IFM (US) Securities, LLC

September 2021

IFM Investors

IFM Global Infrastructure Fund

Prepared for: Tulare County Employees Retirement Association

November 17, 2021

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Case studies are provided for illustrative purposes only and should not be relied on to make an investment decision. Past performance does not guarantee future results. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

Investing on the basis of sustainability/ESG criteria involves qualitative and subjective analysis. There is no guarantee that the determinations made by the adviser will align with the beliefs or values of a particular investor. Companies identified by an ESG policy may not operate as expected, and adhering to an ESG policy may result in missed opportunities.

Risks of IFM Investors' investment programs typically include: assets of IFM Investors funds may have limited liquidity; distributions are uncertain, a return on your investment is not guaranteed and you may lose all or a substantial amount of your investment; unfavorable economic conditions in the markets in which IFM Investors funds operate could adversely affect your investment; assets acquired with leverage have risks including loss of value and limits on flexibility needed if there are changes in the business or industry.

Liquidity- An investment in the Partnership provides limited liquidity since withdrawal rights are not unqualified and Interests may not be transferred without the prior written consent of the General Partner, which generally may be withheld in its absolute discretion. Although the portfolio investments may generate some current income, they are expected to be generally illiquid.

Valuation- Most of the portfolio investments will be highly illiquid, and will most likely not be publicly traded or readily marketable.

Economic conditions- Interest rates, general levels of economic activity, the price of securities and participation by other investors in the financial markets may affect the value of portfolio investments made by the Master Fund or considered for prospective investment.

Leverage- Portfolio investments may include businesses whose capital structures may have significant leverage.

An infrastructure investment is subject to certain risks including: the burdens of ownership of infrastructure; local, national and international economic conditions; the supply and demand for services from and access to infrastructure; the financial condition of users and suppliers of infrastructure assets; changes in interest rates and the availability of funds which may render the purchase, sale or refinancing of infrastructure assets difficult or impractical; changes in environmental and planning laws and regulations, and other governmental rules; environmental claims arising in respect of infrastructure acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established; changes in energy prices; changes in fiscal and monetary policies; negative economic developments that depress travel; uninsured casualties; force majeure acts, terrorist events, under insured or uninsurable losses; and other factors beyond reasonable control. Please consult the constituent documents for more information on risks specific to infrastructure investing.

An investment in any of these investment programs should be made only after careful review of the risk factors described in the related offering documents. This Information may contain material provided by third parties for general reference or interest. While such third party sources are believed to be reliable, IFM Investors does not assume any responsibility for the accuracy or completeness of such information. This Information does not constitute investment, legal, accounting, regulatory, taxation or other advice and the Information does not take into account your investment objectives or legal, accounting, regulatory, taxation or financial situation or particular needs. You are solely responsible for forming your own opinions and conclusions on such matters and for making your own independent assessment of the Information. This Information is confidential and should not be distributed or provided to any other person without the written consent of IFM Investors.

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IFM Investors Firm Overview

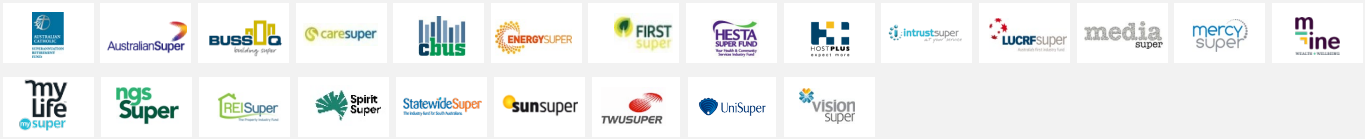
GIF asset
Global Container Terminals (Canada)

Firm Overview

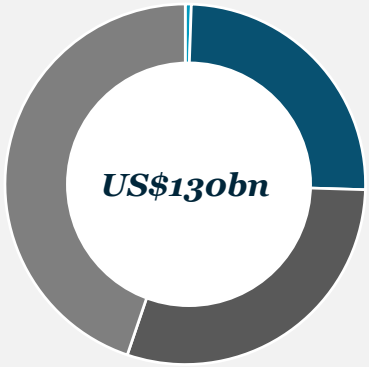
ifm investors

IFM Investors is a truly aligned global fund manager investing across multiple asset classes

Established & owned by 23 pension funds



US$130 billion across four asset classes[1]



- Infrastructure Equity **$58.0bn**
- Debt Investments **$38.5bn**
- Listed Equities **$32.3bn**
- Private Equity **$0.7bn**

10 global locations

New York | Berlin | Melbourne | Hong Kong | Amsterdam

London | Zurich | Sydney | Seoul | Tokyo

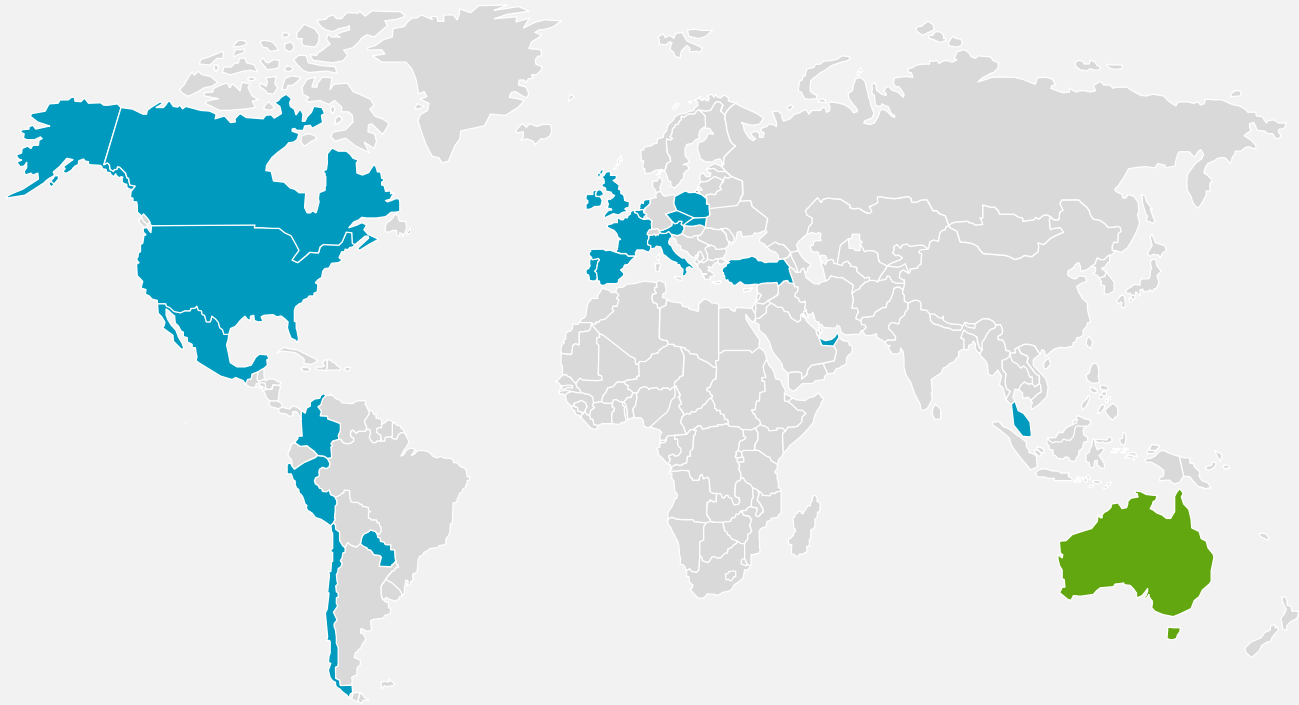
A distinct ownership model, focusing on the prosperity of our investors

(1) As at 30 September 2021. US $130bn represents the FUM of investments and undrawn investor commitments. Differences may be due to rounding.

Infrastructure Equity

With a track record over two decades, IFM Investors is an established infrastructure equity manager with global scale

US$ 58 BN	Funds Under Management
2	Open-end infrastructure equity funds
26	Years investing in infrastructure
100+	Infrastructure investment professionals
80+	Transactions since 1995
33	Portfolio Companies



Global Infrastructure Fund (GIF)
Incepted in December 2004
18 Portfolio Companies

Australia Infrastructure Fund (AIF)
Incepted in August 1995
15 Portfolio Companies

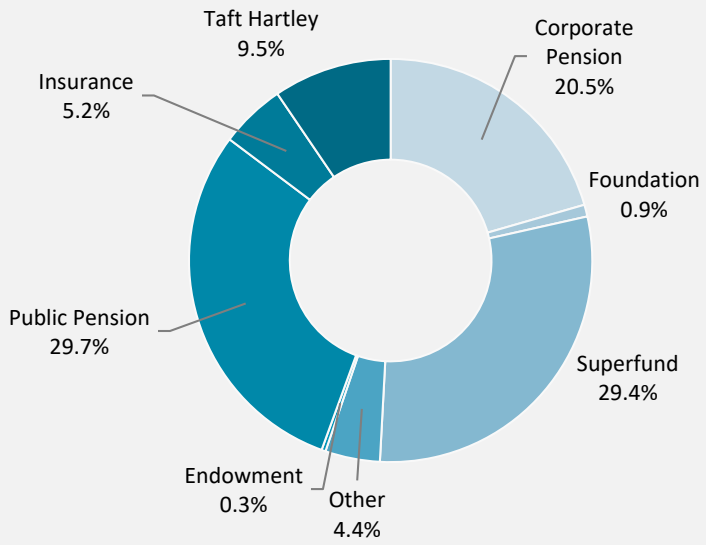
All figures as at 30 September 2021. Differences may be due to rounding.

GIF Investor Base

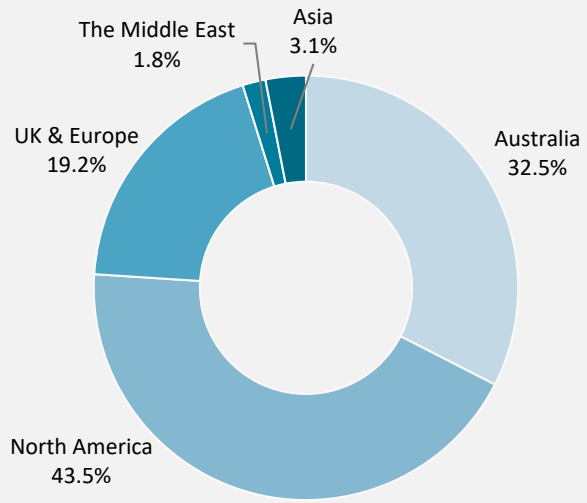
IFM Investors manages infrastructure investments for long-term institutional investors globally, with impacts on our investors' 30 million+ members and retirees.

Serving 499 investors

FUM by Investor Type (1)



FUM by Investor Region



As at 30 September 2021.
(1) FUM represents total NAV of the IFM Global Infrastructure Master Fund plus all undrawn investor commitments and cash available for investment in USD. Differences due to rounding. Past returns are not indicative of future performance.

IFM Global Infrastructure Fund

GIF asset
Freeport LNG (United States)

IFM Global Infrastructure Fund (GIF)

IFM GIF's strategy is to manage a diversified portfolio of global infrastructure investments with a net target return of 8-12% over the long term [1]

Total Investment Value: $35.9 bn

Number of portfolio companies: 18

Weighted average leverage: 35.1%

	1-Year	3-Year	5-Year	7-Year	10-Year	Since Inception
GIF Net Return[2]	**18.0%**	**10.6%**	**13.1%**	**12.5%**	**10.7%**	**9.1%**

6.1% net cash yield since inception [3]

GIF's total return seeks a significant contribution from cash yield over the medium to long term.

Past returns are not indicative of future performance. All figures as at 30 September 2021.

(1) There is no guarantee that target returns will be realized. Actual returns may vary materially from target and past returns as a result of changes in the portfolio composition, such as acquisitions, divestments or material changes in business plan forecasts for individual assets. Returns are reported on an annualized basis.

(2) The IFM Global Infrastructure Fund ("Master Fund") has been investing in core infrastructure assets globally ex-Australia since December 1, 2004 (including investments made through predecessor vehicles). The return series shown above is time-weighted, reported on an annualized basis, and reflects the aggregated performance of each asset's respective local currency performance at the Master Fund level, weighted by the USD proportionate equity value of each asset. In order to show net returns for the Master Fund return series, the highest Class A management and performance fees structure has been applied on a pro-forma basis. The Master Fund return series does not reflect the impact and costs of hedging and other expenses charged to the fund, which will further reduce returns. No representation is being made that the Master Fund return series reflects the returns of any feeder fund or the returns of an actual investor in the fund. Actual net feeder performance is available upon request. This information is provided for illustrative purposes only. Investment decisions should not be made solely based on the returns series shown above. Past performance is not indicative of future performance.

