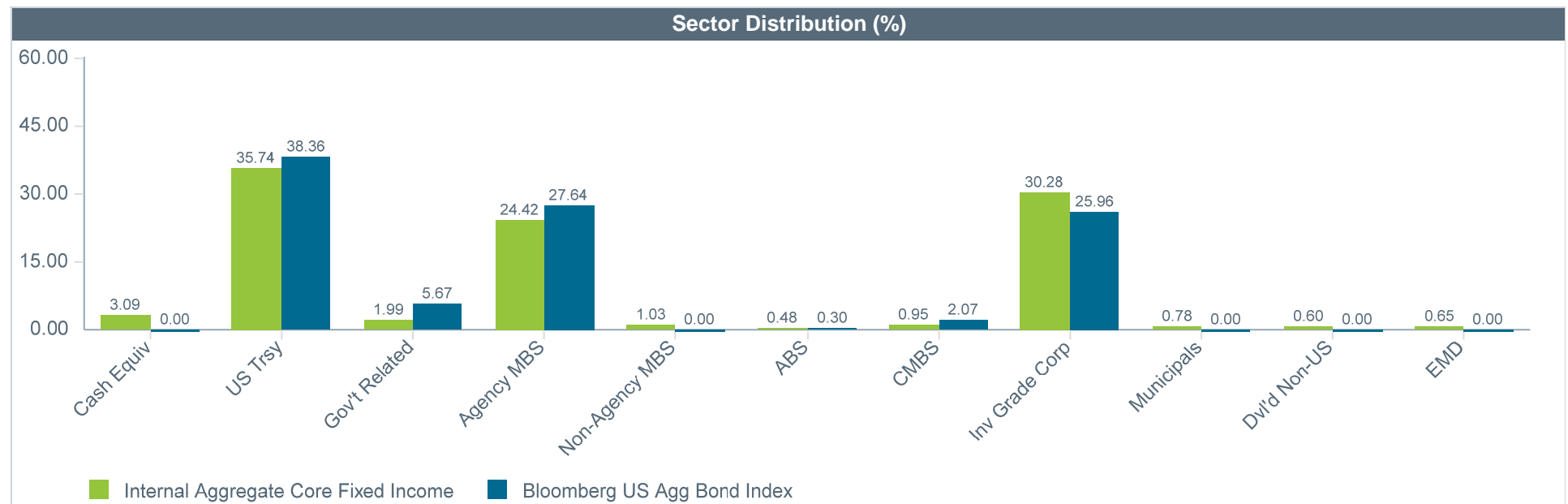


The statistics are calculated based on a weighted average of the underlying managers. Allocation to "Other" consists of Euro/Yankee securities.

Wyoming State Treasurer's Office
Internal Aggregate Core Fixed Income vs. Bloomberg US Agg Bond Index
Portfolio Characteristics

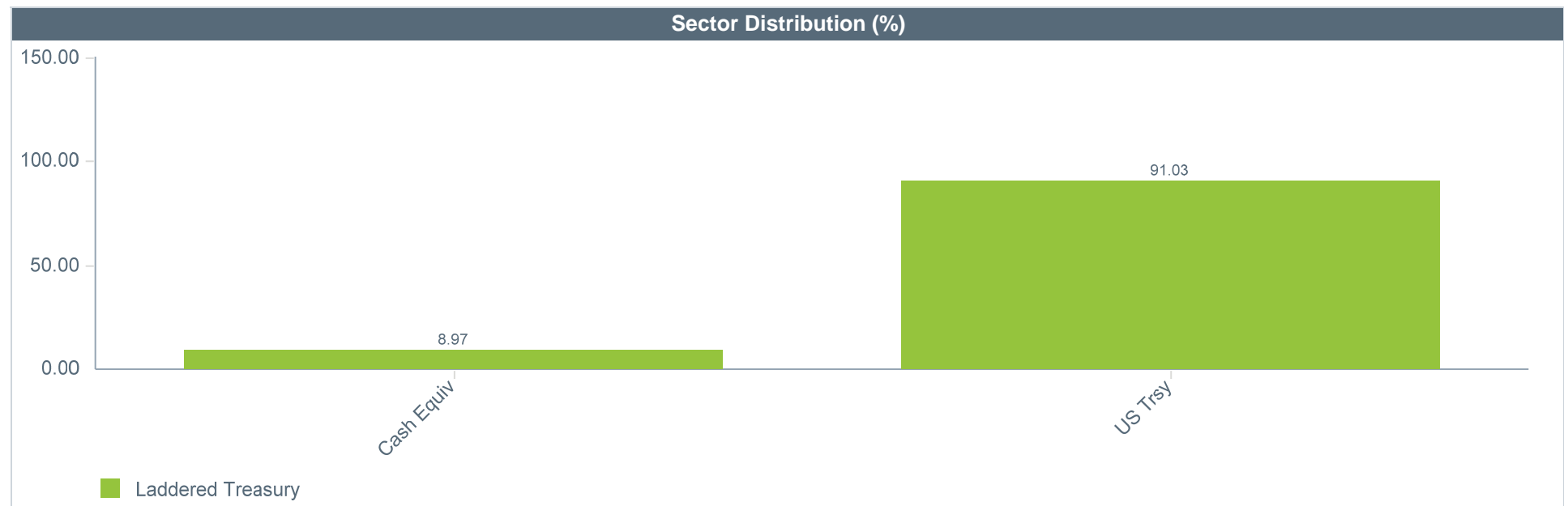
As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.86	6.71
Convexity	3.52	0.33
Avg. Maturity	8.16	8.63
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	1.44	1.57
Coupon Rate (%)	2.70	2.48
Current Yield (%)	2.77	N/A



The statistics are calculated based on a weighted average of the underlying managers.

Portfolio Characteristics	
	Portfolio
Effective Duration	1.65
Convexity	0.04
Avg. Maturity	1.72
Avg. Quality	Aaa
Yield To Maturity (%)	0.24
Coupon Rate (%)	0.83

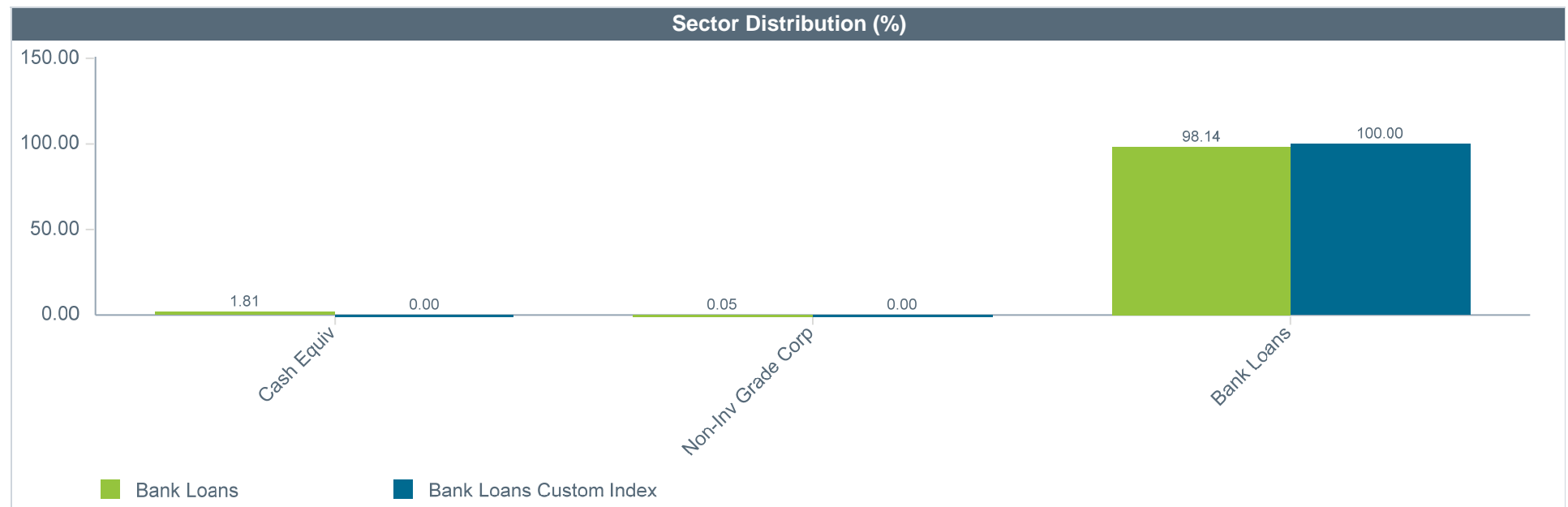


The statistics are calculated based on a weighted average of the underlying managers.

Wyoming State Treasurer's Office
Bank Loans vs. Bank Loans Custom Index
Portfolio Characteristics

As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	0.24	0.20
Avg. Maturity	5.18	4.81
Avg. Quality	B2	B1
Yield To Maturity (%)	4.67	4.33
Coupon Rate (%)	4.13	3.92
Current Yield (%)	4.25	4.33

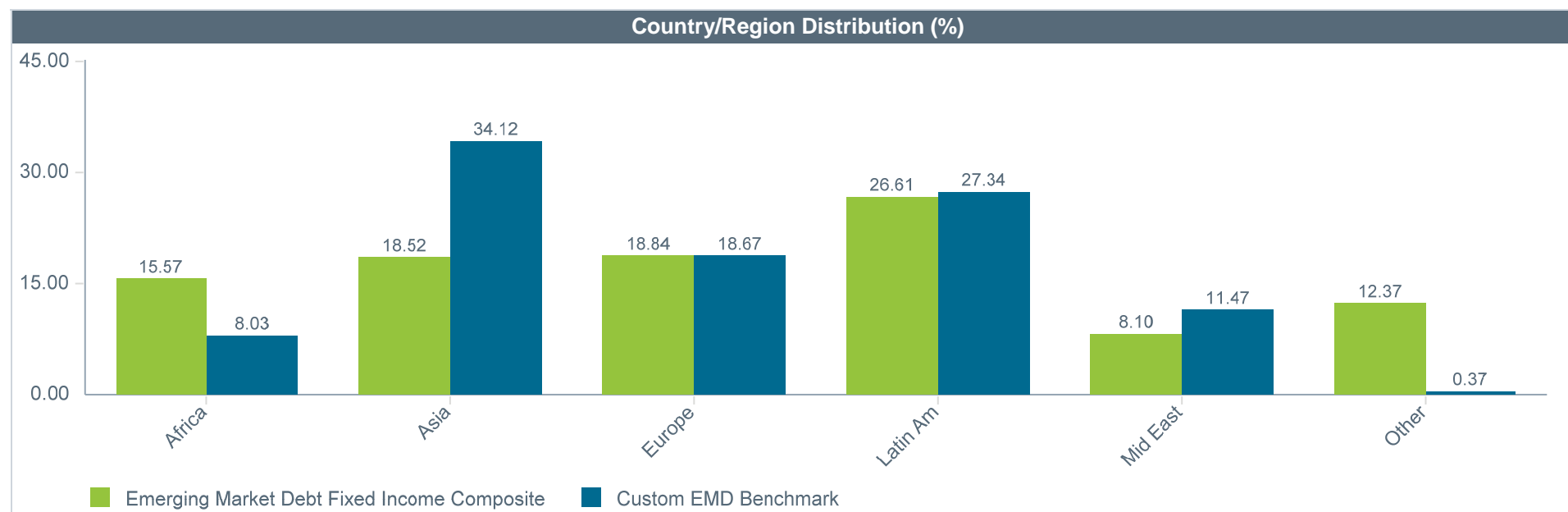


The statistics are calculated based on a weighted average of the underlying managers.

Wyoming State Treasurer's Office
Emerging Market Debt Fixed Income Composite vs. Custom EMD Benchmark
Portfolio Characteristics

As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.82	5.98
Convexity	N/A	0.60
Avg. Maturity	10.13	10.31
Avg. Quality	Ba1	Ba2
Yield To Maturity (%)	5.37	4.63
Coupon Rate (%)	5.33	5.08
Current Yield (%)	5.26	4.91

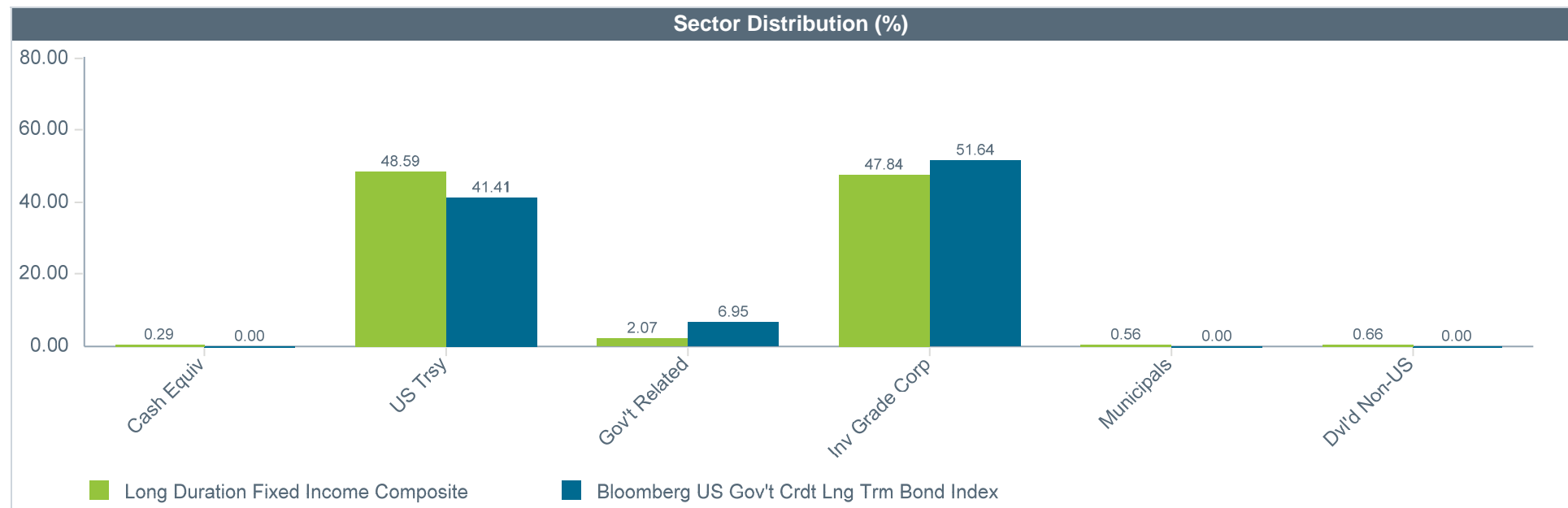


The statistics are calculated based on a weighted average of the underlying managers. Region allocation to "Other" consists of cash, supranational, developed, foreign exchange, futures, margin for derivatives, holdings not specified by country, and interest rate swaps. The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.

Long Duration Fixed Income Composite vs. Bloomberg US Gov't Crdt Lng Trm Bond Index

Portfolio Characteristics

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	16.08	16.55
Convexity	3.30	3.64
Avg. Quality	A1	Aa3/A1
Yield To Maturity (%)	2.66	2.68
Coupon Rate (%)	3.53	3.61

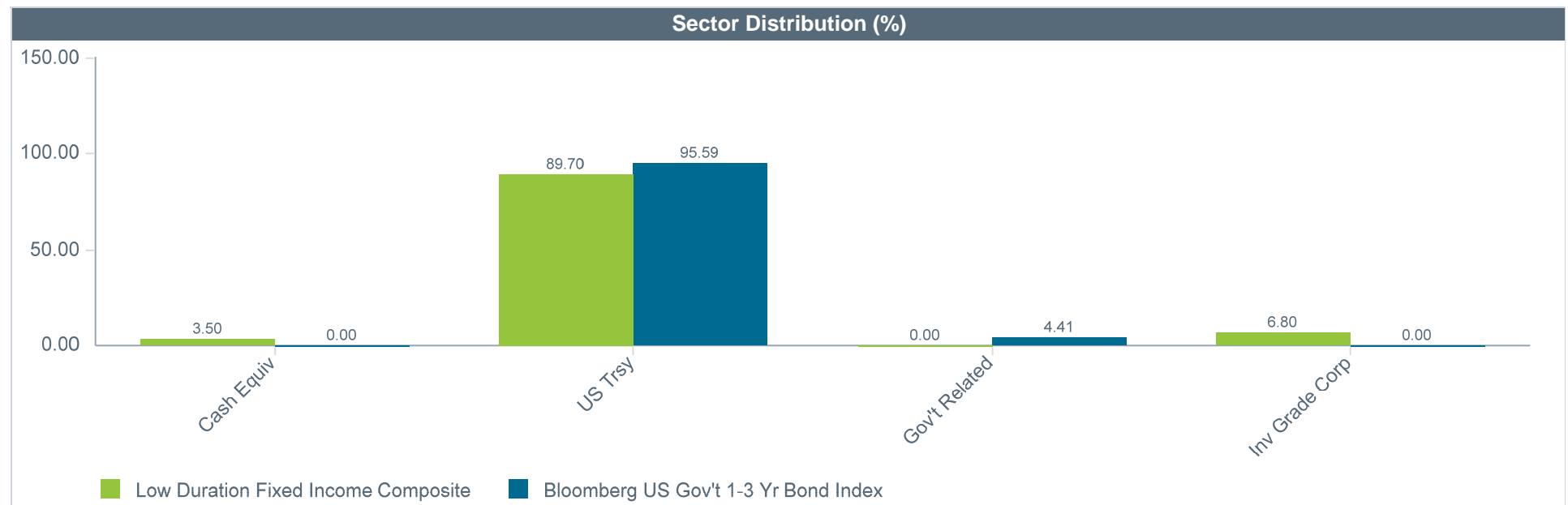


The statistics are calculated based on a weighted average of the underlying managers.

Wyoming State Treasurer's Office
Low Duration Fixed Income Composite vs. Bloomberg US Gov't 1-3 Yr Bond Index
Portfolio Characteristics

As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	1.09	1.96
Convexity	0.02	0.02
Avg. Quality	Aaa	Aaa/Aa1
Yield To Maturity (%)	0.10	0.29
Coupon Rate (%)	1.30	1.22



The statistics are calculated based on a weighted average of the underlying managers.

Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
JP Morgan Cash Composite	0.01	0.01	0.03	0.04	1.16	1.11	0.88	0.67	0.43	1.41	01/01/2006
JP Morgan Cash Custom Index	0.02	0.02	0.04	0.07	1.27	1.16	0.93	0.72	0.67	1.44	
Difference	-0.01	-0.01	-0.01	-0.03	-0.11	-0.05	-0.05	-0.05	-0.24	-0.03	
Wyo-Star Cash Composite	0.02	0.02	0.00	0.01	1.47	1.22	0.98	0.75	1.13	3.04	10/01/1996
Wyo-Star Cash Custom Index	0.02	0.02	-0.08	-0.03	1.60	1.30	1.05	0.83	1.36	2.51	
Difference	0.00	0.00	0.08	0.04	-0.13	-0.08	-0.07	-0.08	-0.23	0.53	
WYO STAR II Total Fund	0.09	0.09	0.06	0.60	N/A	N/A	N/A	N/A	3.53	3.09	01/01/2019
Bloomberg US Corp 1-3 Yr Index	0.16	0.16	0.41	1.09	3.41	2.53	2.33	2.38	3.79	3.44	
Difference	-0.07	-0.07	-0.35	-0.49	N/A	N/A	N/A	N/A	-0.26	-0.35	

Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.

The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.

The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the ICE BofAML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
JP Morgan Cash Composite	0.01	0.01	0.03	0.04	1.19	1.15	0.94	0.75	0.44	1.48	01/01/2006
JP Morgan Cash Custom Index	0.02	0.02	0.04	0.07	1.27	1.16	0.93	0.72	0.67	1.44	
Difference	-0.01	-0.01	-0.01	-0.03	-0.08	-0.01	0.01	0.03	-0.23	0.04	
Wyo-Star Cash Composite	0.03	0.03	0.04	0.06	1.53	1.28	1.04	0.82	1.20	3.08	10/01/1996
Wyo-Star Cash Custom Index	0.02	0.02	-0.08	-0.03	1.60	1.30	1.05	0.83	1.36	2.51	
Difference	0.01	0.01	0.12	0.09	-0.07	-0.02	-0.01	-0.01	-0.16	0.57	
WYO STAR II Total Fund	0.10	0.10	0.11	0.66	N/A	N/A	N/A	N/A	3.60	3.16	01/01/2019
Bloomberg US Corp 1-3 Yr Index	0.16	0.16	0.41	1.09	3.41	2.53	2.33	2.38	3.79	3.44	
Difference	-0.06	-0.06	-0.30	-0.43	N/A	N/A	N/A	N/A	-0.19	-0.28	

Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.

The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.

The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the ICE BofAML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

Wyoming State Treasurer's Office
Investment Values by Fund
September 30, 2021

	Total Investment Value	Fiscal Year Ending 06/30/21 Market Value	Current Market Value	% of MV
Wyoming State Total Fund	\$22,358,916,620	\$24,987,283,259	\$24,957,420,569	100.0%
Permanent Mineral Trust	\$7,781,658,313	\$9,391,475,140	\$9,480,343,898	100.0%
US Equity	\$784,920,667	\$1,216,275,401	\$1,208,386,796	12.7%
International Equity	\$1,176,110,633	\$1,632,354,836	\$1,588,205,848	16.8%
MLPs	\$394,561,091	\$488,549,023	\$500,503,275	5.3%
Private Equity	\$429,599,251	\$846,257,219	\$830,886,898	8.8%
Real Estate	\$898,581,784	\$941,612,928	\$1,087,624,664	11.5%
Diversified Hedge Funds	\$692,383,642	\$699,066,141	\$776,441,468	8.2%
Fixed Income	\$3,129,644,522	\$3,291,229,021	\$3,194,291,506	33.7%
Opportunistic	\$55,762,776	\$61,751,569	\$72,710,075	0.8%
Public Purpose Investments	\$124,642,639	\$124,601,092	\$124,642,639	1.3%
Cash Equivalents (Liquidated Managers)	\$0	\$657,872	\$574,776	0.0%
Cash (invested in State Agency Pool)	\$95,451,308	\$89,120,036	\$96,075,952	1.0%
Common School Perm Land Fund	\$4,084,744,160	\$4,579,667,486	\$4,587,309,344	100.0%
US Equity	\$286,074,673	\$424,697,364	\$446,445,895	9.7%
International Equity	\$395,307,270	\$547,205,723	\$533,050,960	11.6%
Preferred Stock	\$144,044,474	\$134,447,870	\$177,414,561	3.9%
MLPs	\$253,867,023	\$309,453,596	\$320,709,794	7.0%
Private Equity	\$1,251,818	\$1,711,684	\$1,793,995	0.0%
Real Estate	\$566,600,412	\$612,900,438	\$670,060,584	14.6%
Diversified Hedge Funds	\$87,156,107	\$0	\$87,589,443	1.9%
Fixed Income	\$2,281,146,897	\$2,436,054,361	\$2,275,379,947	49.6%
Opportunistic	\$15,708,226	\$16,615,535	\$20,769,414	0.5%
Public Purpose Investments	\$18,359,738	\$18,359,738	\$18,359,738	0.4%
Cash Equivalents (Liquidated Managers)	\$0	\$316,882	\$276,958	0.0%
Cash (invested in State Agency Pool)	\$35,227,522	\$77,904,296	\$35,458,055	0.8%
Permanent Land Fund	\$207,302,094	\$243,031,461	\$244,658,982	100.0%
US Equity	\$26,116,256	\$33,108,519	\$32,575,867	13.3%
International Equity	\$31,239,841	\$43,144,286	\$41,903,462	17.1%
MLPs	\$10,398,204	\$12,044,605	\$13,028,512	5.3%
Private Equity	\$11,192,346	\$19,573,163	\$20,564,483	8.4%
Real Estate	\$23,137,658	\$24,350,901	\$27,926,106	11.4%
Diversified Hedge Funds	\$18,173,790	\$19,347,015	\$20,490,455	8.4%
Fixed Income	\$80,101,615	\$85,398,287	\$80,631,303	33.0%
Opportunistic	\$1,902,722	\$2,131,090	\$2,452,651	1.0%
Cash Equivalents (Liquidated Managers)	\$0	\$15,403	\$13,500	0.0%
Cash (invested in State Agency Pool)	\$5,039,663	\$3,918,192	\$5,072,643	2.1%
University Permanent Land Fund	\$22,377,324	\$28,182,629	\$28,273,627	100.0%
US Equity	\$1,149,009	\$3,754,909	\$3,763,709	13.3%
International Equity	\$3,342,848	\$4,495,355	\$4,321,196	15.3%
MLPs	\$1,160,294	\$1,378,959	\$1,476,184	5.2%
Private Equity	\$1,372,226	\$2,415,362	\$2,525,776	8.9%
Real Estate	\$3,035,442	\$3,253,332	\$3,622,357	12.8%
Diversified Hedge Funds	\$2,285,438	\$2,466,920	\$2,582,188	9.1%
Fixed Income	\$9,577,992	\$10,027,966	\$9,465,510	33.5%
Opportunistic	\$153,299	\$179,670	\$212,415	0.8%
Cash Equivalents (Liquidated Managers)	\$0	\$1,778	\$1,549	0.0%
Cash (invested in State Agency Pool)	\$300,776	\$208,380	\$302,744	1.1%

Wyoming State Treasurer's Office
Investment Values by Fund
September 30, 2021

	Total Investment Value	Fiscal Year Ending 06/30/21 Market Value	Current Market Value	% of MV
Wyoming State Total Fund	\$22,358,916,620	\$24,987,283,259	\$24,957,420,569	100.0%
Hathaway Scholarship	\$566,459,098	\$683,528,413	\$683,218,403	100.0%
US Equity	\$55,561,620	\$86,775,414	\$85,964,049	12.6%
International Equity	\$89,561,229	\$125,717,739	\$122,185,430	17.9%
MLPs	\$29,266,057	\$38,893,127	\$37,330,138	5.5%
Private Equity	\$35,545,212	\$51,653,520	\$57,782,121	8.5%
Real Estate	\$65,064,355	\$71,036,792	\$79,320,028	11.6%
Diversified Hedge Funds	\$51,771,513	\$54,751,940	\$58,126,978	8.5%
Fixed Income	\$221,561,545	\$245,352,775	\$222,986,811	32.6%
Opportunistic	\$3,579,506	\$4,658,506	\$4,835,940	0.7%
Cash Equivalents (Liquidated Managers)	\$0	\$49,771	\$43,642	0.0%
Cash (invested in State Agency Pool)	\$14,548,061	\$4,638,828	\$14,643,265	2.1%
Higher Education	\$124,925,780	\$140,858,113	\$139,664,160	100.0%
US Equity	\$8,403,873	\$14,254,540	\$12,908,456	9.2%
International Equity	\$14,563,401	\$18,891,116	\$18,135,305	13.0%
Preferred Stock	\$4,457,271	\$3,733,596	\$5,411,618	3.9%
MLPs	\$7,843,186	\$10,630,726	\$10,104,774	7.2%
Private Equity	\$47,243	\$64,598	\$67,705	0.0%
Real Estate	\$16,615,712	\$17,991,703	\$19,714,396	14.1%
Diversified Hedge Funds	\$2,019,240	\$0	\$2,034,641	1.5%
Fixed Income	\$69,761,436	\$71,877,050	\$69,898,591	50.0%
Opportunistic	\$408,652	\$548,108	\$568,662	0.4%
Cash Equivalents (Liquidated Managers)	\$0	\$10,236	\$8,972	0.0%
Cash (invested in State Agency Pool)	\$805,766	\$2,856,440	\$811,039	0.6%
Workers Compensation Fund	\$2,417,090,792	\$2,673,499,559	\$2,556,887,406	100.0%
US Equity	\$169,574,776	\$300,099,937	\$186,847,211	7.3%
International Equity	\$246,763,046	\$336,730,567	\$314,686,921	12.3%
MLPs	\$104,915,802	\$130,387,728	\$126,514,246	4.9%
Private Equity	\$817,931	\$1,118,404	\$1,172,186	0.0%
Real Estate	\$200,598,780	\$226,535,175	\$236,360,674	9.2%
Diversified Hedge Funds	\$0	\$0	\$0	0.0%
Fixed Income	\$1,662,927,887	\$1,659,325,557	\$1,654,538,701	64.7%
Opportunistic	\$17,147,744	\$19,136,062	\$22,221,844	0.9%
Cash Equivalents (Liquidated Managers)	\$0	\$119,868	\$106,923	0.0%
Cash (invested in State Agency Pool)	\$14,344,827	\$46,261	\$14,438,701	0.6%
Pool A	\$258,862,332	\$266,181,124	\$267,578,911	100.0%
US Equity	\$17,093,028	\$22,279,842	\$20,471,946	7.7%
International Equity	\$15,836,233	\$21,503,413	\$20,908,271	7.8%
Preferred Stock	\$27,562,849	\$20,024,927	\$20,260,931	7.6%
MLPs	\$10,147,382	\$13,809,340	\$13,451,491	5.0%
Private Equity	\$60,507	\$82,735	\$86,714	0.0%
Real Estate	\$20,037,207	\$21,746,193	\$22,935,862	8.6%
Diversified Hedge Funds	\$3,963,065	\$0	\$3,993,764	1.5%
Fixed Income	\$161,516,614	\$157,940,089	\$162,806,498	60.8%
Opportunistic	\$0	\$0	\$0	0.0%
Cash Equivalents (Liquidated Managers)	\$0	\$677	\$677	0.0%
Cash (invested in State Agency Pool)	\$2,645,447	\$8,793,907	\$2,662,759	1.0%
LSRA	\$1,428,557,614	\$1,599,348,958	\$1,466,770,475	100.0%
US Equity	\$109,591,775	\$189,400,162	\$119,038,170	8.1%
International Equity	\$107,121,092	\$148,547,493	\$139,318,788	9.5%
MLPs	\$49,811,961	\$77,347,272	\$62,350,197	4.3%
Private Equity	\$365,303	\$499,500	\$523,520	0.0%
Diversified Hedge Funds	\$87,161,613	\$135,009,626	\$96,626,868	6.6%
Fixed Income	\$1,074,223,294	\$1,039,334,270	\$1,048,628,509	71.5%
Opportunistic	\$0	\$0	\$0	0.0%
Cash (invested in State Agency Pool)	\$282,575	\$9,210,634	\$284,424	0.0%
State Agency Pool	\$5,466,939,112	\$5,381,510,376	\$5,502,715,363	100.0%
Fixed Income	\$3,670,931,430	\$3,690,821,338	\$3,820,988,511	69.4%
Public Purpose Investments	\$45,302,494	\$59,650,000	\$46,700,000	0.8%
Cash Equivalents	\$1,750,705,189	\$1,631,039,037	\$1,635,026,851	29.7%

Wyoming State Treasurer's Office
Investment Values by Manager
September 30, 2021

	Total Investment Value	Fiscal Year Ending 06/30/21 Market Value	Current Market Value	% of MV
Wyoming State Total Fund	\$22,358,916,620	\$24,987,283,259	\$24,957,420,569	100.0%
US Equity	\$1,458,485,677	\$2,290,646,089	\$2,116,402,100	8.5%
State Street All Cap	\$990,956,848	\$1,713,072,934	\$1,593,829,472	
UW Portfolio Management Program	\$1,000,000	\$1,865,552	\$1,877,851	
Wyoming Internal Domestic Equity	\$48,056,199	\$54,018,991	\$52,738,537	
Wyoming Internal Domestic Equity - QT	\$53,002,518	\$51,693,545	\$51,326,575	
Van Berkum	\$184,890,767	\$249,726,454	\$228,611,811	
State Street Small Cap	\$0	\$0	\$0	
BlackRock Small Cap	\$130,247,816	\$166,649,630	\$136,178,327	
Wyoming Internal Small Cap - QT	\$44,013	\$46,698	\$44,662	
Wyoming Internal Small Cap	\$50,287,515	\$53,572,284	\$51,794,865	
International Equity	\$2,079,845,594	\$2,878,590,529	\$2,782,716,181	11.1%
Northern Trust	\$936,723,047	\$1,247,499,085	\$1,186,931,150	
Harding Loevner	\$554,321,572	\$715,540,178	\$680,552,880	
Arrowstreet	\$588,800,975	\$915,551,267	\$915,232,151	
Mixed Assets	\$1,038,035,595	\$1,240,700,768	\$1,288,555,721	5.2%
Cohen & Steers	\$176,064,594	\$158,206,393	\$203,087,110	
Harvest	\$437,958,443	\$541,678,027	\$546,795,792	
Harvest Passive	\$424,012,557	\$540,816,348	\$538,672,819	
Private Equity	\$480,251,837	\$923,376,185	\$915,403,397	3.7%
Access Venture Partners II	\$2,205,145	\$2,810,913	\$3,008,425	
Cheyenne Capital Fund, L.P.	\$87,239,179	\$193,021,509	\$193,021,510	
Hamilton Lane Nowood Fund, L.P.	\$119,383,487	\$178,374,648	\$163,857,644	
BlackRock LTIC	\$156,378,204	\$245,306,369	\$257,102,601	
Valor PE	\$30,238,533	\$33,868,594	\$45,904,330	
GTCR	\$6,610,000	\$2,086,985	\$10,634,110	
Nautic	\$0	\$0	\$28,451	
Neuberger Berman Sauger	\$78,197,289	\$267,907,167	\$241,846,325	
Real Estate	\$1,790,255,780	\$1,919,427,462	\$2,147,564,670	8.6%
Clarion Lion	\$784,233,734	\$997,100,001	\$971,539,317	
Morgan Stanley Prime	\$400,000,000	\$208,464,606	\$430,148,380	
UBS Trumbull	\$200,059,943	\$229,238,501	\$224,788,461	
M&G	\$38,661,659	\$15,440,696	\$15,245,957	
Northwood	\$114,430,218	\$180,265,051	\$195,666,061	
SC Capital	\$99,592,288	\$110,495,144	\$112,480,266	
Realterm	\$150,000,000	\$169,555,857	\$189,162,641	
WestRiver	\$3,277,938	\$8,867,607	\$8,533,587	
Diversified Hedge Funds	\$944,914,407	\$910,641,643	\$1,047,885,806	4.2%
PAAMCO - Jackalope	\$6,433,236	\$2,808,370	\$2,805,749	
Grosvenor Diversified Hedge Funds	\$362,491,087	\$333,675,996	\$406,979,177	
Internal Diversified Hedge Funds	\$575,990,084	\$574,157,276	\$638,100,880	
Fixed Income	\$12,455,620,857	\$12,687,360,714	\$12,539,615,888	50.2%
PIMCO	\$2,784,366,802	\$3,019,931,619	\$2,790,163,987	
Payden & Rygel	\$660,163,221	\$685,581,601	\$679,919,104	
JPM MBS	\$754,359,061	\$715,093,888	\$759,278,875	
Credit Suisse	\$501,482,951	\$502,023,456	\$501,960,097	
Octagon	\$737,001,991	\$771,634,014	\$750,706,965	
KKR	\$140,000,000	\$0	\$140,114,767	
Grosvenor Silvery Lupine Fund	\$24,851,966	\$32,584,997	\$32,966,975	
Investec	\$0	\$0	\$0	
Global Evolution	\$106,599,659	\$142,351,773	\$98,644,692	
Eaton Vance EMD	\$192,000,000	\$228,858,537	\$199,927,859	
Global Evolution Hard	\$173,935,576	\$194,417,130	\$169,142,485	
Finisterre	\$150,032,970	\$150,796,023	\$148,175,877	
Goldman Sachs	\$214,716,170	\$192,567,741	\$222,534,316	
Wellington	\$100,000,000	\$0	\$96,887,550	
Internal Long Duration Govt Portfolio	\$301,342,512	\$320,279,050	\$318,267,924	
Logan Circle	\$417,010,515	\$482,750,725	\$452,123,460	
Internal Int. Duration Govt Portfolio	\$1,155,809,033	\$1,167,969,825	\$1,113,352,920	
Internal Low Duration Govt Portfolio	\$509,425,377	\$497,388,086	\$497,839,849	
Wyoming Internal Ladder Portfolio	\$3,532,523,053.50	\$3,583,132,248	\$3,567,608,185	
Opportunistic	\$94,662,924	\$105,020,541	\$123,771,001	0.5%
Grosvenor D	\$94,662,924	\$105,020,541	\$123,771,001	
Public Purpose Investments	\$189,702,377	\$202,610,830	\$189,702,377	0.8%
Cash & Cash Equivalents	\$1,827,141,572	\$1,828,908,498	\$1,805,803,428	7.2%
Epoch	\$0	\$0	\$0	
Internal Equity Russell 2000	\$0	\$1,095	\$1,095	
Fisher Investments	\$0	\$901,588	\$756,097	
Cornerstone	\$83,682	\$2,354	\$2,354	
Heitman	\$1,759,375	\$0	\$0	
TA Realty	\$1,572,513	\$26,117	\$26,117	
Allianz Global Investors	\$0	\$36,297	\$36,297	
C.S. McKee	\$4,588,726	\$0	\$0	
JP Morgan Core	\$12,476,418	\$0	\$0	
Neuberger Berman Credit	\$0	\$574,056	\$574,056	
Seix	\$0	\$1,520	\$1,520	
State Street TIPS	\$1,798,617	\$0	\$0	
State Street Low Duration	\$0	\$29,699	\$29,699	
Stone Harbor	\$150,719	\$0	\$0	
JP Morgan Cash Composite	\$1,804,711,521	\$1,827,335,771	\$1,804,376,193	

Investment Manager Profiles



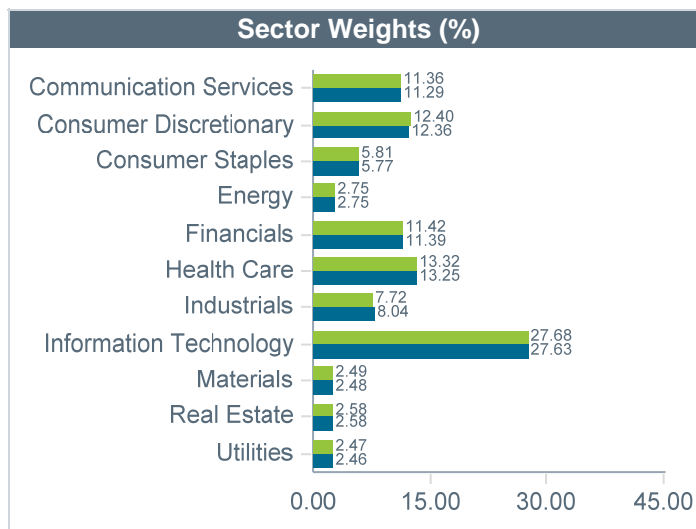
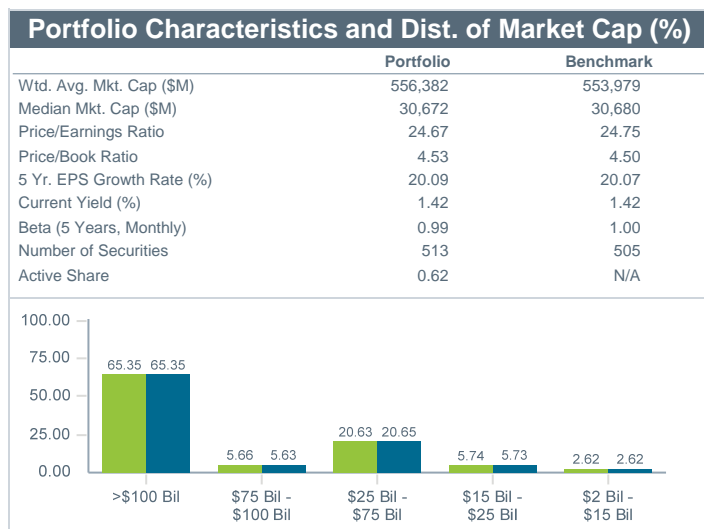
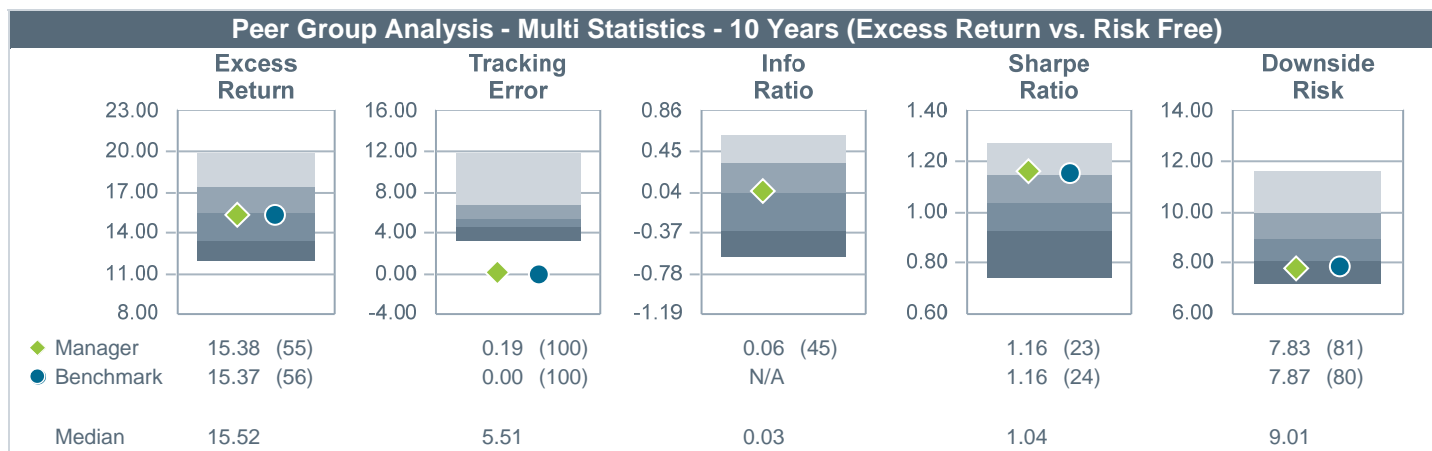
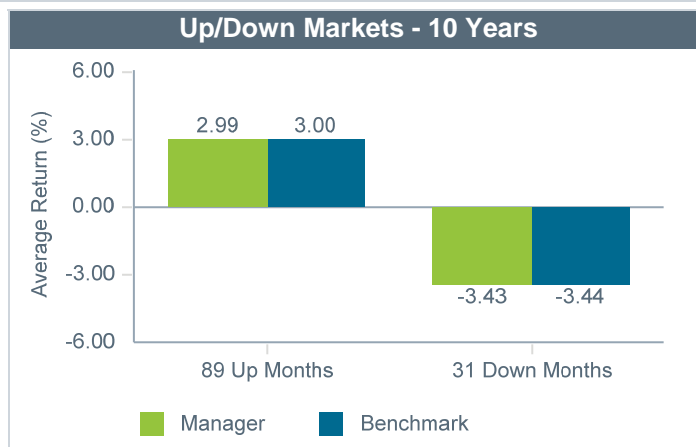
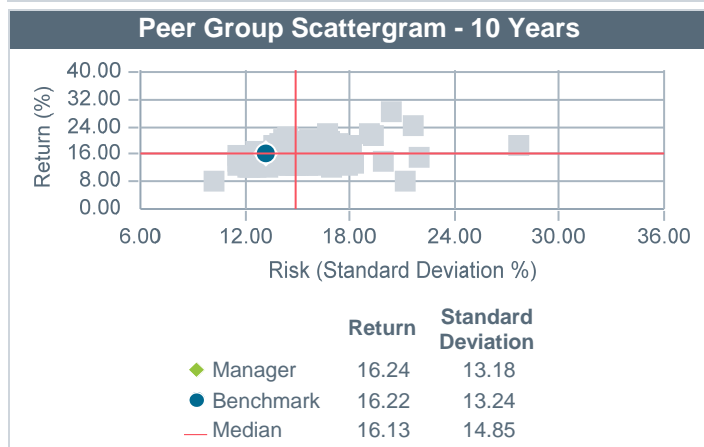
Manager: State Street All Cap

As of September 30, 2021

Benchmark: State Street All Cap Custom Index

Peer Group: IM U.S. All Cap Equity (SA+CF)

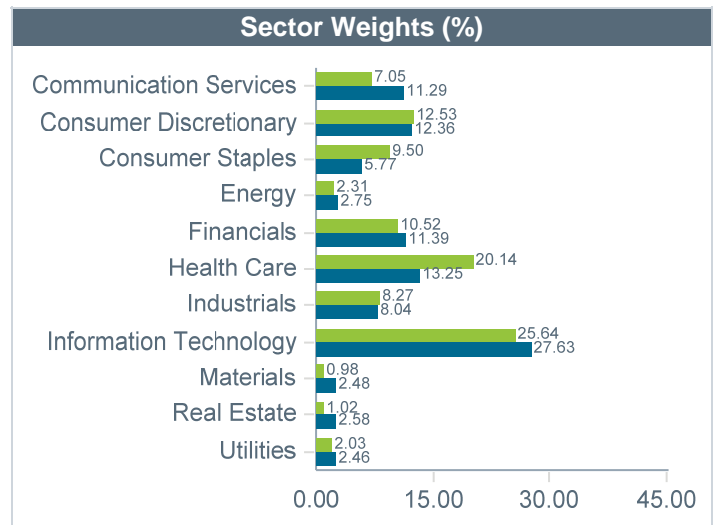
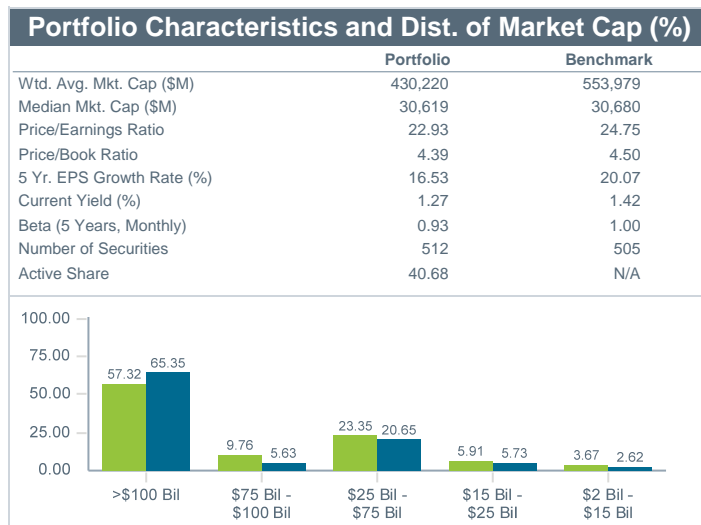
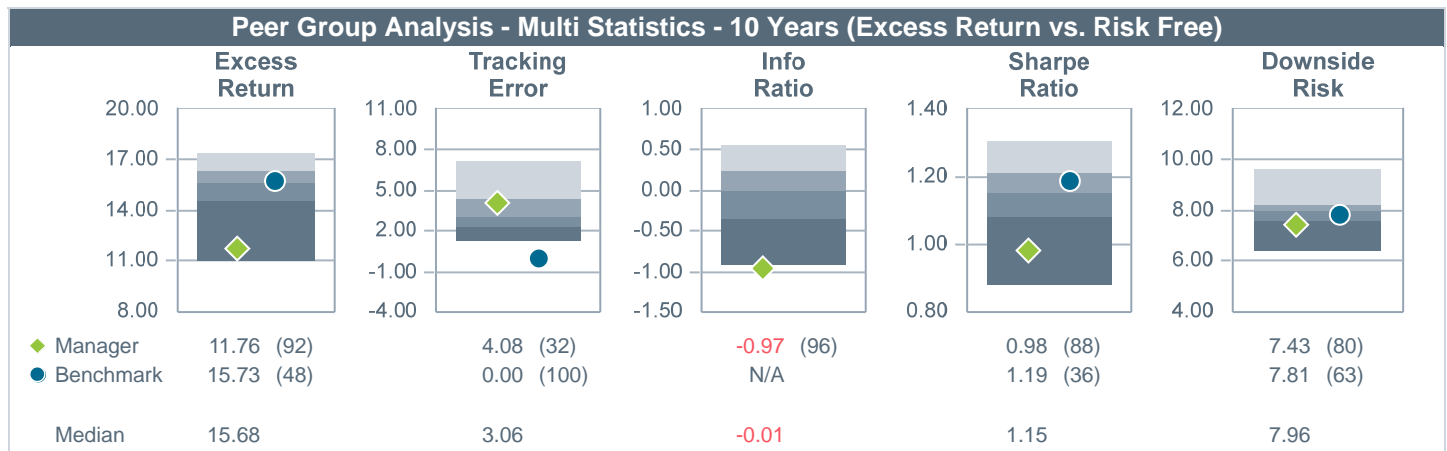
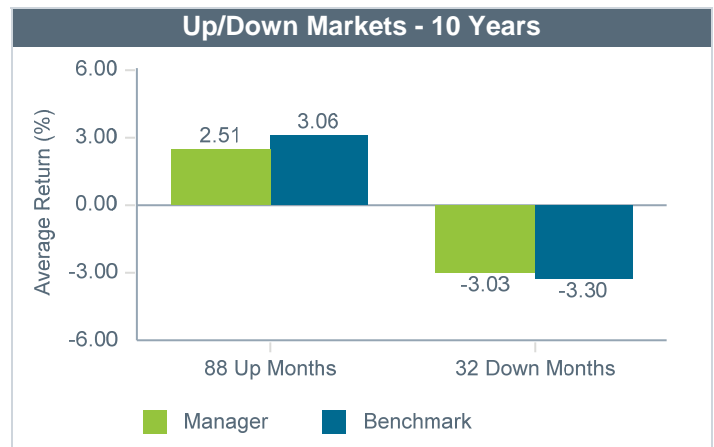
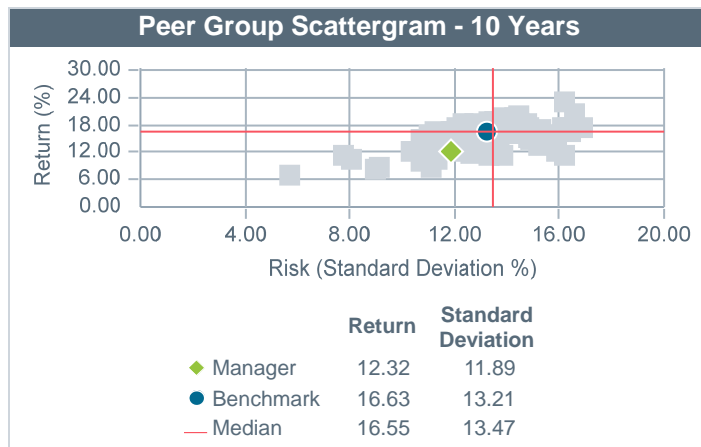
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.58	30.00	15.39	16.11	13.43	16.24	17.58	30.34	-5.25	19.79	13.77
Benchmark	0.58	30.00	15.25	16.03	13.40	16.22	17.65	30.11	-5.50	19.85	13.78
Difference	0.00	0.00	0.14	0.08	0.03	0.02	-0.07	0.23	0.25	-0.06	-0.01
Peer Group Median	-0.20	34.31	15.08	15.96	12.81	16.13	16.18	29.10	-5.75	20.23	12.73
Rank	29	65	48	50	45	45	48	44	46	54	44
Population	145	144	141	137	125	113	162	178	183	188	201