(3) Cash yield for the IFM Global Infrastructure Master Fund represents aggregate feeder cash yield to investors on a NAV basis net of management and performance fees.
Since inception cash yield is calculated as of the Fund's first distribution to investors on June 1, 2012. Returns are reported on an annualized basis.

Global Infrastructure Team

Kyle Mangini

Global Head of Infrastructure

Julio Garcia

Head of North America

Christian Seymour

Head of Europe

Michael Hanna

Head of Australia

10
years average tenure at IFM Investors[1]

21
years average industry experience[1]

28%
Women

20+
Languages Spoken

300+
Support staff across Legal, Tax & Ops

100+
Professionals

78 *Investment Team*

Infrastructure specialists

- Origination and agile transactional capability
- Deal team continues to be responsible for asset management, ensuring alignment and continuity
- Deep sector knowledge

17 *Asset Management Specialists*

Support investment team for value creation across portfolio

- Managing key asset risks
- Enhancing asset performance
- Leveraging portfolio's scale to generate synergies

6 *Portfolio Management*

Improving efficiency of portfolio

- Portfolio insight
- Determining optimal asset allocations
- FX, structuring and liquidity management

Diverse Skill Set

- **IB/ Capital Markets**
- **Operations**
- **Regulation/ Government / Legal**
- **Project Management**
- **HR/Labour Relations**

(1) Representative of employees who are Director and above in title.

Targeted Investments

IFM GIF seeks to invest in essential infrastructure assets primarily in OECD countries

We target assets with distinct characteristics:

- 01 Strong market positions/ High barriers to entry
- 02 Long asset/ concession life
- 03 Inflation protection
- 04 Benefit from regional/global economic growth
- 05 Stable and predictable revenues
- 06 Stable regulatory environment
- 07 Targeting investment-grade financing

Target sectors

Toll Roads

Airports

Seaports

Gas & Electric

Water

Telecom

Terminals&LNG

Pipelines

Renewables

Transportation ***Utilities*** ***Energy***

Investment Strategy

IFM GIF is focused on building and managing a diversified portfolio of essential infrastructure assets to deliver stable long-term returns

GIF asset:
Global Container Terminals (US)

Key building blocks of our investment strategy include specific goals through the investment cycle:

Buy Well

- A long-term partner aligned with government entities and strategics
- Opportunities sourced through 100+ dedicated specialists and senior advisors, extended sourcing network through portfolio companies' industry relationships
- Current portfolio is a platform for bolt on acquisitions and capital reinvestment

Manage Intensively

- Strong governance and active board representation
- Integrated Asset Management Specialist team driving global knowledge sharing and best practice
- Prudent and conservative approach towards leverage
- ESG principles embedded in investment decision and asset management

Sell Opportunistically

- Create value with a long-term return focus
- Sell to capture one-off market opportunities
- Partial divestments to rebalance portfolio and partner with strategic sponsors

GIF Open-end Fund Benefits

IFM Investors seeks to match long-term infrastructure investment to investors' long-term liabilities

1 — *Aligned to Core Infrastructure Investment*

- Matches long-term nature of assets and concessions
- Support portfolio companies with new investment
- Entry and exit not limited by fund life

2 — *Sourcing Capabilities*

- Embedded growth opportunities in existing portfolio
- Differentiated sourcing capabilities through long-term alignment with partners

3 — *Manager Alignment*

- Truly aligned long-term manager
- Robust conflicts policy

4 — *Responsible Investment*

- Focus on longer term sustainability and ESG risk management

5 — *No Blind Pool Risk*

- Mature, diversified portfolio of assets
- 26-year track record of infrastructure investment

6 — *Access to Liquidity*

- Robust redemption policy
- Quarterly external independent valuations validates GIF unit price

7 — *No J-Curve*

- Investors typically drawn within 12-18 months
- No fees on undrawn commitments
- Immediate cash yield

Investments in infrastructure are subject to various risks including regulatory risk and market risk, which are outlined in further detail on the "Important Disclosures" page. Prior to making an investment in any infrastructure strategy, investors should refer to the offering documents for a complete discussion of risks.

Portfolio Evolution

Buy and manage strategy with opportunistic exits

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Since 2015, we've executed 18 acquisitions and follow-ons, representing US$20bn+ (1)

	2015	2016	2017	2018	2019	2021
13 New Acquisitions ***c. $18bn***	Indiana Toll Road (US) Conmex (US)		VTTI (Global) & Follow-on OHL Mexico (Mexico) M6toll (UK) Mersin Port (Turkey)	FCC Aqualia (Spain, Czech Republic) GCT Terminals (US and Canada) Impala Terminal (Peru, Spain & Mexico) Aleatica (Global)	DCT Gdańsk (Poland) Buckeye Partners (US)	Enwave Energy Corporation (Canada)
5 Follow-ons/ Expansion ***c. $2bn***		Vienna Airport (Austria)	Conmex (Mexico) Freeport Notes 2 (US)	Indiana Toll Road (US) VTTI (Global)		
Divestitures		Essential Power, Full (US) Indiana Toll Road, Partial (US)	Freeport Notes, Full (US) Duquesne Light, Full (US)	Conmex, Partial (Mexico) 50Hertz, Full (Germany) Freeport Notes 2 (US)	VTTI, Partial (Global)	Indiana Toll Road, Partial (US)

Main Reasons for divesture

- Portfolio Diversification
- Strategic Considerations
- Opportunistic Exit

(1) Investments made since 2015 have been included. This is not a representation of all investments completed since the inception of the Global Infrastructure Fund.
It should not be assumed that the investments shown herein will be profitable or that investments made in the future will be profitable or will equal the performance of the investments shown herein.
A complete list of historical investments in the portfolio is available upon request.

IFM Global Infrastructure Fund

Diversified portfolio of investments

18 portfolio companies across 20+ countries[1]

Americas

Colonial Pipeline
US, 2007
The largest refined product pipeline system in U.S.

Global Container Terminals
US & Canada, 2018
Portfolio of container terminals in Vancouver and NY/NJ

Buckeye Partners, L.P.
US, 2019
Energy midstream company with over 130 years of operating history

Freeport LNG
US, 2014
Natural gas liquefaction and export facility

Indiana Toll Road
US, 2015
157-mile toll road in the State of Indiana

enwave
Canada, 2021
Fully integrated district energy business – cooling & heating

Global

aqualia
Spain and Global, 2018
One of the world's largest private water groups

vtti
Global, 2017
Portfolio of energy midstream marine terminals across five continents

ALEATICA
Americas and Spain, 2015
Portfolio of transportation infrastructure concessions with 20 assets

impala
Global, 2018
Portfolio of essential base metals terminals

Europe

arqiva
UK, 2004
Broadcast & wireless communication infrastructure

Veolia Energia Polska
Poland, 2006
District heating and cogeneration plants

Anglian Water Group
UK, 2006
4th largest water supply and sewerage company in England

MHP
Turkey, 2017
Turkey's largest import/export port

MAG
UK, 2013
One of the top three airport operators in the UK

Vienna International Airport
Austria, 2014
The primary airport in Austria and a gateway to Eastern Europe

M6toll
UK, 2017
A 43km, dual three-lane tolled motorway

DCT Gdansk SA
Poland, 2019
The largest container port in Poland and the Baltic Sea

As at 30 September 2021. Portfolio holdings shown are as of the date noted, may not represent all of the portfolio's current holdings, and are not representative of future investments.
Note: Year indicates initial acquisition year. Certain assets have subsequent transactions (follow-on investments or partial divestments).

(1) Country exposures outlined here reflect material asset exposures (based on contribution to total EBITDA) across our portfolio companies. GIF has assets located in 45+ countries, of which 92.6% are OECD.

Asset Management & Responsible Investment

GIF asset
London Stansted Airport (UK)

Asset Management Framework

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Objectives

PROTECT
Manage risks and deliver expected returns

ENHANCE
Achieve superior returns from individual assets

EXCEED
Deliver above what seems possible from individual assets

Capability

Investment Team

Asset Management Specialist Team

KNOWLEDGE
- Policies & Guidelines
- White Papers
- Case Studies
- Training

Senior Advisors

Global Network

Action

PLAN
- ~200 targeted and tracked initiatives annually:
  - Portfolio-wide
  - Asset specific
- Embedded in IFM Staff KRA's

IMPLEMENT
- Through Boards
- Through Secondments
- With Management Teams
- With other Shareholders

REVIEW
- Regular Progress tracking to drive performance and accountability
- Quarterly Reporting
- Annual Asset Reviews

Results

Return on Investment

Responsible Investment

Healthy Environment | *Inclusive Society* | *Strong Governance*

Risk Mitigation

Approach to Responsible Investment

IFM Investors has been a signatory to the UNPRI since 2008

We focus on delivering investment returns over the long term in a socially responsible and ethical manner

PRI

Principles of Responsible Investment

Enterprise-wide measure of Strategy & Governance

2017	2018	2019	2020
A+	A+	A+	A+

Infrastructure

2017	2018	2019	2020
A	A	A+	A+

Responsible Investment Charter and ESG Policy

- The Charter and Policy articulate our core investment beliefs and how these inform our day-to-day activities

Focused principles

- Climate Change
- Working People
- Inclusion and Diversity

ESG framework

- IFM uses a proprietary ESG due diligence framework to support the identification of key ESG focus areas
- Key sectors have specific guidance notes, best practices and case studies to support the due diligence process

Dedicated team of responsible investment (RI) professionals

Chris Newton
Executive Director

Chris manages the RI team, working closely with each investment team. He helps ensure responsible investment considerations are embedded in IFM Investors' investment, asset management and reporting frameworks.

Jess Humphrey
Senior Associate

Lauren Owens
Senior Associate

Mattia Taboga
SFDR Program Manager

Ashley Kopczynski
Associate Director

Hiroka McGregor
Associate Director

Responsible Investment in Action

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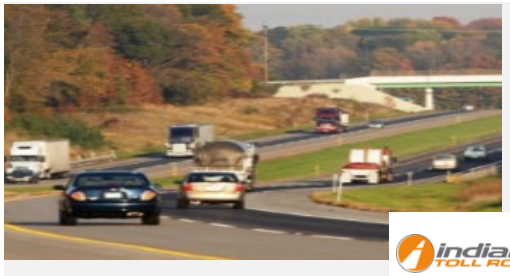
IFM looks to ensure best practice and share knowledge on ESG matters across the portfolio



indiana TOLL ROAD

- IFM has driven a strong ESG-focused culture at ITR
- **ITRCC has seen a material improvement in customer safety** since recent the completion of Intelligent Transportation System ("ITS") project, which included installing overhead message boards, traffic speed limit signs, and incident detection cameras
  - Within the ITS area, incidents were **11% lower** from 2017 to 2018 and lane closure times **reduced by 26%**
- In 2017, ITR made substantial investment in energy efficient LED lighting up to 60% more efficient than traditional bulbs
- Nine new travel plazas began utilizing solar power and were **Silver LEED certified** in 2017
  - In a 6-month period, the panels produced over 55,000 kWh of energy, offsetting 41 metric tons of CO2

Anglian Water Group

- Key strategic targets of AWG are the **reduction of emissions** and the conservation of the world's natural resources
- **An industry-leading performance on leakage:** cut leakage to half the national average by water lost per km of pipe in 2017
- **Efficiency savings have been shared with customers** through lower bills: Anglian bills have increased just 20p for every £1 other companies have added to their charges
- In 2019, Anglian signed a 25-year PPA with NextEnergy Capital, who will design, build, own and operate > **35MW of large-scale solar assets** and sell the power to Anglian
- Alongside other water companies in England, Anglian pledged in 2019 to achieve **net zero carbon emissions for the sector by 2030**
  - Anglian will continue to focus on renewables, particularly solar and combined heat and power (CHP)

MAG

- Manchester was the **first airport in the UK to be awarded Level 3+ carbon neutral status**
  - All three MAG airports are carbon-neutral and purchase 100% of their electricity from renewable sources
  - **Reduced Stansted's carbon footprint by 66% in the first year** of IFM ownership
- In 2018, an £11m college was opened at Stansted offering technical and professional courses in aviation, engineering, business, hospitality, and retail
- As of 2019, **Stansted Airport sends 0% of its waste to landfill** and 75% of all its waste is recycled.

Assets shown to provide examples of sustainable investment across different sectors within infrastructure.

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One purpose. Shared prosperity.

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PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

PERIOD ENDING: SEPTEMBER 30, 2021

Investment Performance Review for

Tulare County Employees' Retirement Association

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Investment Landscape TAB I

Investment Performance Review TAB II

PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

4TH QUARTER 2021

Investment Landscape

Recent Verus research

Visit: https://www.verusinvestments.com/insights/

Topics of interest

THINKING ABOUT INFLATION IN RISK TERMS

Inflation has been subdued in the United States for the last three decades. In this piece, we analyze historic inflationary environments to understand the protection offered by different types of assets. Using a variety of risk tools, we consider the impact inflation has on an investor's overall portfolio and their obligations. No single asset class can reliably protect against inflationary environments but through constructing diversified portfolios and understanding risk exposures, we believe an investor can best position themselves for an uncertain future.

THINKING DIFFERENTLY

Today's market environment appears to be an exceedingly challenging one to navigate, and investors are grappling with the question of how best to structure portfolios that not only meet their return targets but provide impactful diversification and risk management. In this Topic of Interest paper, we will assess a wide variety of less-conventional investment strategies in both mature and nascent marketplaces, and which may only appeal to a specific set of investors.

ESTABLISHMENT OF RISK MITIGATION BUCKETS

An evolving market environment has arguably diminished the role of traditional fixed income as a diversifier in portfolios and led to a higher opportunity cost of holding bonds due to lower yields. This may suggest improved relative attractiveness of other equity risk mitigation approaches. In this research piece we discuss other approaches to risk mitigation and outline their merits, while tying these ideas to the Functionally-Focused Portfolios (FFP) approach to portfolio construction.

Annual research

2021 PRIVATE EQUITY OUTLOOK

In the Verus 2021 Private Equity Outlook, we focus attention on investor appetite for ESG and the growing response from private equity. The outlook also addresses the resilience of private equity in the face of COVID; SPACs rise as a streamlined path to the public markets, however not without risk; Private credit markets continue to gain investor interest; Buyout purchase multiples expand as public market valuations continue to climb; and Venture capital valuations soar alongside increased economic confidence

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3rd quarter summary

THE ECONOMIC CLIMATE

— Real GDP grew at a 12.2% rate year-over-year in Q2 (+6.7% quarterly annualized rate) as the U.S. fully recovered from the pandemic-induced recession of 2020. ***p. 10***

— In the U.S. labor market, unemployment has fallen as many workers who desired jobs have been successful in gaining employment. The overall U.S. labor participation rate has not improved, as millions of workers remain neither employed nor seeking employment. ***p. 15***

— Consumer sentiment deteriorated during the third quarter, on reports of pessimism around the COVID Delta variant, higher inflation, and unfavorable economic prospects. Small business optimism also fell, as businesses face difficulty in hiring and are concerned about tax increases and more burdensome government regulations. ***p. 17***

PORTFOLIO IMPACTS

— Credit markets traded in a relatively tight range throughout the quarter, delivering mild returns. Bank loans outperformed in Q3, returning 1.1% and outpacing high yield bonds (0.9%) and corporate investment grade (0.0%). ***p. 24***

— U.S. core CPI, which excludes food & energy prices, rose 4.0% YoY in September. U.S. headline inflation came in at 5.4%. Price changes moderated during Q3, relative to the larger price moves that occurred in March through June. ***p. 12***

THE INVESTMENT CLIMATE

— The Biden Administration's $3.5 trillion social spending package remains in the negotiation stage among Democrats, as the size of the package, the contents, and national concerns over inflation have given some members of the party reason to pause. The package is reportedly being scaled back, which creates the risk of rejection from progressives within the party who are pushing for more spending. ***p. 10***

— It seems that investors have put the 2020 pandemic-induced recession and its associated risks behind them. However, it is not clear that market risks have completely subsided, as the Delta-variant continues to spread, high inflation could indeed persist, and most governments are set to pull back generous stimulus programs. ***p. 34***

ASSET ALLOCATION ISSUES

— Equity markets took a breather in Q3. U.S. equities delivered 0.6%, while international equities experienced slight losses of -0.4% and emerging market equities saw a larger selloff of -8.1%, on an unhedged currency basis. ***p. 27***

— Factor performance was negative during the quarter, as large capitalization stocks outperformed small cap by a wide margin (Russell 1000 +0.2%, Russell 2000 -4.4%) and growth stocks beat value (Russell 1000 Growth +1.2%, Russell 1000 Value -0.8%). ***p. 30***

The economic recovery may be slowing, though the environment remains positive for risk assets

We believe a neutral risk stance is warranted in the current environment

What drove the market in Q3?

"Covid cases are rising again in all 50 states across U.S. as delta variant tightens its grip"

DELTA VARIANT SHARE OF COVID CASE GROWTH IN THE UNITED STATES

Apr	May	Jun	Jul	Aug	Sep
0.6%	3.1%	31.9%	96.0%	97.9%	99.9%

Article Source: CNBC, as of July 23rd, 2021

"The World Economy's Supply Chain Problem Keeps Getting Worse"

SHIPS AT ANCHOR OUTSIDE THE PORT OF LOS ANGELES (MONTHLY AVERAGE)

Apr	May	Jun	Jul	Aug	Sep
11	10	7	12	22	27

Article Source: Bloomberg, August 25th, 2021

"Beijing's Crackdown Ruins July for Investors Everywhere"

NASDAQ GOLDEN DRAGON CHINA INDEX TOTAL RETURN

Apr	May	Jun	Jul	Aug	Sep
-0.1%	-5.6%	+1.8%	-22.0%	-1.6%	-9.8%

Article Source: Bloomberg, July 27th, 2021

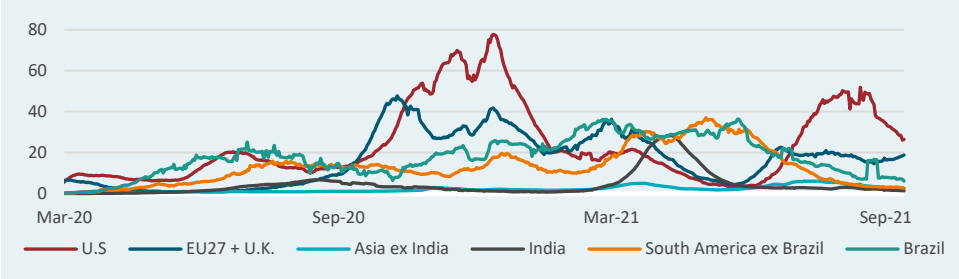
"Commodities surge again; spot price index hits decade high"

BLOOMBERG COMMODITY SPOT INDEX

Apr	May	Jun	Jul	Aug	Sep
464.0	476.9	480.2	487.4	486.3	510.3

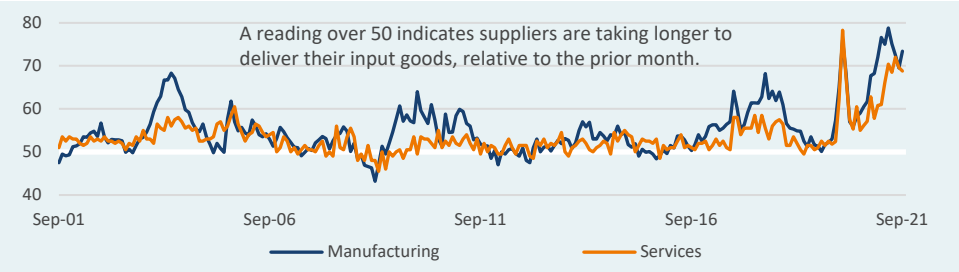
Article Source: BNN Bloomberg, September 13th, 2021

AVERAGE DAILY CASE GROWTH PER 100,000 (TRAILING TWO WEEKS)



Source: Bloomberg, as of 9/30/21

SUPPLIER DELIVERY INDICES



Source: Institute for Supply Management, as of 9/30/21

NASDAQ GOLDEN DRAGON CHINA INDEX

Source: NASDAQ, Bloomberg, as of 9/30/21

Economic environment

U.S. economics summary

— Real GDP grew at a 12.2% rate year-over-year in Q2 (+6.7% quarterly annualized rate) as the U.S. fully recovered from the pandemic-induced recession of 2020. However, it appears that recent strong economic activity may be slowing down.

— U.S. core CPI, which excludes food & energy prices, rose 4.0% YoY in September. U.S. headline inflation came in at 5.4%. Price changes moderated during Q3, relative to the larger price moves that occurred in March through June, but remain elevated.

— Unemployment fell from 5.9% to 4.8% during the quarter, while the laborforce participation was unmoved at 61.6%. The unemployment rate has fallen as many workers who desired jobs have been successful in gaining employment, but the overall U.S. laborforce participation rate has not improved

— The Biden Administration's $3.5 trillion social spending package remains in the negotiation stage among Democrats, as the size of the package, the contents, and national concerns over inflation have given some members of the party reason to pause. The package is reportedly being scaled back, which creates the risk of rejection from progressives within the party who are pushing for more spending.

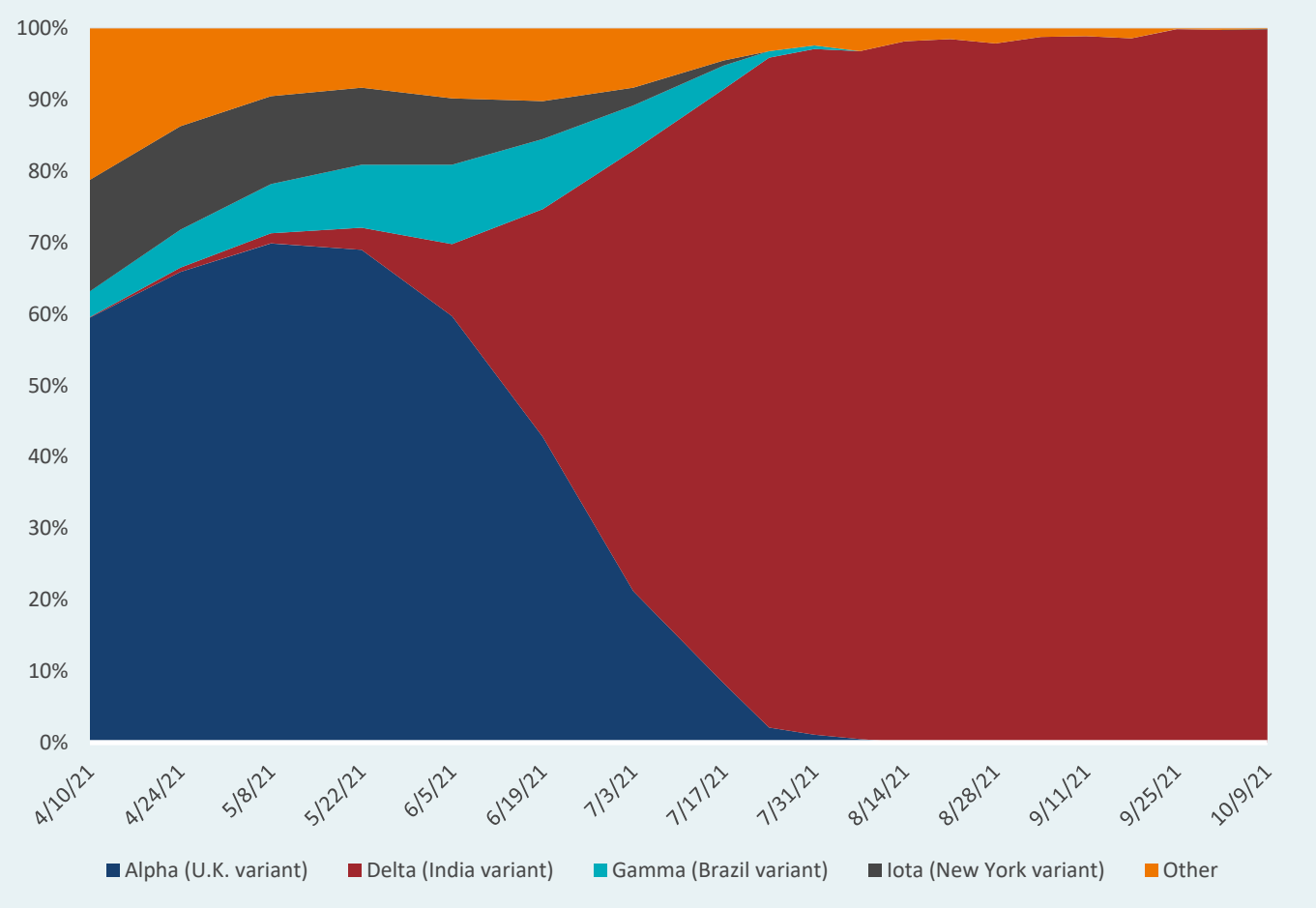
— U.S. home prices have rocketed higher, up 19.7% over the past year, according to the S&P/Case-Shiller U.S. National Home Price Index.