Performance shown is gross of fees. Performance prior to client inception consists of the State Street All Cap Custom Index. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

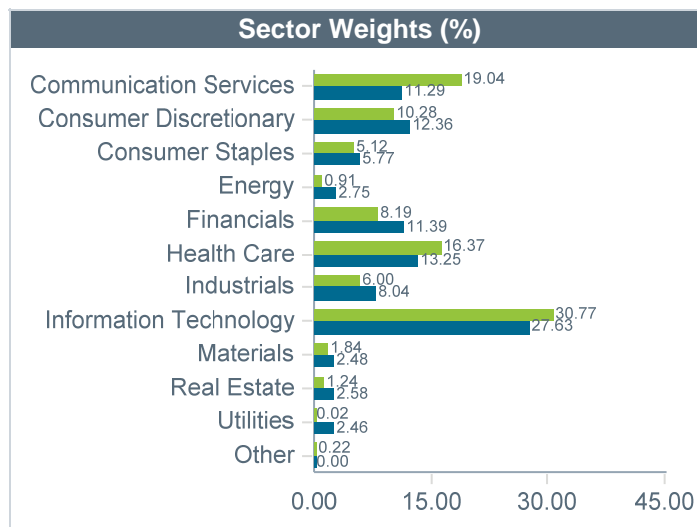
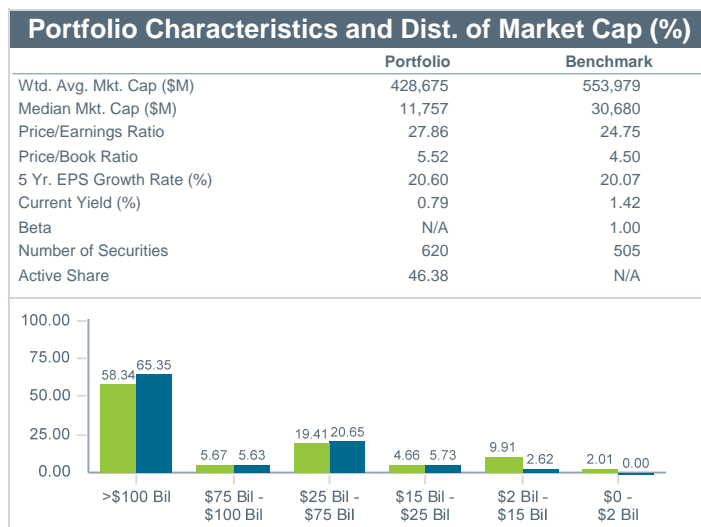
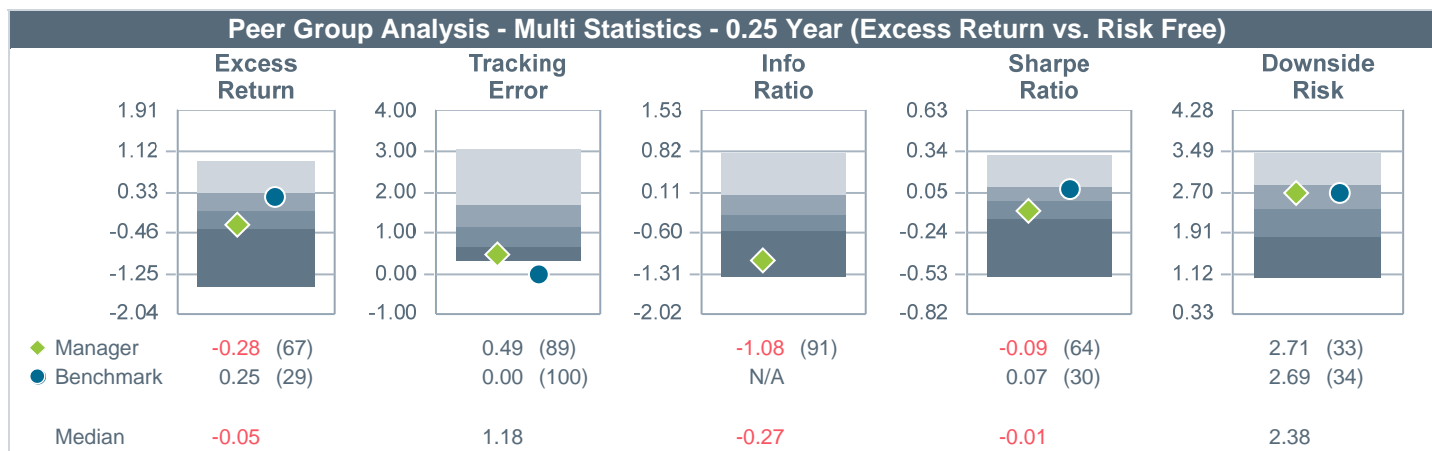
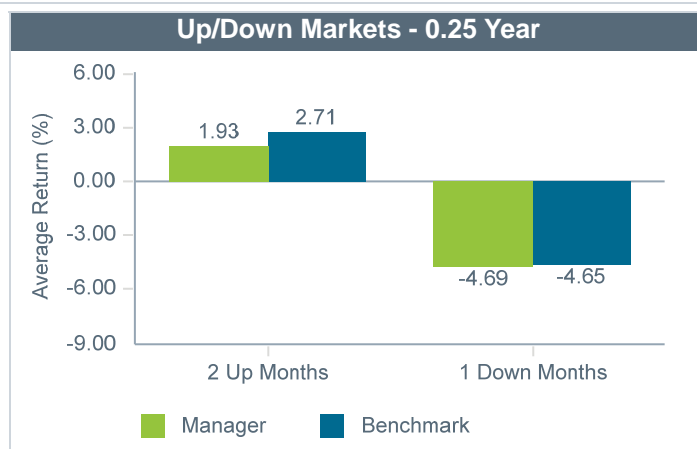
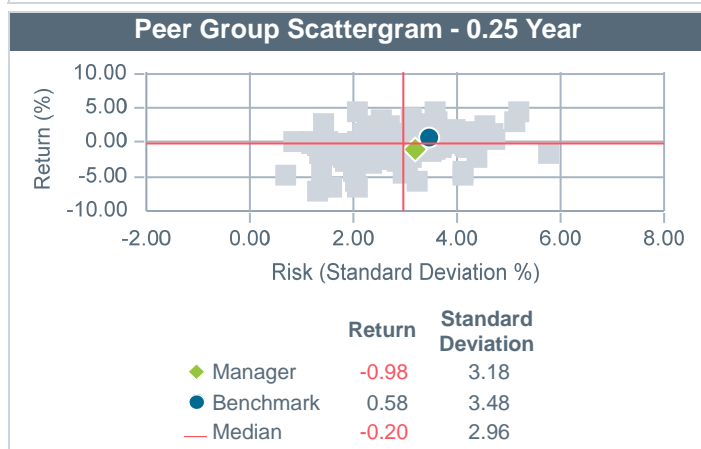


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.95	26.79	10.98	13.42	11.48	12.32	14.73	25.88	-8.04	21.83	10.87
Benchmark	0.58	30.00	15.99	16.90	14.01	16.63	18.40	31.49	-4.38	21.83	11.96
Difference	0.37	-3.21	-5.01	-3.48	-2.53	-4.31	-3.67	-5.61	-3.66	0.00	-1.09
Peer Group Median	0.11	30.58	15.19	16.54	13.64	16.55	17.25	30.00	-5.16	21.86	10.63
Rank	17	76	87	82	82	92	60	80	85	52	48
Population	204	203	196	191	183	165	225	253	276	299	319



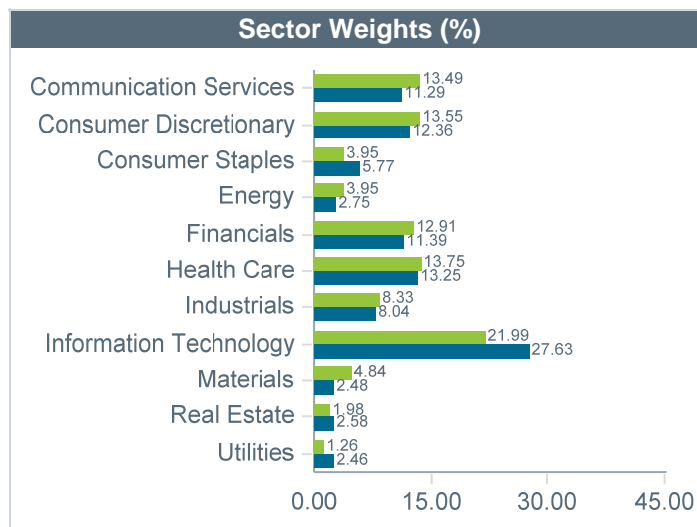
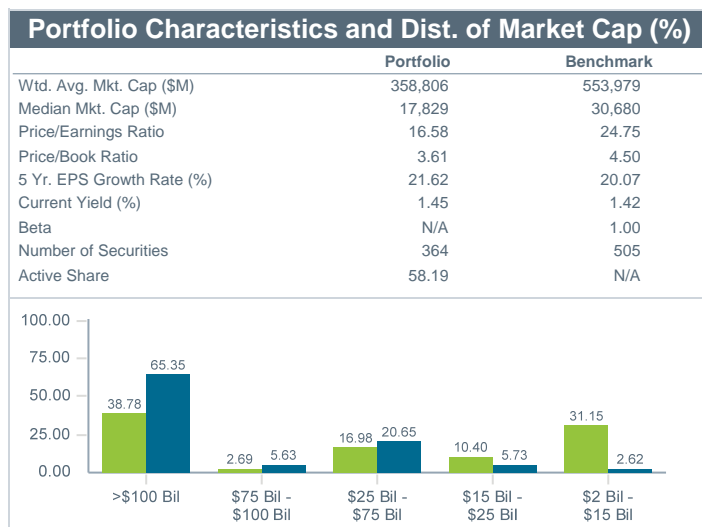
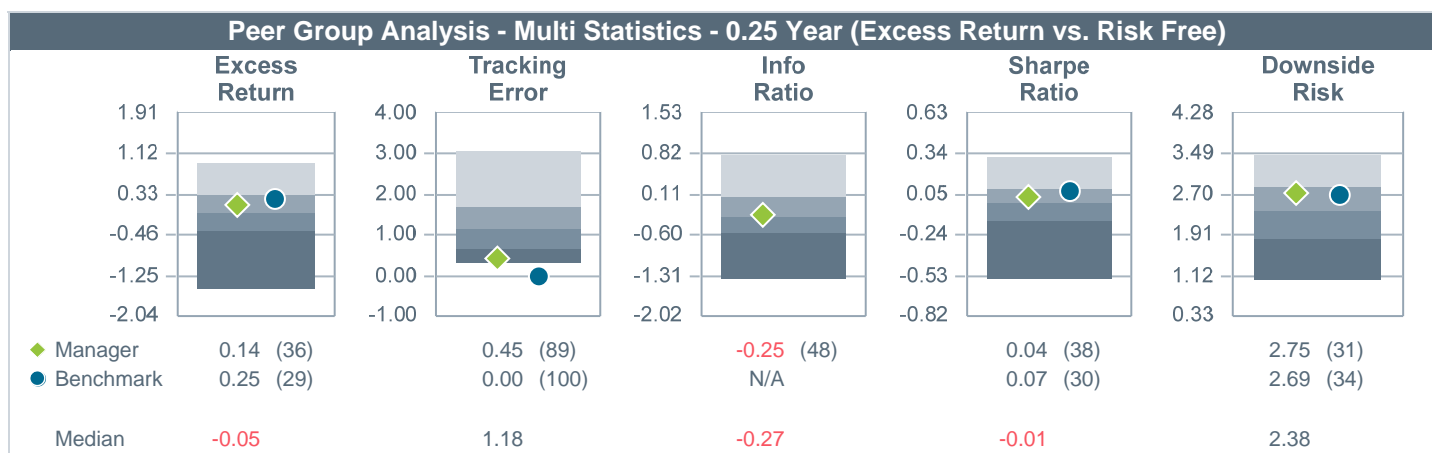
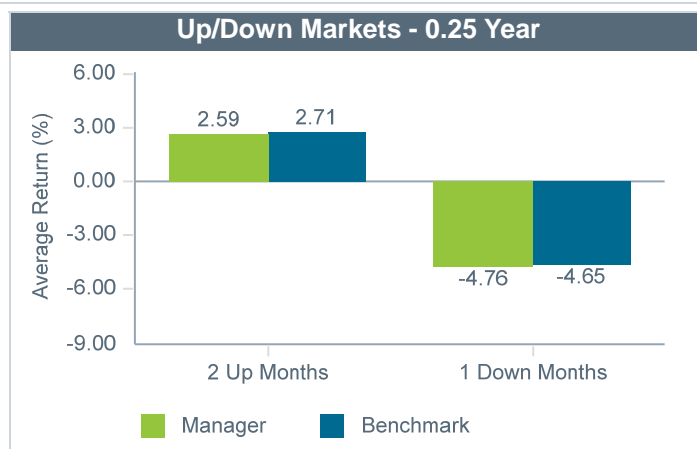
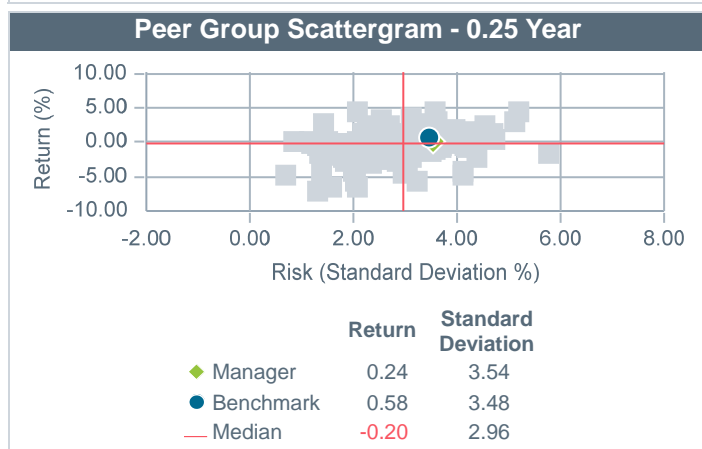
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	0.58	30.00	15.99	16.90	14.01	16.63	18.40	31.49	-4.38	21.83	11.96
Difference	-1.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-0.20	34.31	15.08	15.96	12.81	16.13	16.18	29.10	-5.75	20.23	12.73
Rank	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	145	144	141	137	125	113	162	178	183	188	201



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	0.58	30.00	15.99	16.90	14.01	16.63	18.40	31.49	-4.38	21.83	11.96
Difference	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-0.20	34.31	15.08	15.96	12.81	16.13	16.18	29.10	-5.75	20.23	12.73
Rank	37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	145	144	141	137	125	113	162	178	183	188	201

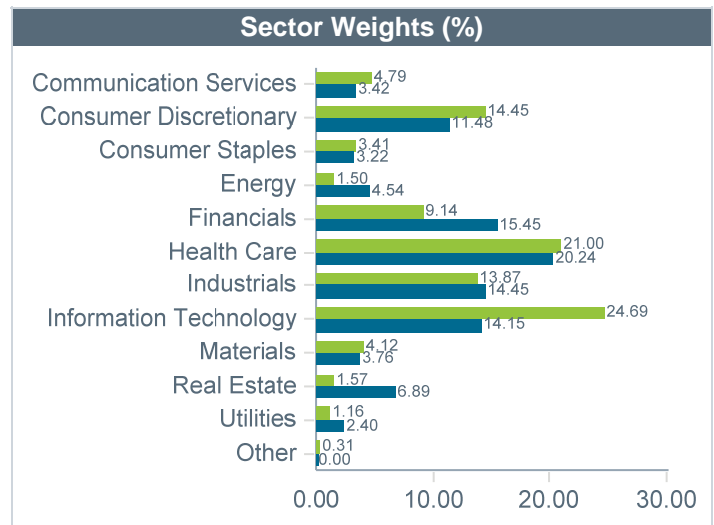
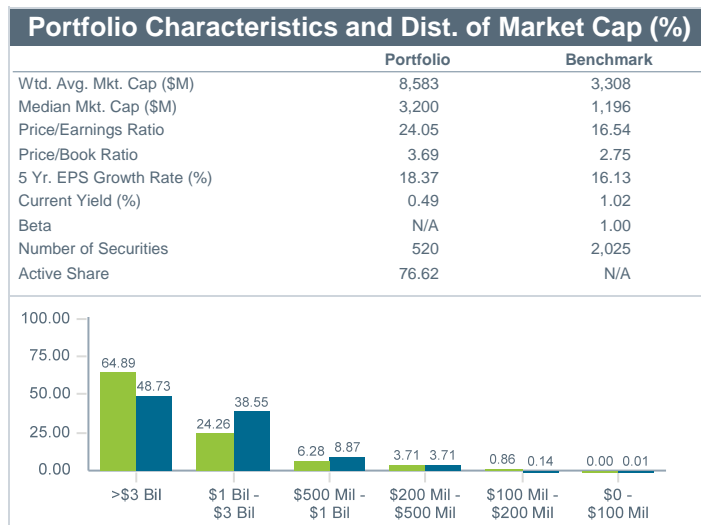
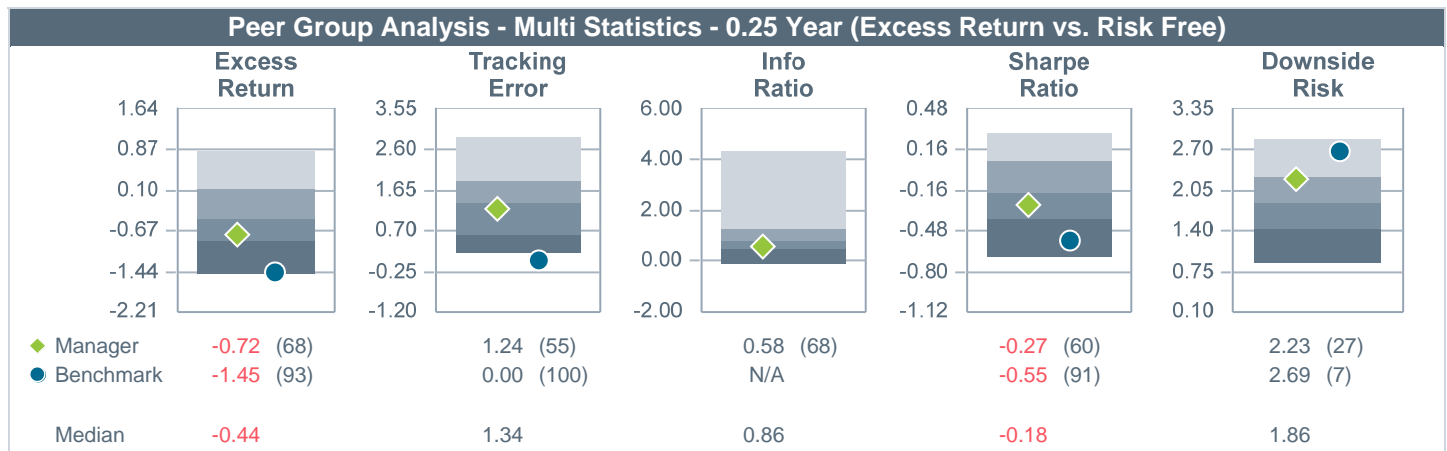
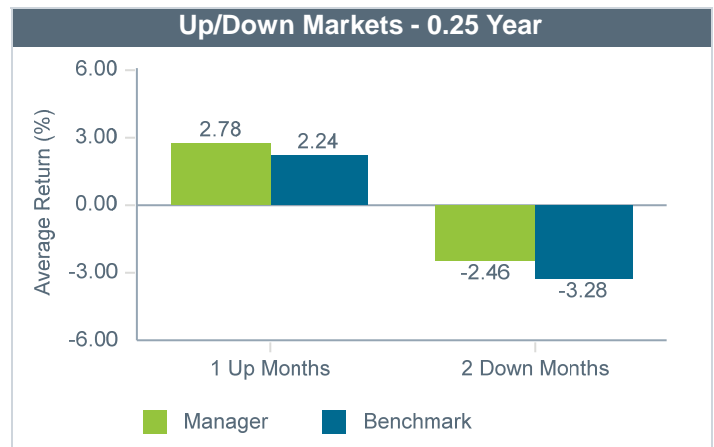
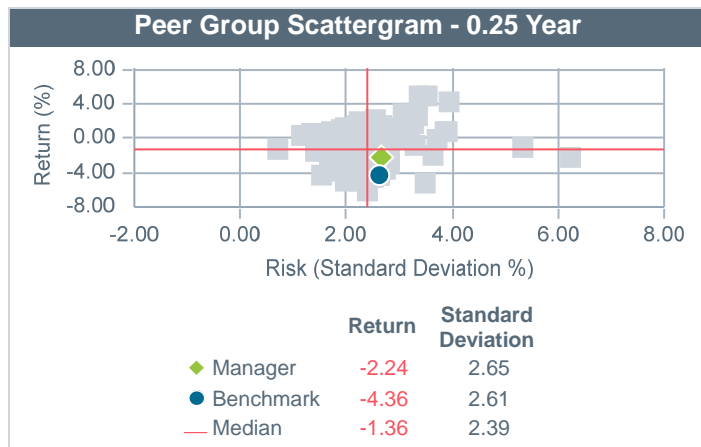


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: Small Cap Equity Quantamental
As of September 30, 2021
Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	-4.36	47.68	10.54	13.45	11.90	14.63	19.96	25.53	-11.01	14.65	21.31
Difference	2.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-1.36	51.69	11.85	14.87	13.18	16.11	17.85	25.11	-10.65	15.07	20.77
Rank	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	113	113	111	109	103	94	121	132	149	153	154



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

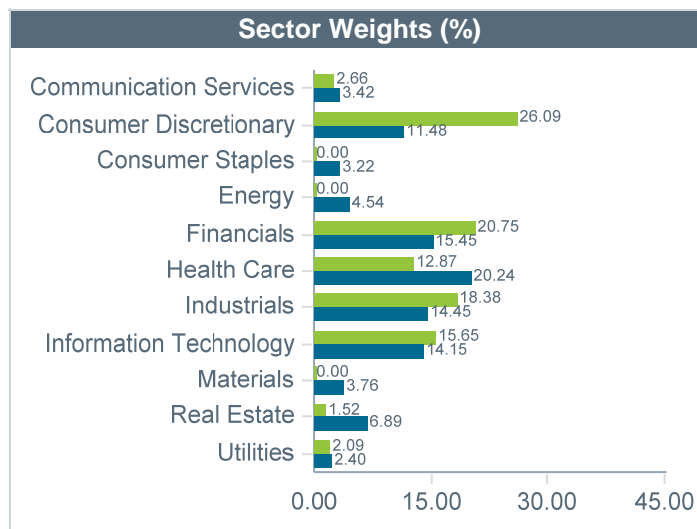
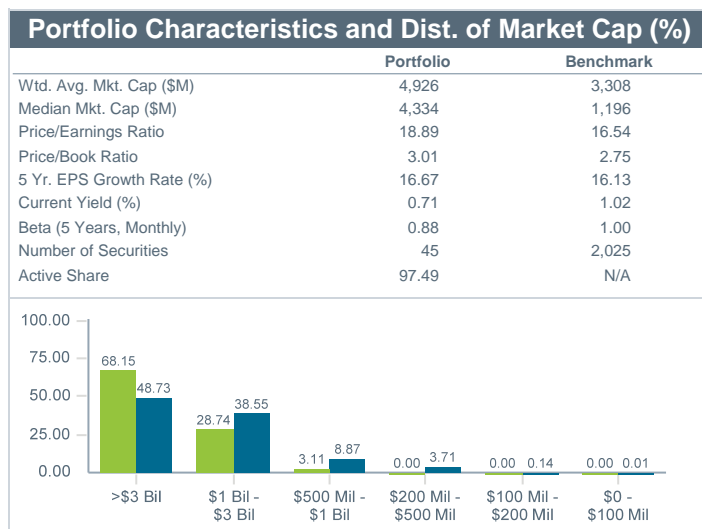
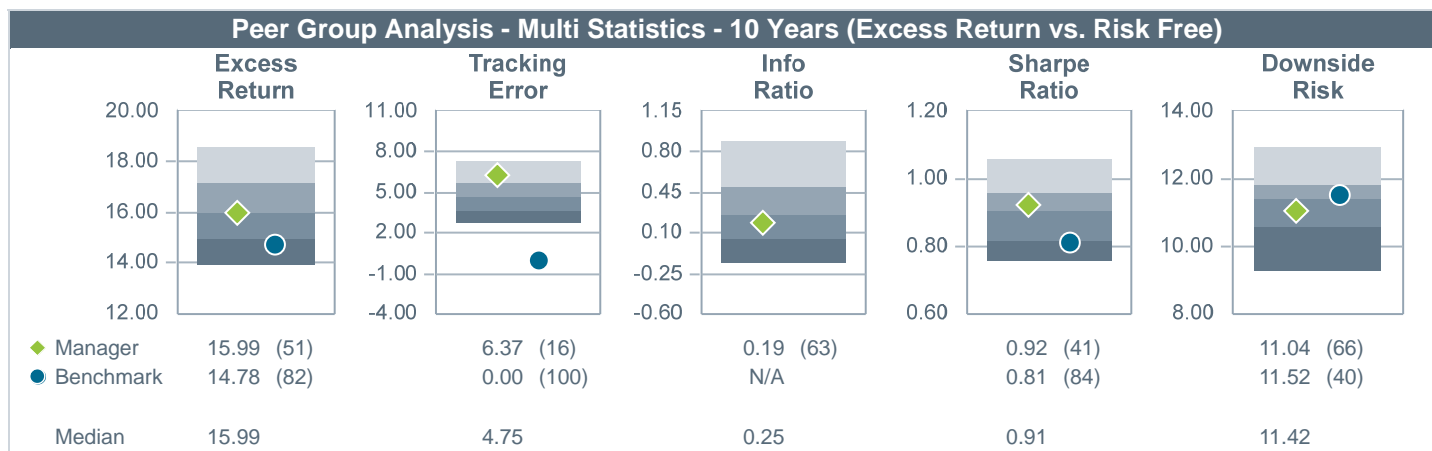
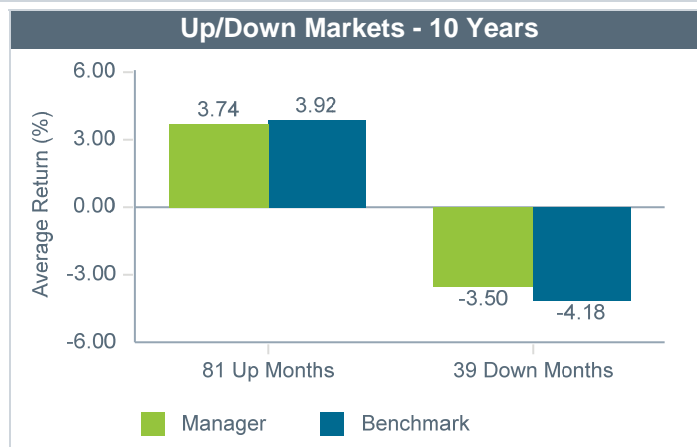
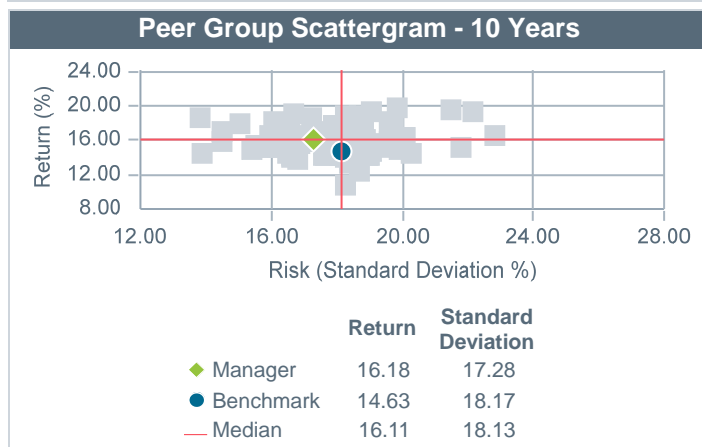
Manager: Van Berkom

As of September 30, 2021

Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.34	41.75	9.99	14.22	13.29	16.18	9.22	29.96	-2.61	16.57	25.90
Benchmark	-4.36	47.68	10.54	13.45	11.90	14.63	19.96	25.53	-11.01	14.65	21.31
Difference	4.02	-5.93	-0.55	0.77	1.39	1.55	-10.74	4.43	8.40	1.92	4.59
Peer Group Median	-1.36	51.69	11.85	14.87	13.18	16.06	17.85	25.11	-10.65	15.07	20.77
Rank	37	84	76	60	50	48	83	22	8	36	15
Population	113	113	111	109	103	94	121	132	149	153	154



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

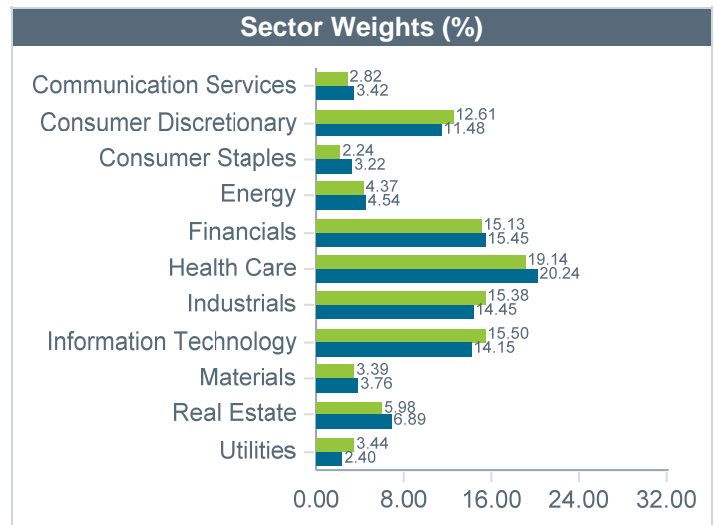
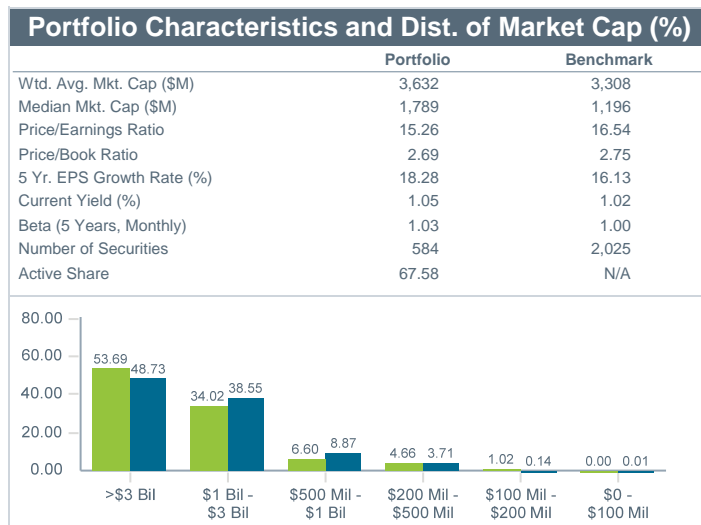
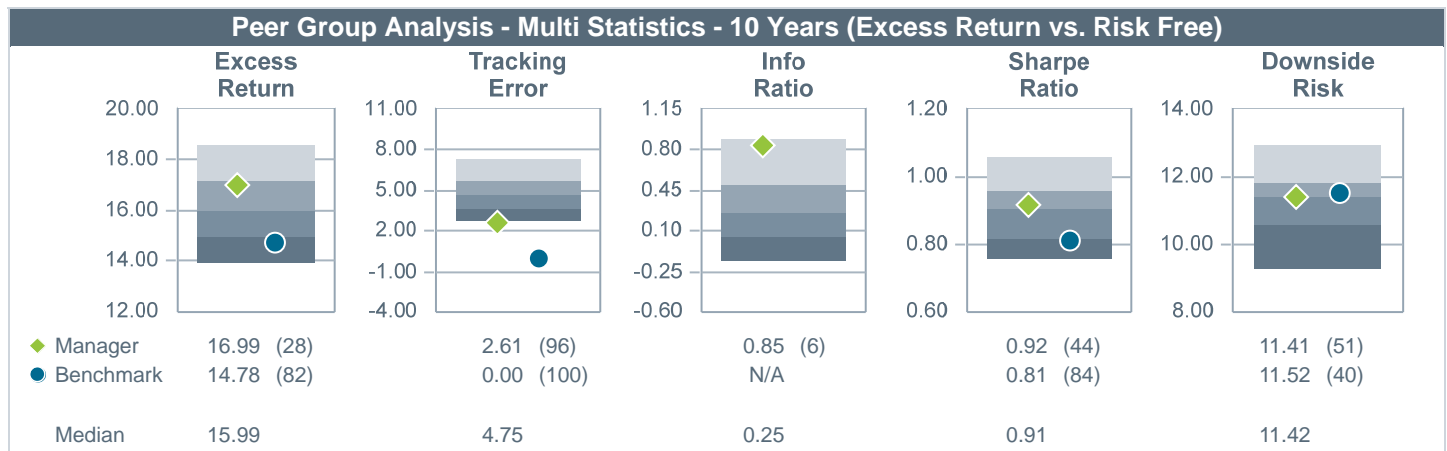
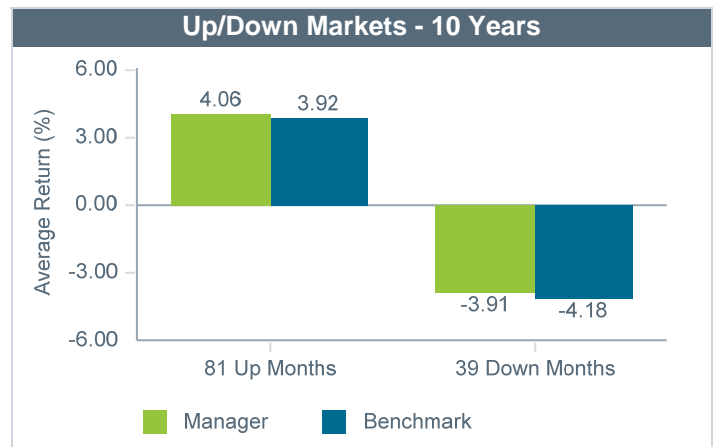
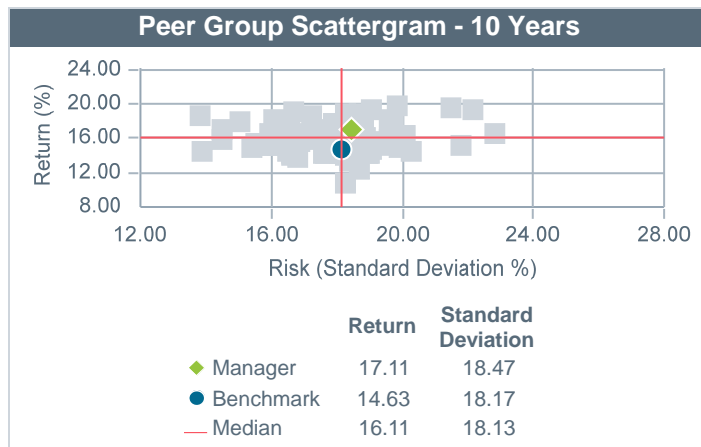
Manager: BlackRock Small Cap

As of September 30, 2021

Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-4.35	48.62	13.80	15.66	13.19	17.11	22.25	33.43	-9.09	11.38	23.63
Benchmark	-4.36	47.68	10.54	13.45	11.90	14.63	19.96	25.53	-11.01	14.65	21.31
Difference	0.01	0.94	3.26	2.21	1.29	2.48	2.29	7.90	1.92	-3.27	2.32
Peer Group Median	-1.36	51.69	11.85	14.87	13.18	16.06	17.85	25.11	-10.65	15.07	20.77
Rank	93	63	34	38	50	28	28	8	36	79	29
Population	113	113	111	109	103	94	121	132	149	153	154



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

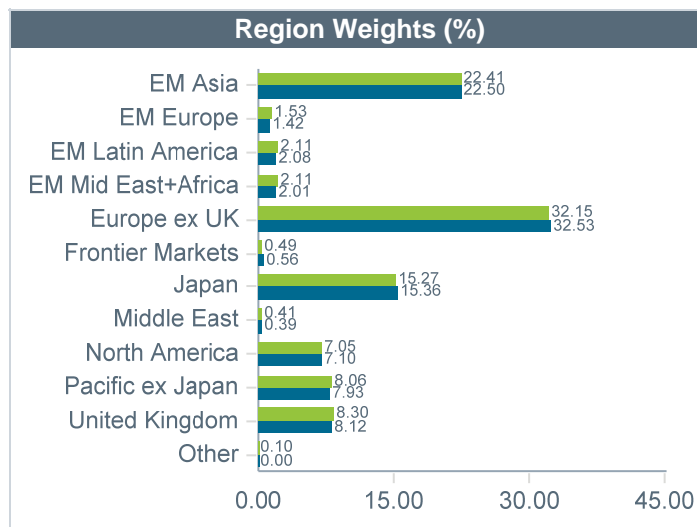
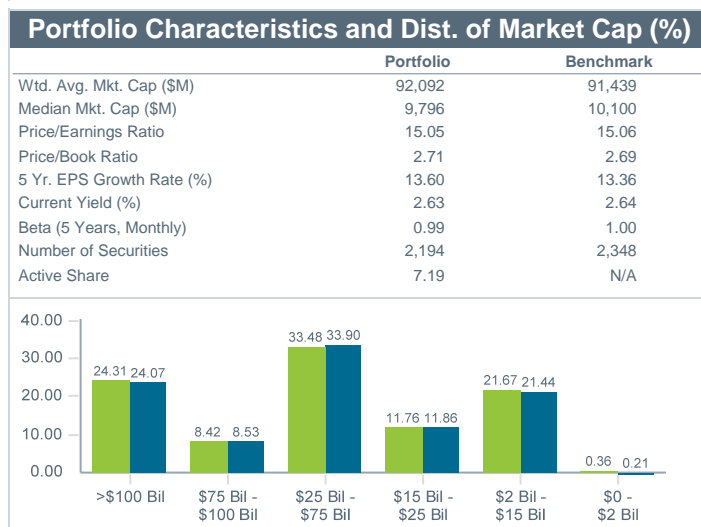
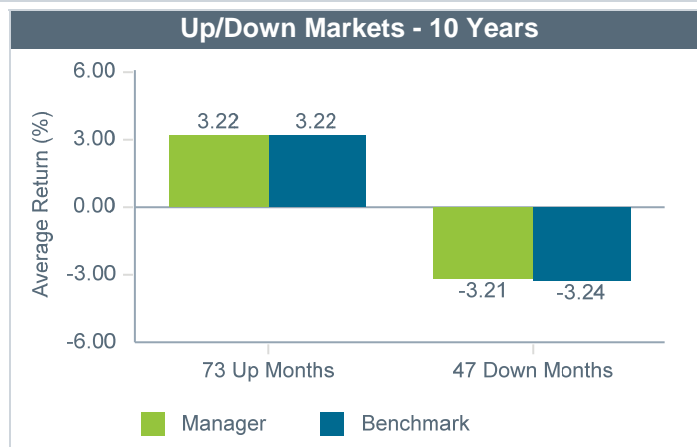
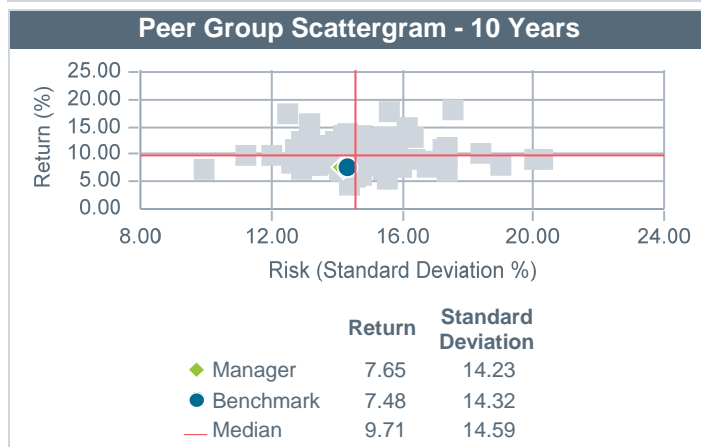
Manager: Northern Trust

As of September 30, 2021

Benchmark: MSCI ACW Ex US Index (USD) (Net)

Peer Group: IM All ACWI Ex US (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-3.12	23.72	8.09	9.08	5.80	7.65	10.69	21.66	-13.81	27.51	4.48
Benchmark	-2.99	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19	4.50
Difference	-0.13	-0.20	0.06	0.14	0.12	0.17	0.04	0.15	0.39	0.32	-0.02
Peer Group Median	-1.87	25.30	10.27	10.68	7.37	9.71	14.71	24.97	-14.64	28.74	2.12
Rank	79	60	66	69	77	87	61	68	40	62	30
Population	153	153	153	153	149	129	163	171	181	191	205



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to other consists of Luxembourg.

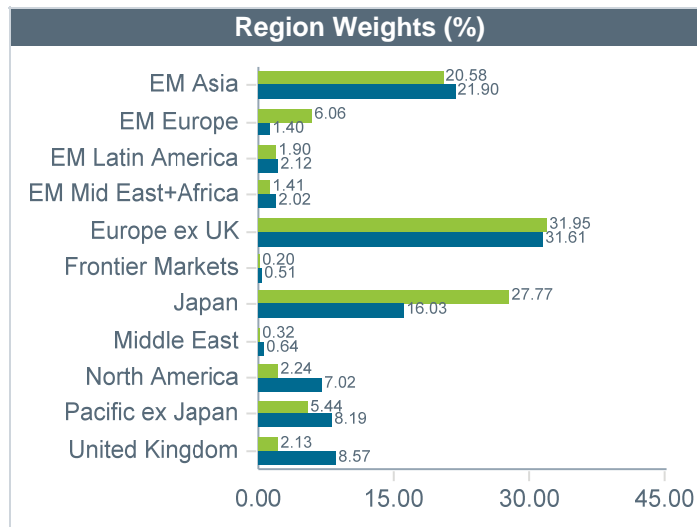
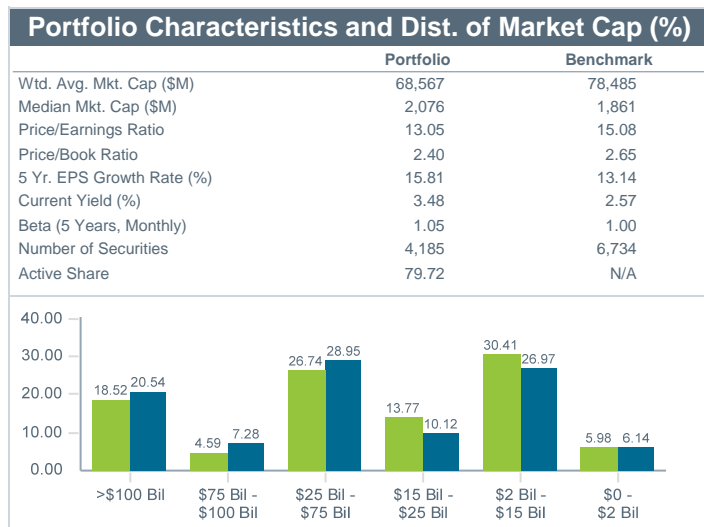
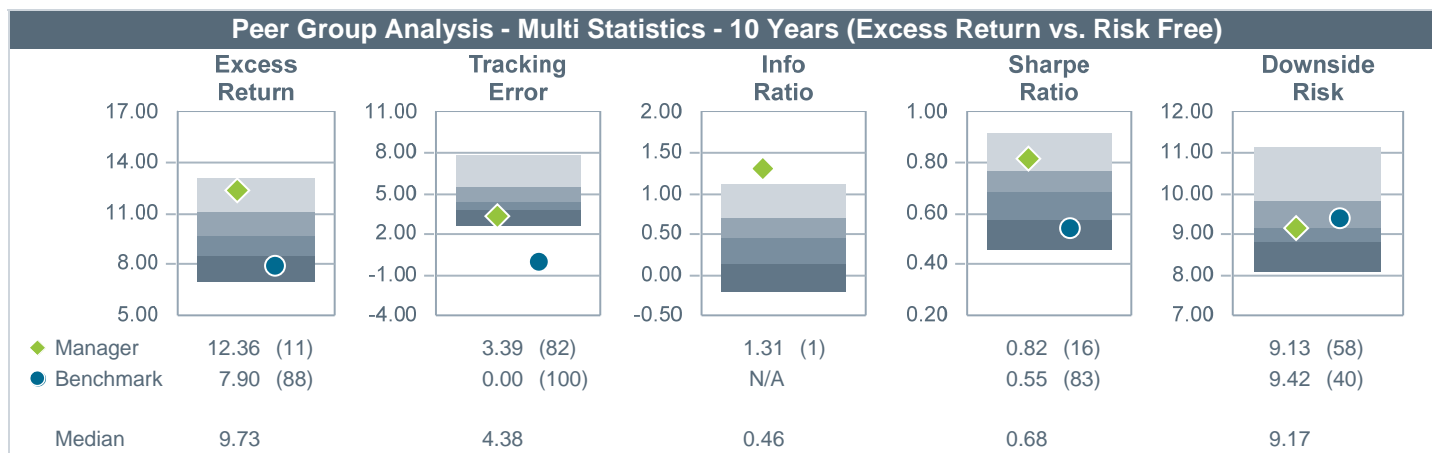
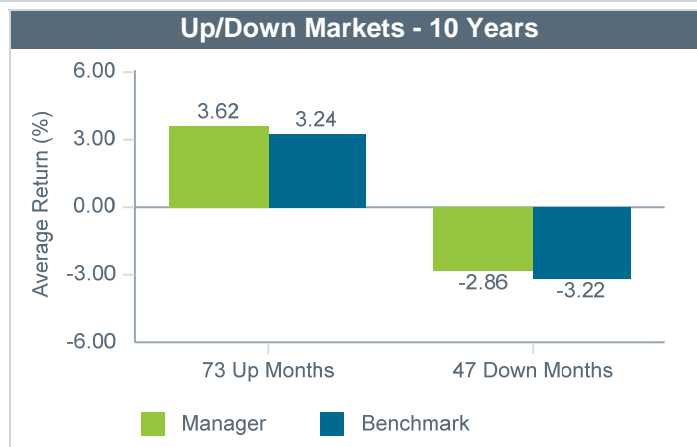
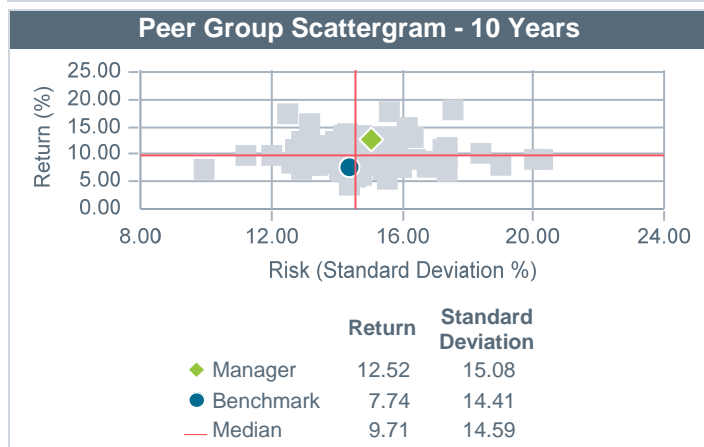
Manager: Arrowstreet

As of September 30, 2021

Benchmark: MSCI ACW Ex US IM Index (USD) (Net)

Peer Group: IM All ACWI Ex US (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.07	40.74	14.67	13.87	10.75	12.52	23.28	23.43	-13.84	29.12	8.06
Benchmark	-2.56	25.16	8.34	9.13	6.02	7.74	11.12	21.63	-14.76	27.81	4.41
Difference	2.63	15.58	6.33	4.74	4.73	4.78	12.16	1.80	0.92	1.31	3.65
Peer Group Median	-1.87	25.30	10.27	10.68	7.37	9.71	14.71	24.97	-14.64	28.74	2.12
Rank	19	3	18	17	18	11	22	58	41	48	10
Population	153	153	153	153	149	129	163	171	181	191	205



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

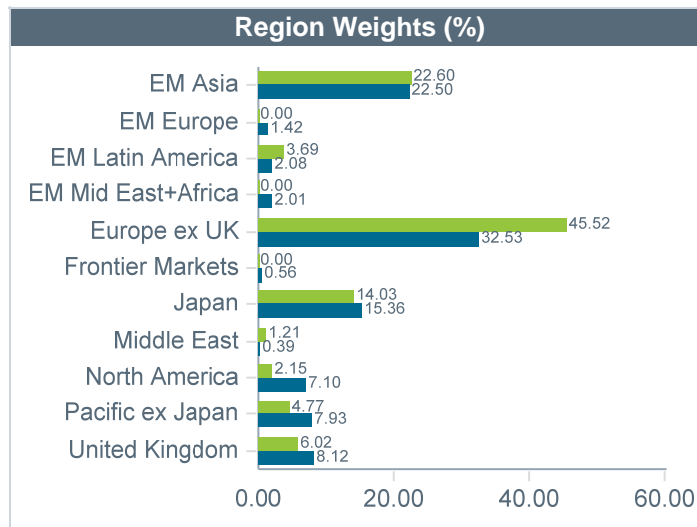
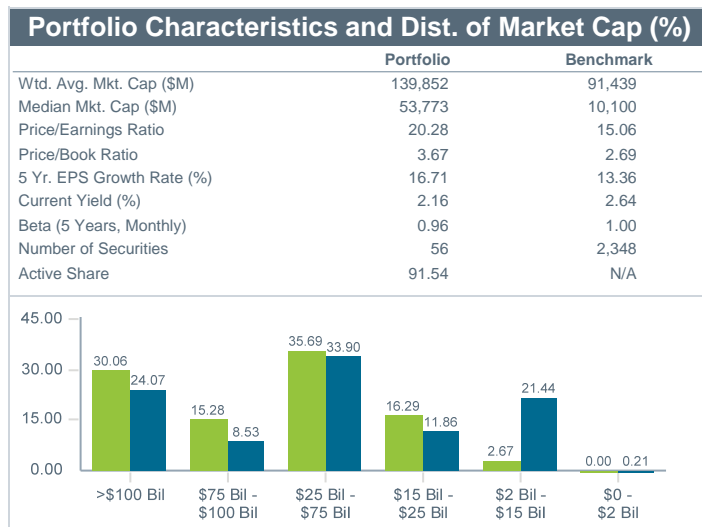
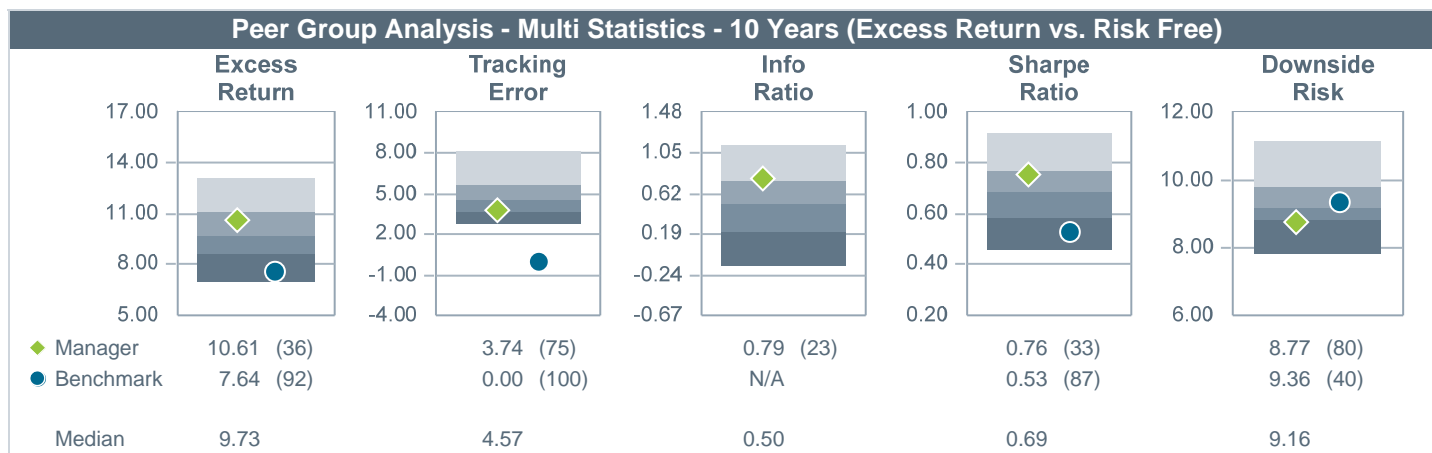
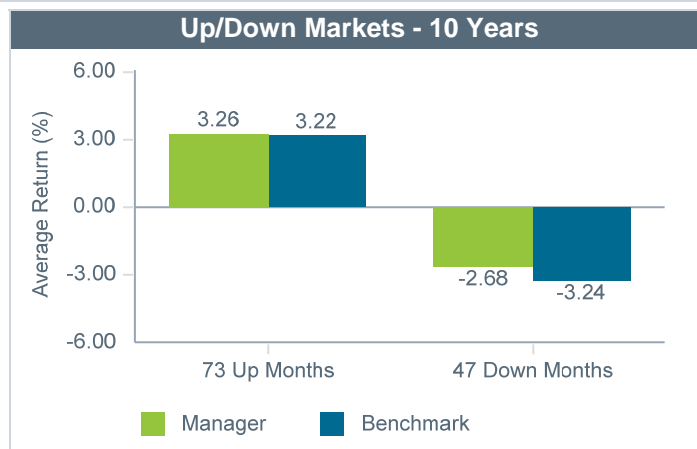
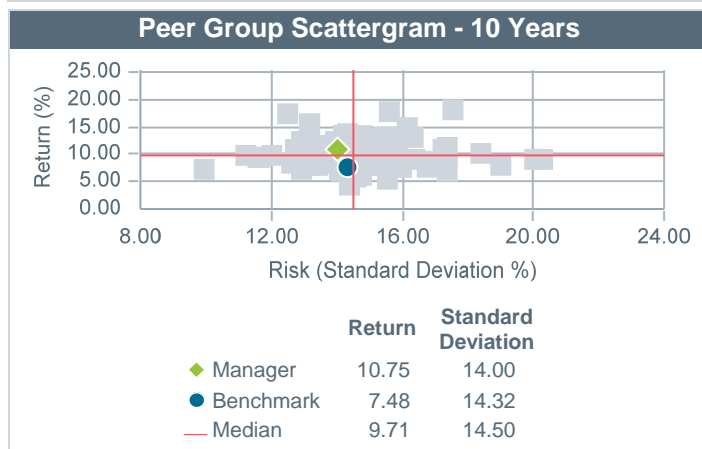
Manager: Harding Loevner

As of September 30, 2021

Benchmark: MSCI ACW Ex US Index (USD) (Net)

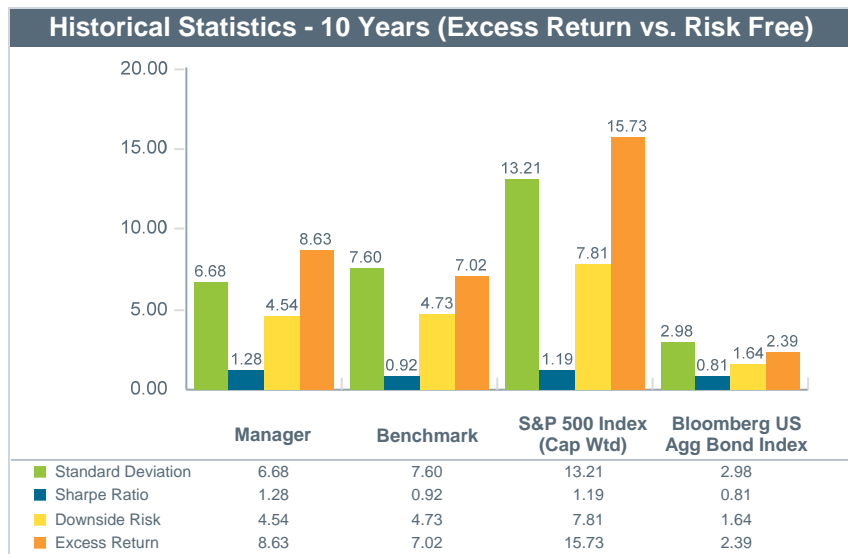
Peer Group: IM All ACWI Ex US (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-2.65	20.45	10.25	11.42	9.37	10.75	20.86	26.27	-13.24	30.86	6.19
Benchmark	-2.99	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19	4.50
Difference	0.34	-3.47	2.22	2.48	3.69	3.27	10.21	4.76	0.96	3.67	1.69
Peer Group Median	-1.87	25.30	10.27	10.68	7.37	9.71	14.71	24.97	-14.64	28.74	2.12
Rank	70	81	51	41	29	35	32	43	33	38	17
Population	153	153	153	153	149	129	163	171	181	191	205



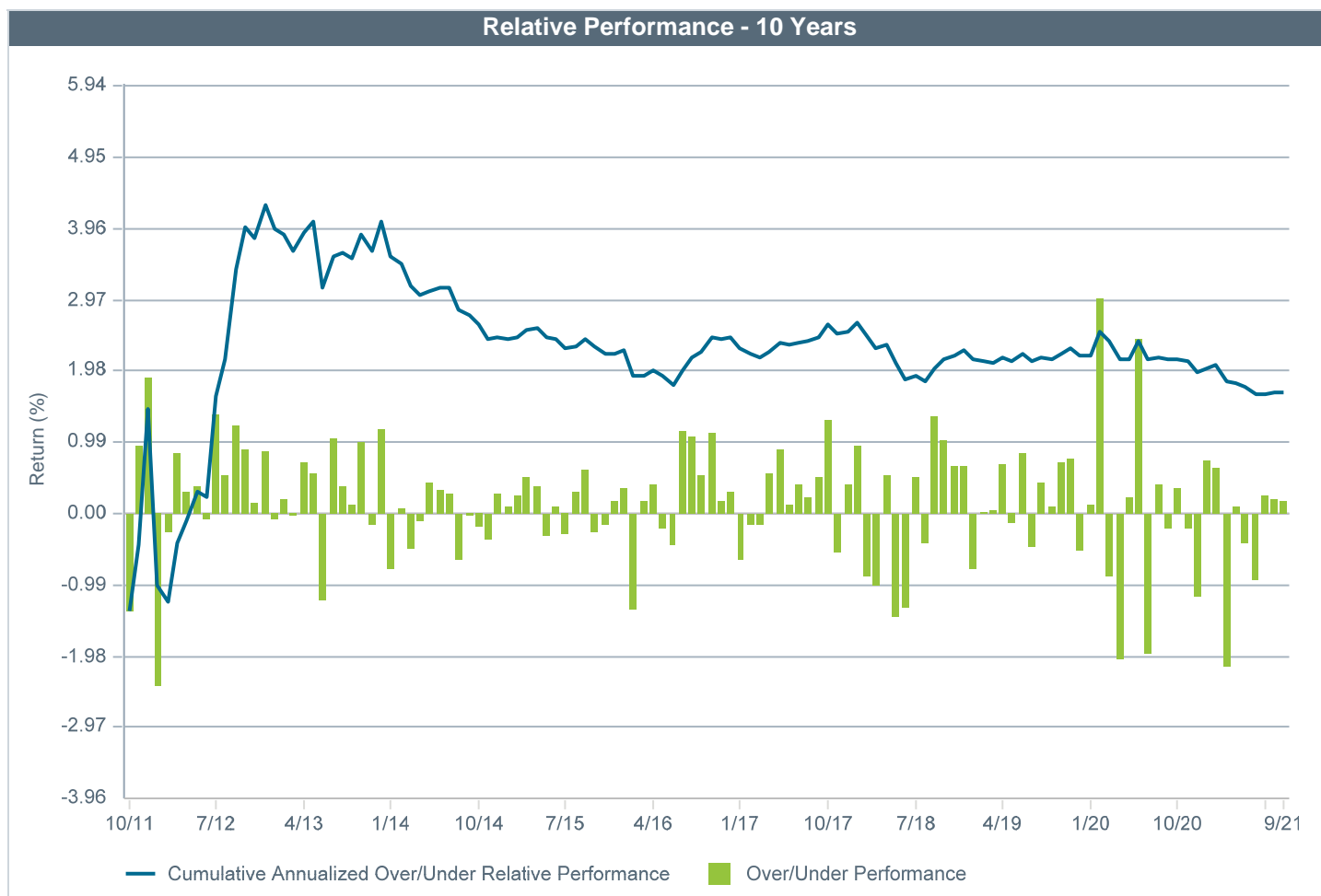
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.26	10.71	9.29	7.43	7.71	9.42	8.01	19.68	-3.68	12.31	5.43
Benchmark	0.60	13.36	8.31	6.25	6.41	7.61	7.97	17.64	-4.25	9.11	1.94
Difference	0.66	-2.65	0.98	1.18	1.30	1.81	0.04	2.04	0.57	3.20	3.49



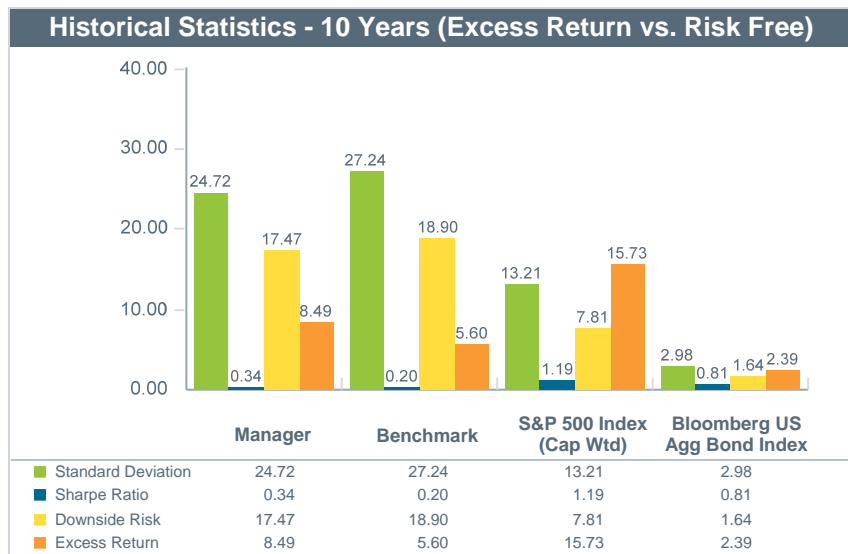
Actual Correlation - 10 Years

	Actual Correlation
Preferred Stock Custom Index	0.95
S&P 500 Index (Cap Wtd)	0.78
Russell 2000 Index	0.69
MSCI EAFE Index (USD) (Net)	0.78
MSCI Emg Mkts Index (USD) (Net)	0.74
Bloomberg US Agg Bond Index	0.24
Bloomberg US Trsy US TIPS Index	0.41
NCREIF ODCE Index (AWA) (Gross)	-0.21
Wilshire US REIT Index	0.72
HFRI FOF Comp Index	0.77
Bloomberg Cmtty Index (TR)	0.54
ICE BofAML 3 Mo US T-Bill Index	-0.29
Cons Price Index (Unadjusted)	0.12



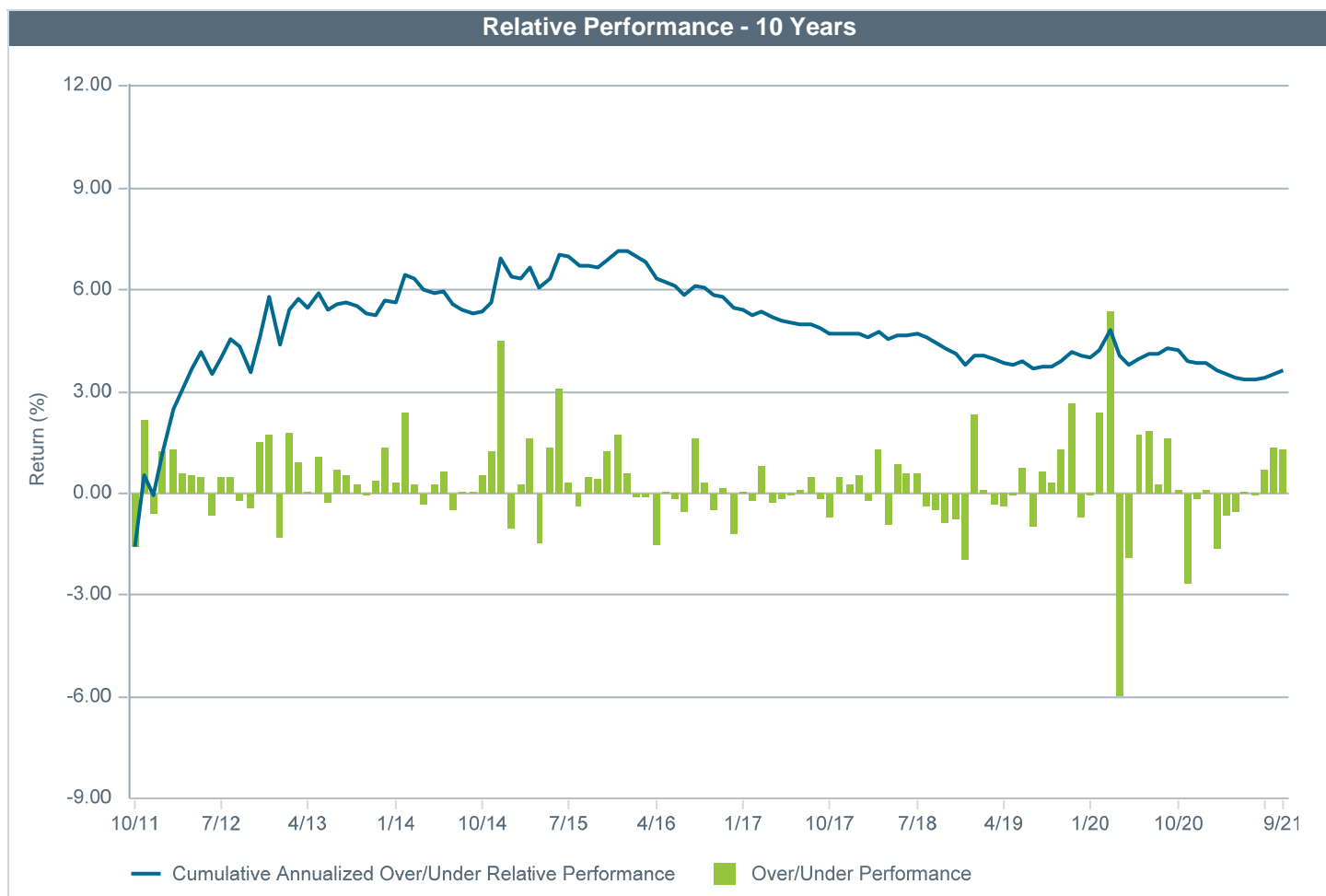
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on quarterly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.26	71.97	-1.30	0.37	-3.31	5.98	-23.94	13.82	-13.12	-4.98	20.34
Benchmark	-3.50	75.66	-2.90	-0.82	-6.03	2.29	-25.60	7.55	-11.67	-5.58	21.95
Difference	3.24	-3.69	1.60	1.19	2.72	3.69	1.66	6.27	-1.45	0.60	-1.61



Actual Correlation - 10 Years

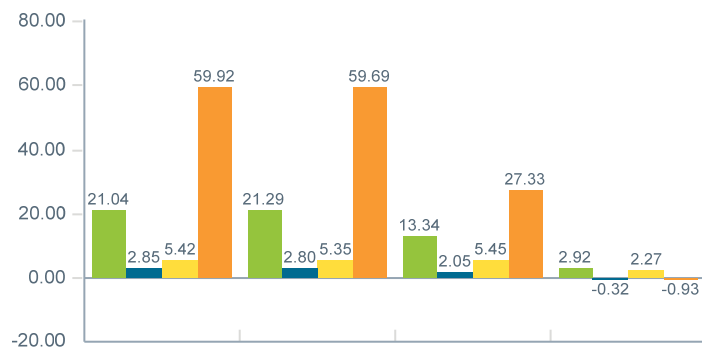
	Actual Correlation
MLP Custom Index	0.99
S&P 500 Index (Cap Wtd)	0.82
Russell 2000 Index	0.82
MSCI EAFE Index (USD) (Net)	0.72
MSCI Emg Mkts Index (USD) (Net)	0.61
Bloomberg US Agg Bond Index	-0.10
Bloomberg US Trsy US TIPS Index	0.18
NCREIF ODCE Index (AWA) (Gross)	-0.08
Wilshire US REIT Index	0.70
HFRI FOF Comp Index	0.77
Bloomberg Cmtty Index (TR)	0.68
ICE BofAML 3 Mo US T-Bill Index	-0.32
Cons Price Index (Unadjusted)	0.28



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on quarterly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-3.36	76.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	-3.50	75.66	-2.90	-0.82	-6.03	2.29	-25.60	7.55	-11.67	-5.58	21.95
Difference	0.14	0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Historical Statistics - 1 Year (Excess Return vs. Risk Free)

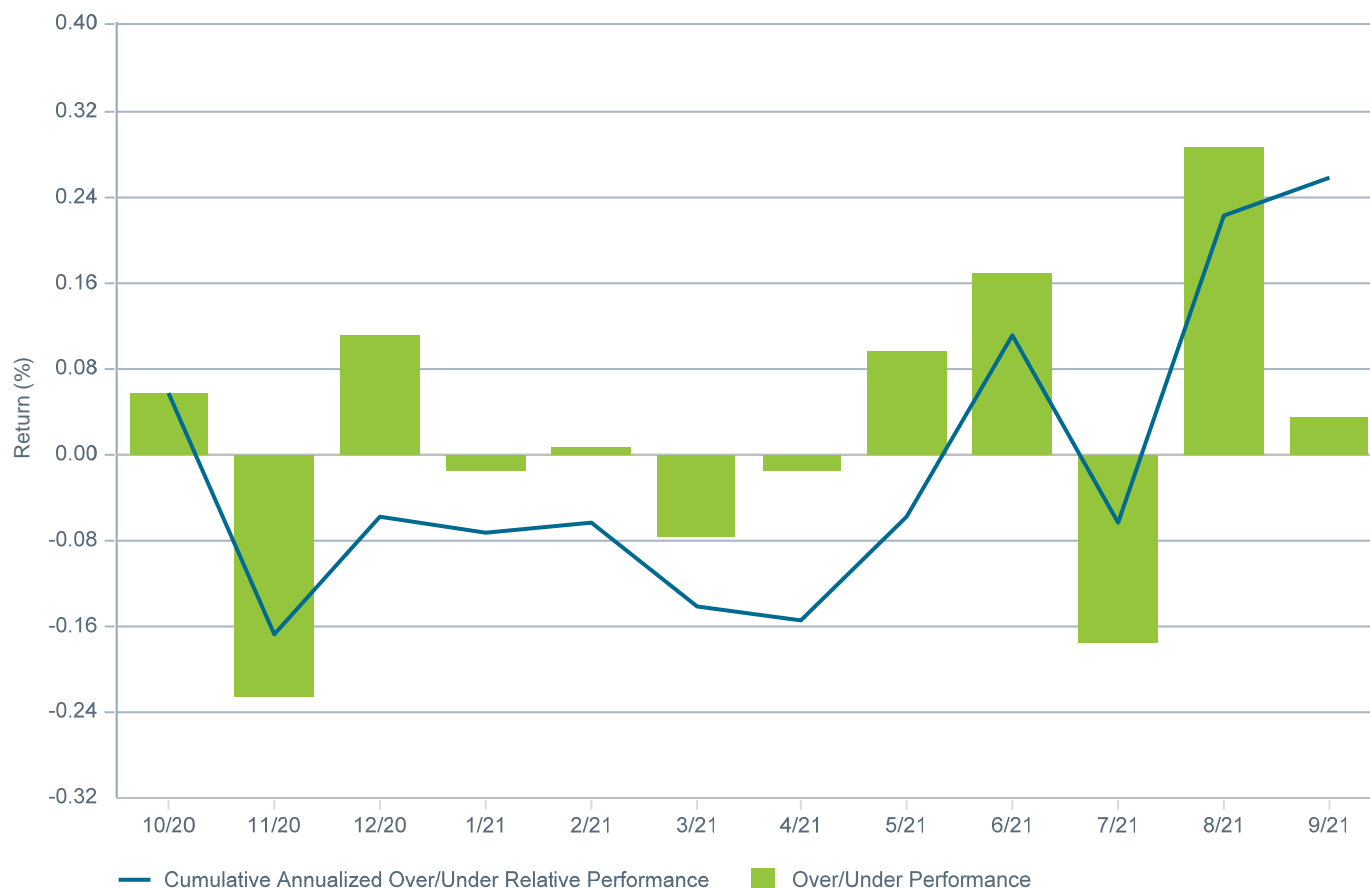


	Manager	Benchmark	S&P 500 Index (Cap Wtd)	Bloomberg US Agg Bond Index
Standard Deviation	21.04	21.29	13.34	2.92
Sharpe Ratio	2.85	2.80	2.05	-0.32
Downside Risk	5.42	5.35	5.45	2.27
Excess Return	59.92	59.69	27.33	-0.93

Actual Correlation - 1 Year

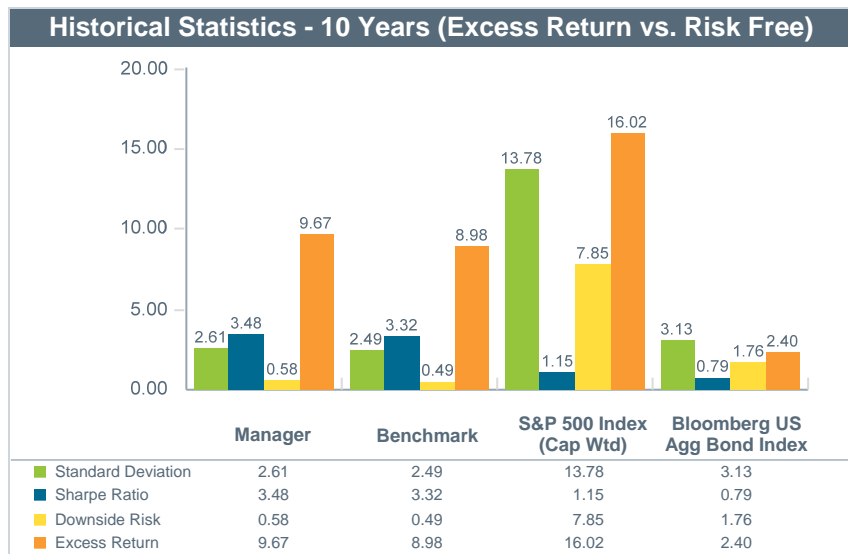
	Actual Correlation
MLP Custom Index	1.00
S&P 500 Index (Cap Wtd)	0.93
Russell 2000 Index	0.82
MSCI EAFE Index (USD) (Net)	0.76
MSCI Emg Mkts Index (USD) (Net)	0.86
Bloomberg US Agg Bond Index	-0.08
Bloomberg US Trsy US TIPS Index	-0.18
NCREIF ODCE Index (AWA) (Gross)	-0.96
Wilshire US REIT Index	0.89
HFRI FOF Comp Index	0.71
Bloomberg Cmnty Index (TR)	0.49
ICE BofAML 3 Mo US T-Bill Index	0.29
Cons Price Index (Unadjusted)	0.00
MLP Custom Index	1.00

Relative Performance - 1 Year



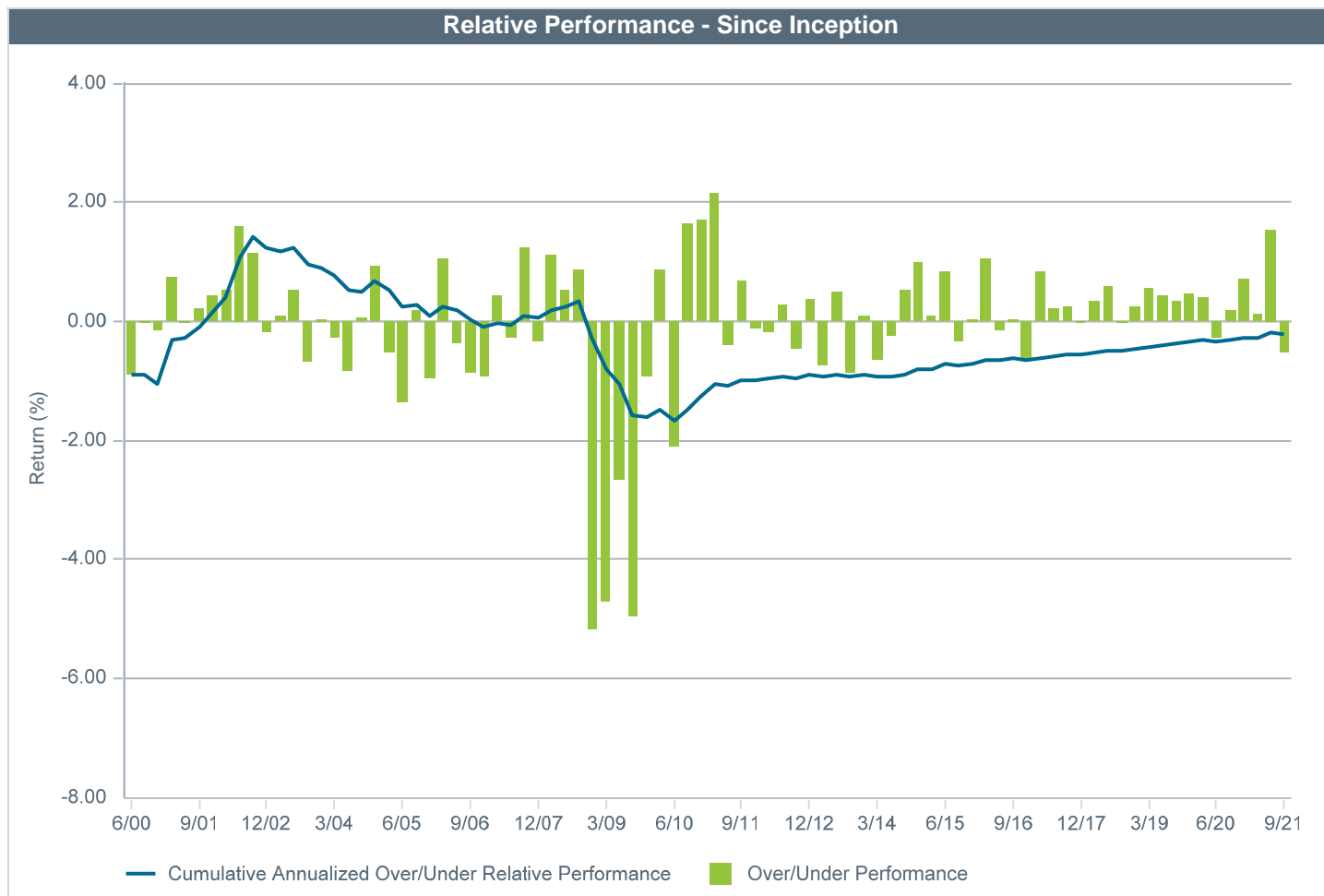
Performance shown is gross of fees and client specific. Calculation is based on quarterly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.08	16.75	8.58	8.76	10.20	10.67	2.24	7.26	9.66	8.99	9.09
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-0.55	2.12	1.52	1.25	1.30	0.75	1.05	1.92	1.31	1.37	0.32



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.91
S&P 500 Index (Cap Wtd)	-0.21
Russell 2000 Index	-0.23
MSCI EAFE Index (USD) (Net)	-0.20
MSCI Emg Mkts Index (USD) (Net)	-0.31
Bloomberg US Agg Bond Index	-0.25
Bloomberg US Trsy US TIPS Index	-0.29
Wilshire US REIT Index	0.02
HFRI FOF Comp Index	-0.22
Bloomberg Cmnty Index (TR)	-0.10
ICE BofAML 3 Mo US T-Bill Index	-0.33
Cons Price Index (Unadjusted)	0.09



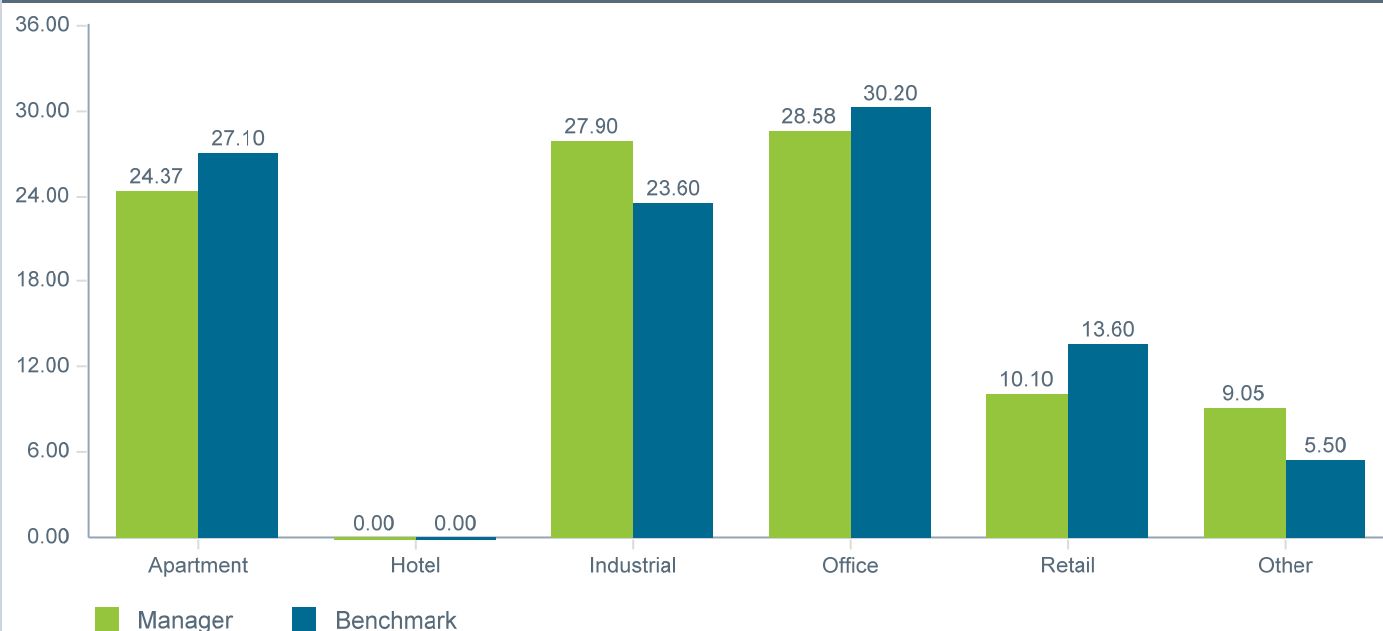
Investment Strategy

The Fund pursues a diversified core real estate strategy and seeks to provide its investors with a reliable total investment gross return of approximately 8% to 10% over a market cycle, with between 40% and 60% of return expected to be generated by the income component. The Fund manages a portfolio of institutional quality real estate assets diversified across the four major property types (office, industrial, retail and multi-family) and across major metropolitan areas. The Fund operates with moderate leverage and may invest up to 15% of its gross assets in higher risk, non-core type real estate investment opportunities.

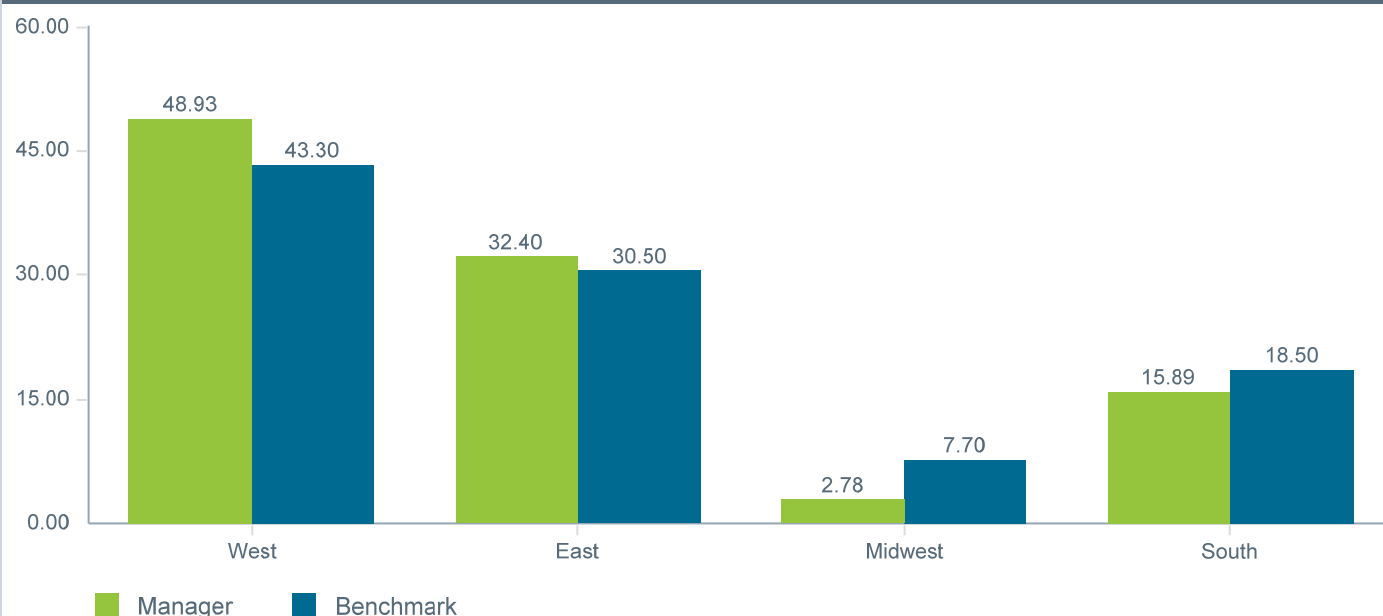
Investment Profile

Fund Inception	2000
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,025
Fund Leverage %	24.79
Portfolio Occupancy %	93.30
Cash Reserve %	1.80
Number of Investments	166
Number of Limited Partners	547

Property Type Allocation (%)

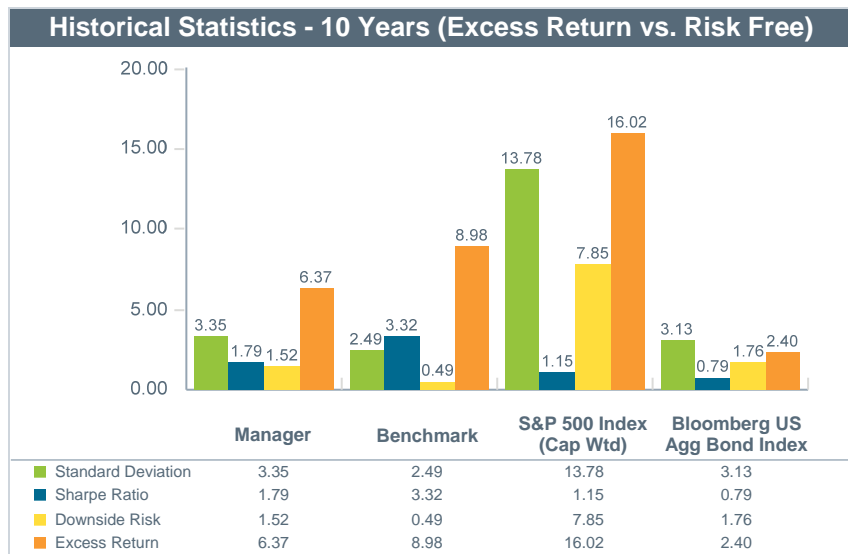


Geographic Allocation (%)



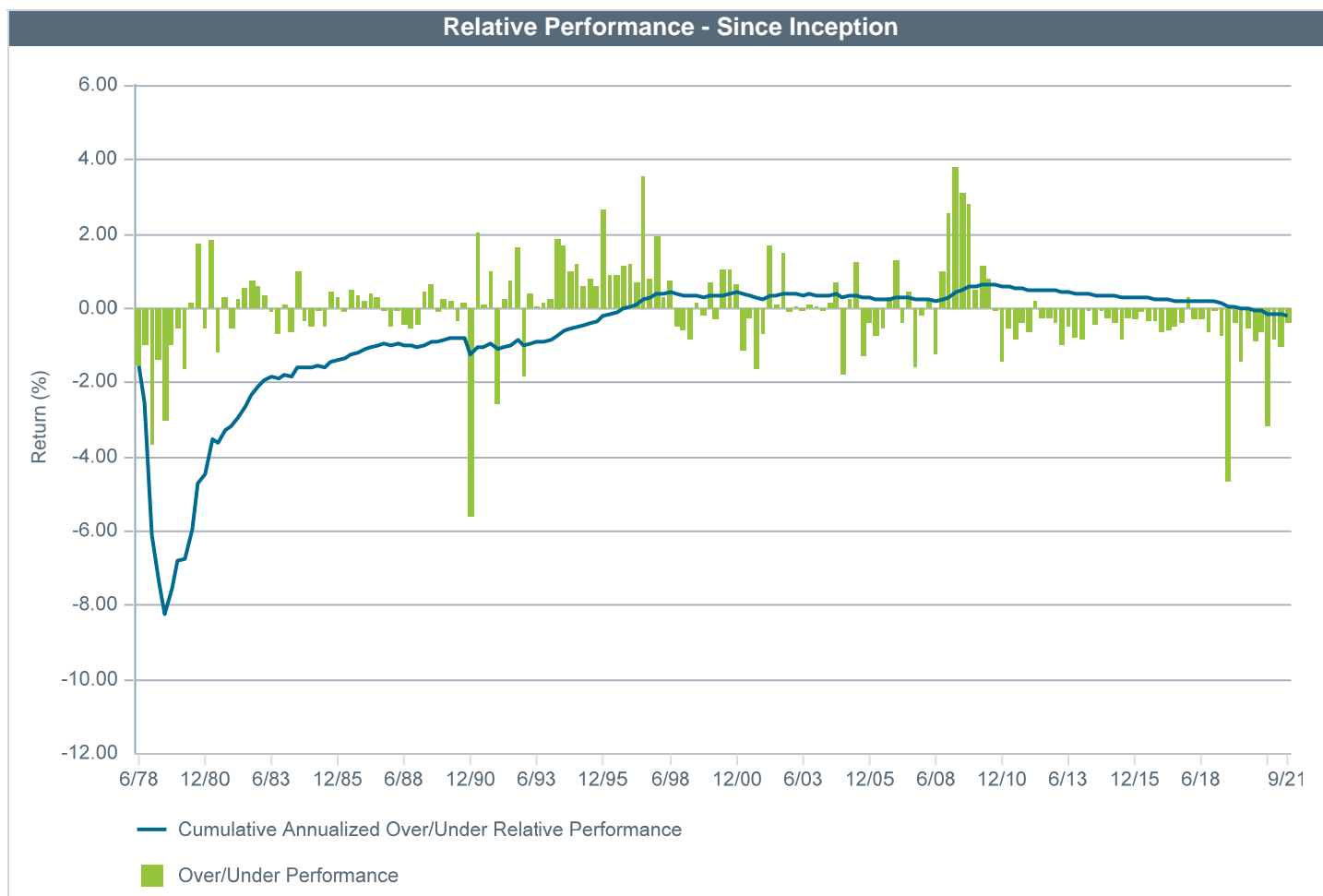
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of lab-office properties. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.22	8.55	1.88	3.70	5.71	7.12	-4.04	-2.10	6.99	6.30	7.21
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-0.41	-6.08	-5.18	-3.81	-3.19	-2.80	-5.23	-7.44	-1.36	-1.32	-1.56