— Consumer sentiment was mixed over the quarter. The University of Michigan reported that the Delta variant and persistent inflation, as well as unfavorable prospects for the national economy, are weighing on sentiment. High prices of homes, vehicles, and durables are a concern.

	Most Recent	12 Months Prior
GDP *(YoY)*	12.2% *6/30/21*	(9.1%) *6/30/20*
Inflation *(CPI YoY, Core)*	4.0% *9/30/21*	1.7% *9/30/20*
Expected Inflation *(5yr-5yr forward)*	2.2% *9/30/21*	1.7% *9/30/20*
Fed Funds Target Range	0% – 0.25% *9/30/21*	0% – 0.25% *9/30/20*
10-Year Rate	1.49% *9/30/21*	0.68% *9/30/20*
U-3 Unemployment	4.8% *9/30/21*	7.8% *9/30/20*
U-6 Unemployment	8.5% *9/30/21*	12.8% *9/30/20*

Delta-plus variant?

SHARE OF NEW COVID-19 CASES ATTRIBUTED TO EACH MAJOR VARIANT



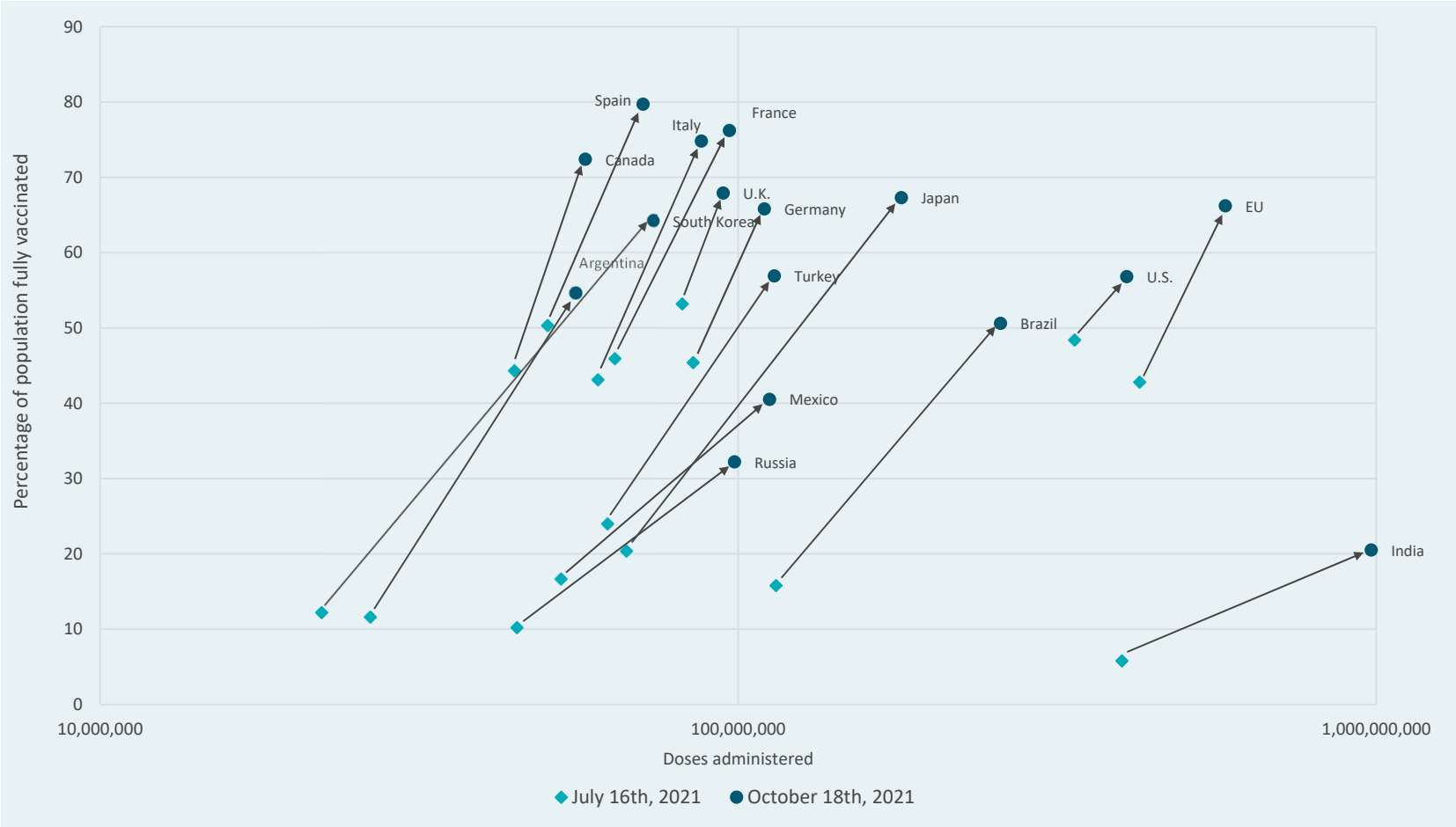
The delta variant of COVID-19 which surged through India in the second quarter took hold in the U.S., and by the end of the quarter, accounted for almost all new cases

Most recently, FDA Commissioner Scott Gottlieb called for "urgent research" into whether a new strain – known as delta plus – could be more transmissible or have partial immune evasion

Source: Bloomberg, BBC, U.K. government, as of 10/9/21

Global vaccination campaign

DOSES ADMINISTERED RELATIVE TO PERCENTAGE OF POPULATION FULLY VACCINATED



Over the last quarter, vaccination rates have improved considerably in Asia, Europe, and to a lesser extent, the emerging markets

Source: Bloomberg, as of 10/18/21

GDP growth

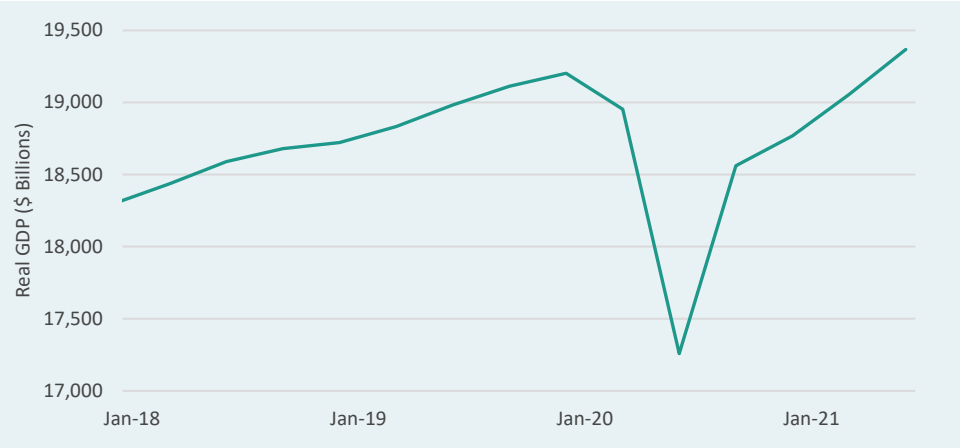
Real GDP grew at a 12.2% rate year-over-year in Q2 (+6.7% quarterly annualized rate) as the U.S. fully recovered from the pandemic-induced recession of 2020. However, it appears that recent strong economic activity may be slowing down. The Atlanta Fed GDPNow estimate, as of October 15th, suggests that GDP growth will slow to 1.2% in the fourth quarter (seasonally-adjusted quarterly annualized rate).

In contrast to the wild swings of 2020, quarterly GDP growth has steadied. Consumption has contributed to the lion's share of GDP, while supply chain issues have detracted from growth as some businesses have been unable to purchase inventory.

The Biden Administration's $3.5 trillion social spending package remains in the negotiation stage among Democrats, as the size of the package, the contents, and national concerns over inflation have given some members of the party reason to pause. The package is reportedly being scaled back, which creates the risk of rejection from progressives within the party who are pushing for more spending. House Speaker Nancy Pelosi reportedly expressed the party's intent to include each of the original social programs (expanded government healthcare, child tax credit, tuition-free community college, etc.) but to scale back the planned length of guaranteed funding in order to reduce overall costs.

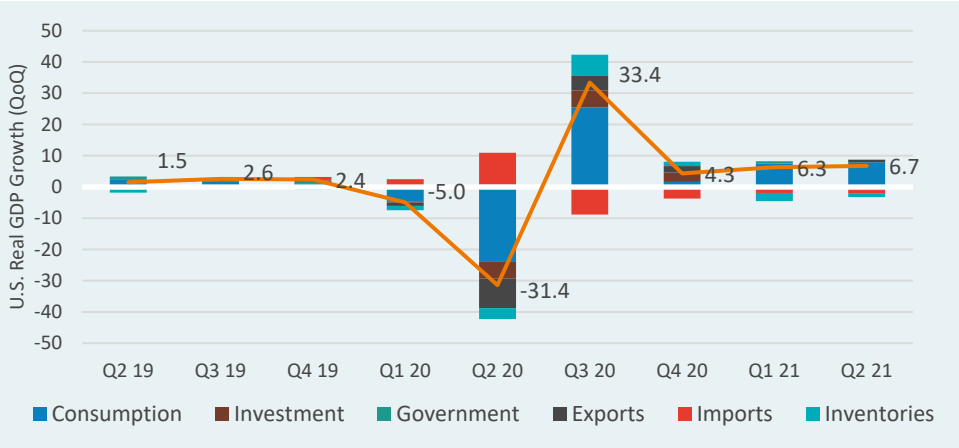
During Q2 2021 the U.S. economy fully recovered from the COVID-19 recession

U.S. REAL GROSS DOMESTIC PRODUCT



Source: FRED, as of 6/30/21

U.S. REAL GDP COMPONENTS (QOQ)



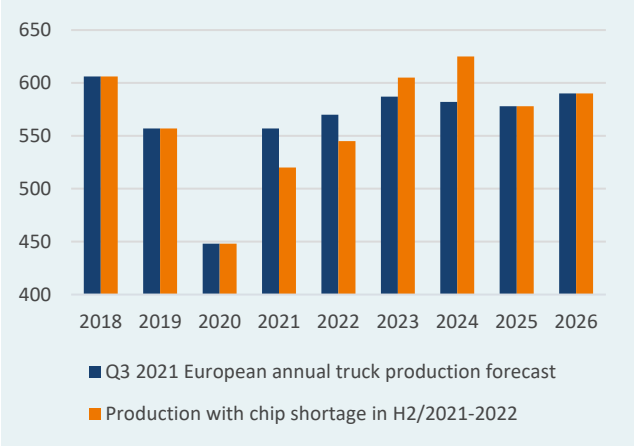
Source: FRED, as of 6/30/21

Supply chain disruptions

Throughout the course of the pandemic, idiosyncratic supply chain snags have caused largely temporary price distortions affecting all sorts of markets, from labor, to lumber, to meat-packing and semiconductors, and many others. In some cases, these distortions have had a large impact on overall inflation levels. For example, limited semiconductor chip supplies led major suppliers to ration chips for higher-margin tech clients at the expense of lower-margin automaker clients. This prioritization resulted in a lower level of new vehicle production, and a massive surge in prices for used cars.

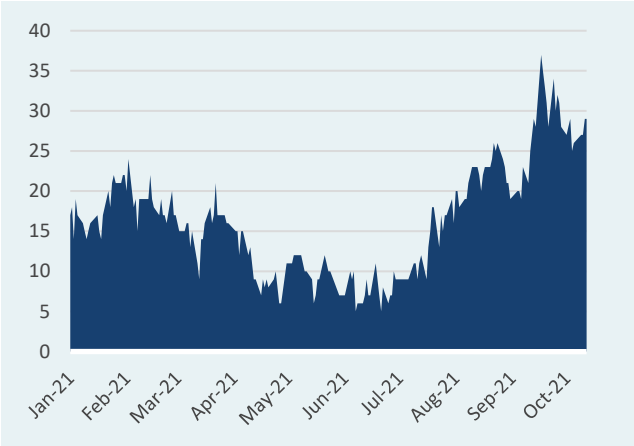
In September, key ports in Southern California hit several new cargo ship backlog records, forcing these ships to remain at anchor outside the ports for several weeks in some cases. Part of the problem has been the massive size of these ships, which require many workers to unload, a lot of trucks to ship their cargo, and many warehouses to store that cargo. If there are not enough truckers to move the new cargo coming in, or there is not enough warehouse capacity to offload new cargo, new ships have longer unload times and the problem compounds. It is important to remember that global supply chains are very complex, and issues in certain segments tend to cascade through the others. According to the NFIB's Small Business Optimism Survey, only 10% of small business owners have been insulated from the impacts of these disruptions. We will be watching corporate guidance to gauge the impact of these disruptions on profit margins.