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.87
S&P 500 Index (Cap Wtd)	-0.26
Russell 2000 Index	-0.32
MSCI EAFE Index (USD) (Net)	-0.28
MSCI Emg Mkts Index (USD) (Net)	-0.37
Bloomberg US Agg Bond Index	-0.29
Bloomberg US Trsy US TIPS Index	-0.31
Wilshire US REIT Index	-0.02
HFRI FOF Comp Index	-0.32
Bloomberg Cmnty Index (TR)	-0.15
ICE BofAML 3 Mo US T-Bill Index	-0.45
Cons Price Index (Unadjusted)	0.02



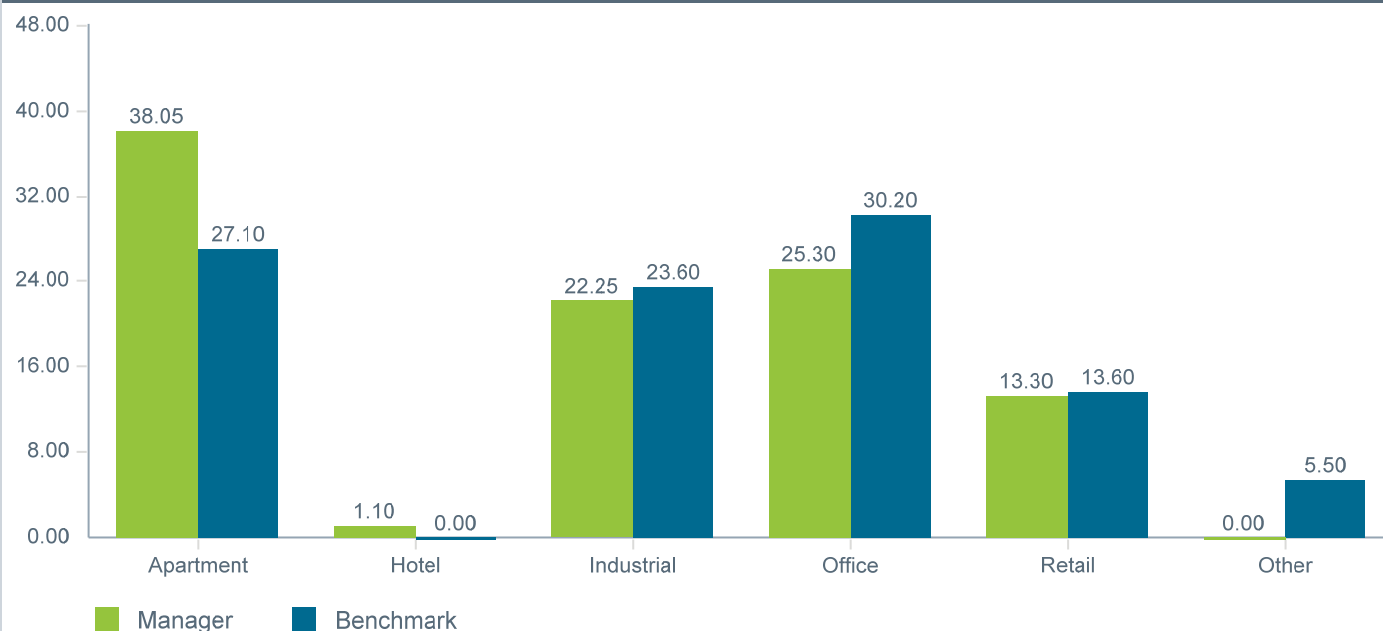
Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

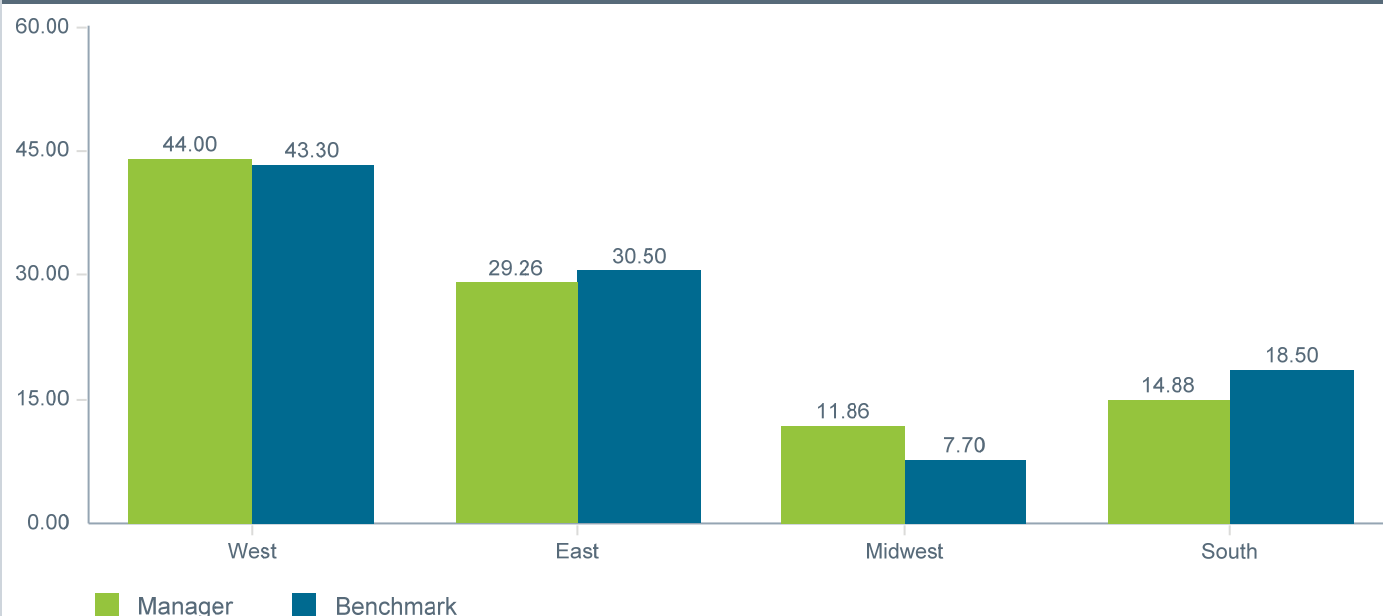
Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	17,816
Fund Leverage %	17.00
Portfolio Occupancy %	93.00
Cash Reserve %	5.50
Number of Investments	172
Number of Limited Partners	446

Property Type Allocation (%)

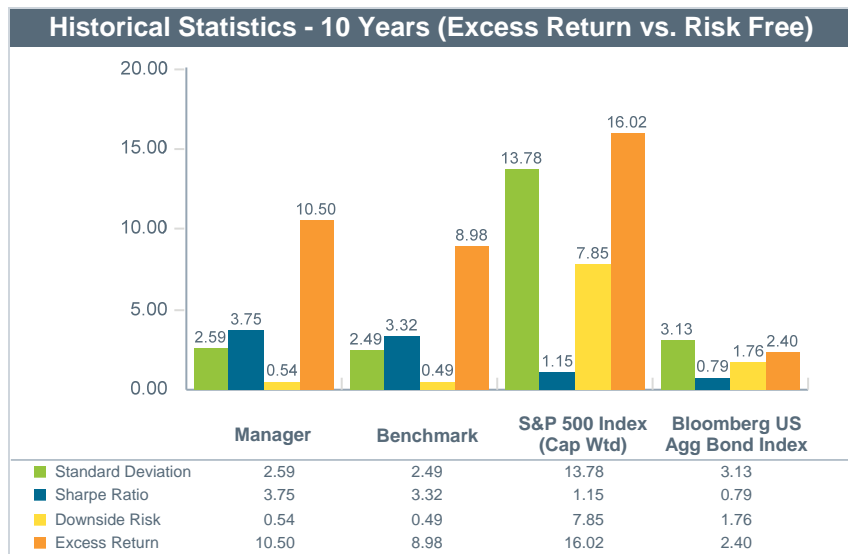


Geographic Allocation (%)



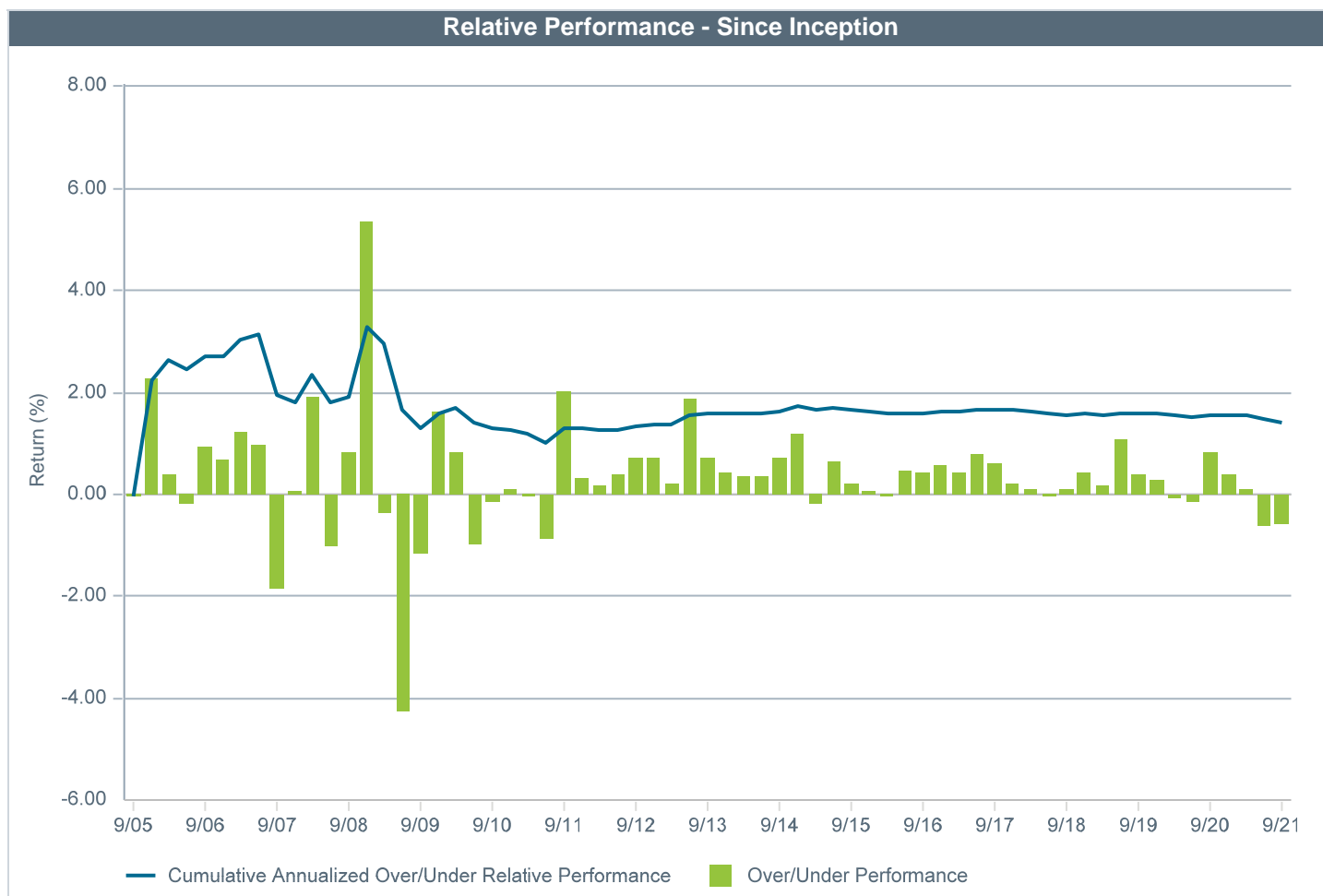
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.00	13.81	7.87	8.59	10.13	11.57	2.18	7.40	8.99	9.84	10.38
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-0.63	-0.82	0.81	1.08	1.23	1.65	0.99	2.06	0.64	2.22	1.61



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.94
S&P 500 Index (Cap Wtd)	-0.19
Russell 2000 Index	-0.19
MSCI EAFE Index (USD) (Net)	-0.16
MSCI Emg Mkts Index (USD) (Net)	-0.34
Bloomberg US Agg Bond Index	-0.37
Bloomberg US Trsy US TIPS Index	-0.48
Wilshire US REIT Index	-0.04
HFRI FOF Comp Index	-0.20
Bloomberg Cmtty Index (TR)	-0.14
ICE BofAML 3 Mo US T-Bill Index	-0.44
Cons Price Index (Unadjusted)	-0.06



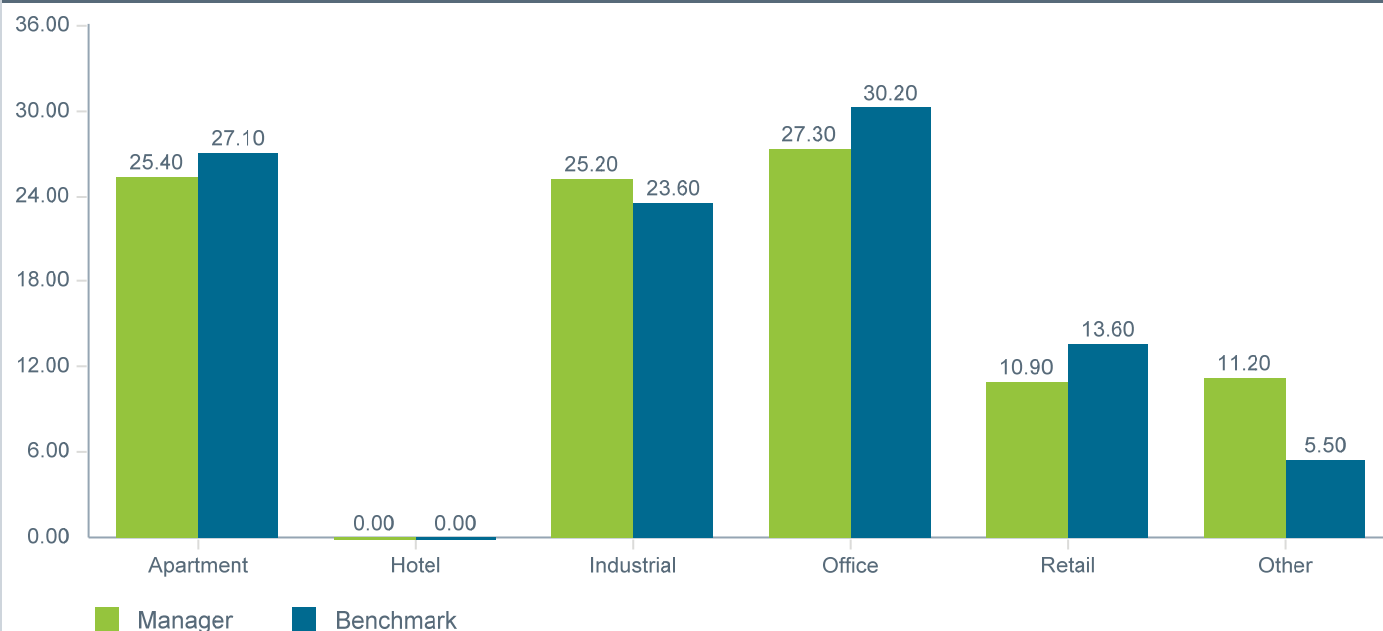
Investment Strategy

The Fund pursues a diversified core real estate strategy that invests in assets with stable, highly predictable cash flow returns. The Fund targets high quality office, Class A multifamily, warehouse distribution, and top-tier super regional malls in addition to storage facilities in targeted primary markets. The Fund favors investing in major metropolitan markets and secondary markets expected to achieve above-average economic performance and believes that those cities offer better liquidity, more diverse tenant bases, and stronger resilience to market cycles. It operates with leverage of 50% or less and may invest up to 15% of its gross assets in higher-risk, value-added real estate investment opportunities.

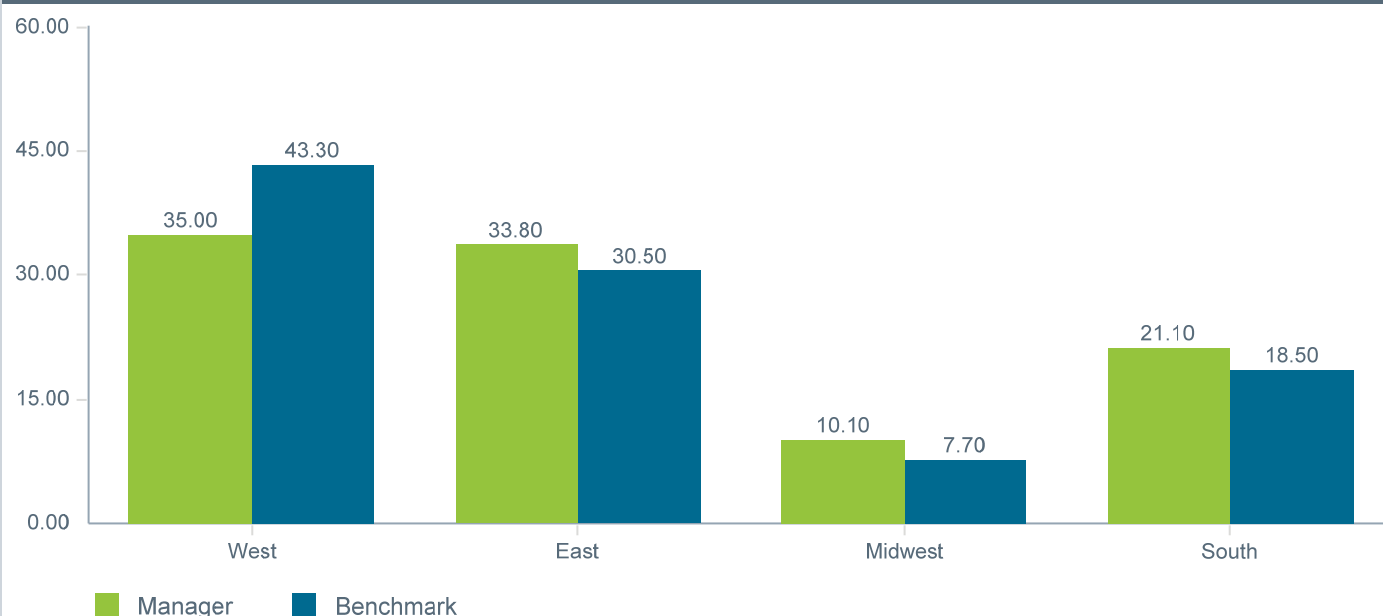
Investment Profile

Fund Inception	1973
Legal Structure	LLC
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	35,163
Fund Leverage %	17.90
Portfolio Occupancy %	94.00
Cash Reserve %	0.50
Number of Investments	471
Number of Limited Partners	419

Property Type Allocation (%)

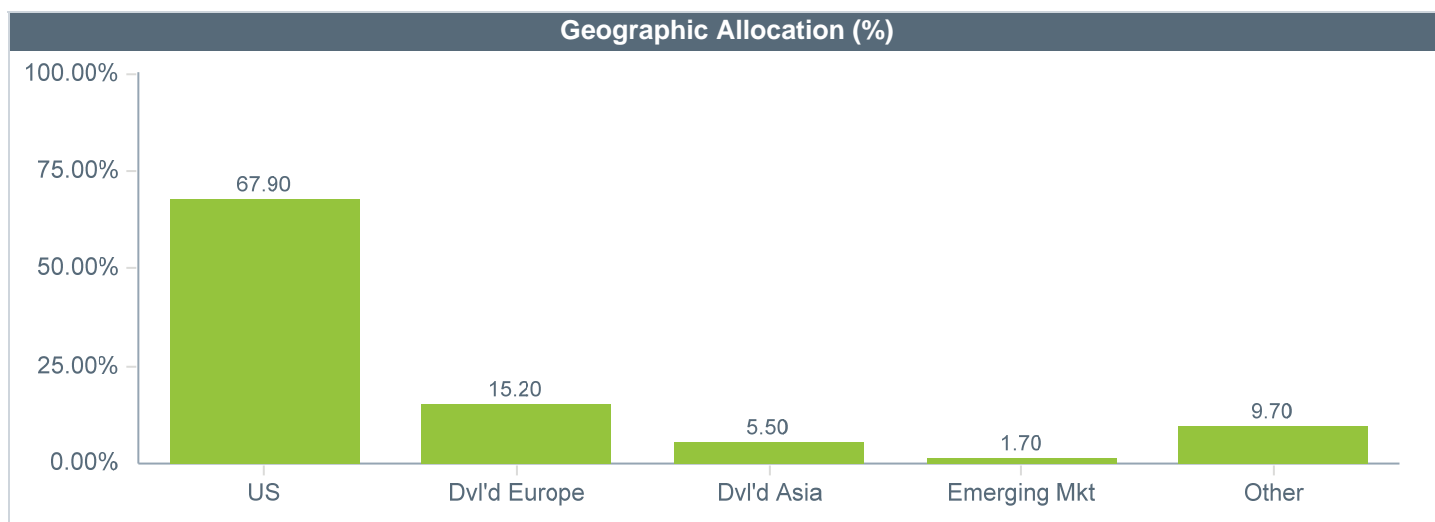
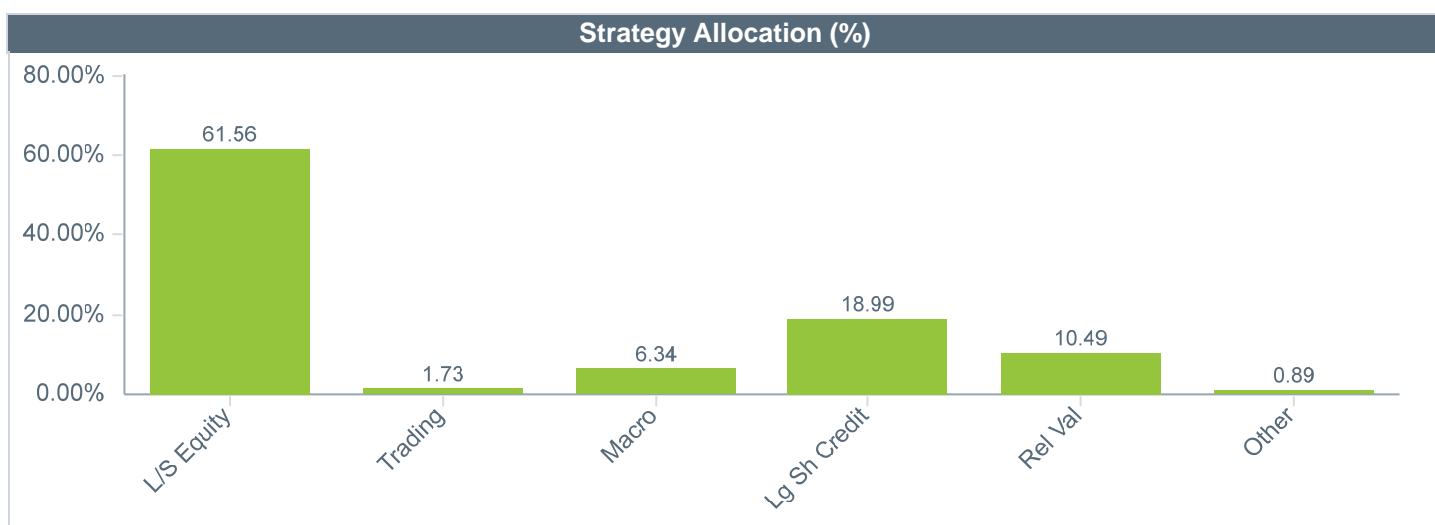


Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of self-storage, health care land held for potential development, and hotel. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

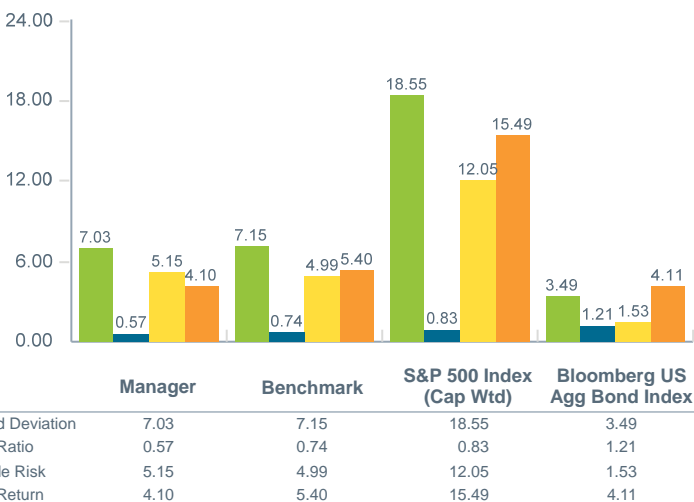
Investment Strategy		Firm Statistics	
<p>The Fund's investment objectives are to generate superior absolute and risk adjusted rates of return with low performance volatility and low correlation with global equity and fixed-income markets over a full market cycle. The Fund is also designed to preserve capital in challenging market environments. It does this through investment in a diversified pool of hedge fund strategies.</p>		Year Firm Established	1971
		Firm AUM (\$M)	26,627
		Percentage Employee Owned %	78.00
		Fund Statistics	
		Fund Inception	2018
		Fund Size(\$M)	407
		Number of Underlying Managers	26
		Maximum Weighting of an Underlying Manager %	10.00
		Current Leverage (Assets/Equity)	3.40
		Annual Manager Turnover %	40.00
		Annual Management Fee %	0.60
		Performance Fee %	5
		Hurdle %	T-bills+2%
		Initial Lock-Up Periods	N/A
		Redemption Frequency	N/A
		Notification Period	N/A



Strategy allocation to other consists of cash, expenses, management fees, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by the investment manager and are as of the most recently available quarter end.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.80	11.04	5.14	N/A	N/A	N/A	9.70	5.67	N/A	N/A	N/A
Benchmark	0.73	14.30	6.50	5.80	4.16	4.46	10.88	8.39	-4.02	7.77	0.51
Difference	1.07	-3.26	-1.36	N/A	N/A	N/A	-1.18	-2.72	N/A	N/A	N/A

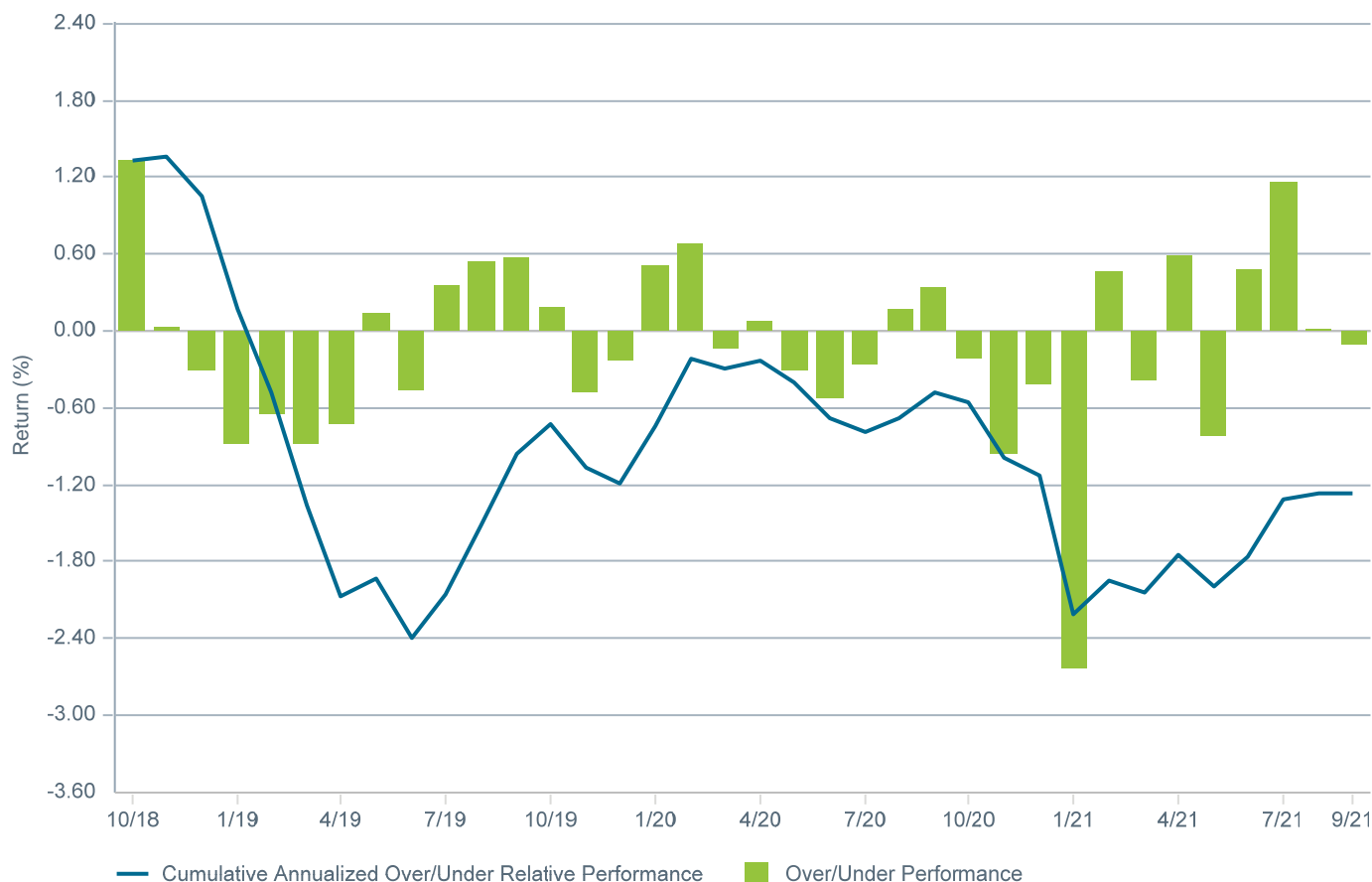
Historical Statistics - 3 Years (Excess Return vs. Risk Free)



Actual Correlation - 3 Years

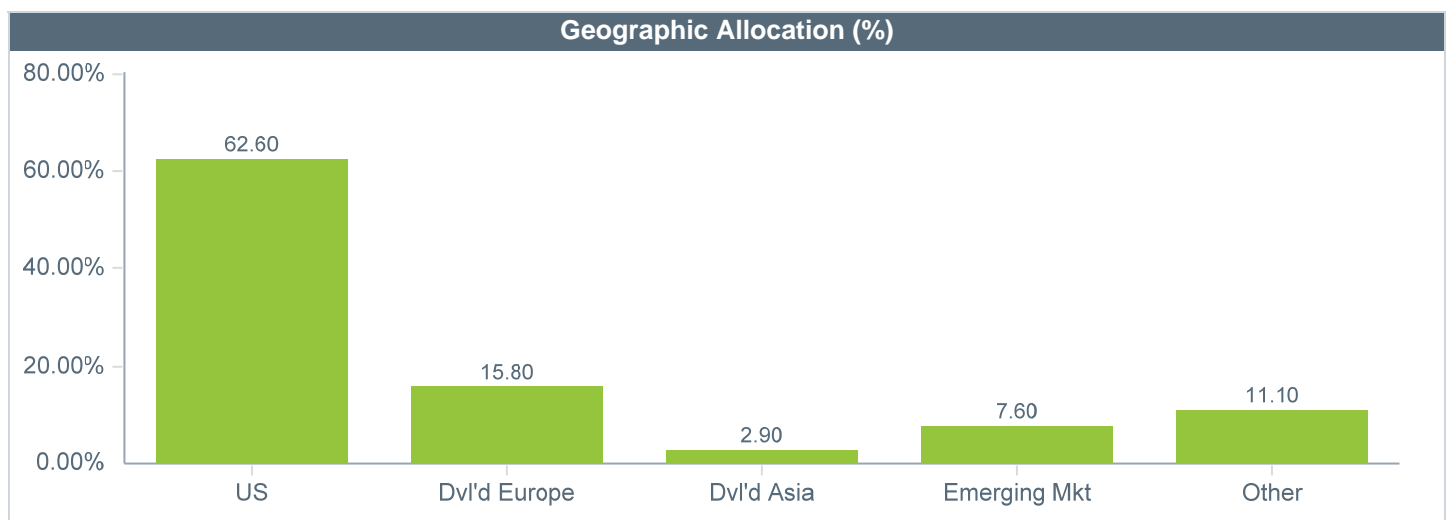
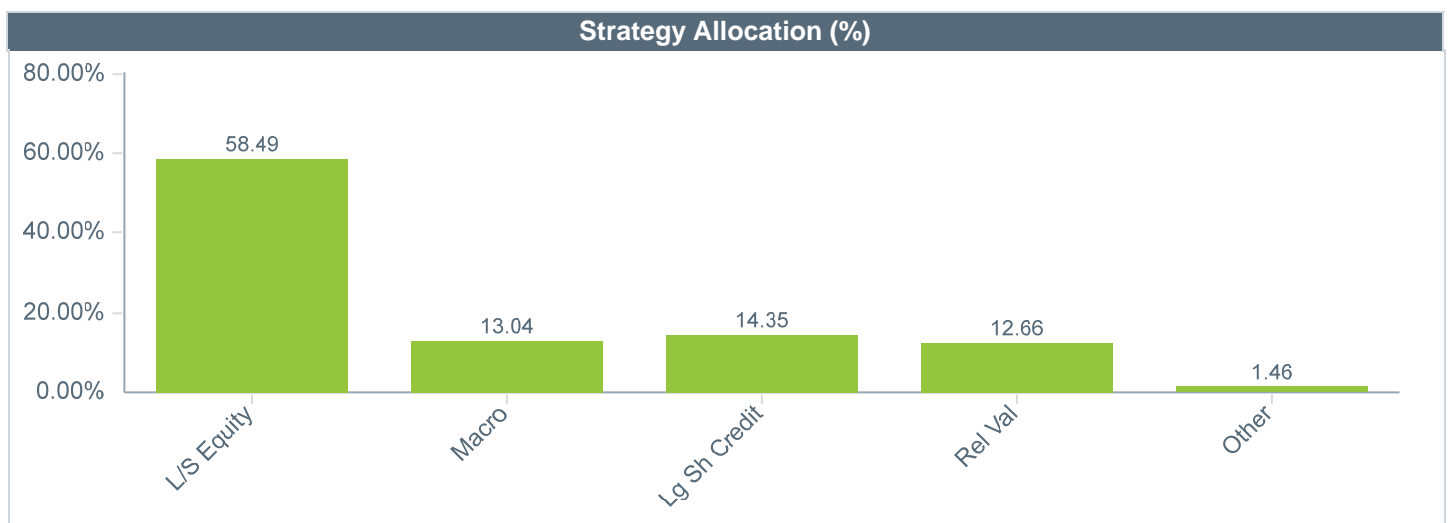
	Actual Correlation
HFRI FOF Comp Index	0.96
S&P 500 Index (Cap Wtd)	0.93
Russell 2000 Index	0.89
MSCI EAFE Index (USD) (Net)	0.94
MSCI Emg Mkts Index (USD) (Net)	0.91
Bloomberg US Agg Bond Index	-0.09
Bloomberg US Trsy US TIPS Index	0.50
NCREIF ODCE Index (AWA) (Gross)	-0.13
Wilshire US REIT Index	0.78
Bloomberg Cmtty Index (TR)	0.86
ICE BofAML 3 Mo US T-Bill Index	-0.60
Cons Price Index (Unadjusted)	0.08

Relative Performance - 3 Years



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

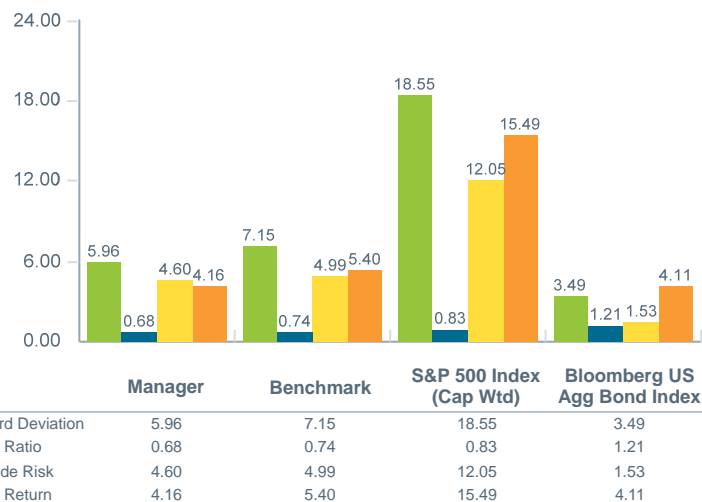
Investment Strategy	Firm Statistics
Silvery Lupine Fund Class C is a direct hedge funds portfolio managed by the Wyoming State Treasurer's Office.	Year Firm Established
	1971
	Firm AUM (\$M)
	26,627
	Percentage Employee Owned %
	78.00
Fund Statistics	
Fund Inception	2018
Fund Size(\$M)	623
Number of Underlying Managers	17
Maximum Weighting of an Underlying Manager %	N/A
Current Leverage (Assets/Equity)	4.50
Annual Manager Turnover %	0.00
Annual Management Fee %	0
Performance Fee %	N/A
Hurdle %	N/A
Initial Lock-Up Periods	N/A
Redemption Frequency	N/A
Notification Period	N/A



Strategy allocation to other consists of cash, expenses, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by GCM and are as of the most recently available quarter end.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.51	11.18	5.28	N/A	N/A	N/A	5.83	6.08	N/A	N/A	N/A
Benchmark	0.73	14.30	6.50	5.80	4.16	4.46	10.88	8.39	-4.02	7.77	0.51
Difference	0.78	-3.12	-1.22	N/A	N/A	N/A	-5.05	-2.31	N/A	N/A	N/A

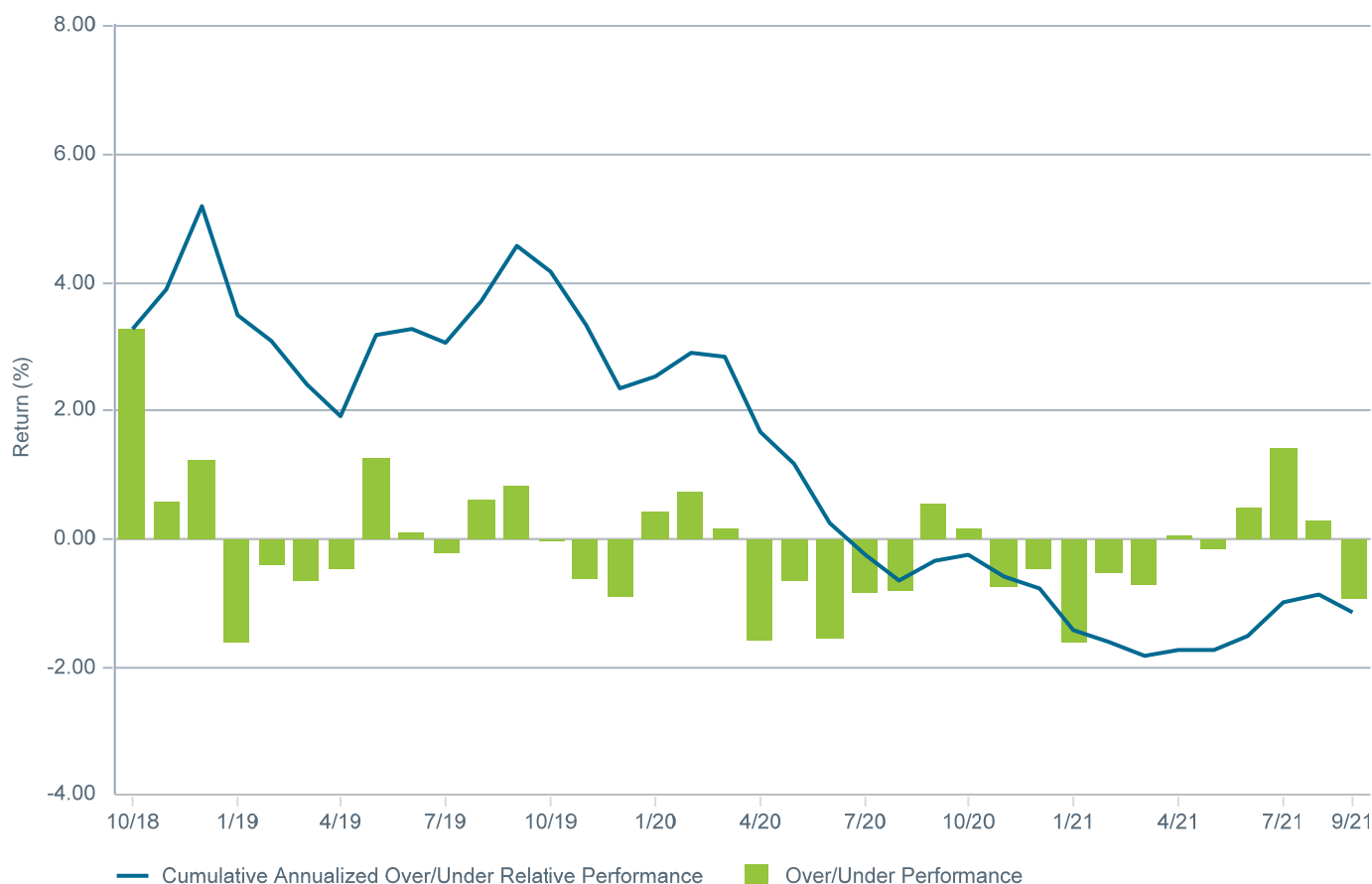
Historical Statistics - 3 Years (Excess Return vs. Risk Free)



Actual Correlation - 3 Years

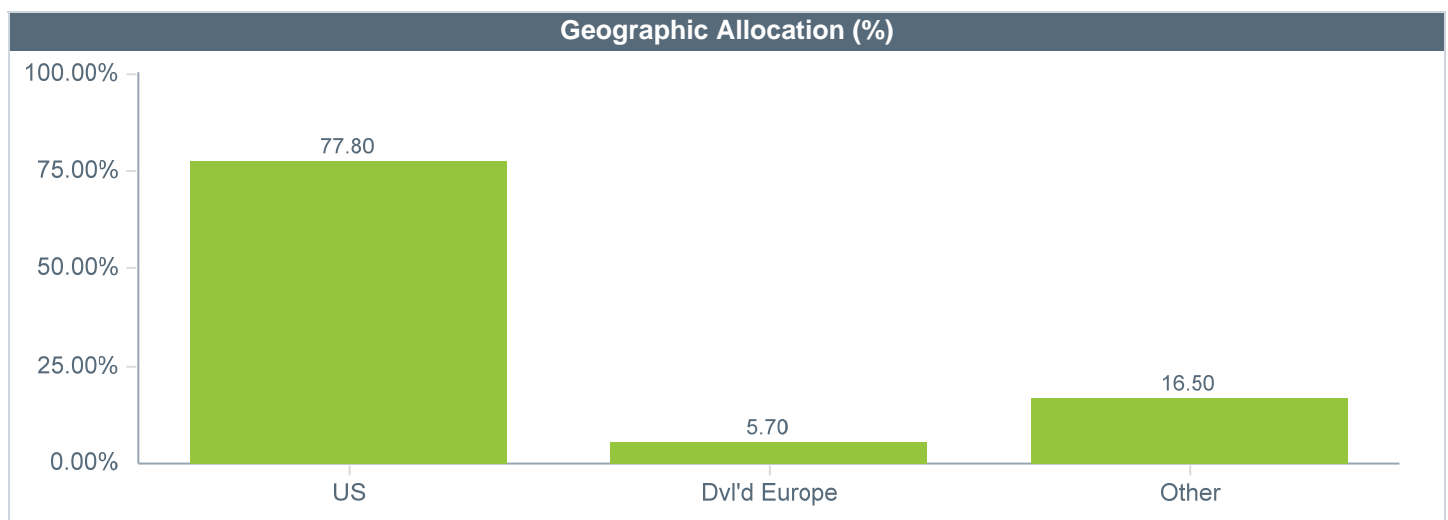
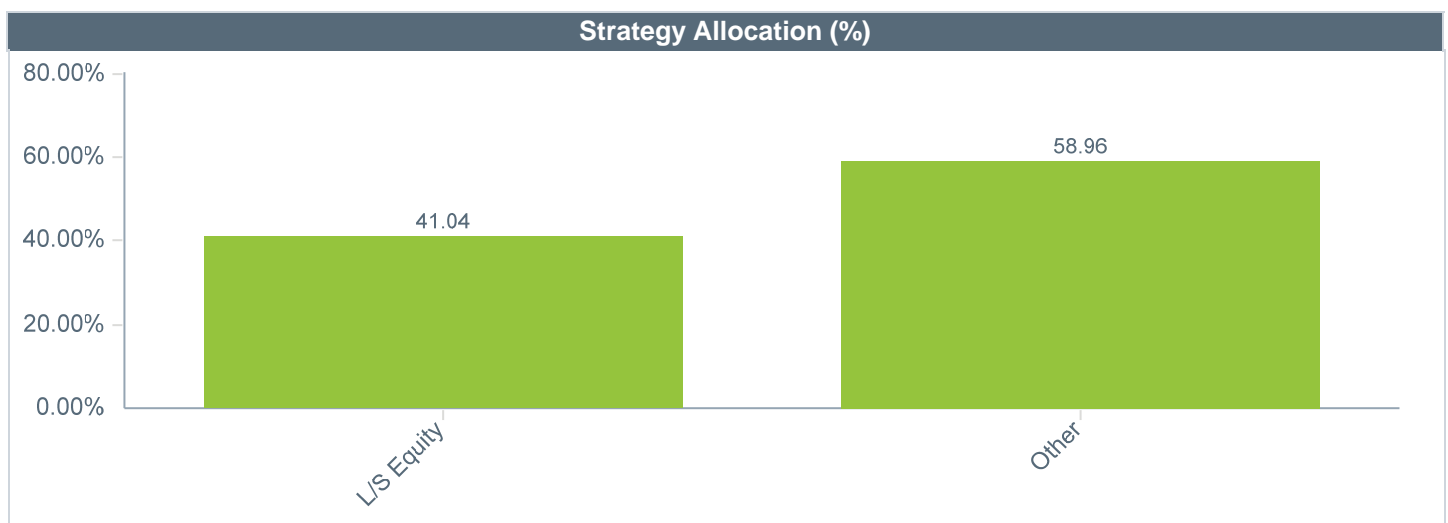
	Actual Correlation
HFRI FOF Comp Index	0.88
S&P 500 Index (Cap Wtd)	0.79
Russell 2000 Index	0.81
MSCI EAFE Index (USD) (Net)	0.88
MSCI Emg Mkts Index (USD) (Net)	0.86
Bloomberg US Agg Bond Index	-0.07
Bloomberg US Trsy US TIPS Index	0.37
NCREIF ODCE Index (AWA) (Gross)	-0.03
Wilshire US REIT Index	0.77
Bloomberg Cmnty Index (TR)	0.83
ICE BofAML 3 Mo US T-Bill Index	-0.48
Cons Price Index (Unadjusted)	0.03

Relative Performance - 3 Years



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

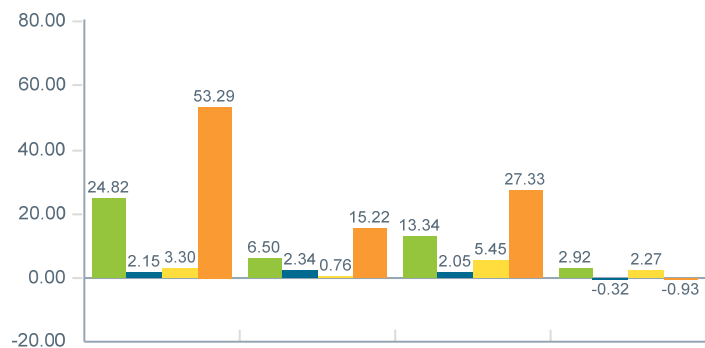
Investment Strategy	Firm Statistics
Grosvenor Silvery Lupine Fund Class D is the opportunistic investment portfolio of the State Treasurer's Office.	Year Firm Established
	1971
	Firm AUM (\$M)
	26,627
	Percentage Employee Owned %
	78.00
	Fund Statistics
	Fund Inception
	2020
	Fund Size(\$M)
	124
	Number of Underlying Managers
	N/A
	Maximum Weighting of an Underlying Manager %
	N/A
	Current Leverage (Assets/Equity)
	1.20
	Annual Manager Turnover %
	N/A
	Annual Management Fee %
	0.30
	Performance Fee %
	10
	Hurdle %
	Custom
	Initial Lock-Up Periods
	N/A
	Redemption Frequency
	N/A
	Notification Period
	N/A



Strategy allocation to other consists of cash, expenses, fees, SPV, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by GCM and are as of the most recently available quarter end.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.91	64.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	-0.04	16.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference	1.95	47.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

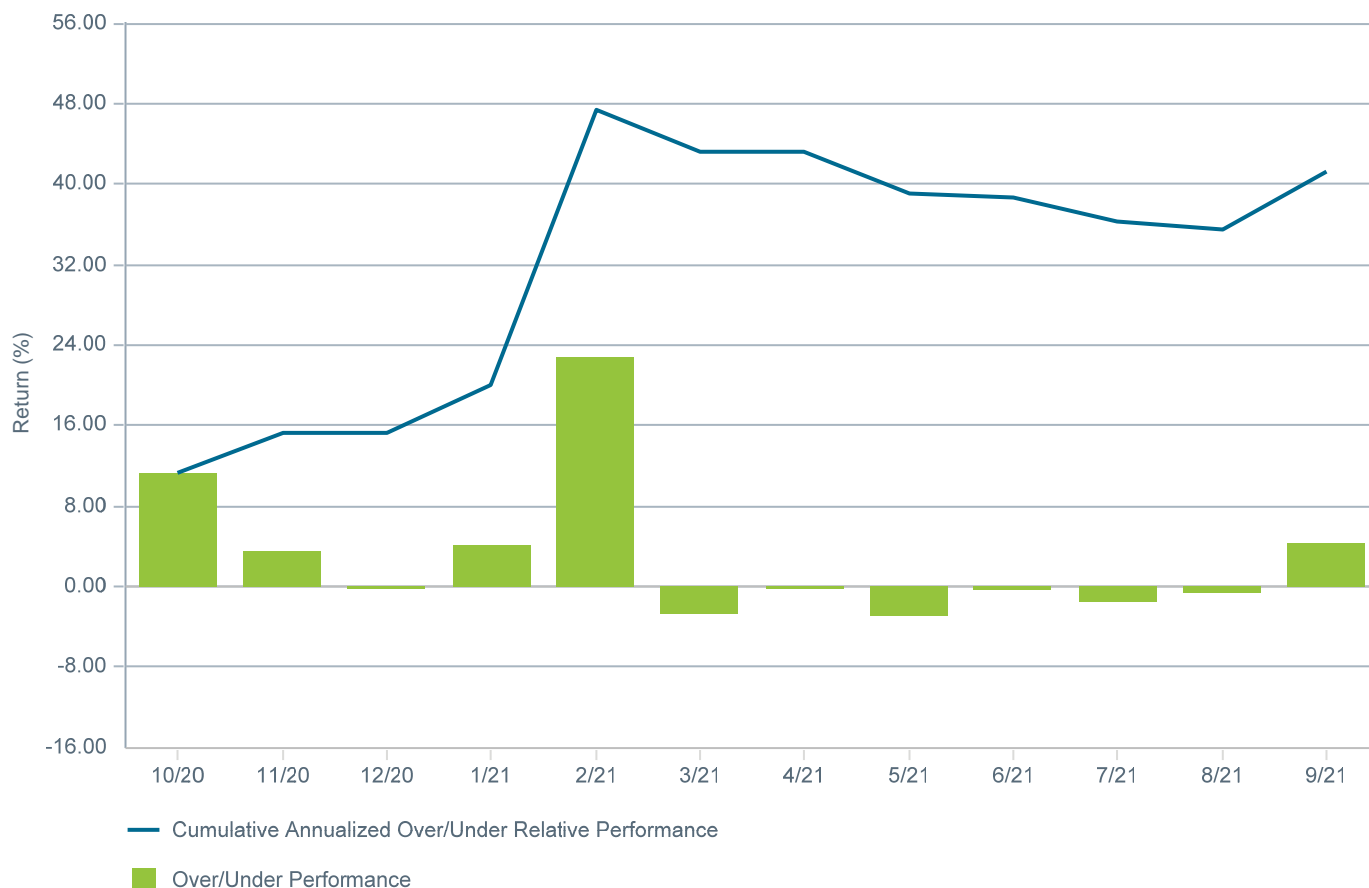
Historical Statistics - 1 Year (Excess Return vs. Risk Free)



Actual Correlation - 1 Year

	Actual Correlation
Grosvenor Class D Custom Benchmark	0.17
S&P 500 Index (Cap Wtd)	0.05
Russell 2000 Index	0.47
MSCI EAFE Index (USD) (Net)	0.13
MSCI Emg Mkts Index (USD) (Net)	0.26
Bloomberg US Agg Bond Index	-0.40
Bloomberg US Trsy US TIPS Index	-0.60
Wilshire US REIT Index	0.00
Bloomberg Cmdty Index (TR)	0.44
ICE BofAML 3 Mo US T-Bill Index	0.42
Cons Price Index (Unadjusted)	-0.31

Relative Performance - 1 Year



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity.

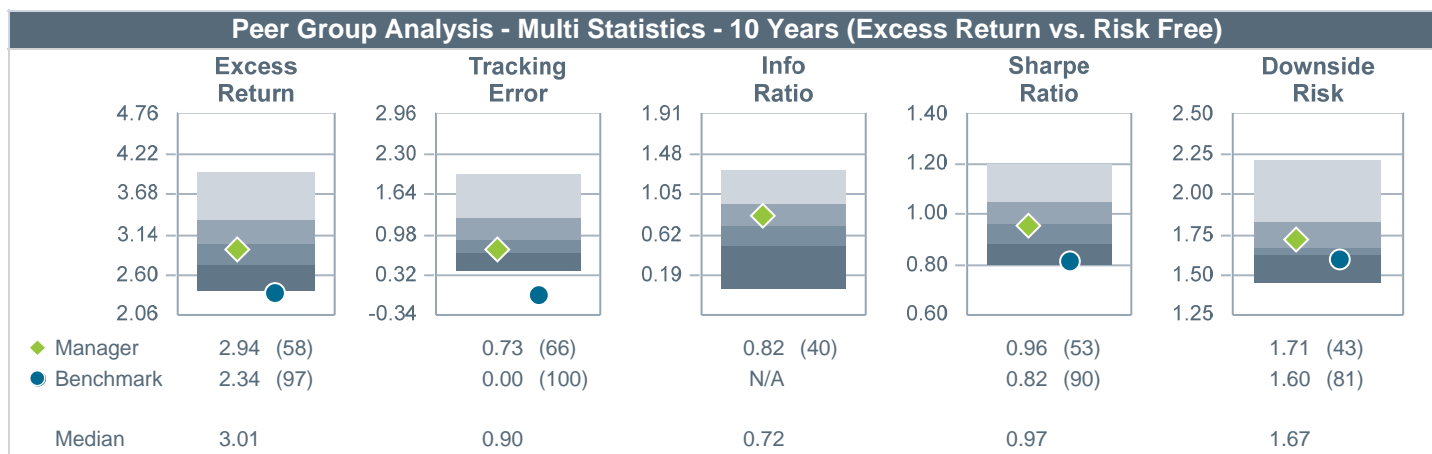
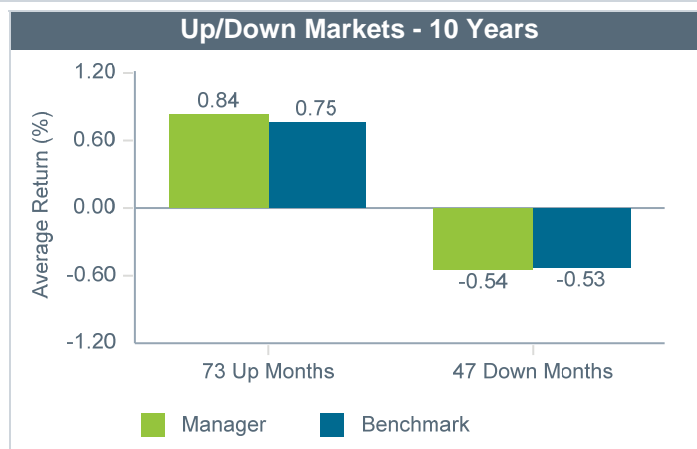
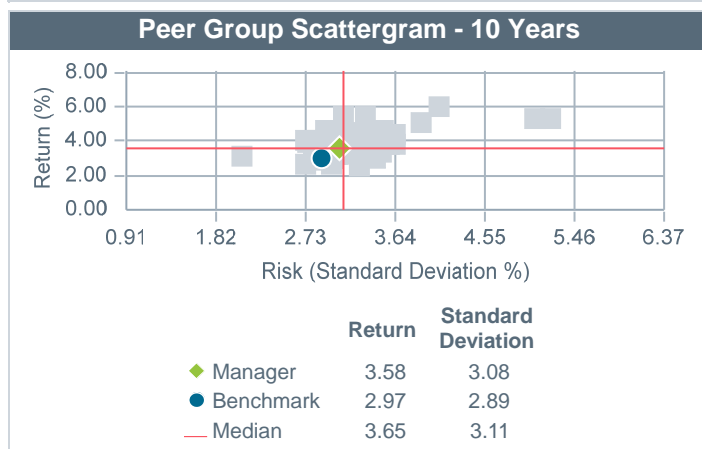
Manager: PIMCO Core

As of September 30, 2021

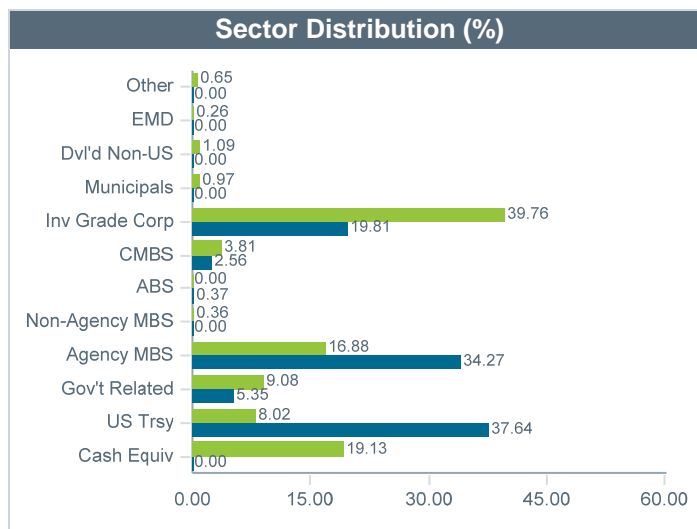
Benchmark: PIMCO Custom Index

Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.12	-0.71	5.51	3.33	3.61	3.58	8.93	7.71	0.58	4.27	3.35
Benchmark	0.05	-0.90	5.16	2.86	3.20	2.97	8.14	7.30	0.32	3.54	2.65
Difference	0.07	0.19	0.35	0.47	0.41	0.61	0.79	0.41	0.26	0.73	0.70
Peer Group Median	0.10	0.01	6.03	3.57	3.79	3.65	8.52	9.20	0.06	4.02	3.12
Rank	44	74	81	70	66	58	33	96	15	33	44
Population	140	140	136	135	133	124	150	153	159	164	171



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.28	N/A
Spread Duration	4.41	4.44
Avg. Maturity	6.27	4.98
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	1.83	1.30
Coupon Rate (%)	2.04	2.24
Current Yield (%)	2.00	N/A
Holdings Count	433	9,189

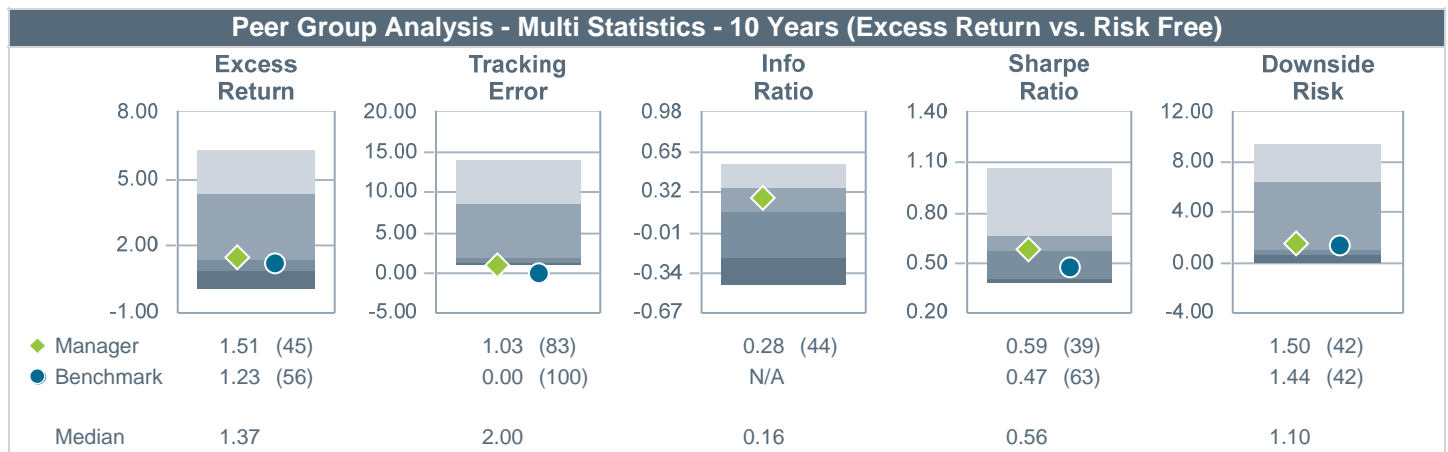
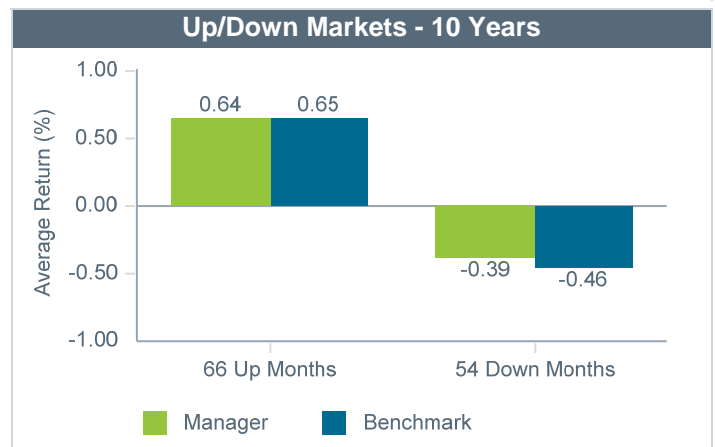
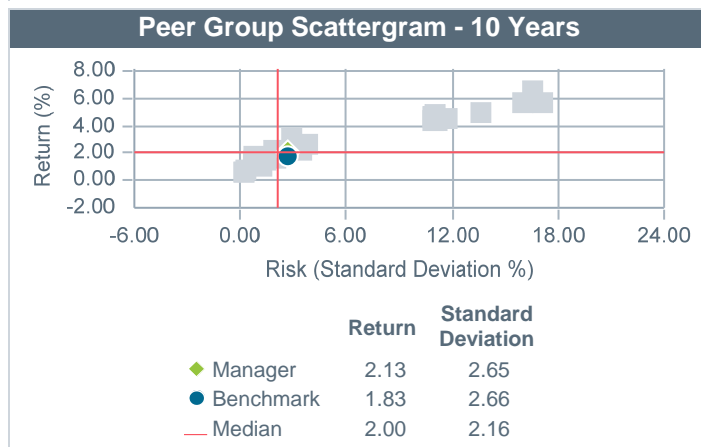


Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector allocation to "Other" consists of Euro/Yankee securities.

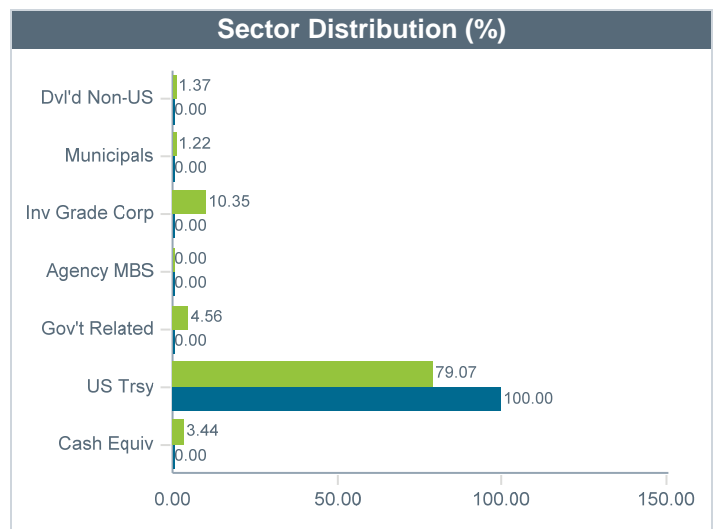
Manager: Internal Intermediate Gov't Fixed Income Portfolio
As of September 30, 2021
Benchmark: Internal Int Govt Fixed Income Portfolio Index

Peer Group: IM U.S. Government Bonds (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.04	-3.43	3.82	2.38	2.41	2.13	7.85	4.53	1.85	1.84	0.95
Benchmark	0.09	-3.30	4.07	2.04	2.24	1.83	8.00	4.70	1.43	1.14	1.05
Difference	-0.13	-0.13	-0.25	0.34	0.17	0.30	-0.15	-0.17	0.42	0.70	-0.10
Peer Group Median	0.08	-2.08	4.51	2.24	2.48	2.00	6.37	5.36	1.28	1.61	1.31
Rank	95	58	73	47	52	46	46	72	8	49	78
Population	40	40	40	39	38	35	46	47	53	52	52



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.73	7.06
Spread Duration	N/A	6.87
Avg. Maturity	8.54	8.28
Avg. Quality	Aaa	Aaa
Yield To Maturity (%)	1.02	1.01
Coupon Rate (%)	1.82	1.60
Current Yield (%)	1.75	N/A
Holdings Count	44	267



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. The Internal Intermediate Govt Fixed Income Portfolio Index consists of the Bloomberg US Treasury Index as of 12/1/2019. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.

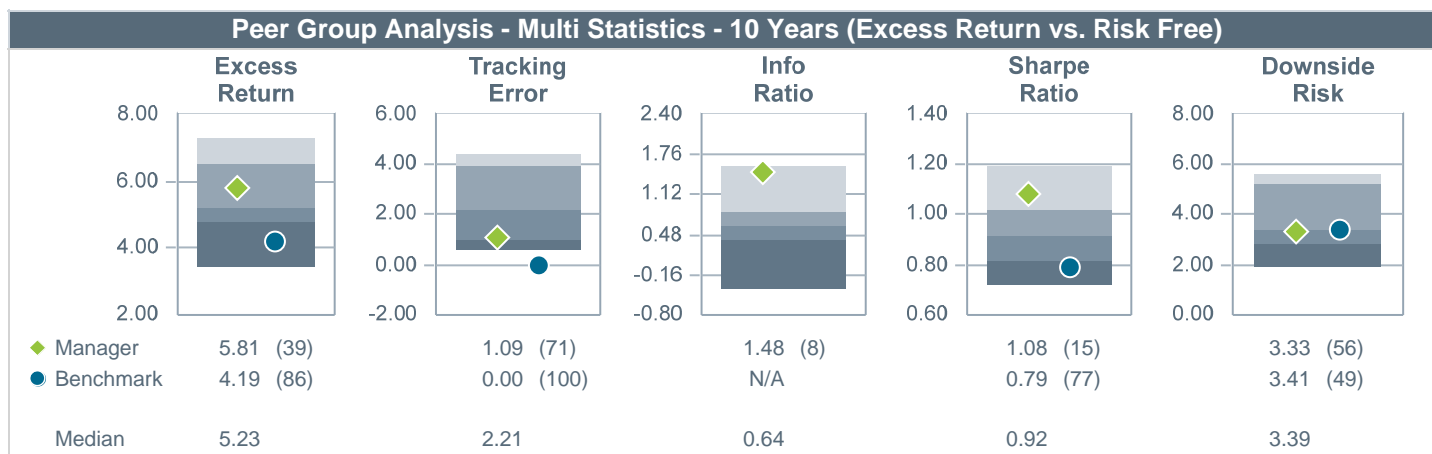
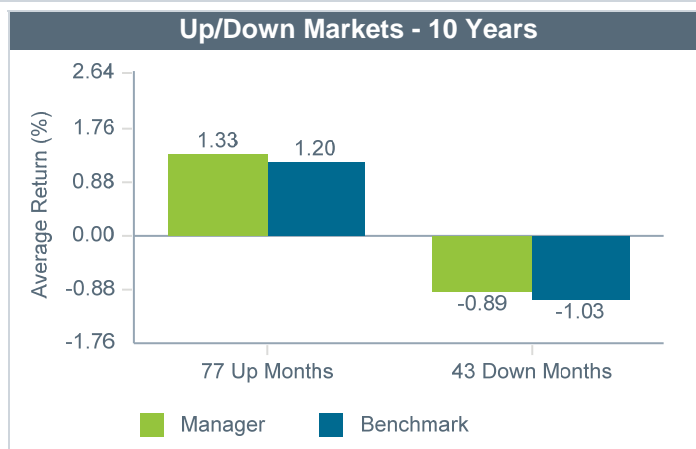
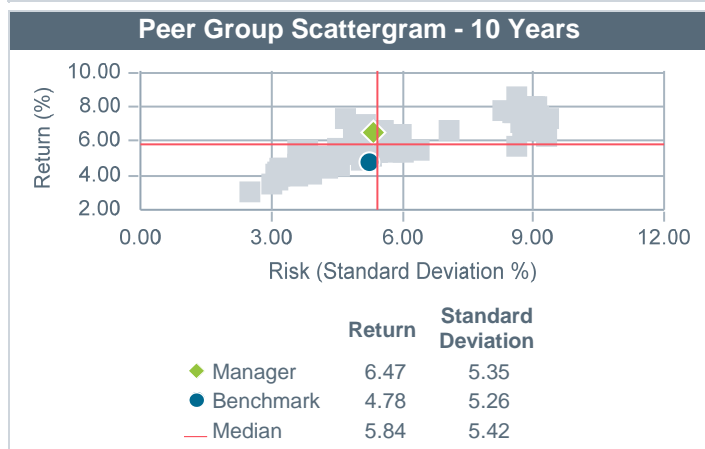
Manager: Payden & Rygel

As of September 30, 2021

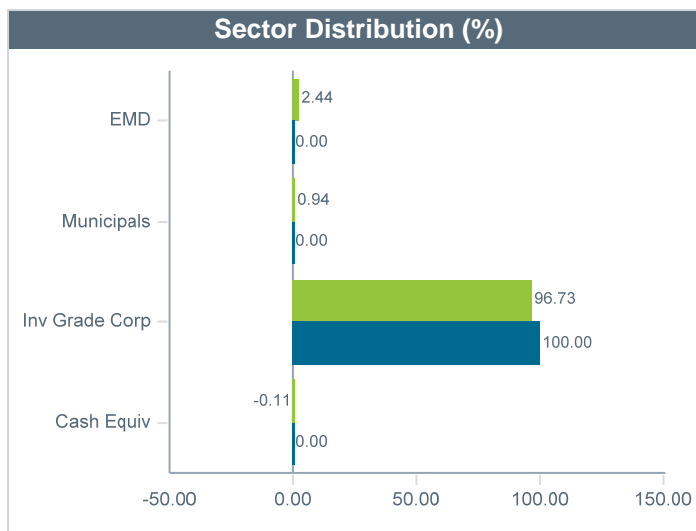
Benchmark: Payden & Rygel Custom Index

Peer Group: IM U.S. Corporate Bonds (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.07	1.51	7.44	5.52	5.81	6.47	10.37	14.96	-2.41	9.23	7.51
Benchmark	0.00	1.74	7.14	4.43	4.61	4.78	8.94	14.54	-2.51	6.42	6.11
Difference	-0.07	-0.23	0.30	1.09	1.20	1.69	1.43	0.42	0.10	2.81	1.40
Peer Group Median	0.10	2.54	8.29	5.39	5.49	5.84	11.35	15.08	-2.33	7.22	7.30
Rank	77	80	72	45	43	38	66	53	53	32	46
Population	118	118	115	107	103	98	125	128	133	130	132



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	8.18	8.71
Spread Duration	8.29	N/A
Avg. Maturity	11.58	12.25
Avg. Quality	A3	A3/Baa1
Yield To Maturity (%)	2.24	2.17
Coupon Rate (%)	3.81	3.59
Current Yield (%)	3.25	N/A
Holdings Count	242	6,938



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

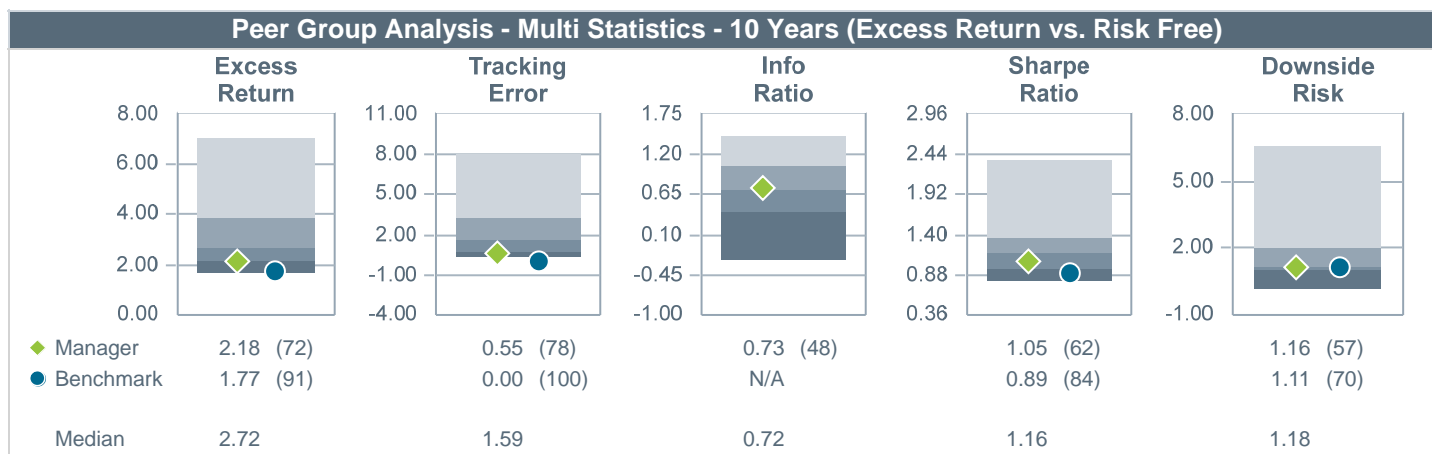
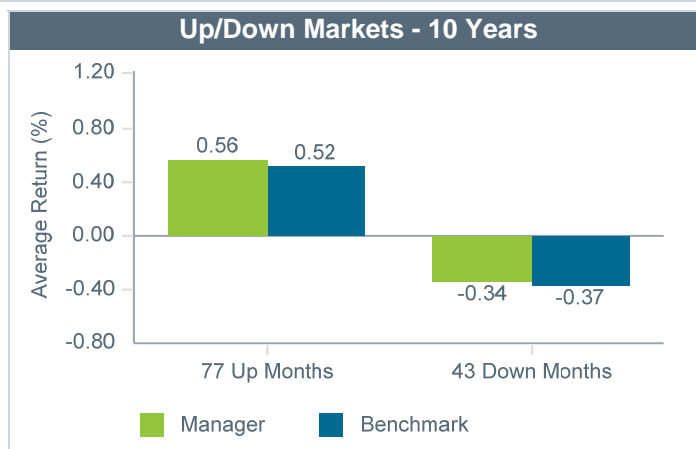
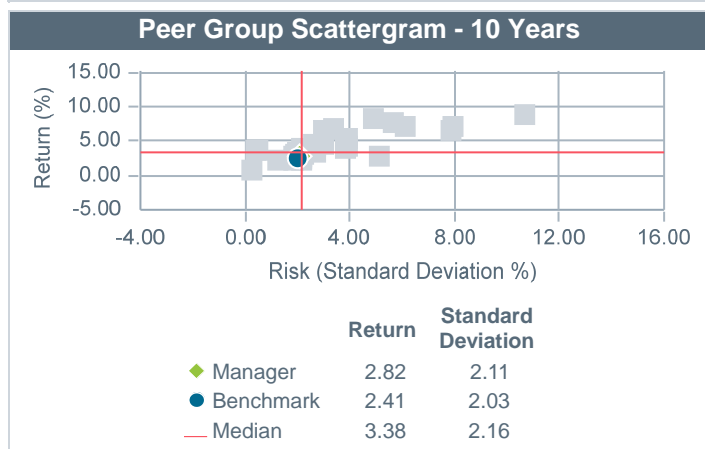
Manager: JPM MBS

As of September 30, 2021

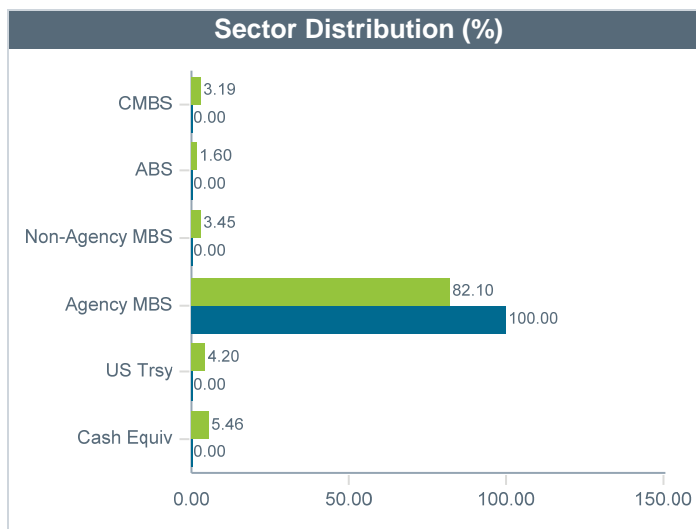
Benchmark: Bloomberg US MBS Index (Unhgd)

Peer Group: IM U.S. Mortgage Backed Bonds (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.15	0.65	4.75	2.76	3.09	2.82	5.73	6.47	1.01	2.64	2.24
Benchmark	0.10	-0.43	3.85	2.17	2.55	2.41	3.87	6.35	0.99	2.47	1.67
Difference	0.05	1.08	0.90	0.59	0.54	0.41	1.86	0.12	0.02	0.17	0.57
Peer Group Median	0.23	0.62	4.36	2.91	2.98	3.26	4.24	6.56	1.44	3.59	2.38
Rank	74	50	27	54	47	67	13	59	73	71	55
Population	45	45	44	43	43	41	50	51	52	55	58

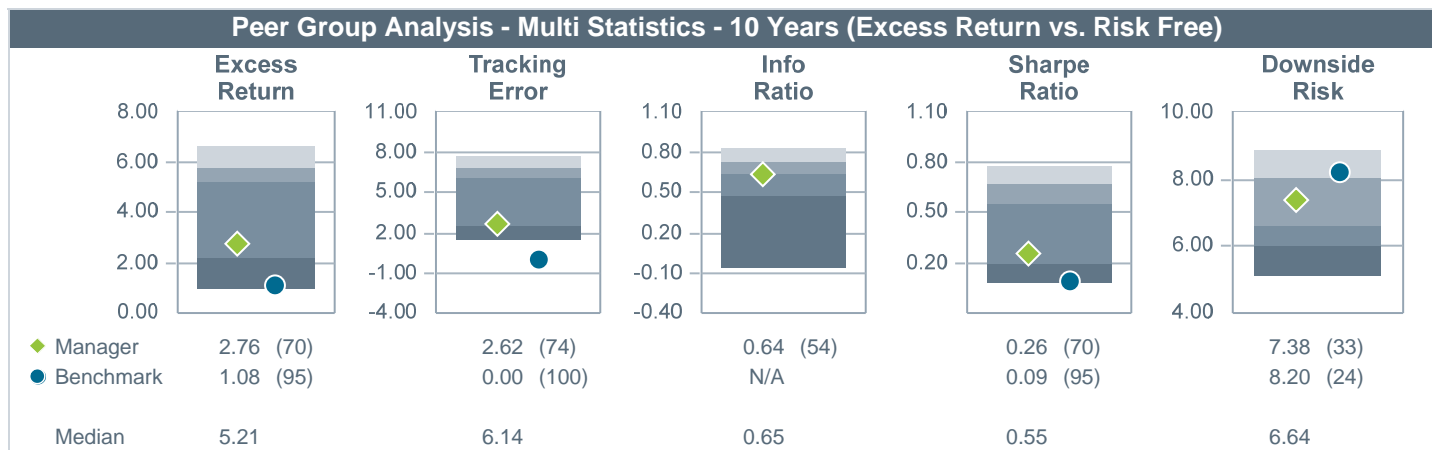
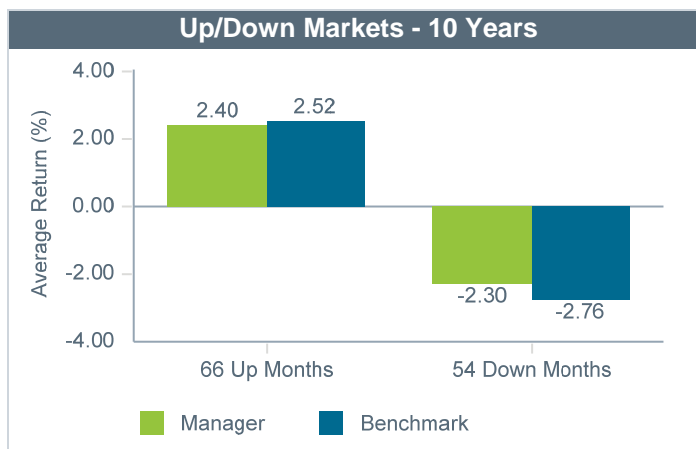
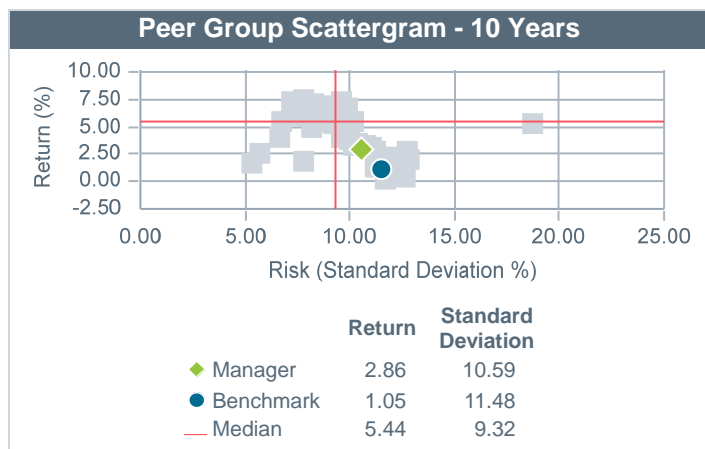


Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	2.50	4.62
Spread Duration	3.59	4.97
Avg. Maturity	4.55	5.94
Avg. Quality	Aa1	Aaa
Yield To Maturity (%)	1.35	1.83
Coupon Rate (%)	3.00	2.72
Current Yield (%)	3.82	N/A
Holdings Count	406	436

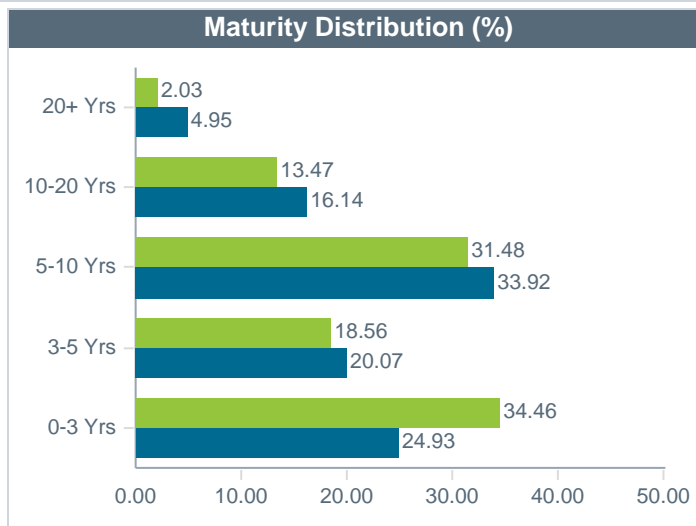


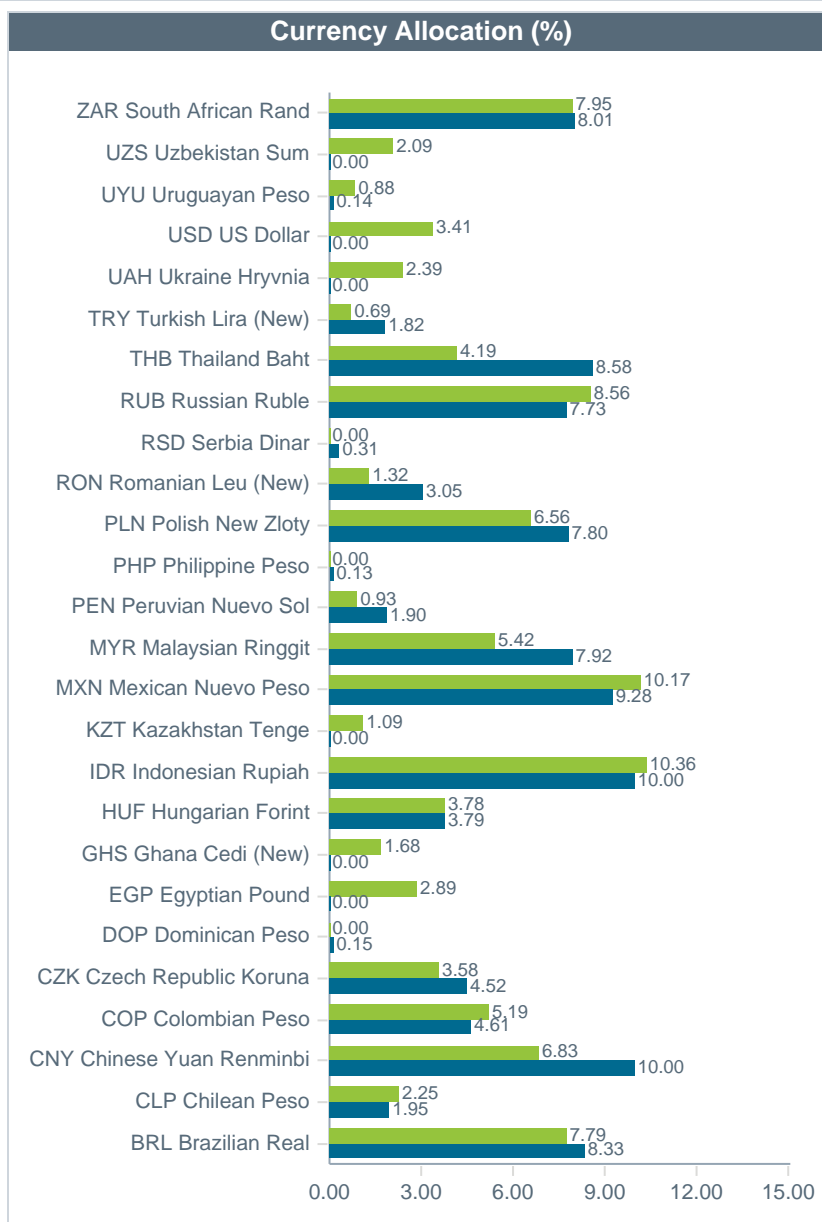
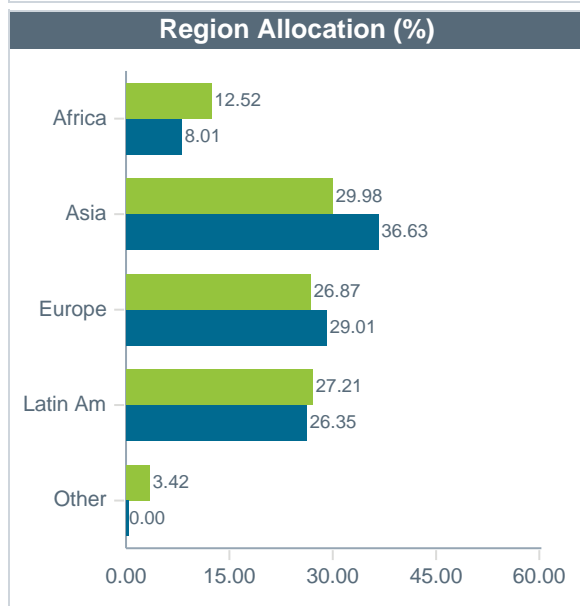
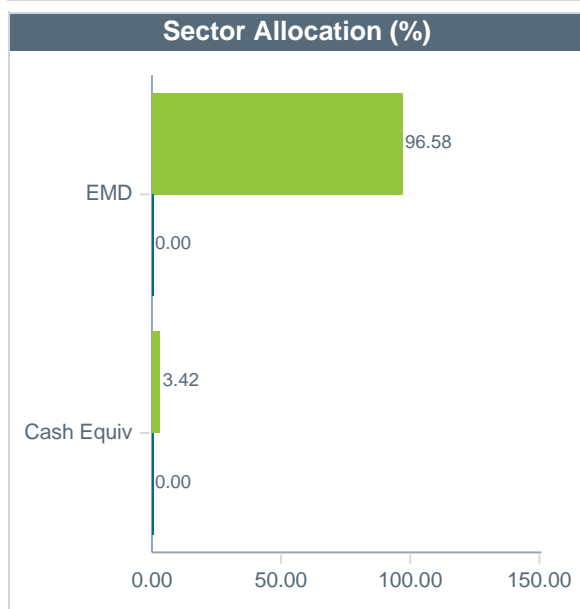
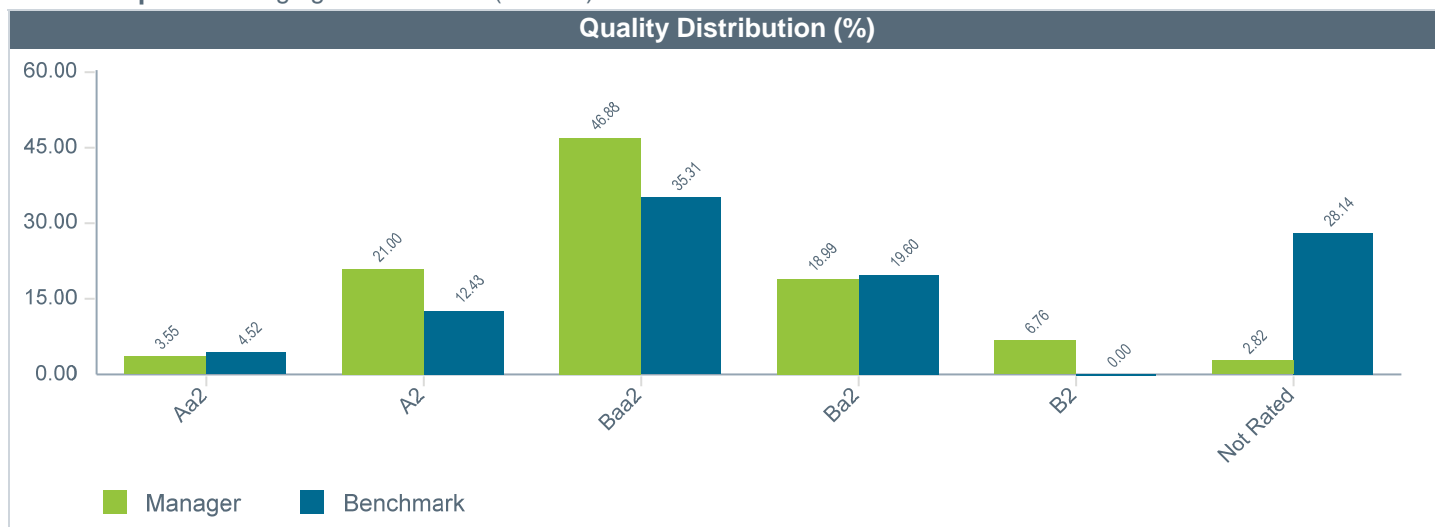
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-2.73	4.22	4.00	2.22	2.22	2.86	2.77	12.61	-7.84	15.68	11.89
Benchmark	-3.10	2.63	3.66	2.06	0.56	1.05	2.69	13.47	-6.21	15.21	9.94
Difference	0.37	1.59	0.34	0.16	1.66	1.81	0.08	-0.86	-1.63	0.47	1.95
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	79	79	88	93	75	69	94	78	86	21	37
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	5.03	5.28
Spread Duration	N/A	0.03
Avg. Maturity	6.80	7.24
Avg. Quality	Baa1	Ba3
Yield To Maturity (%)	6.42	5.31
Coupon Rate (%)	6.71	5.49
Current Yield (%)	5.93	5.23
Holdings Count	65	292





Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash.