IMPACT OF SEMICONDUCTOR SHORTAGE ON EUROPEAN TRUCK PRODUCTION (THOUSANDS)



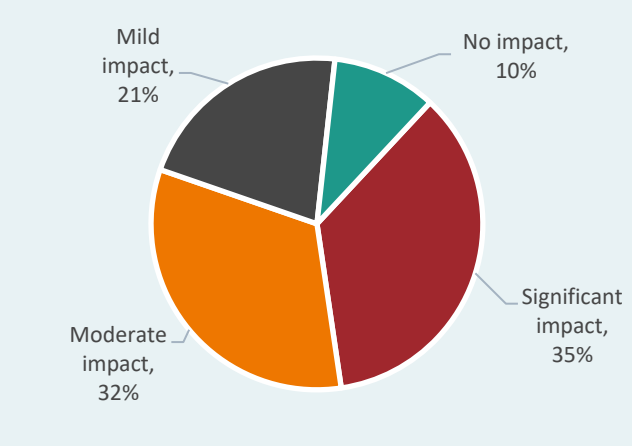
Source: IHS Markit, as of 9/28/21

VESSELS AT ANCHOR – PORT OF LOS ANGELES



Source: The Port of Los Angeles, as of 10/15/21

MAGNITUDE OF THE IMPACT OF SUPPLY CHAIN DISRUPTIONS ON SMALL BUSINESSES IN THE US



Source: NFIB, as of 9/30/21

Inflation

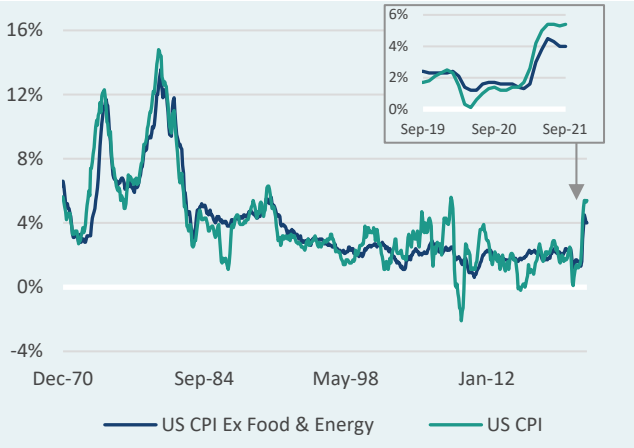
U.S. core CPI, which excludes food & energy prices, rose 4.0% YoY in September. U.S. headline inflation came in at 5.4%. Price changes moderated somewhat during Q3, relative to the larger price moves that occurred from March through June.

Energy and used automobile prices have had outsized impacts on inflation over the past year, increasing 24.8% and 24.4%, respectively. These two components have driven most of the rise in inflation experienced since 2019. If energy and used auto prices moderate, this will push inflation back down towards "normal" level, all else equal. However, continued supply chain issues appear to be contributing to a material rise in certain goods prices such as food, up +0.9% in September. Rent prices (+0.5% over the month) are also a concern as costs begin to catch up with real estate values. As food comprises 13.9% of the overall inflation basket, and shelter comprises 32.6%, price moves across these categories could impact the direction of future inflation.

While we retain our long-term view that inflation is likely to return to lower levels, as most of the recent increases can be attributed to base effects or short-term one-time issues, the significant disruptions in the global supply chain are clearly an important component of the developing story. If this disruption continues there will likely be ongoing effects on the economy as a whole, and on inflation outcomes. We continue to research this issue and it's likely effects.

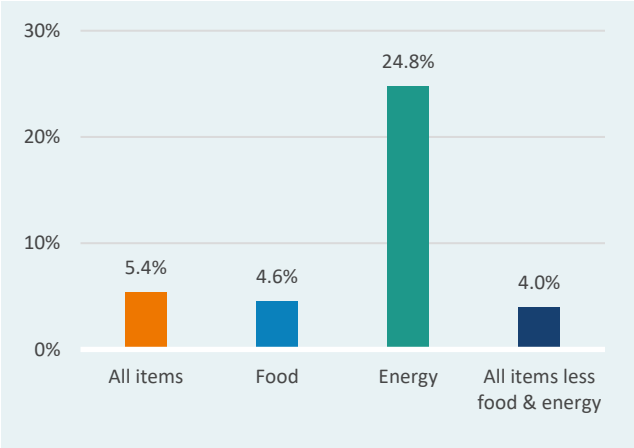
Recent moves suggest a moderation of prices, though we are watching closely for potential structural inflation

U.S. CPI (YOY)



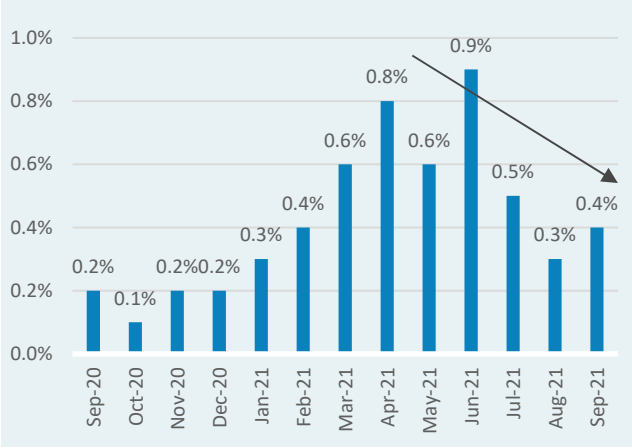
Source: BLS, as of 9/30/21

U.S. CPI (YOY)



Source: BLS, as of 9/30/21

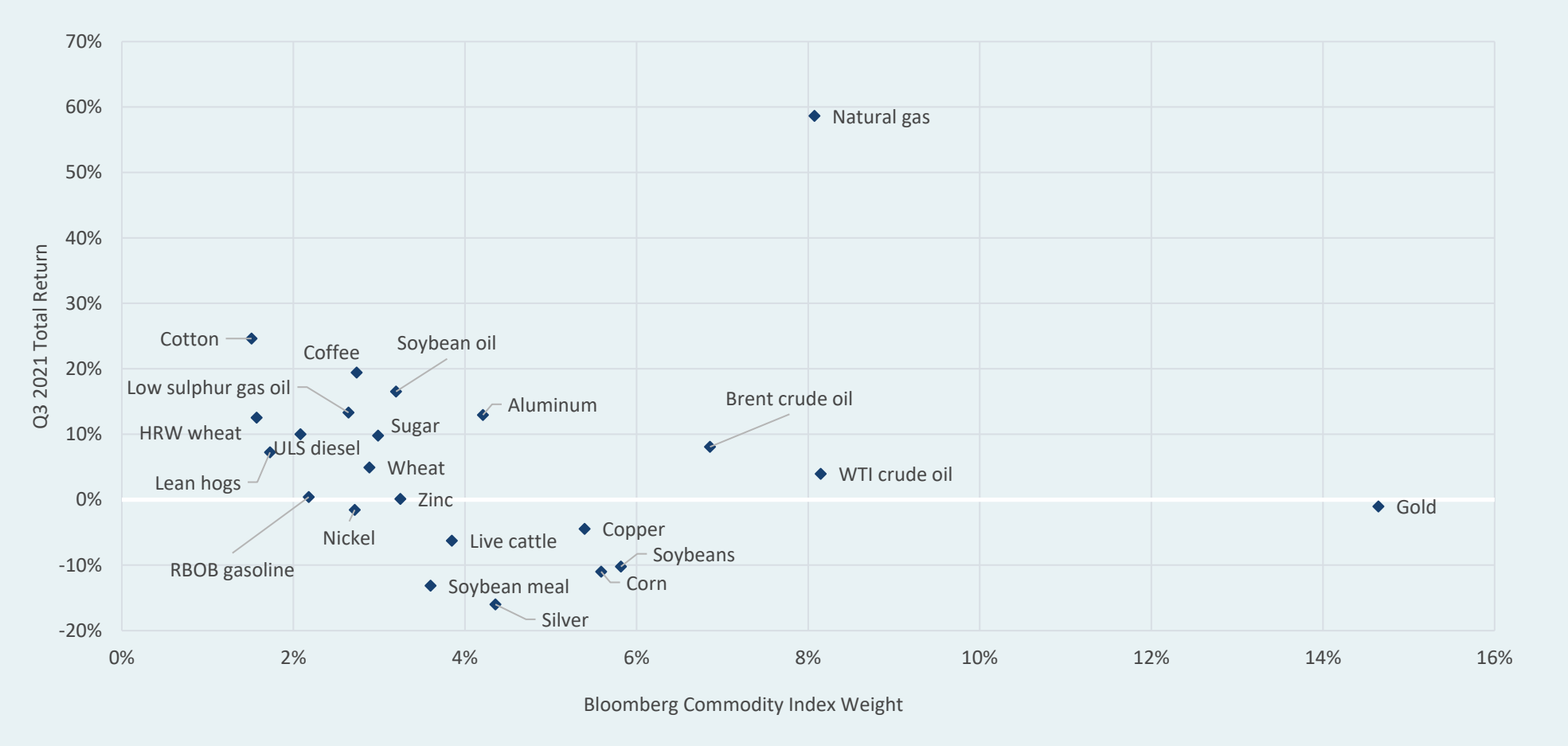
MONTHLY PRICE MOVEMENT



Source: BLS, as of 9/30/21

Commodity surge

BLOOMBERG COMMODITY INDEX – Q3 2021 RETURNS BY INDEX WEIGHT



Source: Bloomberg, as of 9/30/21

Labor market

U.S. unemployment fell from 5.9% to 4.8% during the quarter, while the labor participation rate was unmoved at 61.6%.

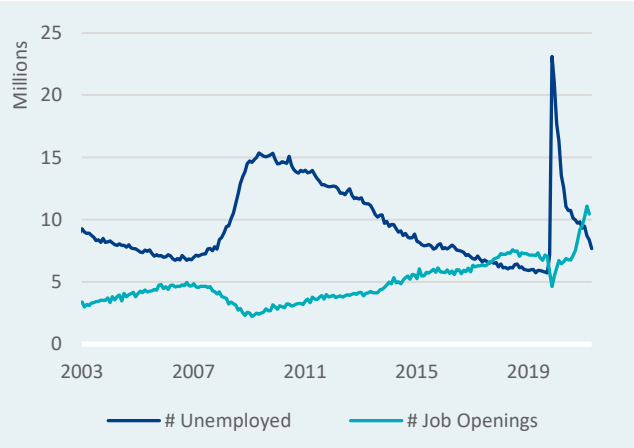
Two major themes can be observed in the U.S. labor market: 1) the unemployment rate has fallen as many workers who desired jobs have been successful in gaining employment, but 2) the overall U.S. laborforce participation rate has not improved, as millions of workers remain out of the laborforce and are not seeking employment. We continue to believe that the second effect has been fueled by approximately two million abnormally early retirements since 2020, which implies that the available U.S. workforce is now permanently smaller. As demonstrated below and on the next slide, the proportion of retired Americans per age group has increased markedly since 2019. It is difficult to know the main drivers behind the trend towards early retirement, but greater wealth (strong returns from markets and real estate), the need to take care of family, and an unwillingness to return to full-time work after extended periods of time off, may all be playing a part.

The number of U.S. job openings has far surpassed the supply of workers. As of August, 10.4 million job openings were posted across the country, while only 8.3 million Americans were seeking employment.