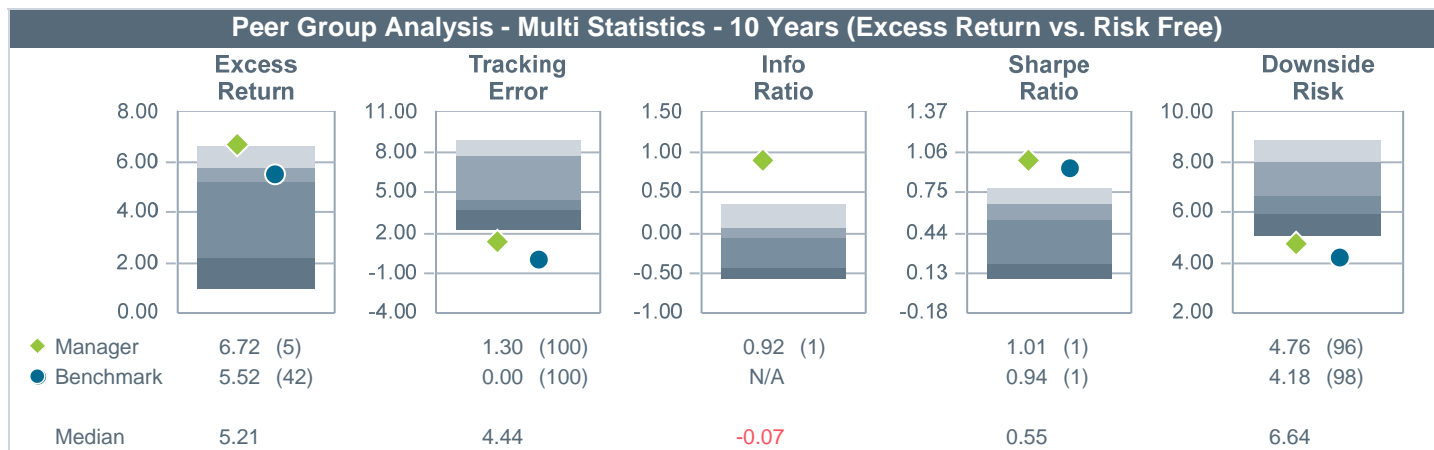
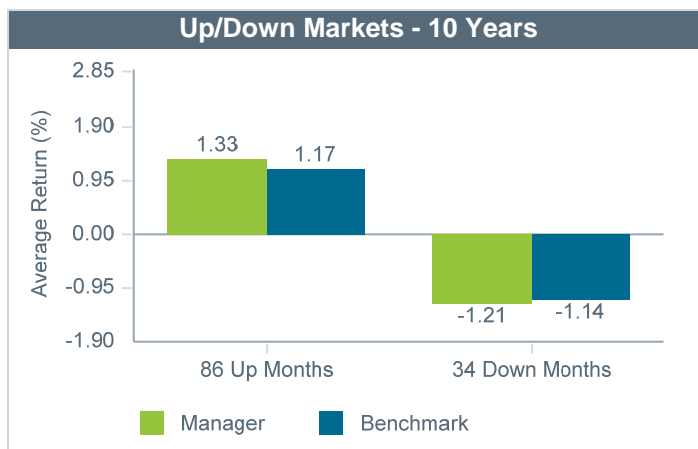
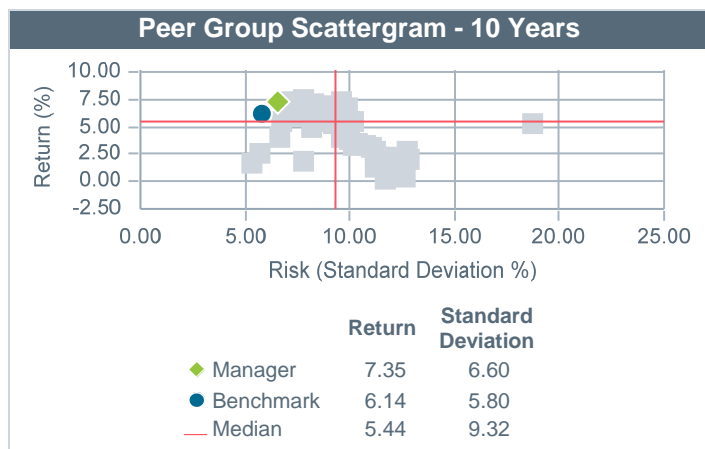
Manager: Goldman Sachs

As of September 30, 2021

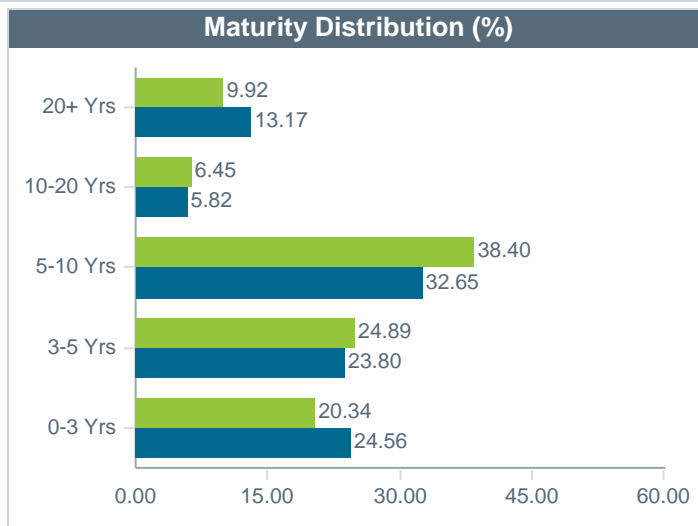
Benchmark: Goldman Sachs Custom Index

Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.16	6.62	7.65	5.99	6.12	7.35	8.70	14.69	-1.62	9.57	11.71
Benchmark	0.25	6.20	7.19	5.24	5.30	6.14	7.31	13.09	-1.65	7.96	9.65
Difference	-0.09	0.42	0.46	0.75	0.82	1.21	1.39	1.60	0.03	1.61	2.06
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	17	42	19	18	7	4	22	41	13	86	41
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	4.53	4.74
Spread Duration	4.78	4.68
Avg. Maturity	14.94	10.69
Avg. Quality	Ba1	Ba1
Yield To Maturity (%)	4.18	3.90
Coupon Rate (%)	4.75	4.70
Current Yield (%)	4.64	4.54
Holdings Count	236	2,104

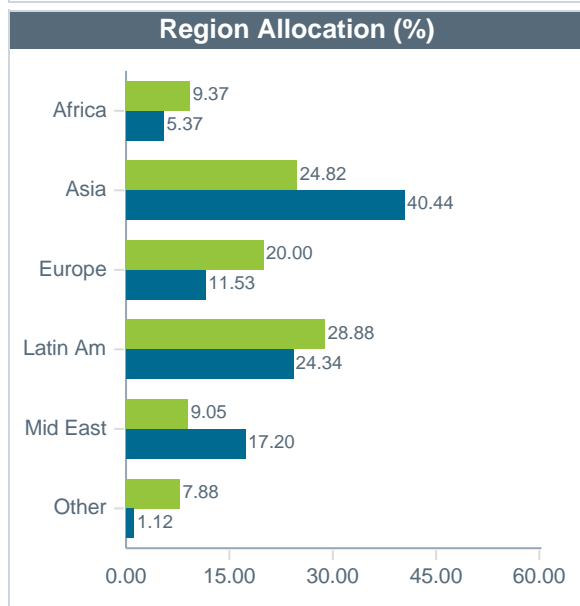
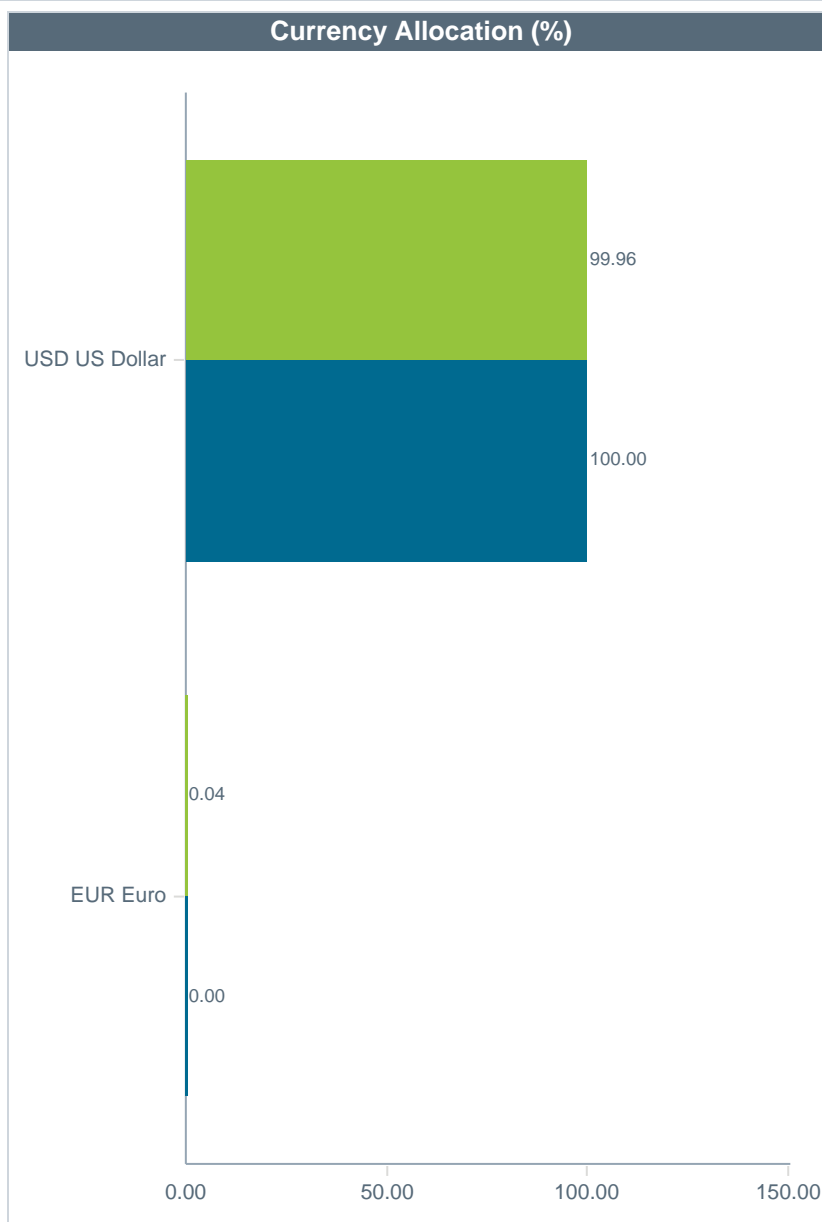
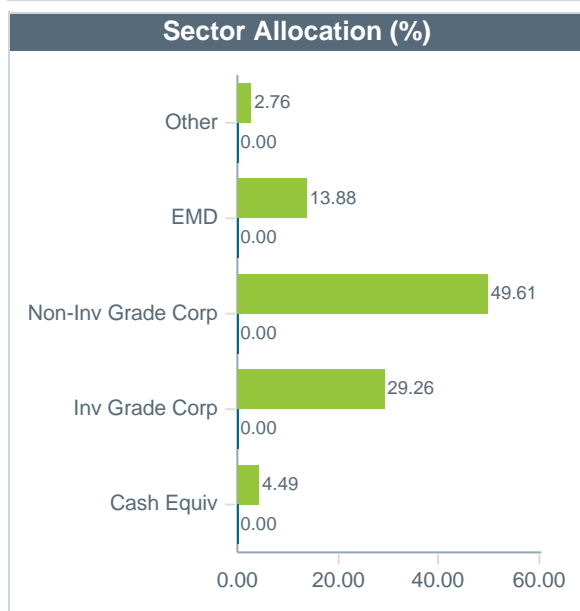
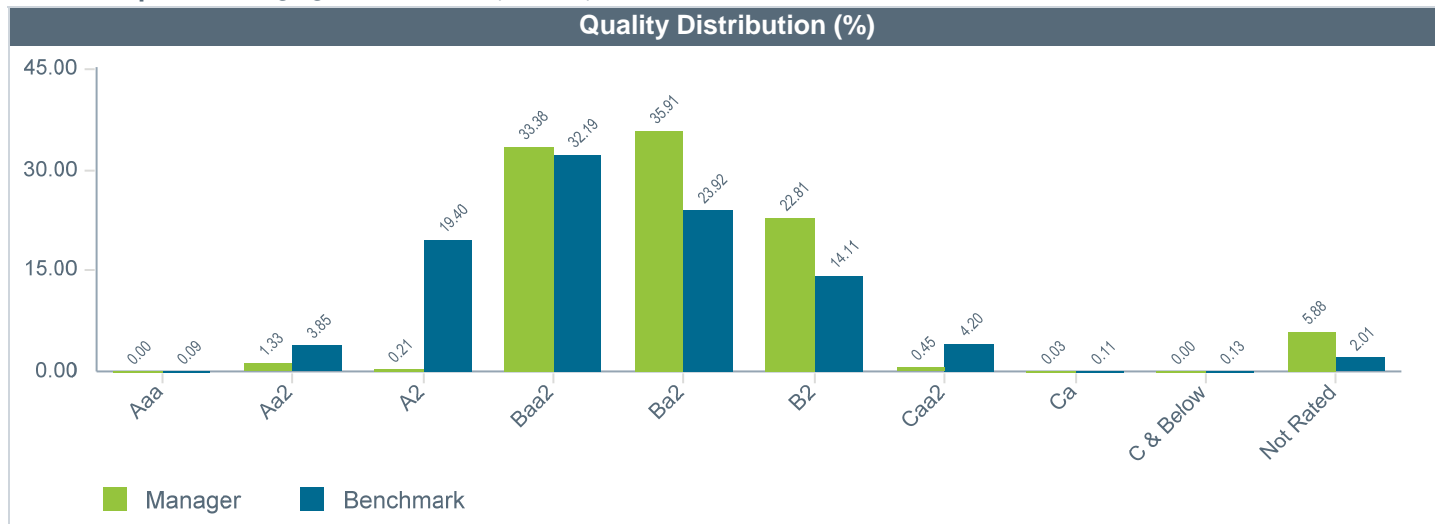


Manager: Goldman Sachs

As of September 30, 2021

Benchmark: Goldman Sachs Custom Index

Peer Group: IM Emerging Markets Debt (SA+CF)



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector allocation to "Other" consists of foreign exchange, supranational and interest rate swaps. Region allocation to "Other" consists of cash, supranational and developed.



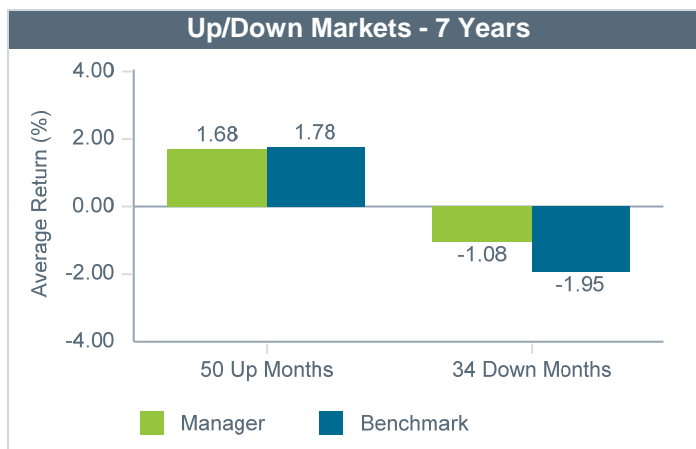
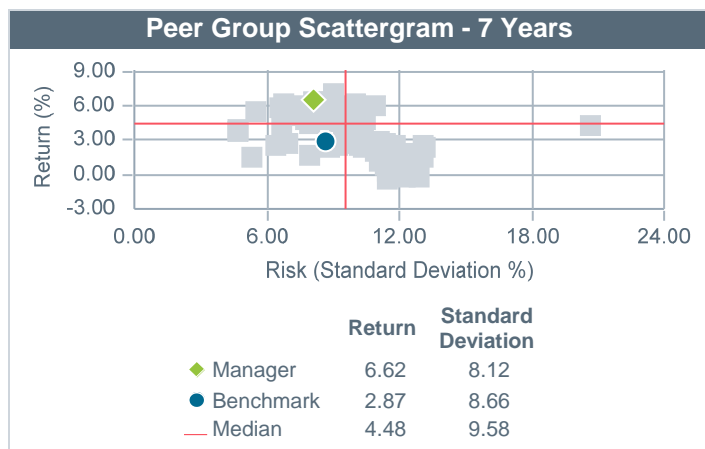
Manager: Eaton Vance

As of September 30, 2021

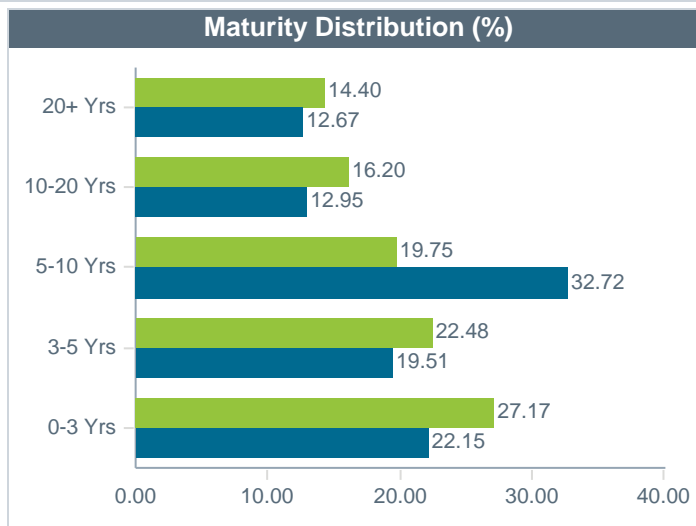
Benchmark: JP Morgan EMB (JEMB) Hard/Local 50/50

Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.66	12.08	10.40	7.86	6.62	N/A	8.35	19.33	-3.44	14.00	11.85
Benchmark	-1.67	3.95	5.08	3.36	2.87	3.56	4.49	13.84	-4.50	12.15	10.06
Difference	2.33	8.13	5.32	4.50	3.75	N/A	3.86	5.49	1.06	1.85	1.79
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	4	5	4	5	2	N/A	24	1	24	36	38
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	2.56	5.80
Spread Duration	3.31	3.12
Avg. Maturity	7.73	9.54
Avg. Quality	B1	Ba2
Yield To Maturity (%)	8.19	4.80
Coupon Rate (%)	6.70	5.18
Current Yield (%)	6.65	4.99
Holdings Count	128	910

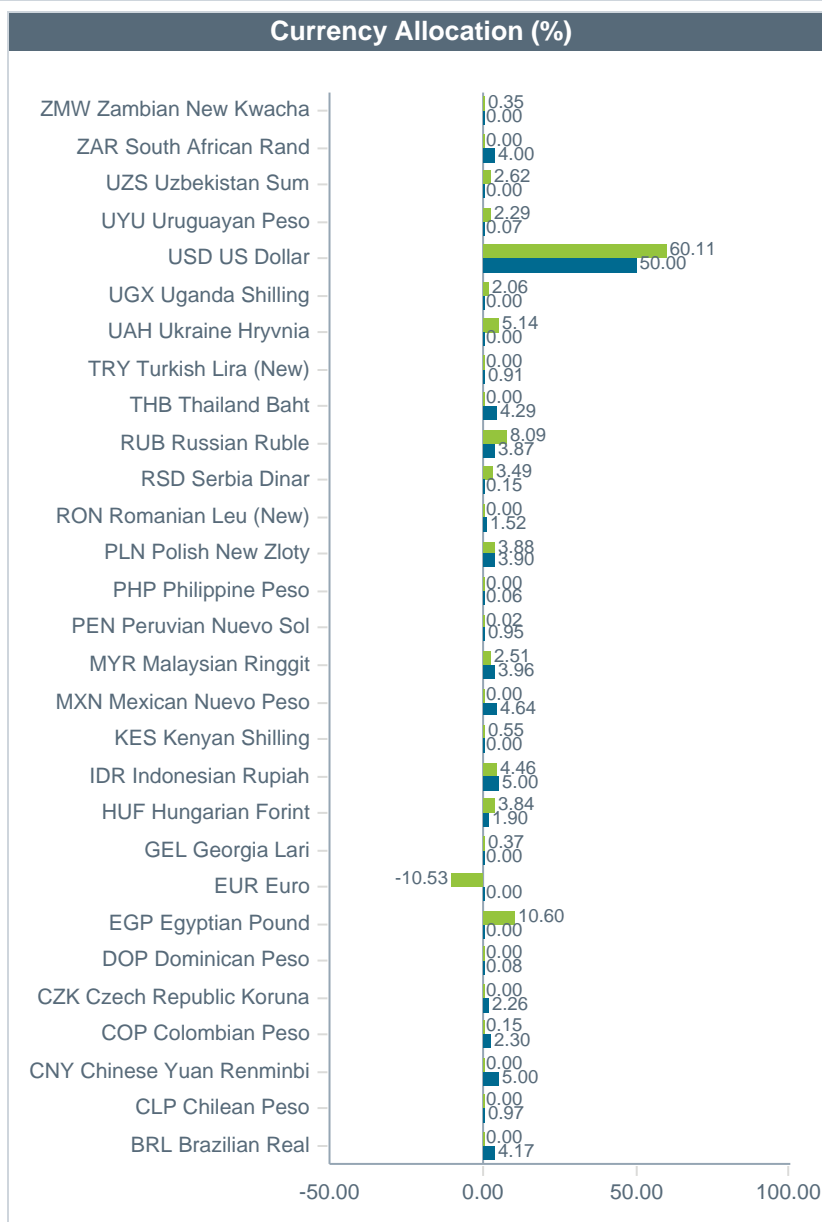
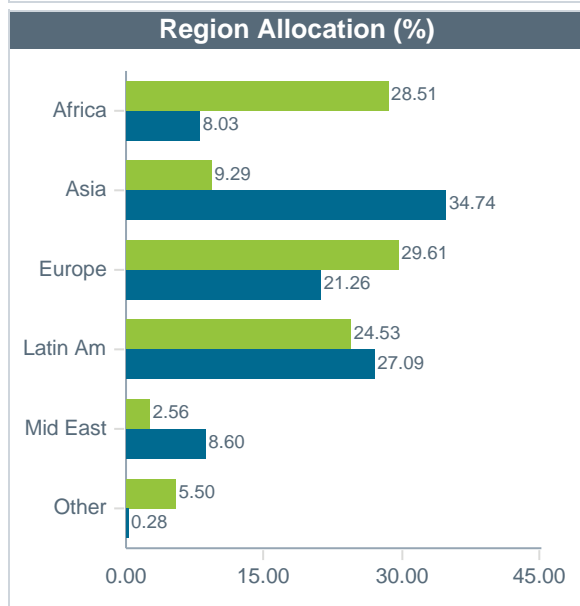
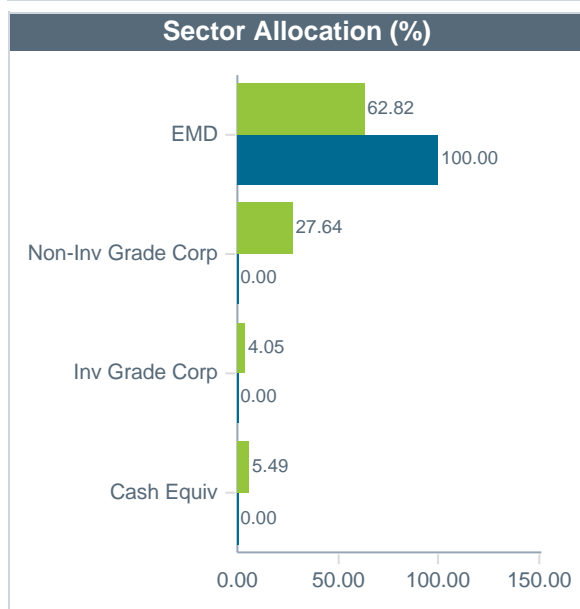
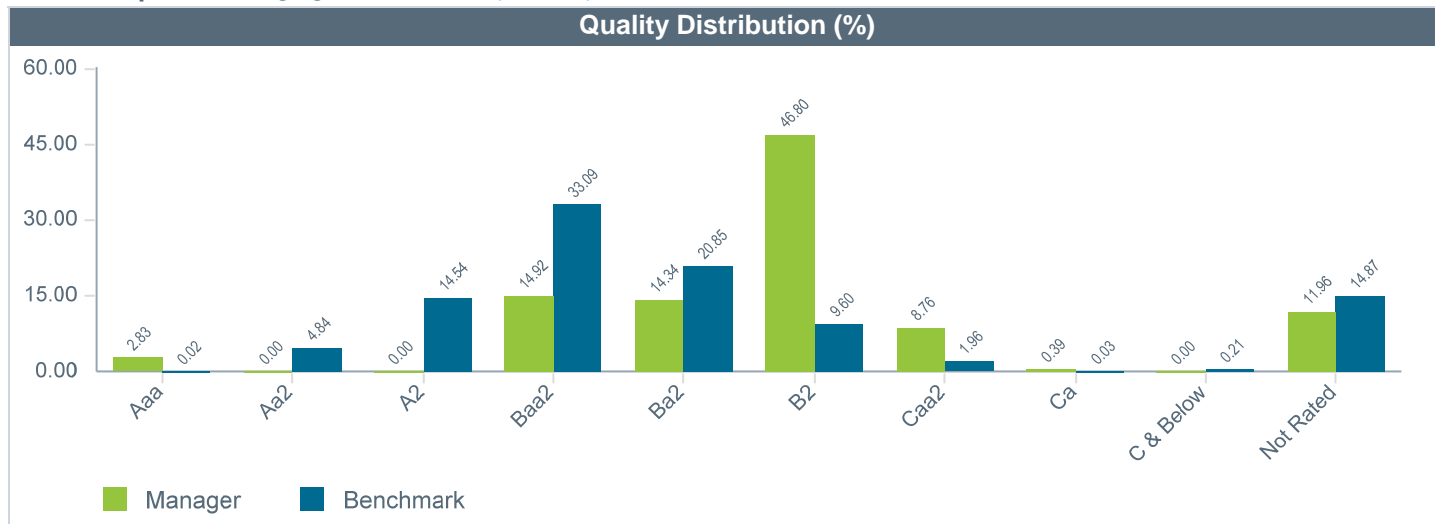


Manager: Eaton Vance

As of September 30, 2021

Benchmark: JP Morgan EMB (JEMB) Hard/Local 50/50

Peer Group: IM Emerging Markets Debt (SA+CF)



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash.

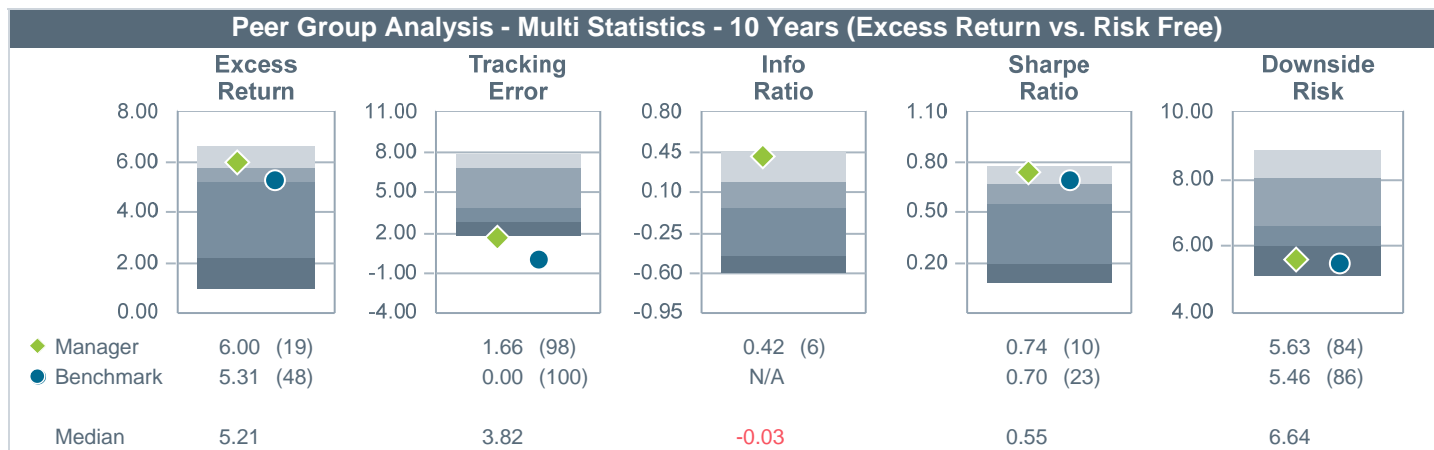
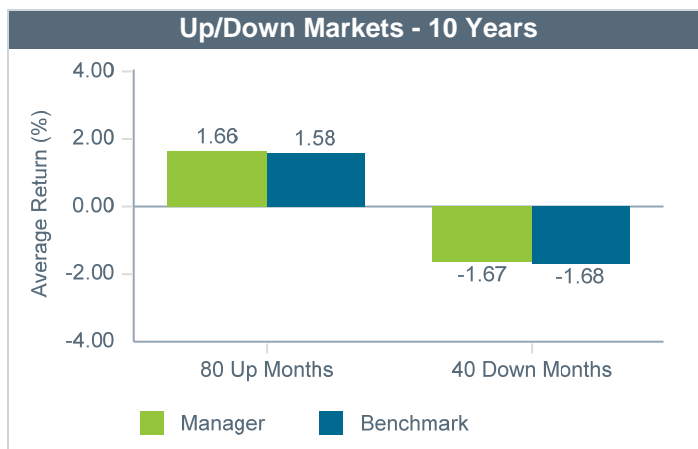
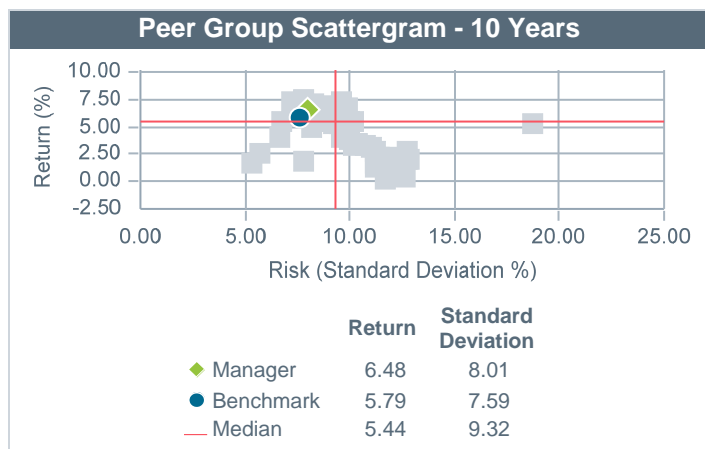
Manager: Global Evolution Hard

As of September 30, 2021

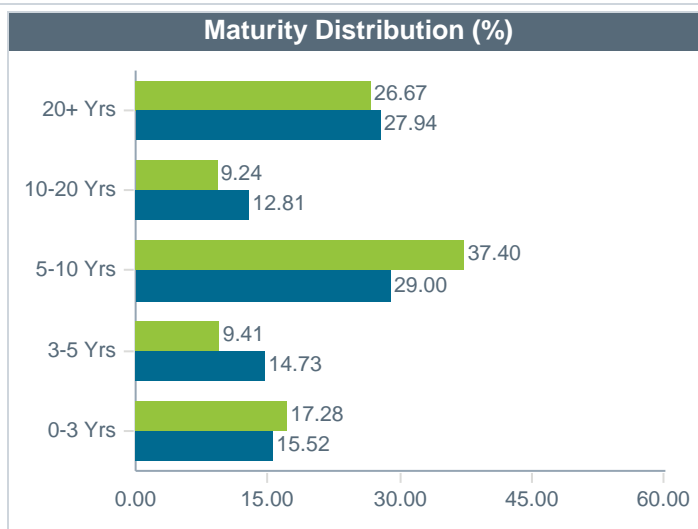
Benchmark: JP Morgan EMBIG Div Ex CCC (USD) (TR) Index

Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-1.08	3.71	5.23	4.28	5.46	6.48	6.04	14.13	-4.01	13.35	12.20
Benchmark	-0.91	3.81	6.00	4.17	5.00	5.79	6.09	15.72	-4.14	10.79	9.22
Difference	-0.17	-0.10	-0.77	0.11	0.46	0.69	-0.05	-1.59	0.13	2.56	2.98
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	60	86	67	50	22	12	59	54	32	41	32
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	8.02	8.12
Spread Duration	N/A	7.92
Avg. Maturity	13.10	12.60
Avg. Quality	Baa3	Baa3
Yield To Maturity (%)	4.20	4.25
Coupon Rate (%)	5.11	5.20
Current Yield (%)	4.85	N/A
Holdings Count	108	854

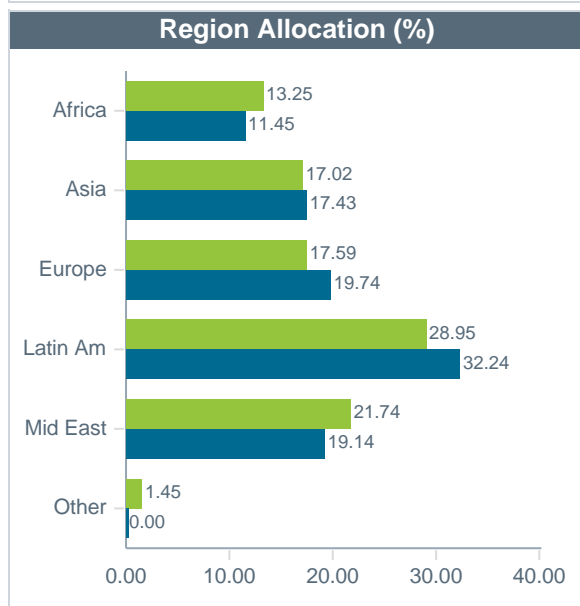
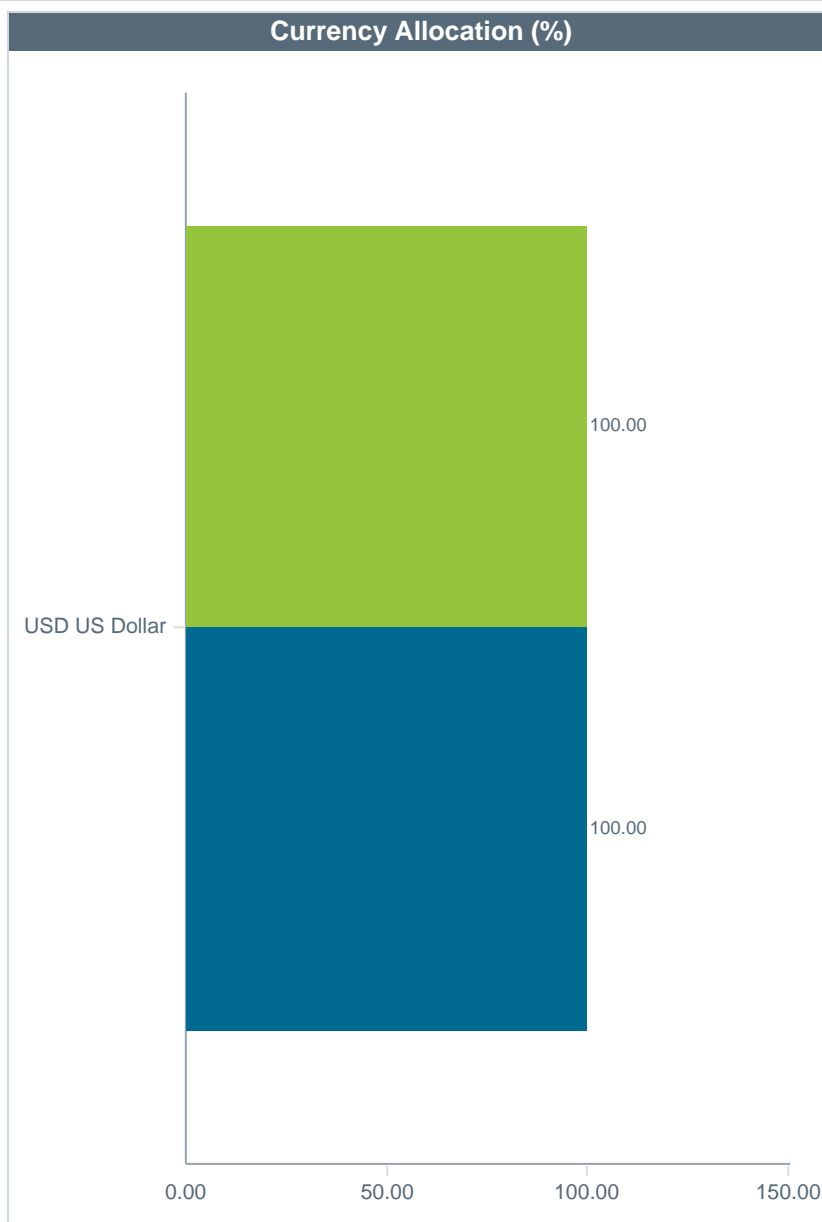
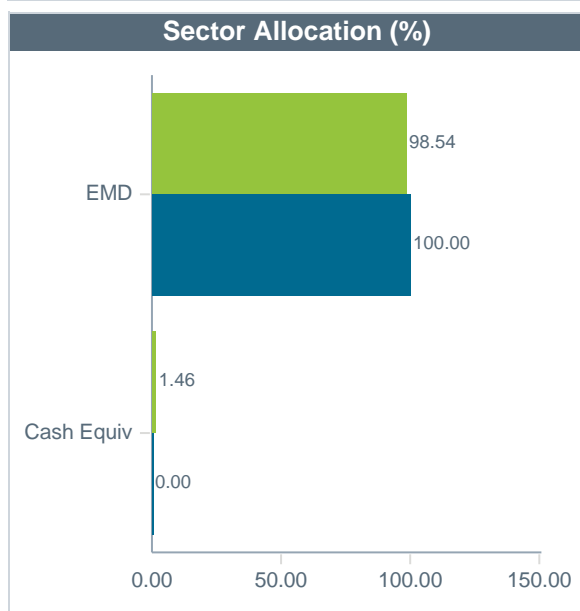
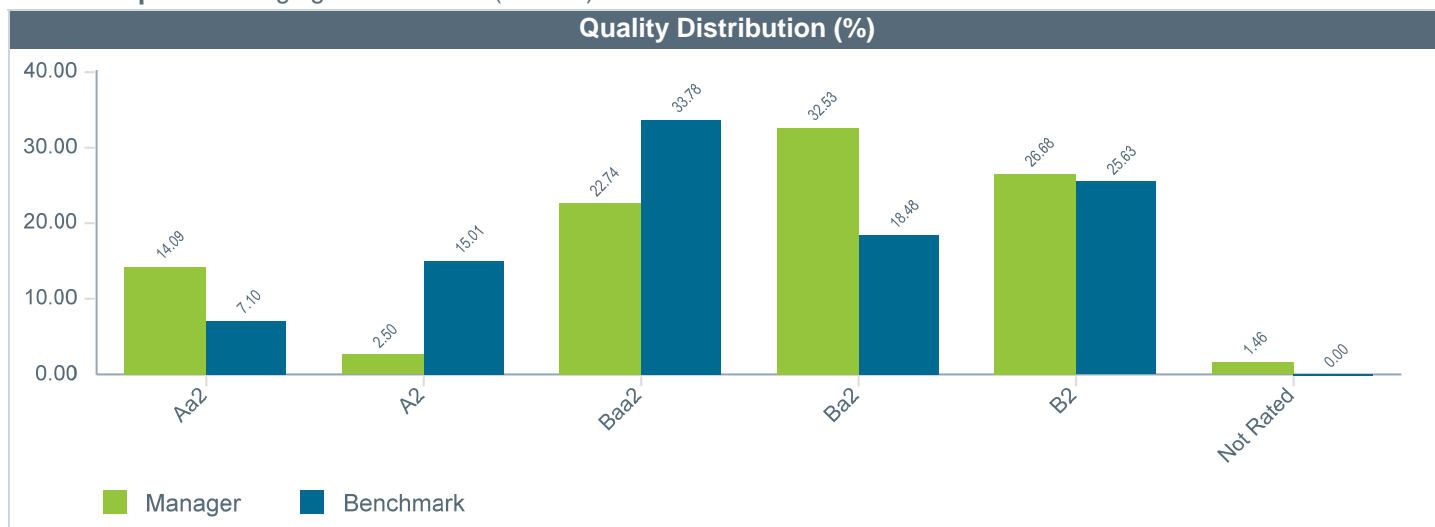


Manager: Global Evolution Hard

As of September 30, 2021

Benchmark: JP Morgan EMBIG Div Ex CCC (USD) (TR) Index

Peer Group: IM Emerging Markets Debt (SA+CF)



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash.

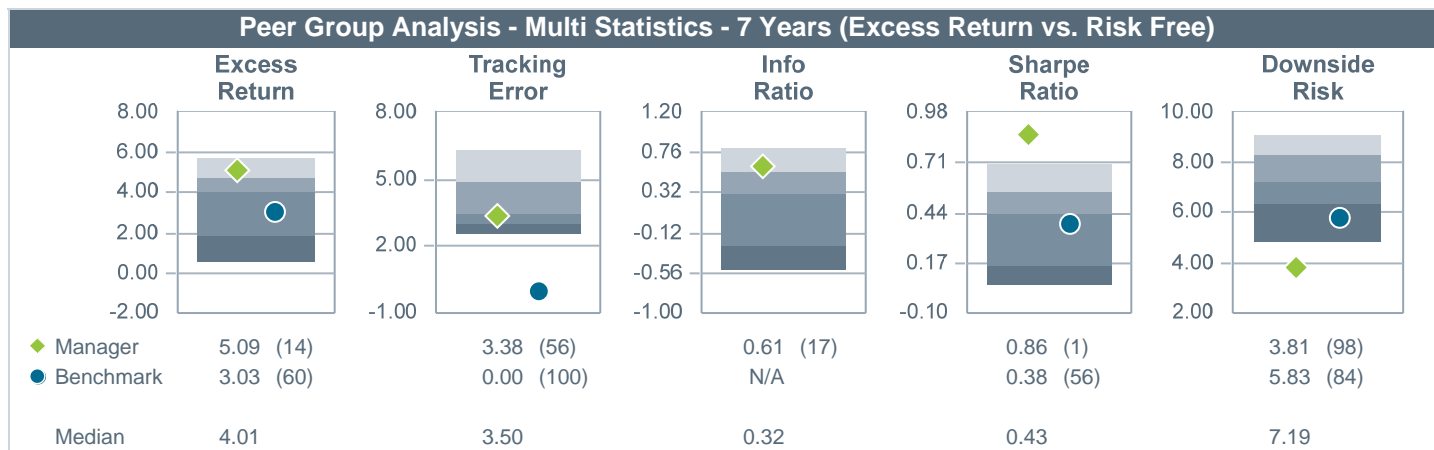
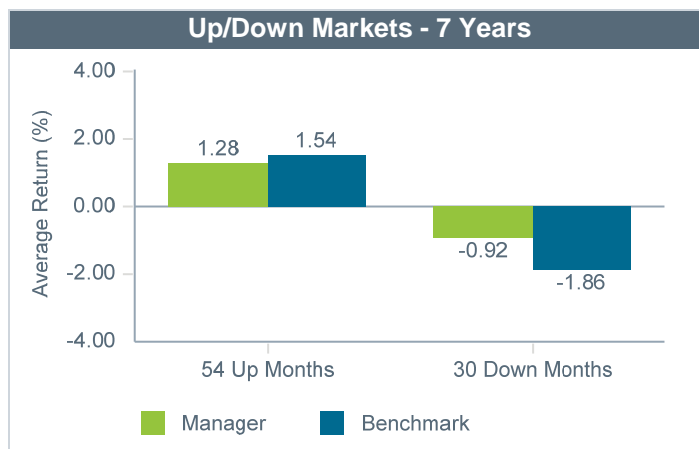
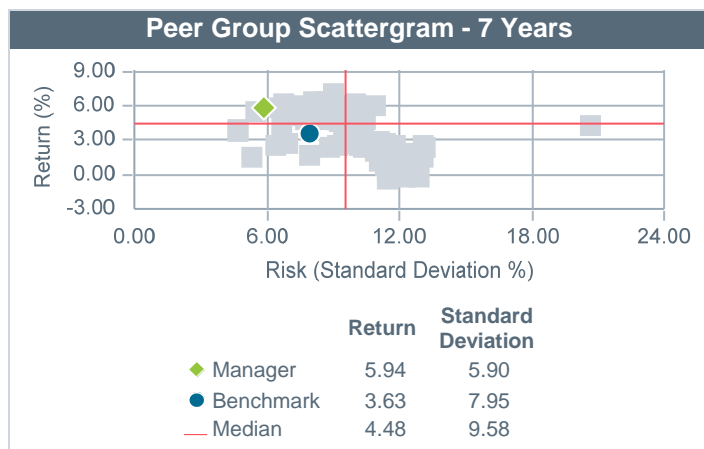
Manager: Finisterre

As of September 30, 2021

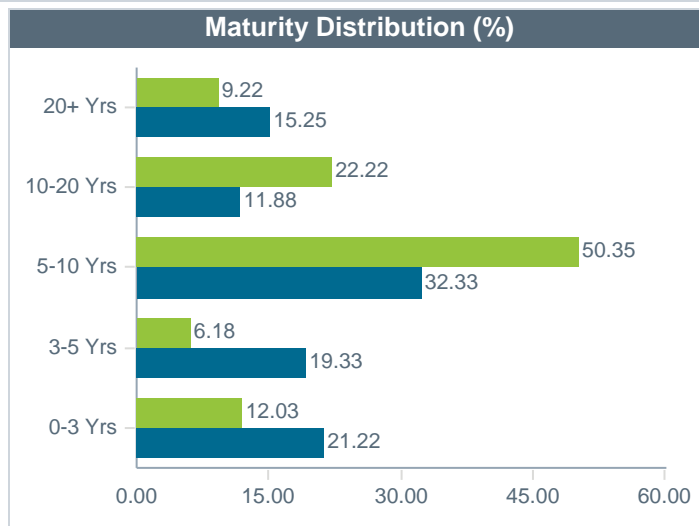
Benchmark: Custom EMD Benchmark (1/3)

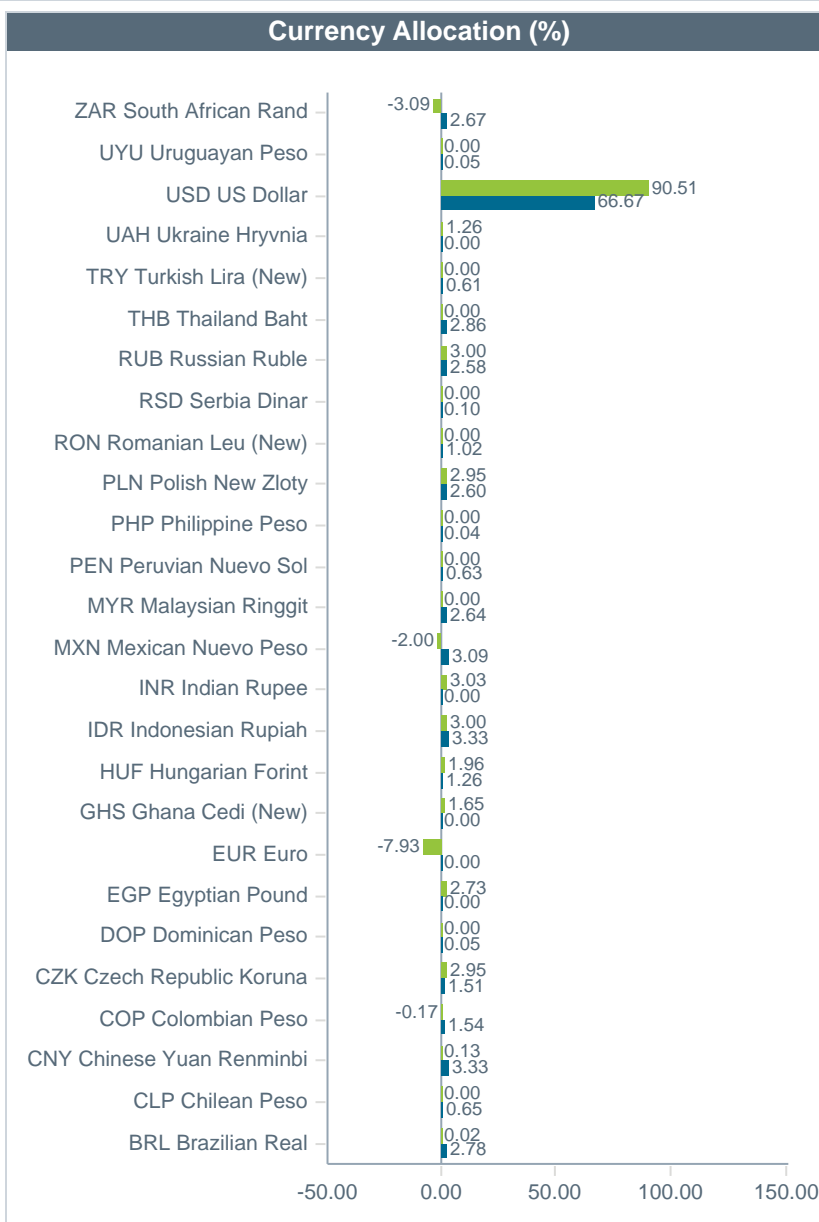
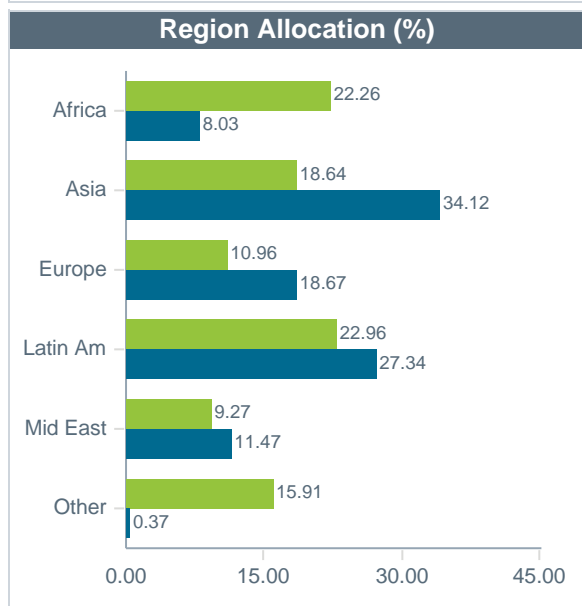
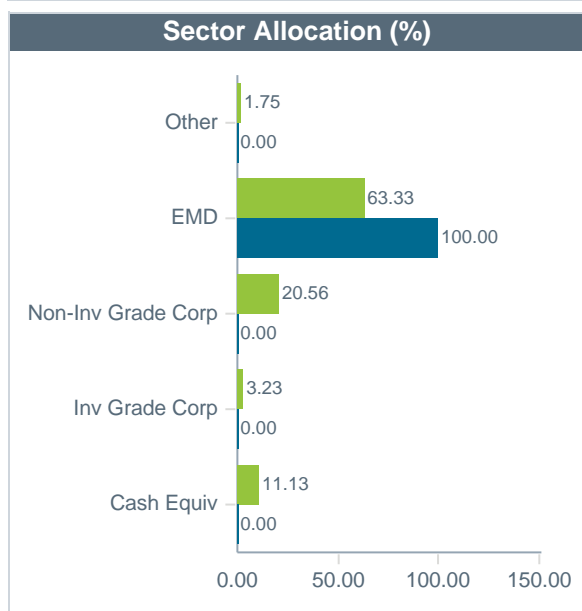
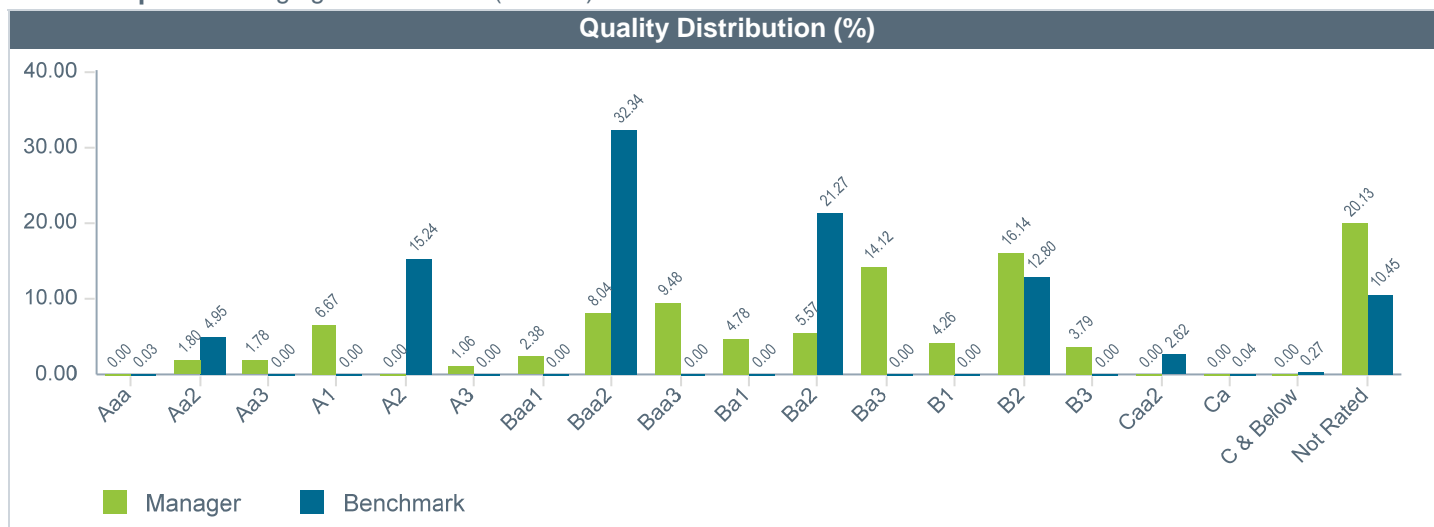
Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-1.63	5.46	6.79	6.59	5.94	N/A	8.14	16.04	-0.20	12.46	11.21
Benchmark	-1.19	4.38	5.53	3.77	3.63	4.37	5.07	13.93	-3.96	11.13	10.04
Difference	-0.44	1.08	1.26	2.82	2.31	N/A	3.07	2.11	3.76	1.33	1.17
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	65	63	33	11	11	N/A	28	14	6	51	48
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	3.35	5.98
Spread Duration	2.76	4.15
Avg. Maturity	5.25	10.31
Avg. Quality	Ba1	Ba2
Yield To Maturity (%)	4.08	4.63
Coupon Rate (%)	4.39	5.08
Current Yield (%)	4.76	4.91
Holdings Count	104	1,116





Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector and region allocation to "Other" consists of foreign exchange, futures, margin for derivatives and interest rate swaps.