A portion of the U.S. labor force remains neither employed nor seeking work

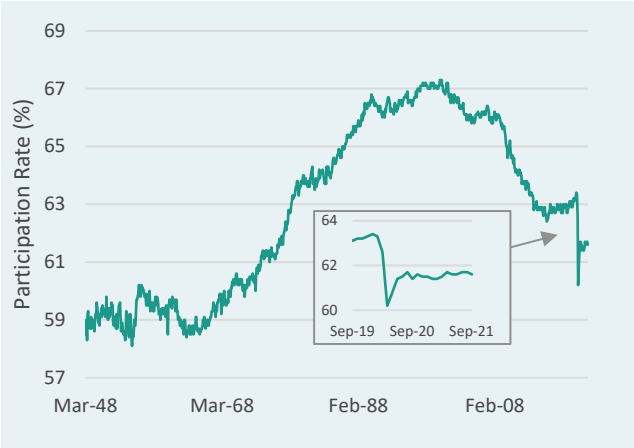
Much of this loss appears to be due to early retirements

UNEMPLOYMENT VS. JOB OPENINGS



Source: FRED, as of 9/30/21

LABOR PARTICIPATION RATE



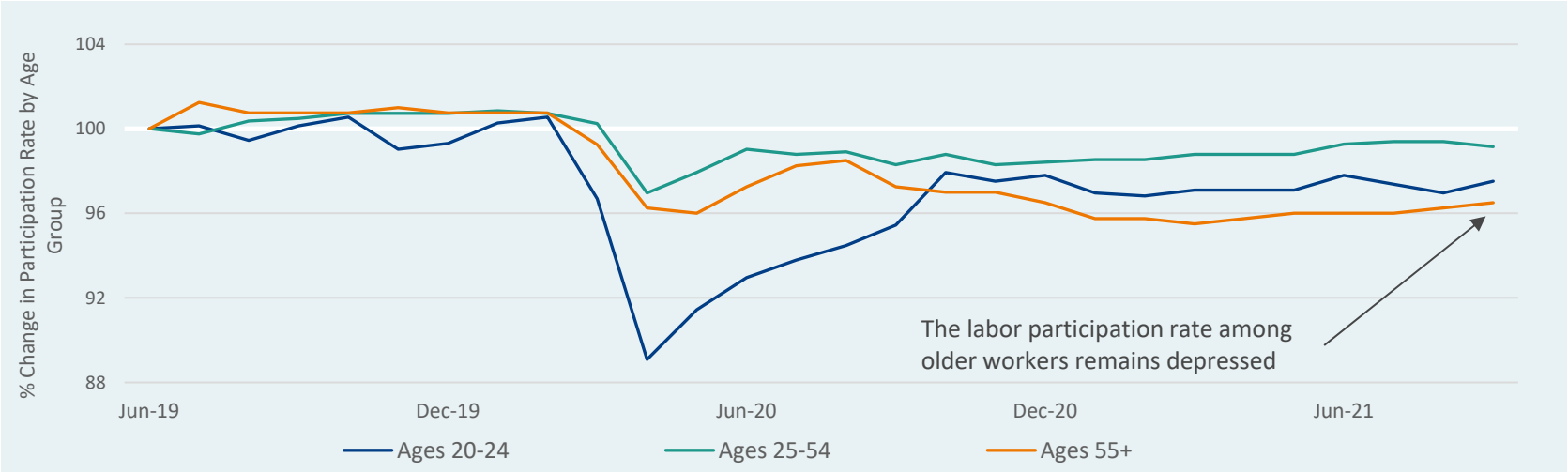
Source: FRED, as of 9/30/21

% OF AMERICANS RETIRED

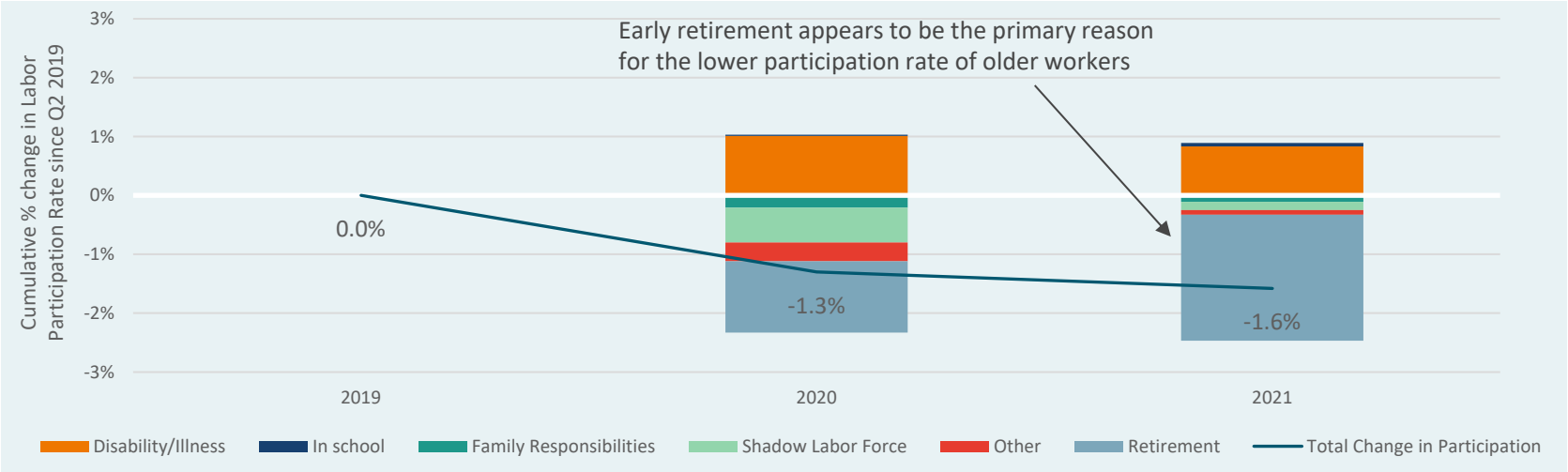
	Women		Men	
Age cohort	2019	2021	2019	2021
55+	52%	54%	44%	45%
55-59	11%	11%	7%	7%
60-64	28%	29%	21%	21%
65-69	59%	62%	52%	53%
70-74	78%	80%	71%	73%
75+	87%	88%	83%	85%

Source: St. Louis Federal Reserve

Labor participation rate



The U.S. labor participation rate remains considerably depressed, due to millions of workers being out of work *and also not seeking work*



Economic data suggests that this effect may be largely due to millions of unusually early retirements since 2019

Source: Federal Reserve Bank of St. Louis, Verus, as of Q2 2021

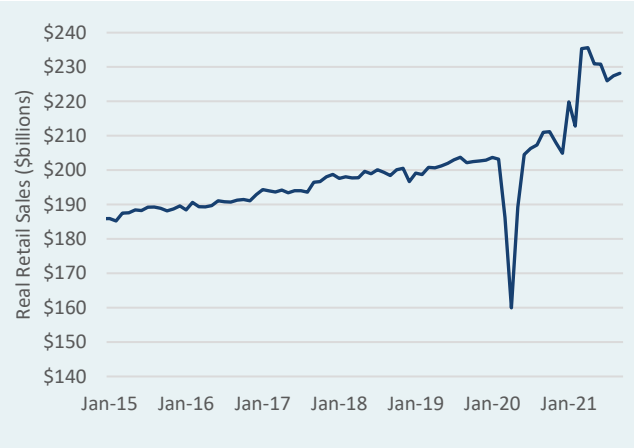
The consumer

U.S. retail sales remain strong but have now slowed for two consecutive quarters, lower by -1.1% in Q3. The *reopening* spending surge appears to be slowing down, as retail sales, auto sales, and home sales have all declined in recent months. Fears around the COVID-19 Delta variant are also likely weighing on consumer spending activity. We examine quarterly rate of change here, because year-over-year rate of change (the traditional measure) is skewed due to the events of 2020.

Retail sales were expected to fall in September, but exceeded those expectations despite global supply chain issues and the rolling off of some enhanced government benefits. U.S. auto sales continued to fall sharply, likely fueled by the dual effects of low supply and also the fact that many potential buyers, flush with stimulus cash, had already made a recent purchase.

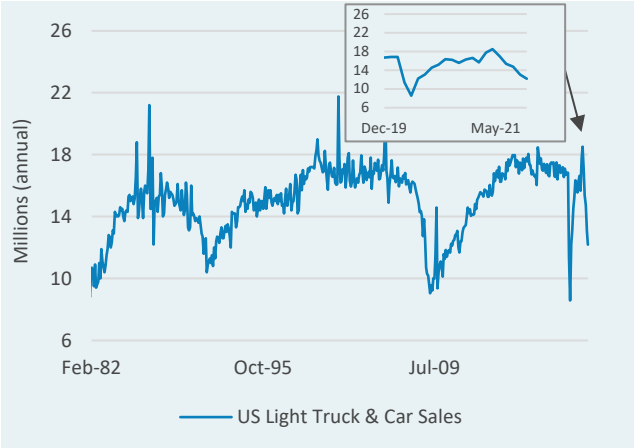
According to anonymized cellular phone data collected by Google for COVID-19 public health research, most economic activity seems to be back to normal for the most part. Public transportation and workplace travel remains the exception, though a recent uptick in workplace mobility might imply that some businesses are bringing staff back to the office.

REAL RETAIL SALES



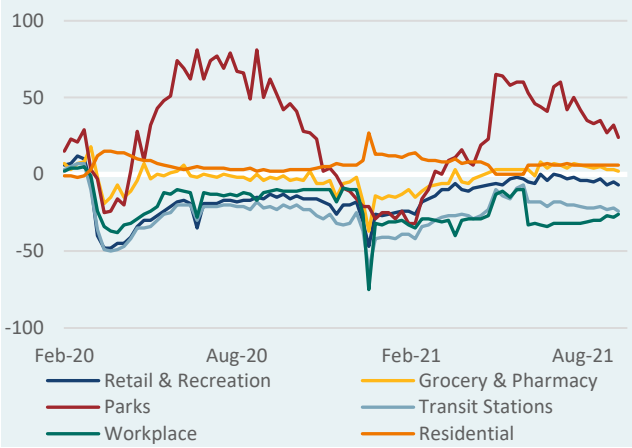
Source: FRED, as of 9/30/21

AUTO SALES



Source: Federal Reserve, as of 9/30/21

GOOGLE U.S. ACTIVITY TRACKER



Source: Google anonymized U.S. citizen mobility, as of 9/30/21

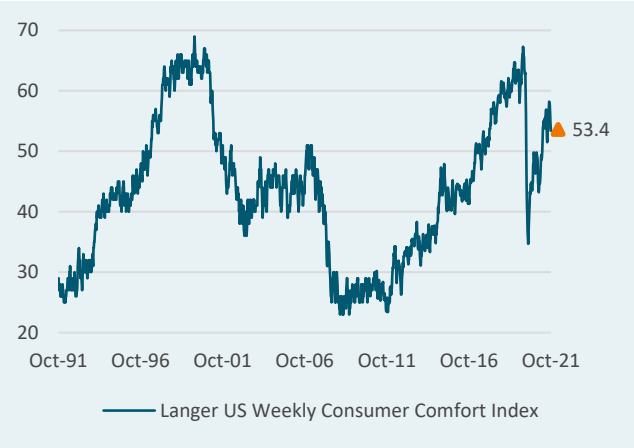
Sentiment

Consumer sentiment deteriorated during the third quarter, on reports of pessimism around COVID-19, inflation, and the economy. Small business optimism also fell as businesses face difficulty in hiring and are concerned about tax increases and more burdensome government regulations.

The University of Michigan Consumer Sentiment Survey attempts to gauge attitudes about the business climate, personal finances, and spending conditions. The survey reading fell from 85.5 to 72.8 on reports that the Delta variant and persistent inflation, as well as unfavorable prospects for the national economy, are weighing on sentiment. High prices of homes, vehicles, and durables are a concern, and only 18% of households anticipate that wage gains will be greater than inflation. The Bloomberg Consumer Comfort Index attempts to gauge Americans' views on the economy, their personal financial situation, and buying conditions. The index fell from 55.1 to 53.4.

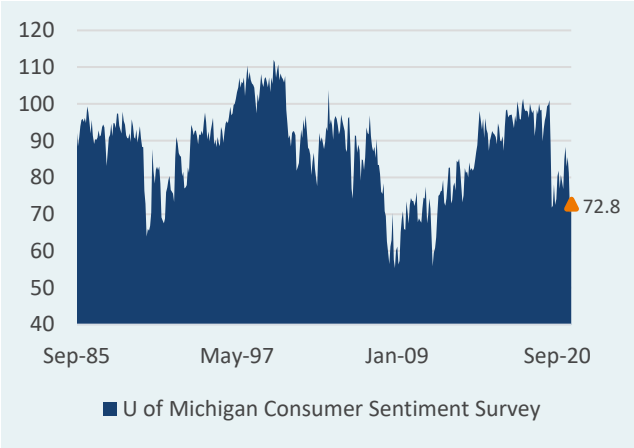
The NFIB Small Business Optimism index fell from 102.5 to 99.1 during the quarter. As reported, "Small business owners are doing their best to meet the needs of customers, but are unable to hire workers or receive the needed supplies and inventories," said NFIB Chief Economist Bill Dunkelberg. "The outlook for economic policy is not encouraging to owners, as lawmakers shift to talks about tax increases and additional regulations."

CONSUMER COMFORT



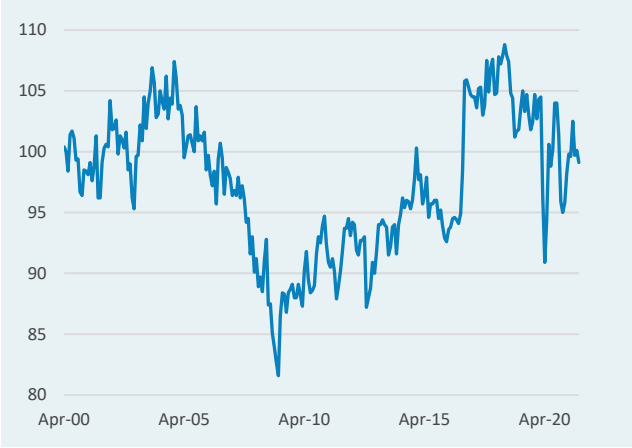
Source: Bloomberg, as of 9/30/21

CONSUMER SENTIMENT



Source: University of Michigan, as of 9/30/21

SMALL BUSINESS OPTIMISM



Source: NFIB, as of 9/30/21

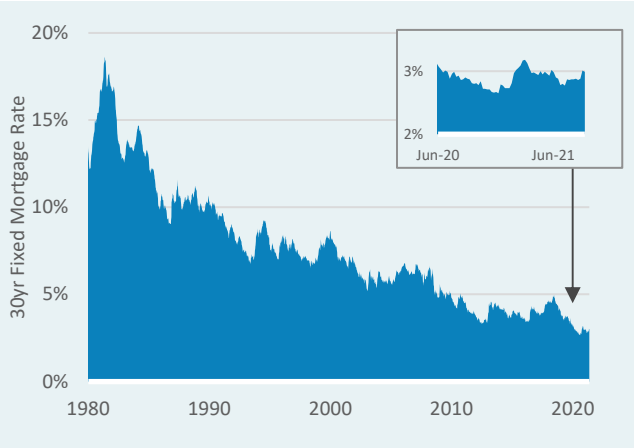
Housing

U.S. home prices have rocketed higher, up 19.7% over the past year, according to the S&P/Case-Shiller U.S. National Home Price Index. This surprising boom appears to have been the product of a perfect storm for home demand, impacted by ultra-low interest rates, Americans' need for more space in the work-from-home environment, and likely pent-up demand from younger families who have been slower to purchase homes than past generations.

Mortgage interest rates have remained steady at around 3.0%, as attractive borrowing conditions support potential buyers who face elevated home prices.

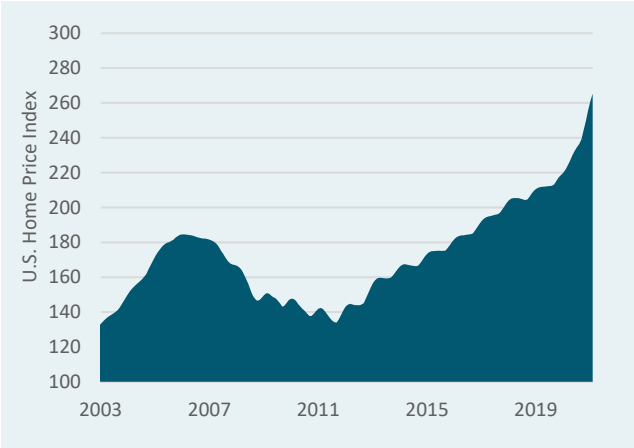
The cost of renting has seen a considerable rise throughout the pandemic, with rents up 9.2% year-over-year in September, according to Zillow. The rise in rent prices has differed quite a bit across the country, and it may be reasonable to assume that states with more outgoing net migration (ex: New York, California) may be experiencing less upward rent pressure than states with more incoming net migration (ex: Arizona, Florida), as demonstrated by recent rental price trends. Dramatic increases in rent prices, without a commensurate improvement in wages, creates obvious issues for many Americans.

30YR FIXED MORTGAGE RATE (AVERAGE)



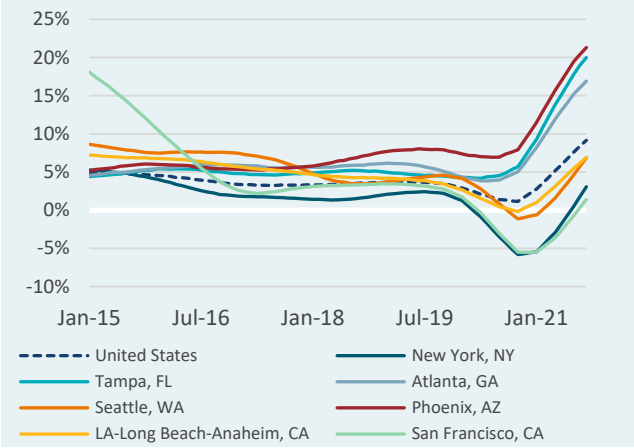
Source: U.S. Census Bureau, as of 9/30/21

U.S. HOME PRICES



Source: S&P/Case-Shiller U.S. National Home Price Index, as of 7/31/21

ZILLOW OBSERVED RENT INDEXES – ZORI* (YOY)



**Measures changes in asking rents across 100 markets over time.*

Source: Zillow ZORI, as of 9/30/21

International economics summary

— The emergence of the delta variant of COVID-19 in Europe and the United States over the summer led to the reimplementation of social distancing controls and a subsequent moderation of economic activity in the services sector.

— European and Japanese vaccination rates improved vastly over the quarter, which helped to contain the spread of COVID-19.

— Inflation surprised to the upside around the globe, but particularly in the Eurozone, which has spurred some tough conversations amongst central bank policymakers.

— Global consumer confidence has trended lower over most of the last two quarters on concerns over labor market prospects, as well as the impact of rising prices on purchasing power stability.

— Natural gas prices surged more than 60% in Q3, primarily as a result of low supply levels and substitution effects due to price surges in other energy sources including coal. On a more thematic basis, Europe's clean energy initiatives also played a role, as renewable sources are not yet equipped to replace carbon-based power supplies, and adequate investment in nuclear plants has not been made. We are keeping a watchful eye on the potential impact of energy prices on inflation.

— Many factories in China were forced to shut down late in the quarter as a result of surging coal and electricity prices. Those shutdowns, alongside weaker than expected investment activity, tighter financing conditions, and stricter social distancing controls, all contributed to a larger-than expected moderation in Chinese GDP growth, which fell to 4.9% year-over-year in Q3.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	12.2% *6/30/21*	5.4% *9/30/21*	4.8% *9/30/21*
Eurozone	14.3% 6/30/21	3.4% *9/30/21*	7.5% *8/31/21*
Japan	7.6% *6/30/21*	0.3% *9/30/21*	2.8% *8/31/21*
BRICS Nations	10.1% *6/30/21*	2.4% *9/30/21*	5.3% *6/30/21*
Brazil	12.4% *6/30/21*	10.3% *9/30/21*	13.7% *7/31/21*
Russia	10.5% *6/30/21*	7.4% *9/30/21*	4.4% *8/31/21*
India	20.1% *6/30/21*	5.3% *8/31/21*	6.9% *9/30/21*
China	4.9% *9/30/21*	0.7% *9/30/21*	5.1% *8/31/21*

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

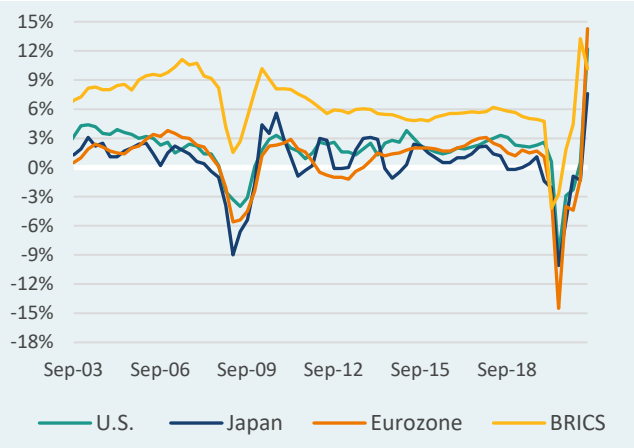
International economics

The IMF expects the global economy will grow by 5.9% in 2021, and 4.9% in 2022. More recently, concerns over the impact of supply chain disruptions have crimped near-term growth expectations for advanced economies, but the expectation remains that those economies will regain their pre-pandemic trend path in 2022 and exceed it by 0.9% by 2024. However, sizable disparities in vaccine access and policy support have resulted in a larger expected setback to living standard improvements in the developing world, where growth is expected to remain 5.5% beneath the pre-pandemic trend by 2024.

Inflation remained high in most global economies, and the United States has seen one of the largest increases among other major developed economies. Inflation trends and the reaction of central banks to these trends will have important implications for markets.

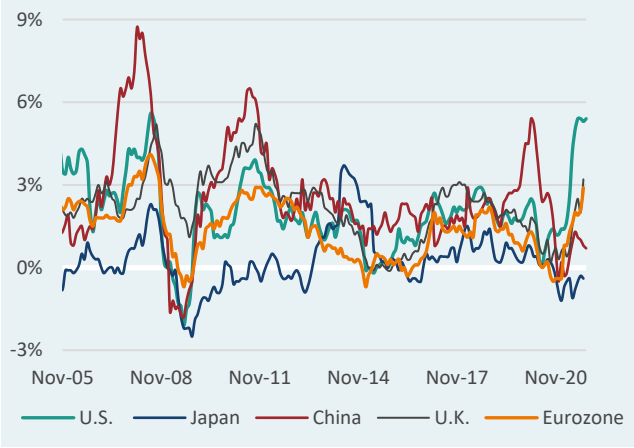
Unemployment around the world has improved as economies recover, government restrictions are loosened, and life moves back towards normalcy.

REAL GDP GROWTH (YOY)



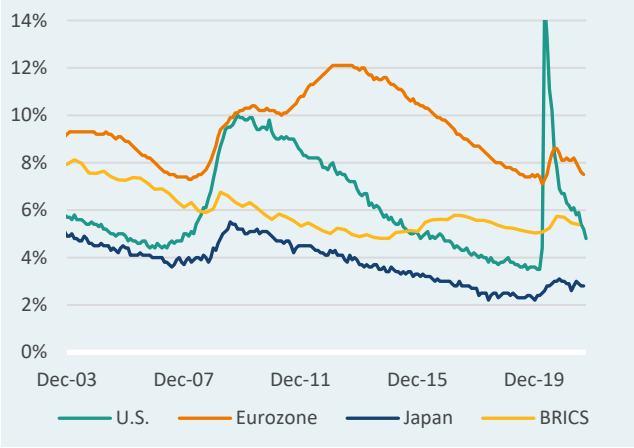
Source: Bloomberg, as of 6/30/21

INFLATION (CPI YOY)



Source: Bloomberg, as of 9/30/21 – or most recent release

UNEMPLOYMENT



Source: Bloomberg, as of 9/30/21 – or most recent release

Fixed income rates & credit

Fixed income environment

— The 10-year U.S. Treasury yield increased slightly during the quarter, from 1.45% to 1.52%. Longer-term Treasury bond yields drifted lower in July and August before picking up considerably in September, as speculation mounted that the Federal Reserve would begin tapering the current asset purchase program ($80 billion in monthly Treasury purchases and $40 billion in monthly agency mortgage-backed-securities) in November or December of this year.

— Credit spreads traded in a relatively tight range during the quarter and remained at a very low level relative to the historical average. Historically low credit default rates have supported tight spread levels. Above-average credit quality has also been supportive, specifically in the high-yield universe. Although credit spreads are tight, spreads arguably remain healthy relative to current bond default levels.

— Reports that Evergrande, one of the largest property developers in China, was on track to miss debt service payments led to a sell-off in Chinese high-yield debt as investors braced for potential contagion. Dollar-denominated high-yield Chinese bonds in aggregate fell by around 20% in value.

— Realized and expected inflation metrics reached high levels relative to history, sparking a number of different policy responses from central bankers. The base case at the Fed and at the ECB remains that inflation will be transitory, and that rates can remain at current levels at least until late next year. In contrast, officials at the Bank of England are now expected to begin hiking rates in November, and many central banks in the emerging markets have already begun tightening policy.