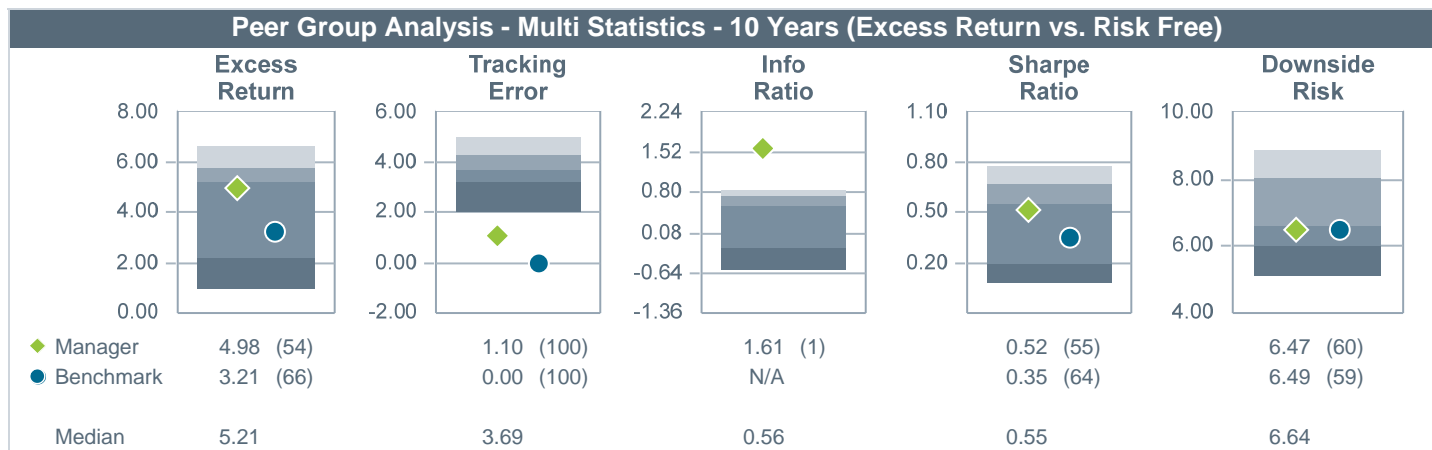
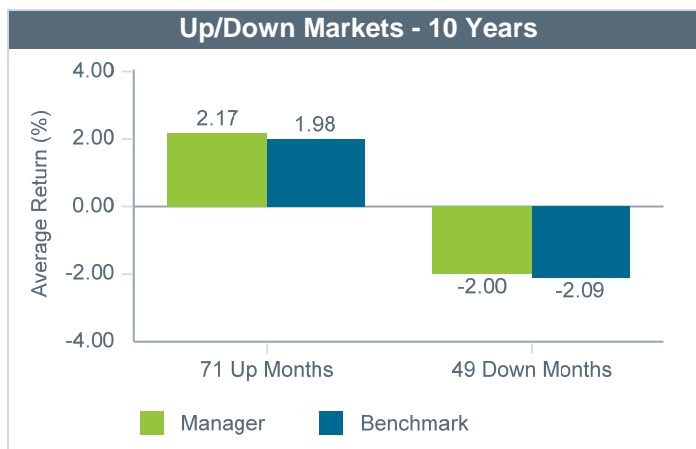
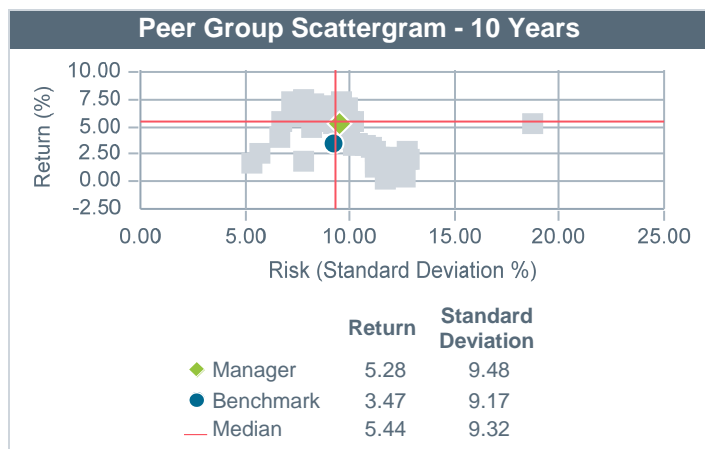
Manager: Wellington

As of September 30, 2021

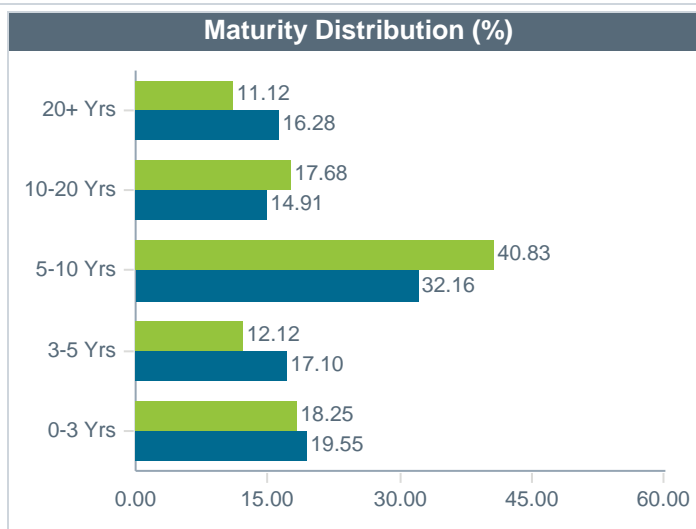
Benchmark: 50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div

Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-1.54	5.08	6.06	4.67	4.23	5.28	6.53	17.28	-5.34	14.56	12.53
Benchmark	-1.91	3.52	4.70	3.02	2.77	3.47	4.02	14.31	-5.15	12.74	10.16
Difference	0.37	1.56	1.36	1.65	1.46	1.81	2.51	2.97	-0.19	1.82	2.37
Peer Group Median	-0.79	6.13	5.96	4.28	4.48	5.44	6.71	14.28	-5.30	12.46	11.04
Rank	62	66	48	42	54	55	55	6	52	31	27
Population	128	128	124	117	107	79	140	154	164	169	178



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	6.62	6.60
Spread Duration	4.32	3.88
Avg. Maturity	9.71	10.11
Avg. Quality	Baa2	Ba2
Yield To Maturity (%)	5.23	4.99
Coupon Rate (%)	4.24	5.27
Current Yield (%)	4.61	5.10
Holdings Count	461	623

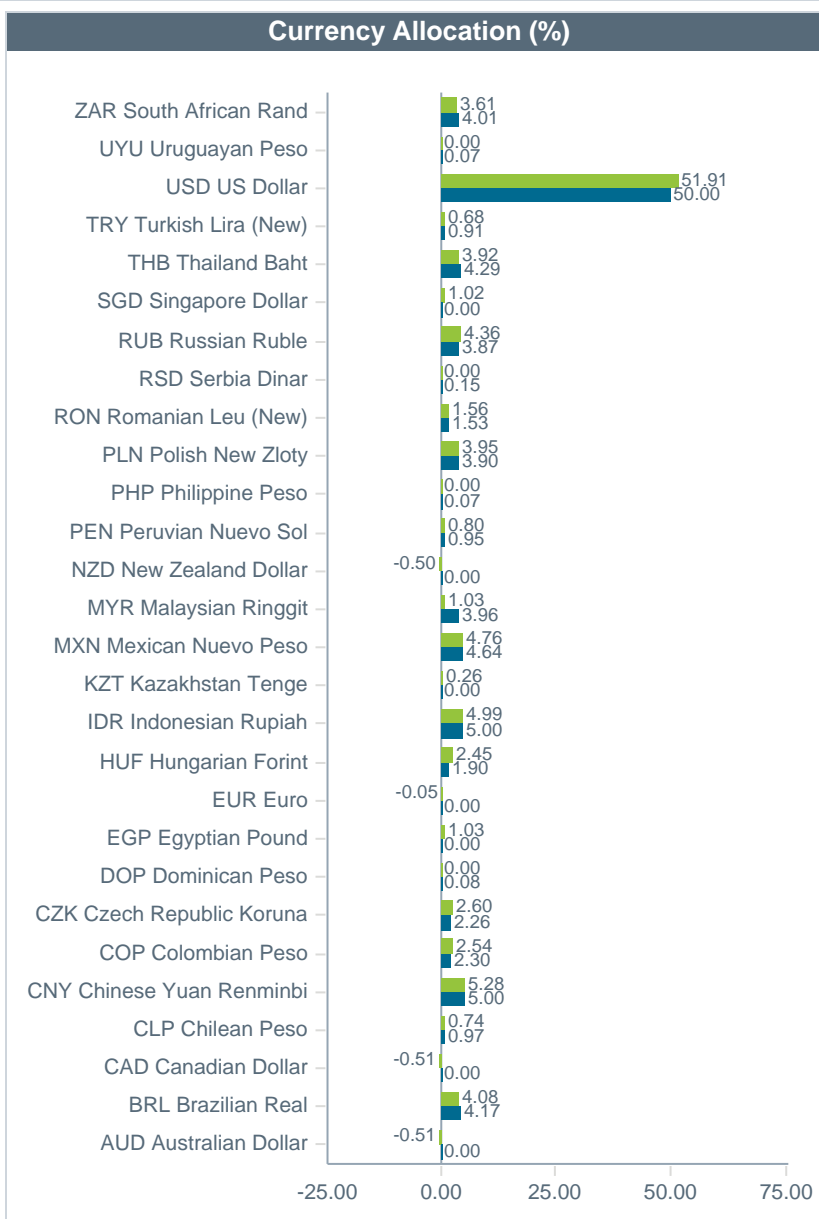
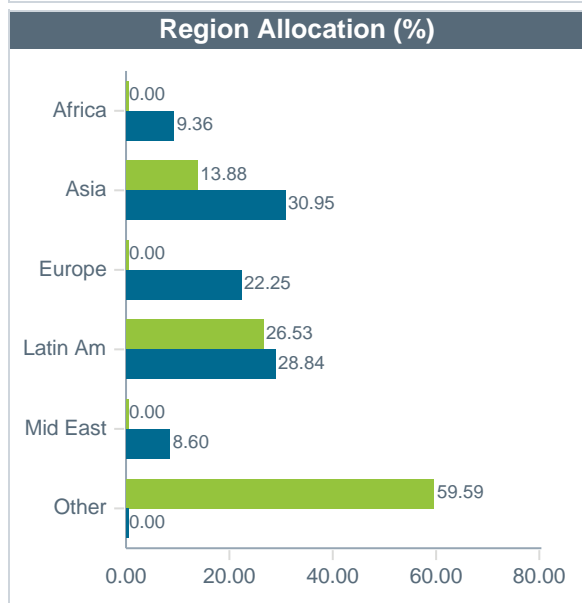
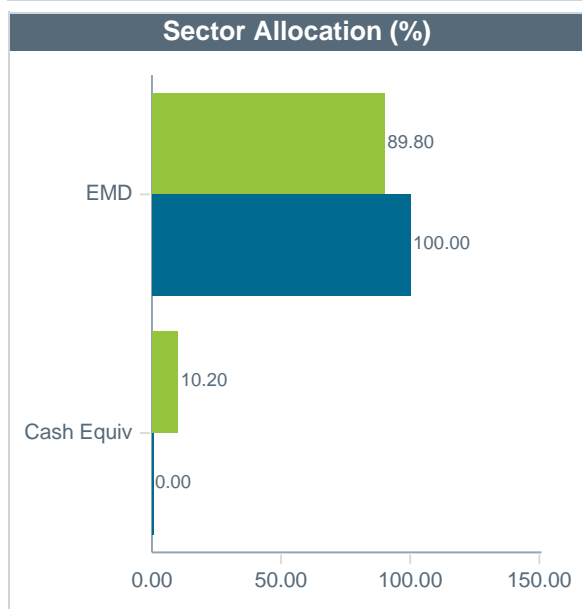
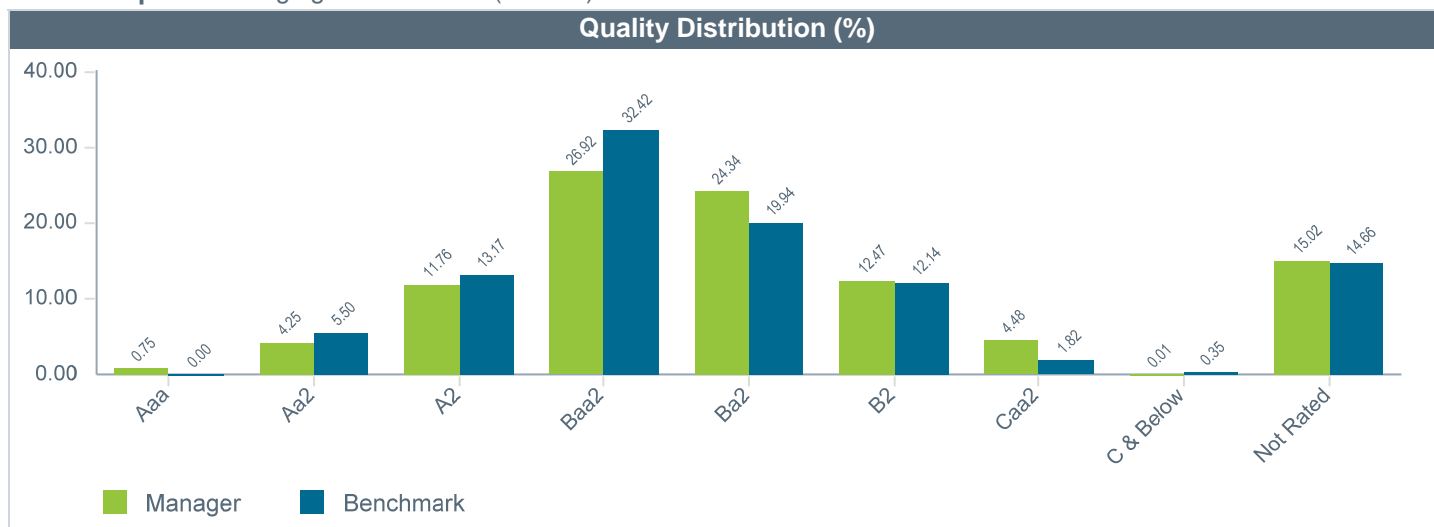


Manager: Wellington

As of September 30, 2021

Benchmark: 50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div

Peer Group: IM Emerging Markets Debt (SA+CF)



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash and holdings not allocated among the other categories.



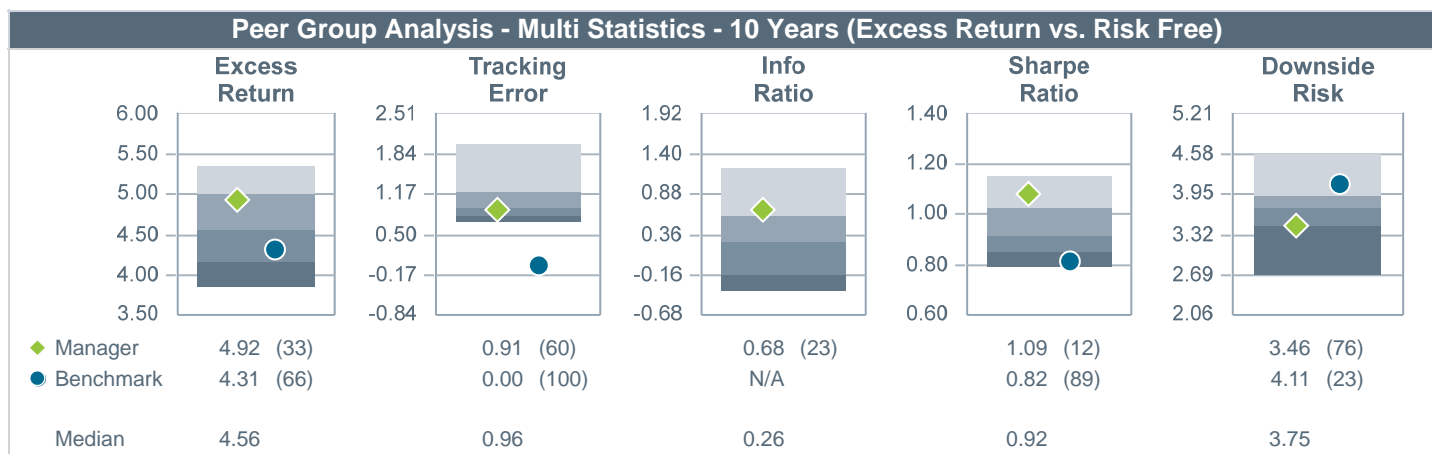
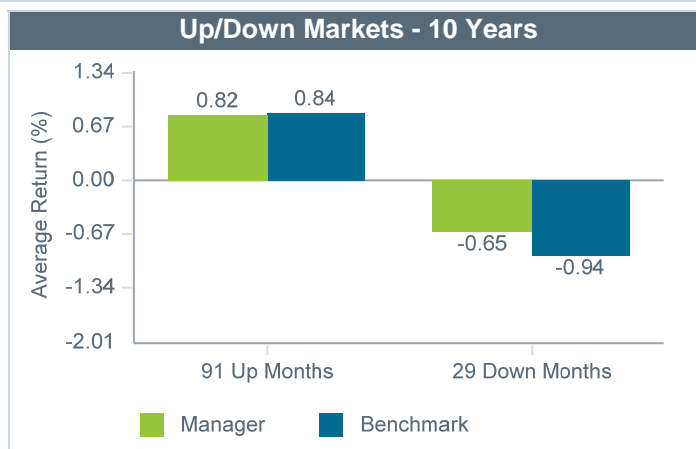
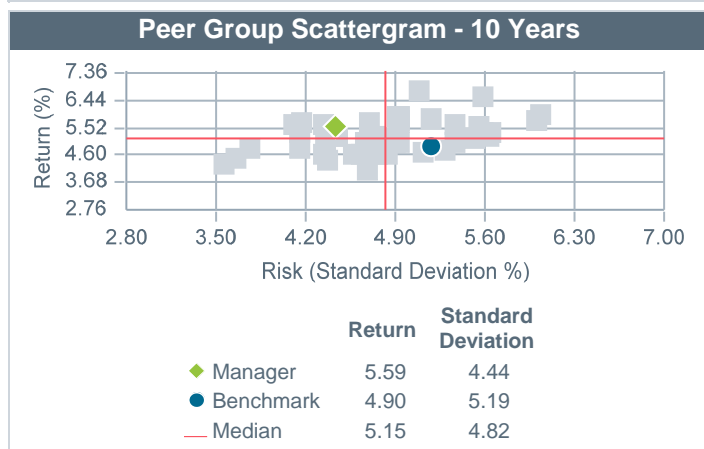
Manager: Credit Suisse

As of September 30, 2021

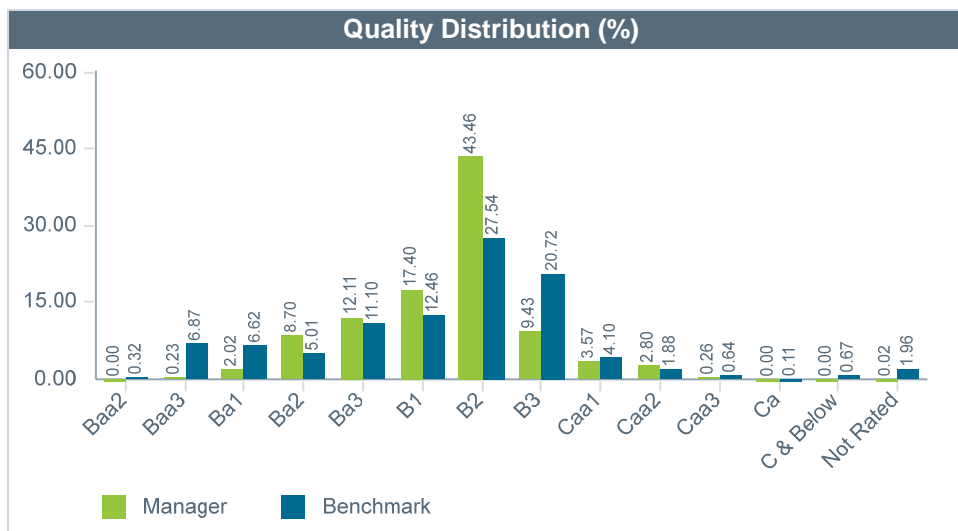
Benchmark: Bank Loans Custom Index

Peer Group: IM U.S. Bank Loans (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.98	8.09	4.20	4.87	4.86	5.59	3.11	7.97	1.51	5.07	9.46
Benchmark	0.98	8.27	4.10	4.56	4.16	4.90	3.12	8.64	0.44	4.12	10.16
Difference	0.00	-0.18	0.10	0.31	0.70	0.69	-0.01	-0.67	1.07	0.95	-0.70
Peer Group Median	1.12	8.20	4.05	4.59	4.26	5.15	2.47	8.74	0.79	4.46	9.51
Rank	82	55	42	26	15	32	28	82	10	16	53
Population	55	55	55	52	52	47	56	59	66	67	68



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	0.25	0.20
Spread Duration	1.85	N/A
Avg. Maturity	4.99	4.81
Avg. Quality	B1	B1
Yield To Maturity (%)	4.88	4.33
Coupon Rate (%)	4.04	3.92
Current Yield (%)	4.08	4.33
Holdings Count	333	1,177



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

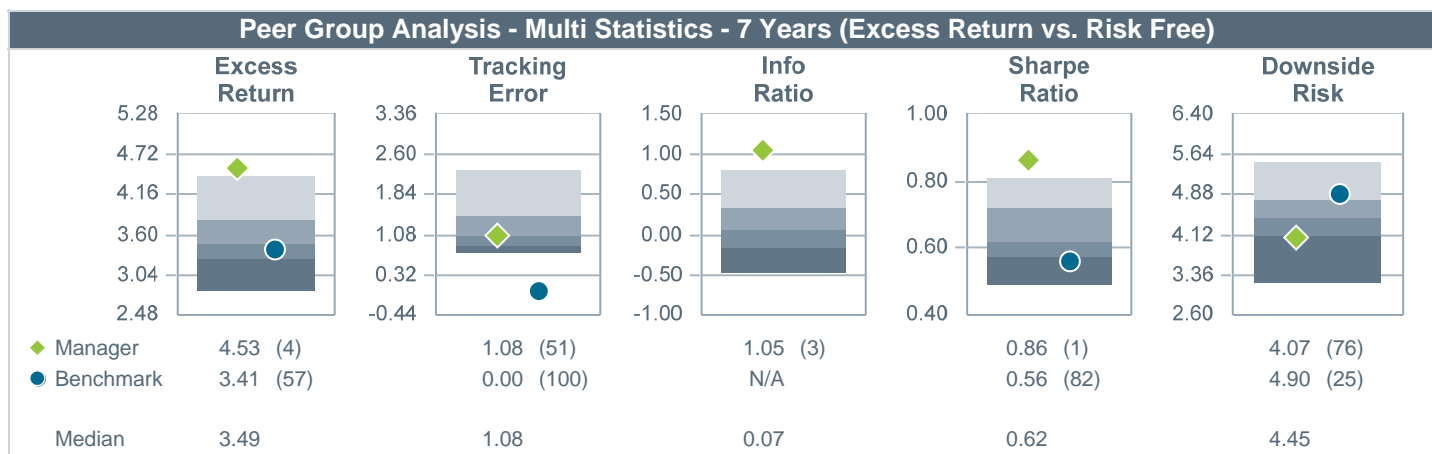
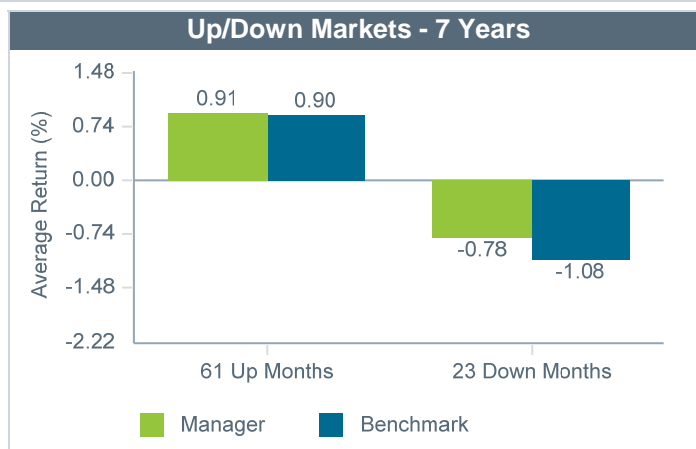
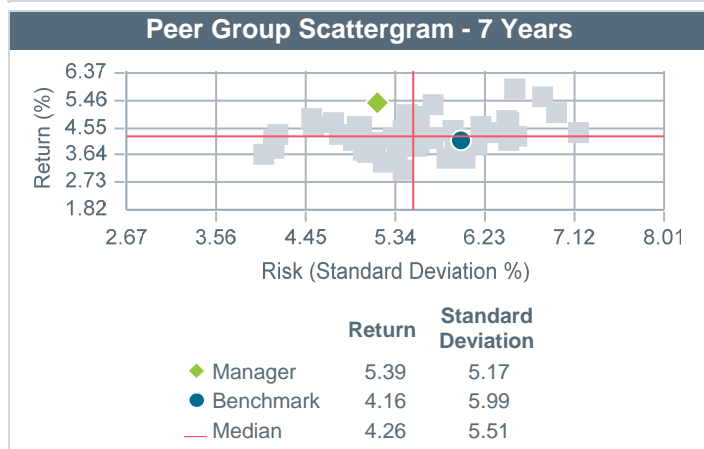
Manager: Octagon

As of September 30, 2021

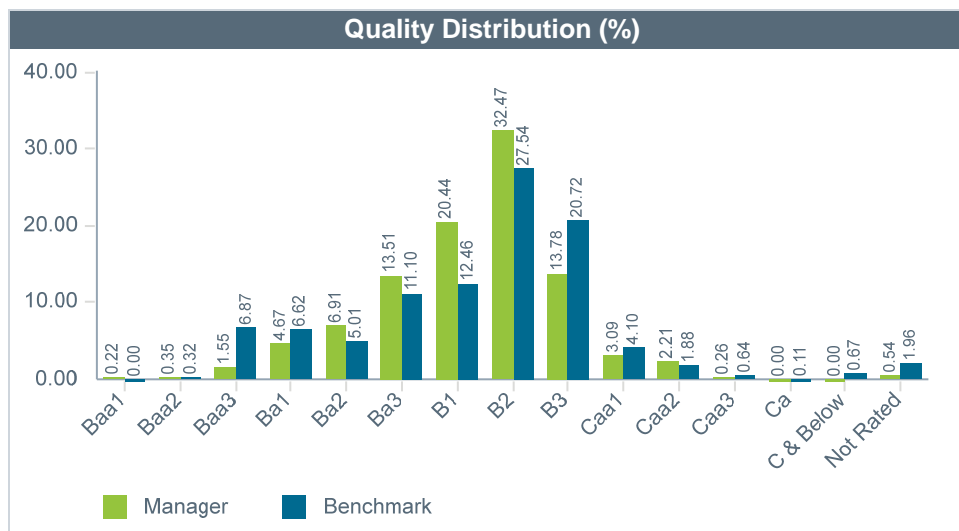
Benchmark: Bank Loans Custom Index

Peer Group: IM U.S. Bank Loans (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.02	8.08	4.51	5.66	5.39	N/A	3.72	8.92	2.17	6.65	10.49
Benchmark	0.98	8.27	4.10	4.56	4.16	4.90	3.12	8.64	0.44	4.12	10.16
Difference	0.04	-0.19	0.41	1.10	1.23	N/A	0.60	0.28	1.73	2.53	0.33
Peer Group Median	1.12	8.20	4.05	4.59	4.26	5.15	2.47	8.74	0.79	4.46	9.51
Rank	77	55	29	7	4	N/A	16	45	6	5	22
Population	55	55	55	52	52	47	56	59	66	67	68



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	0.25	0.20
Spread Duration	N/A	N/A
Avg. Maturity	5.27	4.81
Avg. Quality	B2	B1
Yield To Maturity (%)	4.39	4.33
Coupon Rate (%)	4.14	3.92
Current Yield (%)	4.18	4.33
Holdings Count	341	1,177



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

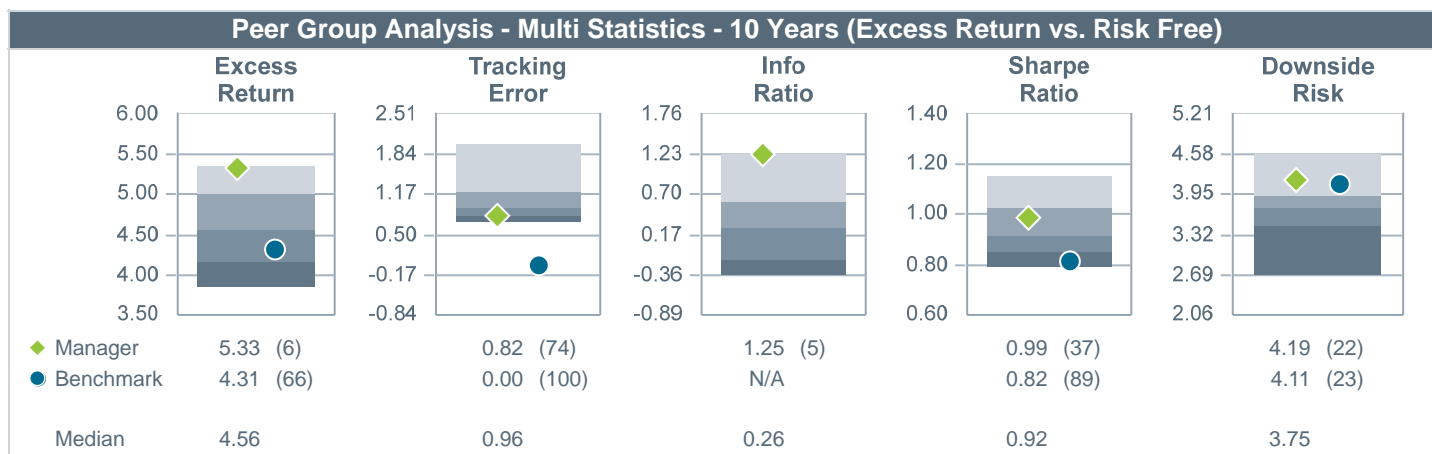
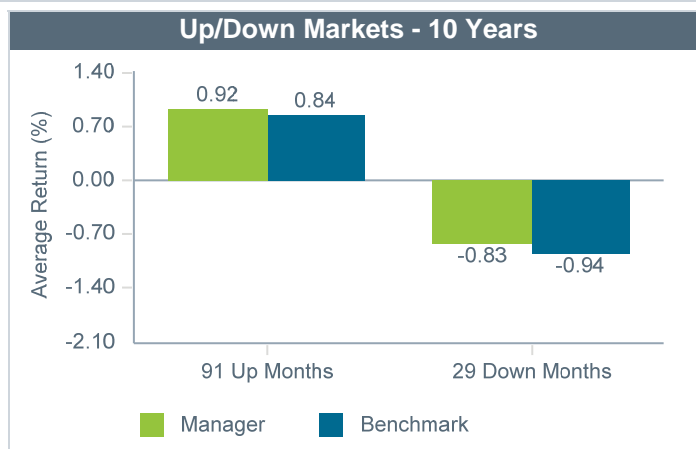
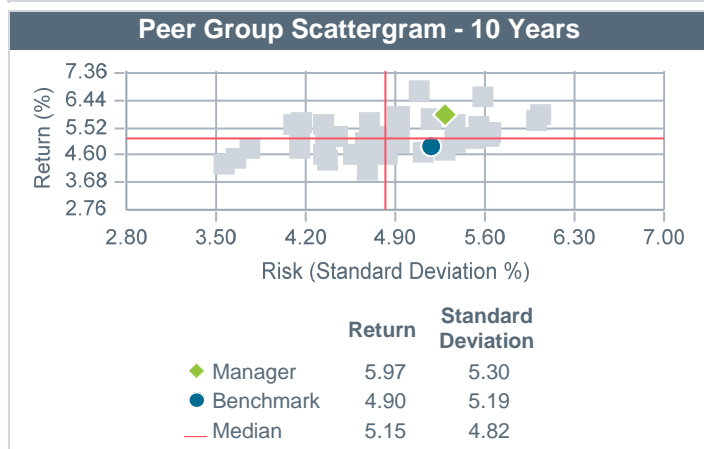
Manager: KKR

As of September 30, 2021

Benchmark: Bank Loans Custom Index

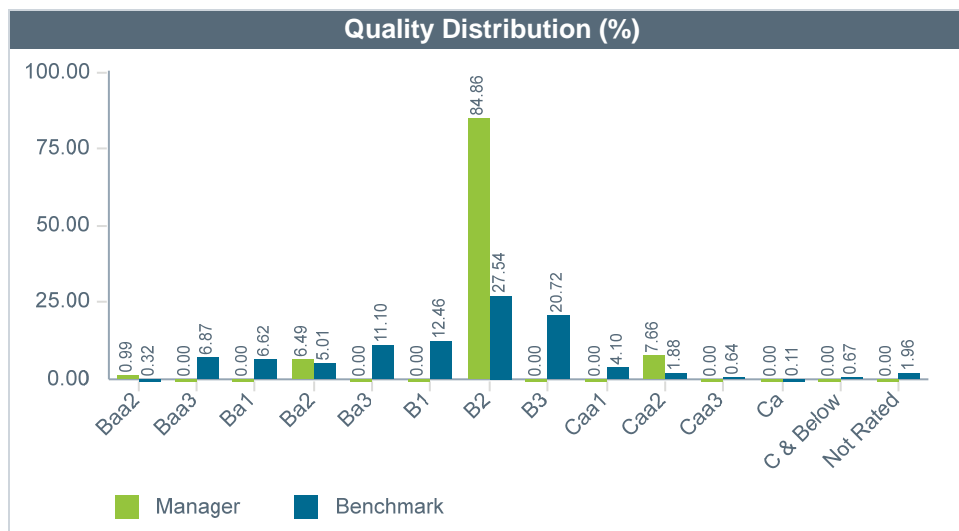
Peer Group: IM U.S. Bank Loans (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.24	9.66	4.84	5.40	5.04	5.97	5.18	7.87	1.10	5.13	11.19
Benchmark	0.98	8.27	4.10	4.56	4.16	4.90	3.12	8.64	0.44	4.12	10.16
Difference	0.26	1.39	0.74	0.84	0.88	1.07	2.06	-0.77	0.66	1.01	1.03
Peer Group Median	1.12	8.20	4.05	4.59	4.26	5.15	2.47	8.74	0.79	4.46	9.51
Rank	21	13	17	8	8	5	5	83	33	15	12
Population	55	55	55	52	52	47	56	59	66	67	68



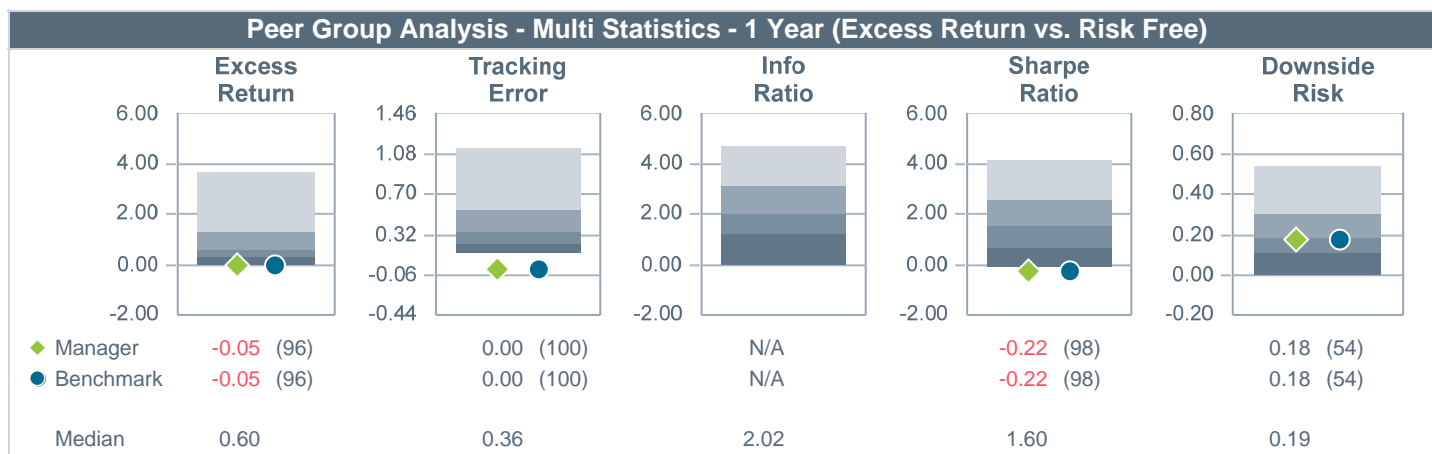
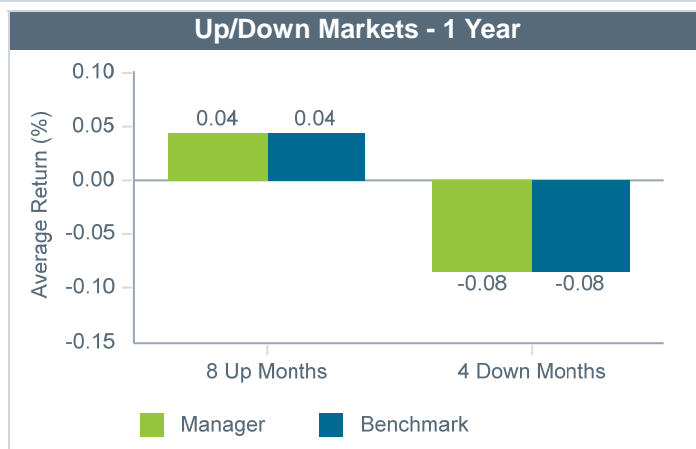
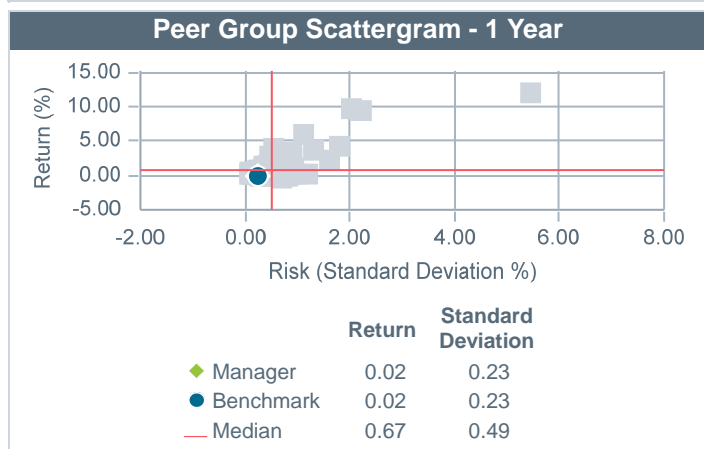
Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	0.17	0.20
Spread Duration	4.61	N/A
Avg. Maturity	5.40	4.81
Avg. Quality	B2	B1
Yield To Maturity (%)	5.44	4.33
Coupon Rate (%)	4.44	3.92
Current Yield (%)	5.23	4.33
Holdings Count	92	1,177

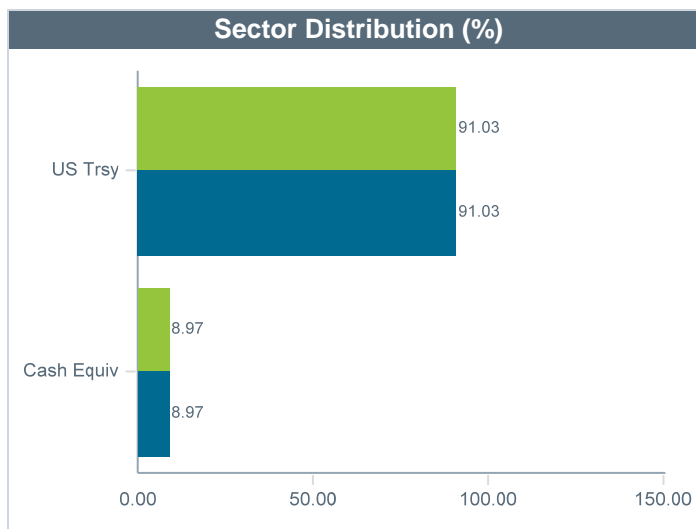


Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.02	0.02	N/A	N/A	N/A	N/A	3.20	N/A	N/A	N/A	N/A
Benchmark	0.02	0.02	N/A	N/A	N/A	N/A	3.20	N/A	N/A	N/A	N/A
Difference	0.00	0.00	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A
Peer Group Median	0.11	0.67	3.21	2.27	2.11	1.98	3.88	4.53	1.67	1.53	1.65
Rank	90	96	N/A	N/A	N/A	N/A	83	N/A	N/A	N/A	N/A
Population	115	115	113	108	103	97	118	123	132	132	133



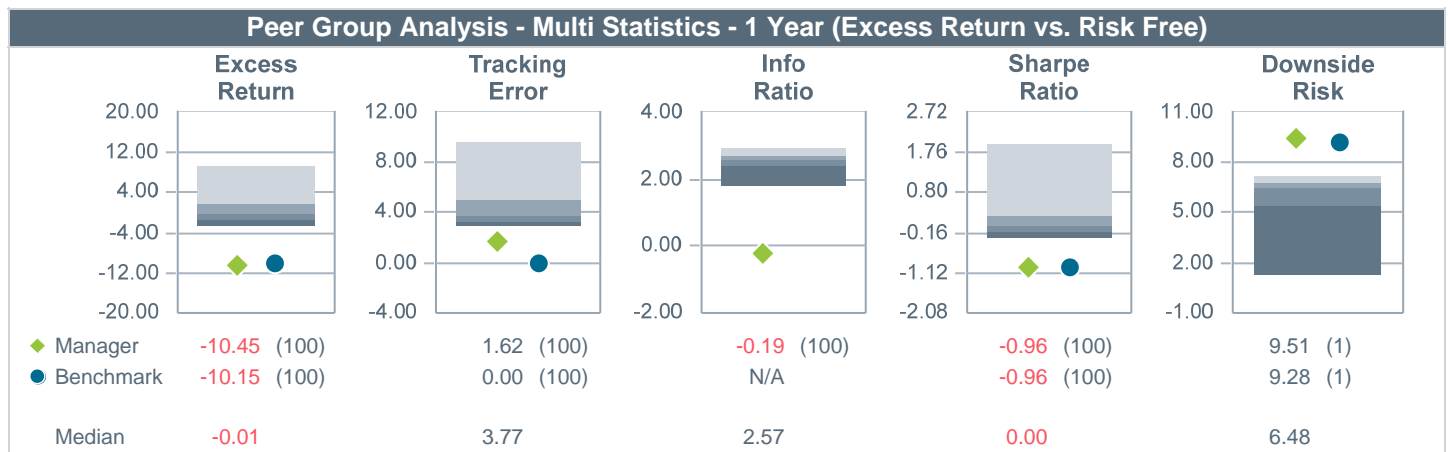
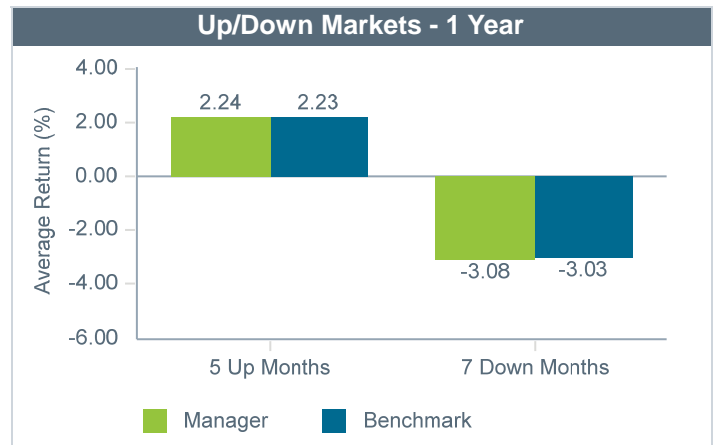
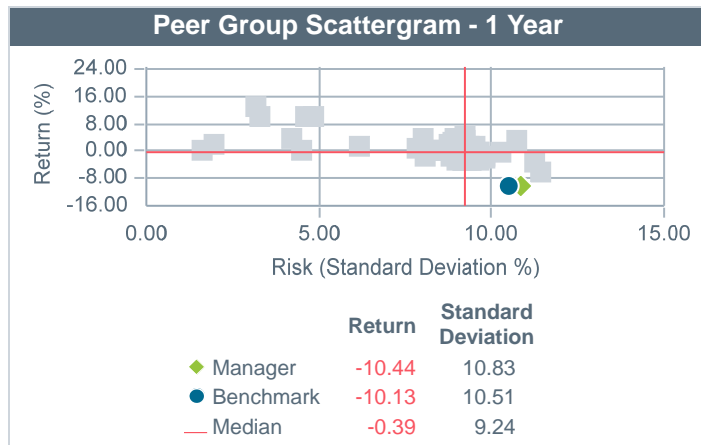
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	1.63	1.63
Spread Duration	N/A	N/A
Avg. Maturity	1.72	1.72
Avg. Quality	Aaa	Aaa
Yield To Maturity (%)	0.24	0.24
Coupon Rate (%)	0.83	0.83
Current Yield (%)	0.83	0.83
Holdings Count	16	16



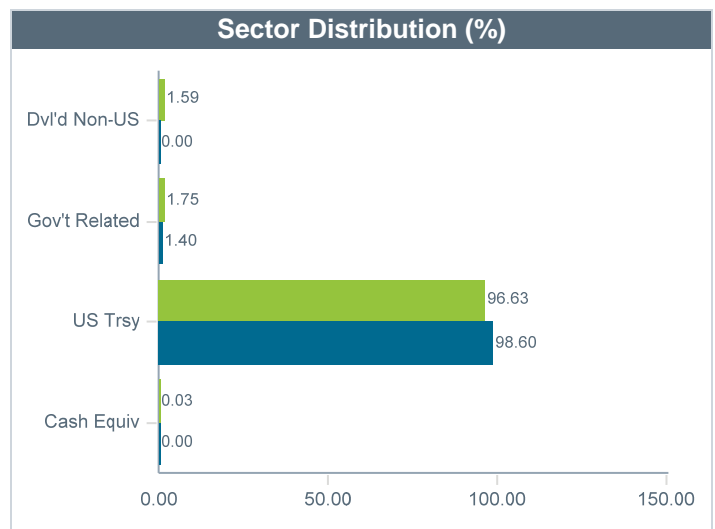
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: Internal Long Duration Fixed Income Portfolio
As of September 30, 2021
Benchmark: Bloomberg US Gov't Lng Trm Bond Index
Peer Group: IM U.S. Long Duration (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.20	-10.44	N/A	N/A	N/A	N/A	17.06	14.61	N/A	N/A	N/A
Benchmark	0.46	-10.13	9.17	3.34	5.42	4.40	17.55	14.75	-1.79	8.53	1.43
Difference	-0.26	-0.31	N/A	N/A	N/A	N/A	-0.49	-0.14	N/A	N/A	N/A
Peer Group Median	0.10	-0.39	10.88	6.03	6.82	6.63	17.07	20.14	-4.73	11.23	7.41
Rank	27	100	N/A	N/A	N/A	N/A	51	92	N/A	N/A	N/A
Population	59	59	57	52	51	49	60	63	74	76	78



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	17.89	18.59
Spread Duration	N/A	17.84
Avg. Maturity	22.97	24.00
Avg. Quality	Aaa	Aaa/Aa1
Yield To Maturity (%)	1.85	2.03
Coupon Rate (%)	2.36	2.57
Current Yield (%)	17.89	N/A
Holdings Count	18	91



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



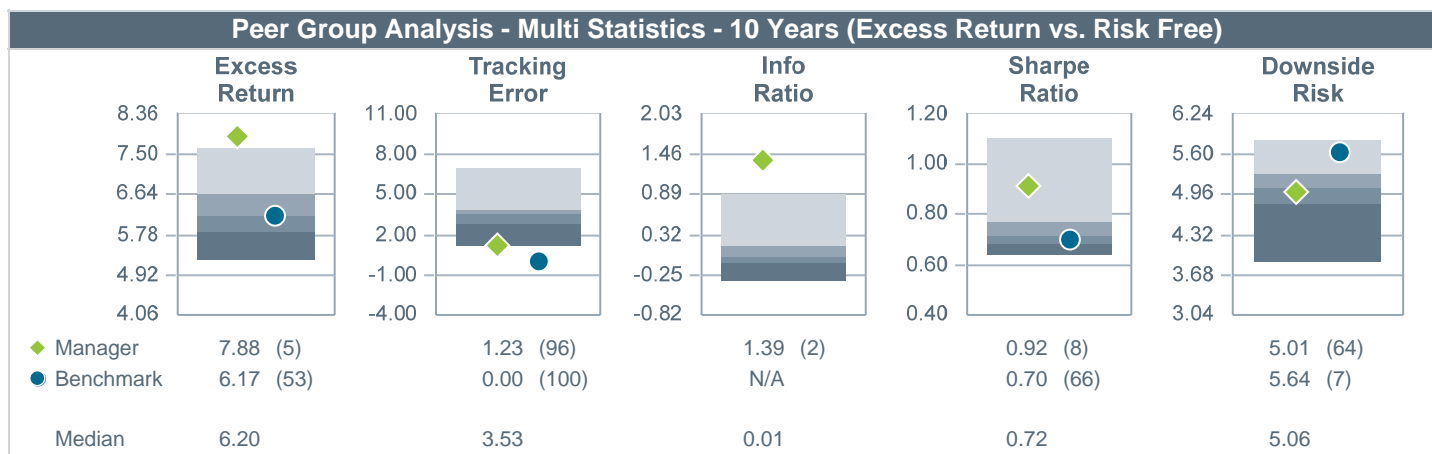
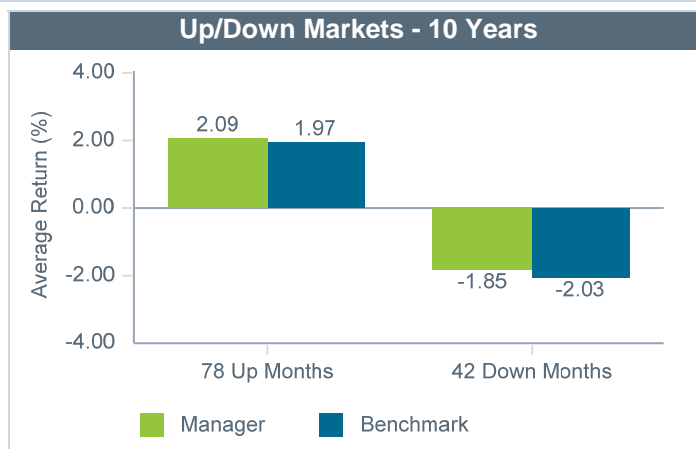
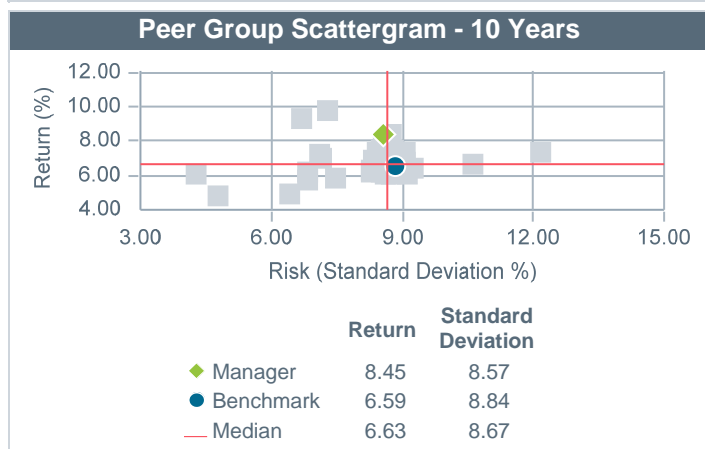
Manager: Metlife

As of September 30, 2021

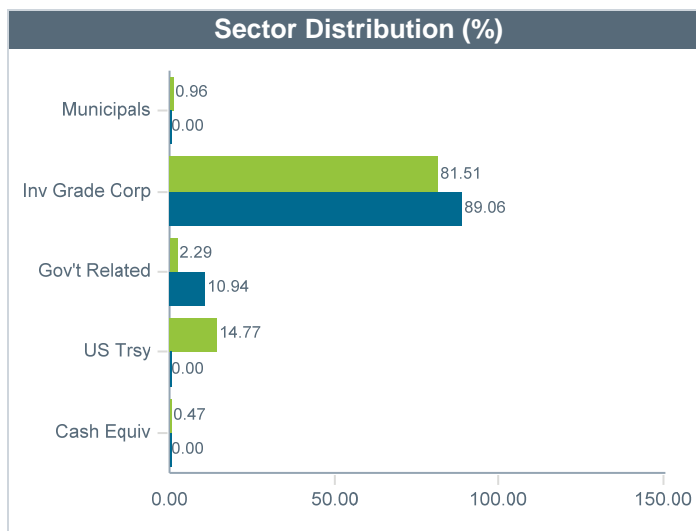
Benchmark: Bloomberg US Lng Crdt Index

Peer Group: IM U.S. Long Duration (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.04	1.57	11.37	7.38	7.75	8.45	16.37	23.73	-5.68	13.59	13.40
Benchmark	-0.18	2.13	10.20	6.14	6.54	6.59	13.32	23.36	-6.76	12.21	10.22
Difference	0.14	-0.56	1.17	1.24	1.21	1.86	3.05	0.37	1.08	1.38	3.18
Peer Group Median	0.10	-0.39	10.88	6.03	6.82	6.63	17.07	20.14	-4.73	11.23	7.41
Rank	76	27	32	2	3	5	58	10	78	3	2
Population	59	59	57	52	51	49	60	63	74	76	78



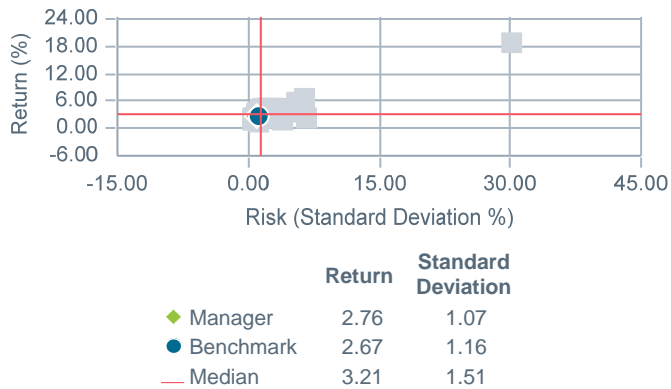
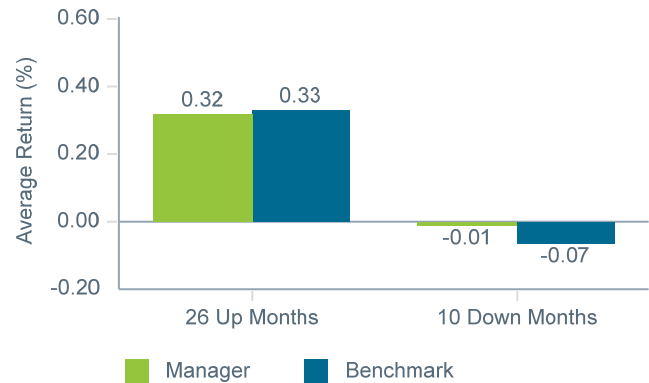
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	14.80	15.11
Spread Duration	11.36	14.60
Avg. Maturity	21.57	23.63
Avg. Quality	A3	A3/Baa1
Yield To Maturity (%)	3.23	3.15
Coupon Rate (%)	4.35	4.41
Current Yield (%)	3.91	N/A
Holdings Count	275	2,946



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

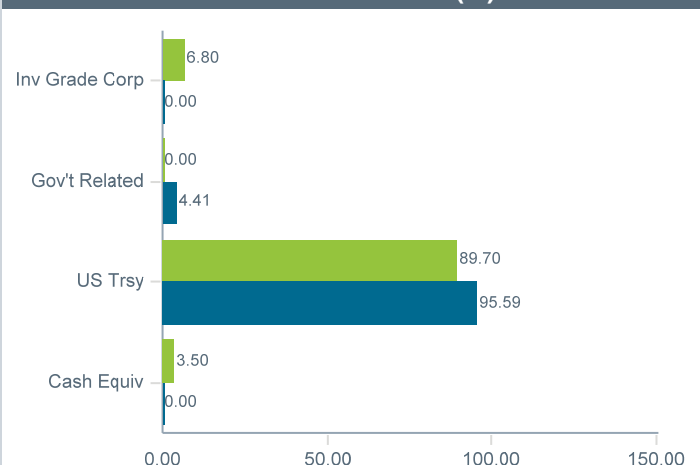
Manager: Internal Low Duration Fixed Income Portfolio
As of September 30, 2021
Benchmark: Bloomberg US Gov't 1-3 Yr Bond Index
Peer Group: IM U.S. Short Duration Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.09	0.21	2.76	N/A	N/A	N/A	3.14	3.80	N/A	N/A	N/A
Benchmark	0.07	0.03	2.67	1.65	1.47	1.18	3.14	3.59	1.58	0.45	0.87
Difference	0.02	0.18	0.09	N/A	N/A	N/A	0.00	0.21	N/A	N/A	N/A
Peer Group Median	0.11	0.67	3.21	2.27	2.11	1.98	3.88	4.53	1.67	1.53	1.65
Rank	66	85	83	N/A	N/A	N/A	83	85	N/A	N/A	N/A
Population	115	115	113	108	103	97	118	123	132	132	133

Peer Group Scattergram - 3 Years

Up/Down Markets - 3 Years

Peer Group Analysis - Multi Statistics - 3 Years (Excess Return vs. Risk Free)

Portfolio Characteristics

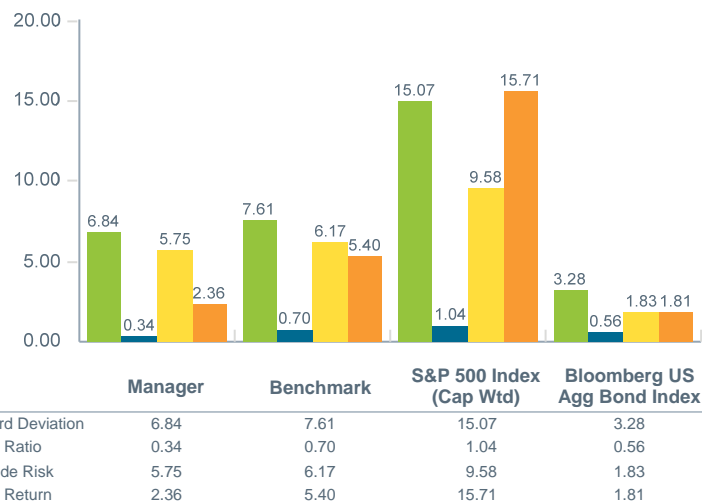
	Portfolio	Benchmark
Effective Duration	1.09	1.96
Spread Duration	1.09	1.96
Avg. Maturity	1.11	2.00
Avg. Quality	Aaa	Aaa/Aa1
Yield To Maturity (%)	0.10	0.29
Coupon Rate (%)	1.30	1.22
Current Yield (%)	1.30	N/A
Holdings Count	15	263

Sector Distribution (%)


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.17	6.03	-0.25	3.31	3.80	N/A	-7.50	6.59	4.12	9.66	8.58
Benchmark	0.99	10.68	6.27	6.43	6.05	8.37	3.59	14.41	-1.08	8.41	11.29
Difference	0.18	-4.65	-6.52	-3.12	-2.25	N/A	-11.09	-7.82	5.20	1.25	-2.71

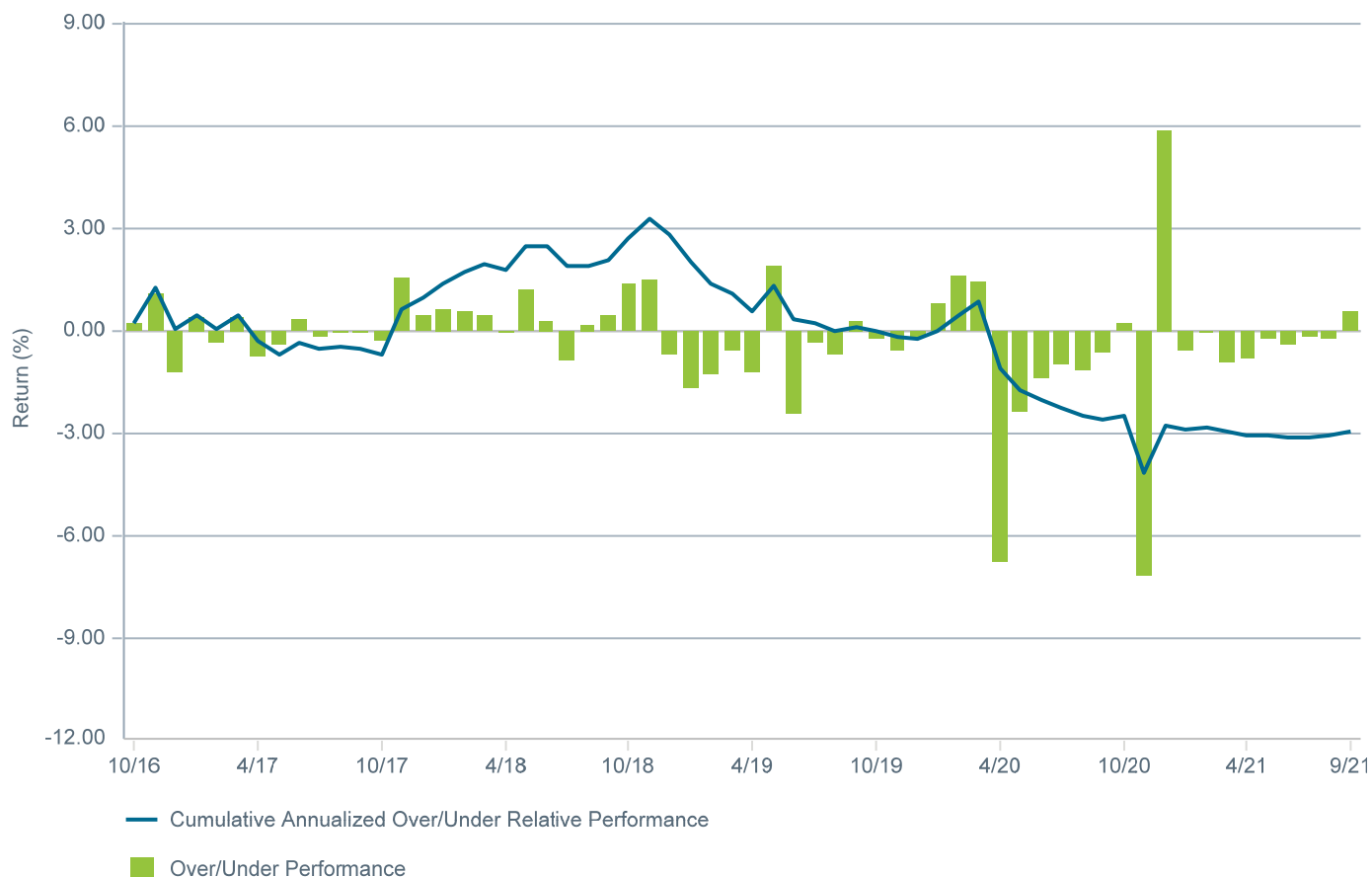
Historical Statistics - 5 Years (Excess Return vs. Risk Free)



Actual Correlation - 5 Years

	Actual Correlation
CS Western Euro Hi Yld Index	0.78
S&P 500 Index (Cap Wtd)	0.68
Russell 2000 Index	0.70
MSCI EAFE Index (USD) (Net)	0.76
MSCI Emg Mkts Index (USD) (Net)	0.65
Bloomberg US Agg Bond Index	-0.34
Bloomberg US Trsy US TIPS Index	-0.13
NCREIF ODCE Index (AWA) (Gross)	0.15
Wilshire US REIT Index	0.69
HFRI FOF Comp Index	0.70
Bloomberg Cmnty Index (TR)	0.71
ICE BofAML 3 Mo US T-Bill Index	-0.27
Cons Price Index (Unadjusted)	0.01
CS Western Euro Hi Yld Index	0.78

Relative Performance - 5 Years



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

Investment Policy Guidelines	Meeting Objective			Explanation
	Yes	No	N/A	
1. Total Fund				
Exceed the rate of inflation (C.P.I.) over a market cycle of 5-years.	✓			Wyoming returned 6.2% vs. 2.6% for the C.P.I. for the current 5-year period
Exceed a weighted index of the total fund's asset allocation and component benchmarks over rolling 5-year periods by an appropriate amount.	✓			Wyoming returned 6.2% vs. 5.9% for the Total Fund Index for the current 5-year period
Not more than 1% of the outstanding common shares of any corporation shall be owned by the State. An exception may be made for Alternative Investments.	✓			
Not more than 1.5% of the total book value of permanent funds shall be invested in the common stock of any corporation. An exception may be made for Alternative Investments.	✓			

	Yes	No	N/A	Explanation
2. Investment Funds				
a) Permanent Mineral Trust Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Permanent Mineral Trust Fund return was 8.1% vs. 7.9% for the Total Fund Index
b) Common School Permanent Land Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Common School Permanent Land Fund return was 6.9% vs. 6.5% for the Total Fund Index
c) Permanent Land Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Permanent Land Fund return was 7.9% vs. 7.8% for the Total Fund Index
d) University Permanent Land Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: University Permanent Land Fund return was 8.4% vs. 8.3% for the Total Fund Index
e) Hathaway Scholarship Endowment Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Hathaway Scholarship Endowment Fund return was 7.6% vs. 7.5% for the Total Fund Index
f) Higher Education Endowment Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Higher Education Endowment Fund return was 6.3% vs. 6.1% for the Total Fund Index
g) Workers Compensation Fund				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Workers Compensation Fund return was 7.0% vs. 6.6% for the Total Fund Index
h) Pool A				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Pool A return was 4.7% vs. 4.0% for the Total Fund Index
i) LSRA				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.			N/A	LSRA was funded during 2019.
j) State Agency Pool				
No public and/or private equities are permitted.	✓			
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: State Agency Pool return was 1.9% vs. 1.7% for the Actual Allocation Index

	Yes	No	N/A	Explanation
3. US Equity Portfolios				
a) State Street Global Advisors – All Cap – Passive				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Apple = 6.1%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Meet performance of the State Street All Cap Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: State Street return was 16.1% vs. 16.0% for the index

	Yes	No	N/A	Explanation
b) Internal Domestic Equity Quantamental – Broad US Equity				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Microsoft = 6.6%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the S&P 500 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 04/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 04/2021
c) Internal Domestic Equity Quantitative – Broad US Equity				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.		✗		Largest Holding: Apple = 8.7% vs 6.1% for the index
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the S&P 500 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021

	Yes	No	N/A	Explanation
d) Van Berkom – Small Cap - Active				
The portfolio will achieve its goal primarily through the investment in a portfolio of 35 to 55 U.S. small-cap equity securities.	✓			
At the time of initial purchase, the market capitalization of the company's common stocks purchased will not exceed 0.023% of the total market capitalization of the S&P 500 Index. Furthermore, the Portfolio Manager may own up to 25% of the portfolio at market value in U.S. stocks that exceed 0.023% of the total market capitalization of the S&P 500 Index.	✓			
Individual Security = no more than 7% of account value Cash Position = no more than 5% of account value Sub-sector Limit = no more than 15% of the account value invested in a single sub-sector (Level IV of GICS sectors) GICS Sectors = minimum of 5 different GICS sectors (Level 1 GICS sectors)	✓			
Outperform the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020
e) BlackRock Small Cap – Small Cap - Active				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Emcor Group = 1.5%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform performance of the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 08/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 08/2020

	Yes	No	N/A	Explanation
f) Internal Small Cap Quantamental – Small Cap				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Herbalife = 1.8%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
g) Internal Small Cap Quantitative – Small Cap				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.			N/A	This account is in development as of 9/30.
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.			N/A	This account is in development as of 9/30.
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.			N/A	This account is in development as of 9/30.
A minimum number of 20 securities shall be held.			N/A	This account is in development as of 9/30.
Exceed performance of the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	This account is in development as of 9/30.
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	This account is in development as of 9/30.

	Yes	No	N/A	Explanation
4. International Equity Portfolios				
a) Northern Trust – Int'l – Passive				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Taiwan Semi = 1.4%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Meet performance of the MSCI ACW Ex US Index (Net), before fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Northern Trust gross of fees return was 9.1% vs. 8.9% for the MSCI ACW Ex US Index (Net)
	Yes	No	N/A	Explanation
b) Arrowstreet – Int'l Active				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: ASML Holding = 3.7%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US IM Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2018
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2018

	Yes	No	N/A	Explanation
c) Harding Loevner – Int'l Active				
A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.	✓			Largest Holding: Tencent = 4.1%
A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. For companies with market capitalizations of less than \$5 Billion, a maximum of 5% shall apply.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2020

	Yes	No	N/A	Explanation
5. Preferred Stock				
a) Cohen & Steers				
Minimum issue credit rating for preferred stock at the time of purchase will be BB or equivalent.	✓			The portfolio currently holds securities which are rated below BB. Retention of these securities in the portfolio is permitted pursuant to Section 7.2 of the Investment Policy.
A maximum of 35% of the total portfolio of the investment manager may be invested in securities rated below investment grade.	✓			
A maximum of 10% of the total portfolio of the investment manager may be invested in any one issuer.	✓			
Outperform the Preferred Stock Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 07/2018
	Yes	No	N/A	Explanation
6. MLPs				
a) Harvest				
A maximum of 15% or the benchmark weighting + 2%, whichever is greater, of the total portfolio may be invested in any one company.	✓			
Outperform the MLP Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 08/2018
b) Harvest Passive				
A maximum of 15% or the benchmark weighting + 2%, whichever is greater, of the total portfolio may be invested in any one company.	✓			
Meet the MLP Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2020

	Yes	No	N/A	Explanation
7. Alternative Strategies				
Core Real Estate				
a) Clarion Lion				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Clarion Lion net of fees return was 8.1% vs. 6.6% for the NCREIF ODCE Index (Net) (AWA)
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
b) UBS Trumbull				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: UBS Trumbull net of fees return was 2.9% vs. 6.6% for the NCREIF ODCE Index (Net) (AWA)
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
c) MS Prime				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 10/2020
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
Diversified Hedge Funds				
d) Grosvenor Diversified Hedge Funds				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 07/2018
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	✓			
e) Internal Diversified Hedge Funds				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 07/2018
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	✓			

	Yes	No	N/A	Explanation
8. Fixed Income Portfolios				
a) PIMCO – Core				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than 5% of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; BBB- or equivalent for corporate bonds, Mortgage-Backed Securities, Commercial Mortgage-Backed Securities, Asset Backed Securities, Non-U.S. Dollar-Denominated Securities and Dollar-Denominated Emerging Market Securities.	✓			
Outperform its Custom Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: PIMCO net of fees return was 3.2% vs. 2.9% for the PIMCO Custom Index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: PIMCO ranked in the 70th percentile for Core Fixed Income

	Yes	No	N/A	Explanation
b) Internal Int. Govt Fixed Income Portfolio – Core				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than 5% of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; BBB- or equivalent for corporate bonds, Mortgage-Backed Securities, Commercial Mortgage-Backed Securities, Asset Backed Securities, Non-U.S. Dollar-Denominated Securities and Dollar-Denominated Emerging Market Securities.	✓			
Outperform the Internal Int. Gov Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Int. Govt Fixed Income Portfolio net of fees return was 2.4% vs. return of 2.0% for the Internal Int. Gov Index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: Int. Govt Fixed Income Portfolio ranked in the 47th percentile for Government Fixed Income

	Yes	No	N/A	Explanation
c) Payden & Rygel – Core				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than 5% of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; BBB- or equivalent for corporate bonds, Mortgage-Backed Securities, Commercial Mortgage-Backed Securities, Asset Backed Securities, Non-U.S. Dollar-Denominated Securities and Dollar-Denominated Emerging Market Securities.	✓			
Outperform the Payden & Rygel Custom Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 11/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2019

	Yes	No	N/A	Explanation
d) JPM MBS – Core				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.			N/A	
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than 5% of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.			N/A	
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; BBB- or equivalent for corporate bonds, Mortgage-Backed Securities, Commercial Mortgage-Backed Securities, Asset Backed Securities, Non-U.S. Dollar-Denominated Securities and Dollar-Denominated Emerging Market Securities.	✓			
Outperform the Bloomberg US MBS Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 11/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2019

	Yes	No	N/A	Explanation
e) Credit Suisse – Bank Loans				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
Minimum issue credit rating at the time of purchase shall be: a) CCC or equivalent for individual securities; and b) Securities that are not rated shall be, in the judgment of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2019
	Yes	No	N/A	Explanation
f) Octagon – Bank Loans				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
Minimum issue credit rating at the time of purchase shall be: a) CCC or equivalent for individual securities; and b) Securities that are not rated shall be, in the judgment of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2019

	Yes	No	N/A	Explanation
g) KKR – Bank Loans				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
Minimum issue credit rating at the time of purchase shall be: a) CCC or equivalent for individual securities; and b) Securities that are not rated shall be, in the judgment of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 10/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 10/2021

	Yes	No	N/A	Explanation
h) Grosvenor Silvery Lupine Fund – Opportunistic Fixed Income				
Outperform the CS Western European Hi Yld Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: net of fees return was 3.3% vs 6.4% for the index
	Yes	No	N/A	Explanation
i) Global Evolution – Emerging Market Debt (Local Currency)				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged), net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 02/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2020

	Yes	No	N/A	Explanation
j) Global Evolution – Emerging Market Debt (Hard Currency)				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM EMBIG Div Ex CCC (USD) Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 12/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 12/2020

	Yes	No	N/A	Explanation
k) Eaton Vance – Emerging Market Debt				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM EMB (JEMB) Hard/Local 50/50 Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2021

	Yes	No	N/A	Explanation
I) Goldman Sachs – Emerging Market Debt (Corporate)				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM CEMBI Broad Div Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020

	Yes	No	N/A	Explanation
m) Finisterre – Emerging Market Debt				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the EMD 1/3 Blend Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2021

	Yes	No	N/A	Explanation
n) Wellington – Emerging Market Debt				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the 50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2021

	Yes	No	N/A	Explanation
o) Metlife – Long Duration Credit				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
A maximum of 30% of the portfolio may be invested in U.S. dollar denominated non-U.S. fixed income securities.	✓			
A maximum of 10% of the portfolio may be invested in U.S. dollar denominated emerging market securities.	✓			
A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible and municipal securities.	✓			
Average portfolio quality will be BBB+ or better. Securities shall be rated investment grade at time of purchase.	✓			
Outperform the Bloomberg US Long Credit Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 11/2018
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2018
	Yes	No	N/A	Explanation
p) Internal Long Duration – Long Duration Government				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
A maximum of 30% of the portfolio may be invested in U.S. dollar denominated non-U.S. fixed income securities.	✓			
A maximum of 10% of the portfolio may be invested in U.S. dollar denominated emerging market securities.	✓			
A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible and municipal securities.	✓			
Average portfolio quality will be BBB+ or better. Securities shall be rated investment grade at time of purchase.	✓			
Outperform the Bloomberg US Gov Long Term Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2019

	Yes	No	N/A	Explanation
q) Internal Low Duration – Low Duration Government				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
Corporate securities will be subject to a maximum limit of 20%.	✓			
Portfolio duration must be within plus or minus 30% of the Bloomberg Barclays US Gov't: 1-3 Year Bond Index.	✓			
Average portfolio quality will be A or better.	✓			
Outperform the Bloomberg US Gov 1-3 Year Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2018
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2018

	Yes	No	N/A	Explanation
9. Cash and Cash Equivalents Portfolios				
JP Morgan Cash Composite*				
a) JP Morgan Treasury Cash				
The portfolio's weighted average maturity shall not exceed 90 days.	✓			
All securities shall have a maximum maturity of 365 days.	✓			
The maximum average cash flow weighted duration of the portfolio shall not exceed 90 days.	✓			
The market value of the portfolio shall remain within +/- 0.5% of 1.0% of amortized cost.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment in any single issuer must not exceed 5% of the outstanding issues of that issuer.	✓			
Investment performance must exceed Monitored Repurchase Agreement Rate and the cash equivalents allocation by the 90-day T-Bill rate, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: JP Morgan Treasury Cash net of fees return was 1.1% vs. 1.2% for the ICE BofAML 3 Mo US T-Bill Index

*During the fourth quarter of 2011, JP Morgan Treasury Cash and JP Morgan Treasury Extended Cash were combined. Net of fees performance shown consists of performance calculated by RVK, Inc. prior to 12/31/2011 and performance calculated by JP Morgan thereafter.

	Yes	No	N/A	Explanation
JP Morgan Wyo-Star Cash Composite*				
b) JP Morgan Wyo-Star Cash				
The portfolio's weighted average maturity is not to exceed 90 days.	✓			
All securities must have a maximum maturity of 365 days.	✓			
The maximum average cash flow weighted duration of the portfolio must not exceed 90 days.	✓			
The market value of the portfolio must remain within +/- 0.5% of 1% of amortized cost.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment performance must exceed Monitored Repurchase Agreement Rate and the cash equivalents allocation by the 90-day T-Bill rate, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: JP Morgan Wyo-Star Cash net of fees return was 1.0% vs. 1.2% for the ICE BofAML 3 Mo US T-Bill Index
c) JP Morgan Wyo-Star Extended Cash				
Maximum average cash flow weighted duration is not to exceed 3 years.	✓			
Individual securities must not exceed a cash flow weighted duration of 5 years.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment Performance must exceed an Equal Weighted Blend of the BofA Merrill Lynch 1-3 Year Agency, 1-3 Year Treasury, and a 0-3 Year Mortgage Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: JP Morgan Wyo-Star Extended Cash net of fees return was 1.7% vs. 1.7% for the Blended Index
The extended portion of WYO-STAR may not exceed 35% of the market value of the portfolio at the time of purchase.	✓			

*During the fourth quarter of 2011, JP Morgan Wyo-Star Cash and JP Morgan Wyo-Star Extended Cash were combined. Net of fees performance shown consists of performance calculated by RVK, Inc. prior to 12/31/2011 and performance calculated by JP Morgan thereafter.

Addendum & Glossary



Custom Benchmark Comments

The Wyoming State Total Fund Index and Pool Total Fund Indices are calculated using target asset class weights applied to the appropriate asset class benchmark return, using the S&P 500 Index for US all cap equities, the Russell 2000 Index for US small cap equity, MSCI ACW Ex US Index (Net) for international equities, MLP Custom Index for MLPs, Bloomberg US Agg Bond Index for core fixed income, S&P/LSTA Lvg'd Loan 100 Index for bank loans, EMD Blended Benchmark for EMD, NCREIF Open-End Diversified Core Equity Index for real estate, Cambridge Index for private equity, HFRI FOF Comp Index for Diversified Hedge Funds, and ICE BofA Merrill Lynch 90 day US T-Bill rate for cash equivalents.

- The Wyoming State Total Fund Index is calculated using beginning month asset class weights applied to the appropriate asset class benchmark return through 12/31/2019. As of 01/01/2020, the Index is calculated using the weighted average of the respective Investment Funds' Target Allocation Indices.
- Pool Total Fund Indices consist of the actual allocation index through 12/31/2019, and the target allocation index thereafter.
- The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter.
- The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.
- The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
- The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.
- The Internal Intermediate Govt Fixed Income Portfolio Index currently consists of the Bloomberg US Treasury Index. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.
- The PIMCO Custom Index consists of the Bloomberg US Agg Bond Index through February 2018, the Bloomberg US Agg Int Index through June 2019, the Bloomberg US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the Bloomberg US Agg Bond Index thereafter.
- The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.
- Transition Fixed Income Custom Index consists of 50% JPM CLOIE IG ldx, 40% BB 1 – 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index.
- The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter.
- The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.
- The JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50 consists of 50% JPM GBI-EM Gbl Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI Gbl Dvf'd Index.
- The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.
- The Bank Loans Custom Index consists of S&P LSTA Lvg'd Loan Index through 06/30/2021, and the S&P LSTA US Lvg'd Loan 100 Index thereafter.
- The Payden & Rygel Custom Index consists of the Bloomberg US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and Bloomberg US Corp Inv Grade Index thereafter.
- Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.
- The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.
- The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the ICE BofAML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

Performance & Holding Comments

RVK, Inc. shows performance beginning with the first full month following inception. Inception date shown for the Int'l Equity and JP Morgan Cash Composites represents the first date of performance calculated by RVK, Inc.

Performance shown for Pooled Funds is calculated on a capital-weighted basis using beginning-period allocations and does not reflect net cash flows.

Performance shown for the UW Portfolio Management Program prior to 07/01/2009 includes their participation in the State Agency Pool. Performance calculated for the UW Portfolio Management Program after 02/01/2013 has not been verified by RVK as the assets have been moved to a platform in which the custodian does not provide a reconcilable return.

Performance for the Internal Intermediate Govt Fixed Income Portfolio excludes distressed securities taken in-kind following the liquidation of WAMCO Core Plus.

Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.

Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark.

Composite performance shown for Fixed Income is historically exclusive of convertibles.

Alternative Investment Comments

Reporting for Private Equity performance was changed from cost basis to the latest portfolio valuation adjusted for cash flows, consistent with the supplementary alternatives report. This methodology change involved reflecting the difference between cost value and the most recent valuation, resulting in a significant positive performance impact on the total fund during 2nd quarter 2008.

Valuations for non-core real estate and private equity were changed from a one-quarter lag to as of the most recent valuation, adjusted for subsequent cash flows. This methodology change involved reflecting all cash flows occurring during 4th quarter 2011 as of January 2012, resulting in a minor positive performance impact on the total fund during 1st quarter 2012. Investment (Cost) Values are not lagged.

Performance for non-core real estate and private equity investments is calculated on an IRR basis. For further analysis, please refer to the supplementary alternatives performance report.

Cheyenne Capital Fund valuations set forth herein could be materially different once underlying investments are realized. Market conditions at the time of exit could be substantially different than at the reporting period, resulting in valuations different than those represented above.

Miscellaneous Comments

Wyoming State Treasurer's Office fiscal year ends on June 30th.

Fixed Income style peer groups have low populations, and may cause ranks to change significantly from quarter to quarter.

"IM" is the acronym for Investment Metrics, the provider of peer group data used in ranking investment manager and asset class performance.

During the 4th quarter of 2012, WAMCO Core Plus, Neuberger Berman Core Plus, PIMCO Core Plus, PIMCO Mortgages, JP Morgan Mortgages, WAMCO Corporates, Logan Circle, and PIMCO Global/EM began the liquidation process to transition assets to the State's new fixed income asset class structure. The proceeds were used to fund State Street TIPS, C.S. McKee, JP Morgan Core, MacKay Shields, Neuberger Berman Core, PIMCO Core, and Wells Capital. During the 1st quarter of 2013, additional assets were transitioned to Neuberger Berman Credit, Seix, Investec, and Stone Harbor.

During the 4th quarter of 2014, State Street S&P 500 and Gabelli began the liquidation process to transition assets to the State's new US equity asset class structure. The proceeds were used to fund State Street All Cap, Epoch, Lazard, and RBC. During the 1st quarter of 2015, additional assets were transitioned to Arrowstreet.

During the 4th quarter of 2015, the Workers Compensation Fund was reclassified as a Permanent Fund.

During the 1st quarter of 2016, the State funded the Internal International Equity Portfolio, using proceeds from the liquidation of The Boston Company.

During the 3rd quarter of 2016, Bloomberg acquired the Barclays Global Family of Fixed Income Indices. Naming conventions have been updated to "Bloomberg" to reflect the acquisition.

During the 3rd quarter of 2016, MacKay Shields began the liquidation process, with proceeds used to increase allocations to C.S. McKee and the Internal Intermediate Govt Fixed Income Portfolio.

During the 1st quarter of 2017, Neuberger Berman Core and Wells Capital began their respective liquidation processes.

During the 2nd quarter of 2017, Manning & Napier began the liquidation process.

During the 4th quarter of 2017, Lazard began the liquidation process.

During the 4th quarter of 2017, Intercontinental Exchange (ICE) acquired the BofA Merrill Lynch Global Research FICC index platform. As a result, all BofA Merrill Lynch indices have been rebranded to "ICE BofA Merrill Lynch".

During the 1st quarter of 2018, Arrowstreet was reclassified as International Equity and the Internal Low Duration portfolio was funded.

During the 2nd quarter of 2018, Cohen & Steers, Grosvenor Diversified Hedge Funds, and Internal Diversified Hedge Funds were funded.

During the 2nd quarter of 2018, the Hybrid Assets Composite was created for convertibles, preferred stock, and MLPs.

During the 2nd quarter of 2018, RBC began the liquidation process.

During the 3rd quarter of 2018, Internal Equity Russell 2000 was funded.

During the 3rd quarter of 2018, Harvest was funded.

During the 4th quarter of 2018, Logan Circle, Internal Long Duration Fixed Income Portfolio, and State Street Low Duration were funded.

During the 1st quarter of 2019, Epoch began the liquidation process.

During the 2nd quarter of 2019, Allianz, Stone Harbor, Fisher, JPM Core, NB Credit, Seix, State Street TIPS, and State Street Low Duration began the liquidation process.

During the 3rd quarter of 2019, Credit Suisse, Octagon, and Internal Ladder Portfolio were funded.

During the 4th quarter of 2019, Harding Loevner, State Street Russell 2000, Harvest Passive, Payden & Rygel, and JPM MBS were funded, and CS McKee began the liquidation process.

During the 1st quarter of 2020, Van Berkom was funded.

During the 2nd quarter of 2020, Grosvenor D was funded.

During the 3rd quarter of 2020, MS Prime and BlackRock Small Cap were funded.

During the 4th quarter of 2020, Eaton Vance and Global Evolution Hard were funded.

During the 1st quarter of 2021, Finisterre was funded.

During the 2nd quarter of 2021, Domestic Equity Quantamental, Domestic Equity Quantitative, and Small Cap Equity Quantamental were funded.

During the 3rd quarter of 2021, KKR and Wellington were funded.

INVESTMENT MANAGER PEER GROUP GLOSSARY

IM U.S. All Cap Equity (SA+CF): The **U.S. All Cap Equity** universe includes products with a higher growth bias, products with a higher value bias, and products where the investment strategy permits investments in both value and growth equity securities across the complete Russell 3000 market cap spectrum.

IM U.S. Large Cap Core Equity (SA+CF): The **U.S. Large Cap Core Equity** universe includes products where the investment strategy can best be described as benchmark driven rather than style driven and can include a blend of both value and growth considerations. The weighted average market cap is in excess of \$10 billion.

IM U.S. Small Cap Core Equity (SA+CF): The **U.S. Small Cap Core Equity** universe includes products where the investment strategy can best be described as benchmark driven rather than style driven and can include a blend of both value and growth considerations. The weighted average market is between \$300 million and \$2 billion.

IM All ACWI ex US (SA+CF): The **All ACWI ex US** universe includes products where the investment strategy can be best described as benchmark driven and includes products investing in growth and value securities across the MSCI ACW Ex US Index.

IM U.S. Broad Mkt Core Fixed Income (SA+CF): The **U.S. Broad Mkt Core Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 4 years and less than 6 years. The average maturity can be between 3 and 8 years. The allocation to high yield bonds or emerging market debt is less than or equal to 5%.

IM Emerging Markets Debt (SA+CF): The **Emerging Markets Debt** universe includes products where the combined market allocation to emerging market debt in Asia, Africa/Europe and Latin America is approximately 75% or more. The JP Morgan Emerging Markets Bond and EMBI+ are commonly used benchmarks.

IM U.S. Government Bonds (SA+CF): The **U.S. Government Bonds** universe includes products where the investment style focuses on government bonds and the sector allocation to them is greater than or equal to 75%. The Barclays Capital U.S. Government or Government: Intermediate are commonly used benchmarks.

IM U.S. Short Duration Fixed Income (SA+CF): The **U.S. Short Duration Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 1 year and less than 2.5 years. The average maturity is between 1 and 3 years.

IM U.S. Long Duration Fixed Income (SA+CF): The **U.S. Long Duration Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 6 years. The average maturity can be greater than 6 years.

IM U.S. Bank Loans (SA+CF): The **U.S. Bank Loans** universe includes products where the sector allocation to bank loans is greater than or equal to 75%. The S&P/LSTA Leverage Loan Index or Credit Suisse Leveraged Loan Index are commonly used benchmarks.

Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

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.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Glossary

Federal Funds Rate - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.

Option-Adjusted Spread - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

Purchasing Managers Index (PMI) - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

Real Gross Domestic Product (Real GDP) - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.

Unemployment Rate - The percentage of the total labor force that is unemployed but actively seeking employment.

US Dollar Total Weighted Index - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

VIX - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

Cash Flow Effect - The composite's active return minus the sum of each managers' active return minus the benchmark effect.

Consistency - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

Convexity - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

Correlation - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.

Coupon Rate - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.

Current Yield - The annual income of a security divided by the security's current price.

Down Market Capture - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.

Downside Risk - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.

Earnings Per Share - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

Effective Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield.

Excess Return vs. Market - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

Excess Return vs. Risk Free - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

Excess Risk - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.

Expense Ratios - Morningstar is the source for mutual fund expense ratios.

Gain/Loss - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

Indices - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.

Information Ratio - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.

Liability Driven Investing (LDI) - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.

Estimated Funded Status - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.

Estimated PV of Liabilities - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.

Duration of Liabilities - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.

Duration of Assets - The dollar-weighted average duration of all the individual Plan assets.

Estimated Plan Hedge Ratio - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and

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multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value

100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

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

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

Glossary

RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<u>Not Liquid Investments</u>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity Funds of Funds	5
US SMid Cap Equity	85		
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. 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.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

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.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITs
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Total Fund Attribution - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.



Glossary

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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