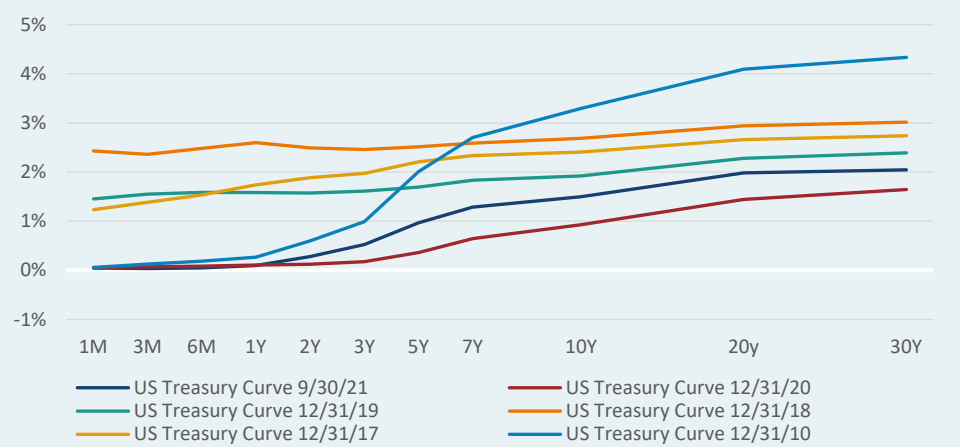
— The four-year discount margin, our preferred spread metric for bank loans, compressed slightly over the quarter from 4.32% to 4.28%.

	QTD Total Return	1 Year Total Return
Core Fixed Income (BBgBarc U.S. Aggregate)	0.1%	(0.9%)
Core Plus Fixed Income (BBgBarc U.S. Universal)	0.1%	0.2%
U.S. Treasuries (BBgBarc U.S. Treasury)	0.1%	(3.3%)
U.S. High Yield (BBgBarc U.S. Corporate HY)	0.9%	11.3%
Bank Loans (S&P/LSTA Leveraged Loan)	1.1%	8.4%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(3.1%)	2.6%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(0.7%)	4.4%
Mortgage-Backed Securities (BBgBarc MBS)	0.1%	(0.4%)

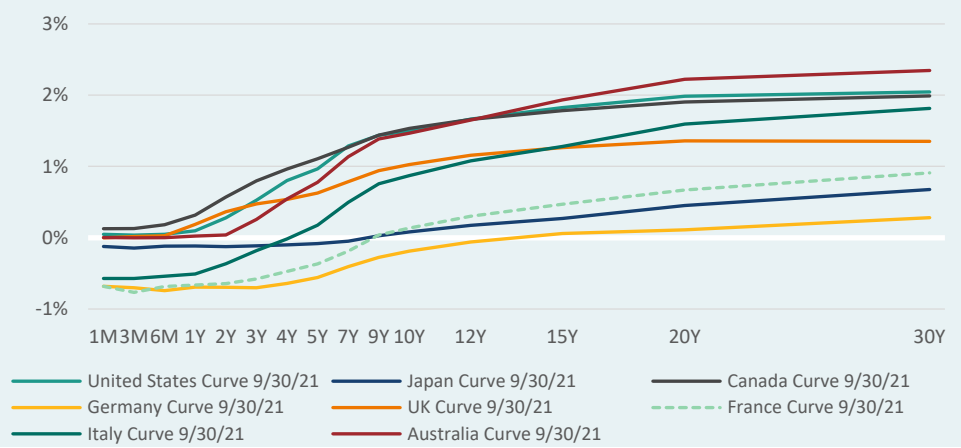
Source: Bloomberg, as of 9/30/21

Yield environment

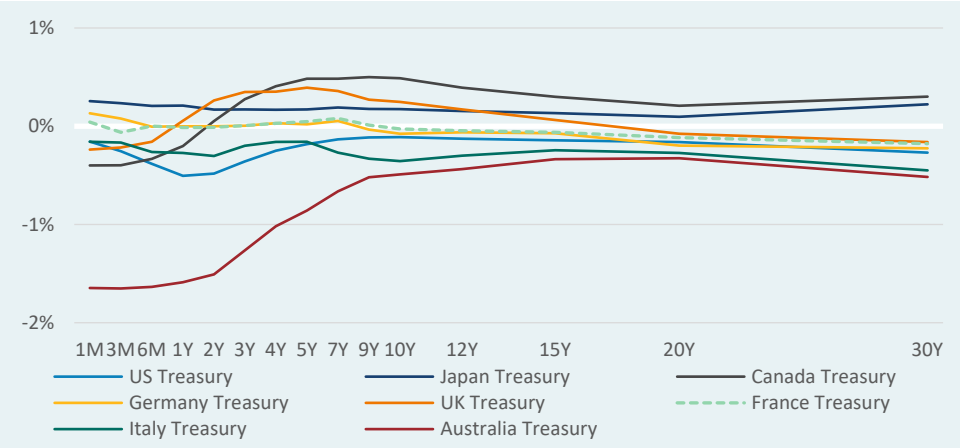
U.S. YIELD CURVE



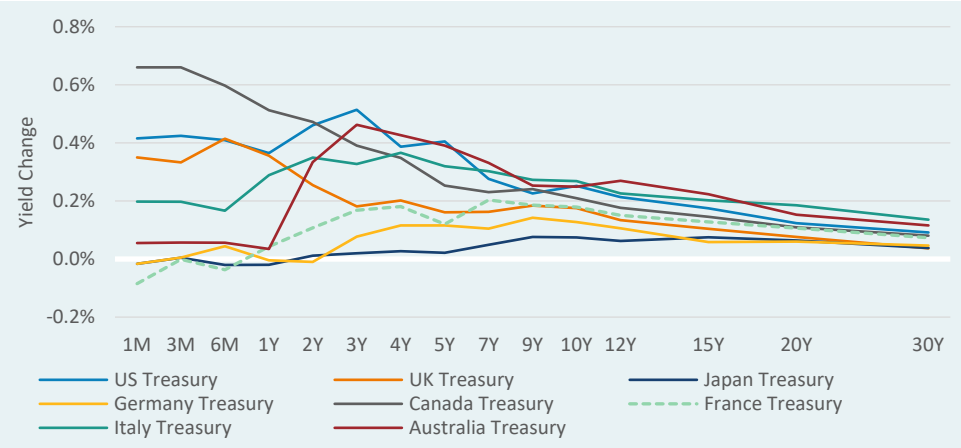
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



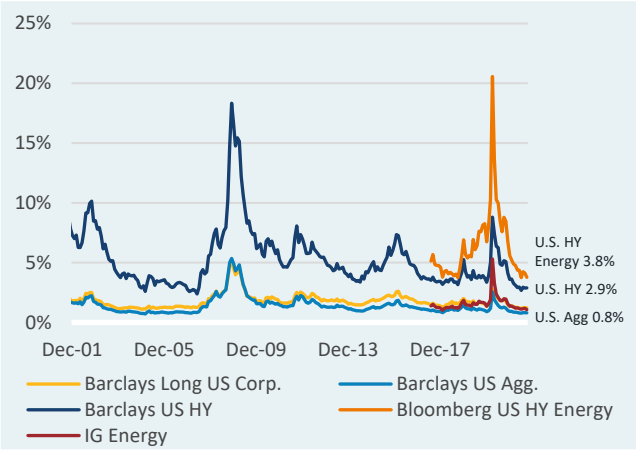
Source: Bloomberg, as of 9/30/21

Credit environment

Credit markets traded in a relatively tight range throughout the quarter, delivering mild returns. Bank loans outperformed, returning 1.1% and outpacing high yield bonds (0.9%) and corporate investment grade (0.0%). Credit spreads widened as strong demand did not fully offset lingering concerns around inflation, persistent supply chain delays, default the by Chinese property developer Evergrande, and risk of a government shutdown. High yield spreads widened 21 basis points to 289 basis points while investment grade spreads widened 4 basis points to end the quarter at 84 basis points.

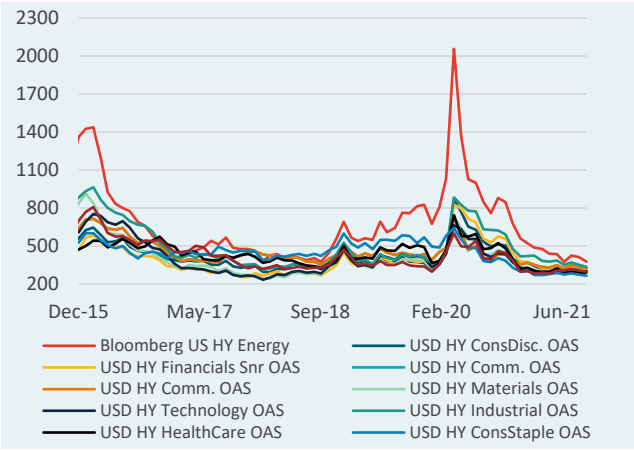
Demand for high quality credit has been strong this year with an estimated $80 billion flowing into corporate investment grade funds. At the same time, the sector has seen improvement in credit fundamentals as businesses repay some of last year's precautionary borrowing, reducing total debt levels. Strong demand and declining leverage, in conjunction with a potentially higher rate environment, are all supportive factors for credit (for example: global investors have stepped in to buy high yield bonds as rates rise, despite tight credit spreads, because the U.S. is a higher interest rate market). Investment grade spreads have only been this tight roughly 5% of the time since 2000. Tight valuations, which product low spread carry and longer relative duration, likely present challenges to credit performance going forward.

SPREADS



Source: Barclays, Bloomberg, as of 9/30/21

HIGH YIELD SECTOR SPREADS (BPS)



Source: Bloomberg, as of 9/30/21

	Credit Spread (OAS)	
Market	**9/30/21**	**9/30/20**
Long U.S. Corp	1.2%	1.9%
U.S. Inv Grade Corp	0.8%	1.4%
U.S. High Yield	2.9%	5.2%
U.S. Bank Loans*	4.3%	5.3%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/21
**Discount margin (4-year life)*

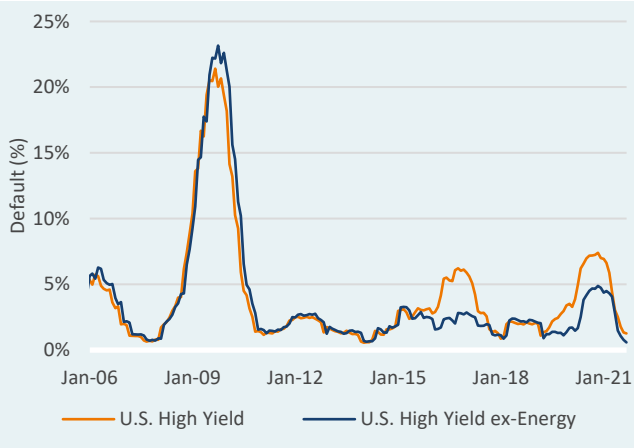
Default & issuance

Default activity continued at a moderate pace in the third quarter with three defaults totaling $1.3 billion across high yield bonds and bank loans. Over the first three quarters of the year, a total of nine companies defaulted on $6.1 billion. As default activity continues to be light, the par-weighted U.S. high yield default rate declined in half to end the quarter at 1.3% year-over-year. Similarly, the loan par-weighted default rate ended the quarter at 0.9%, falling 3.4% year-to-date.

High yield bond issuance remains strong with Q3 gross issuance of $129.4 billion, bringing the year-to date total to $469.8 billion. Leveraged loan issuance continued at a historic pace with $133.7 billion of new loan issued over the quarter. The $418.3 billion of loans issued year-to-date has already surpassed all previous *annual periods* with the exception of 2017 ($419.2 billion).

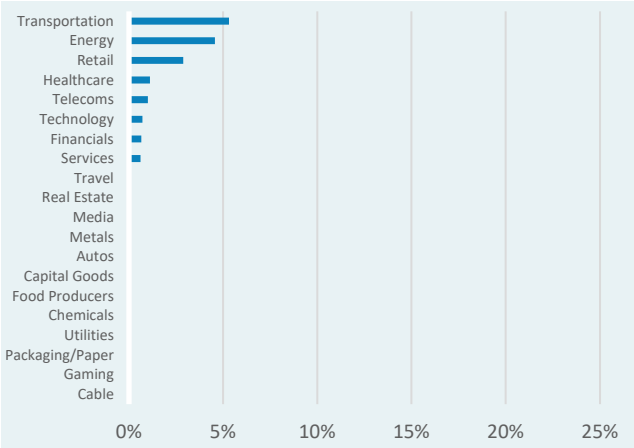
Investment grade issuance for the quarter totaled $321 billion, below first ($423 billion) and second quarter ($350 billion) issuance but in-line with the 4-year average of $323 billion. Of note, year-to-date Financial sector issuance has seen an uptick, accounting for 42% of issuance versus its four-year average share of roughly one-third of total investment grade issuance.

HY DEFAULT RATE (ROLLING 1-YEAR)



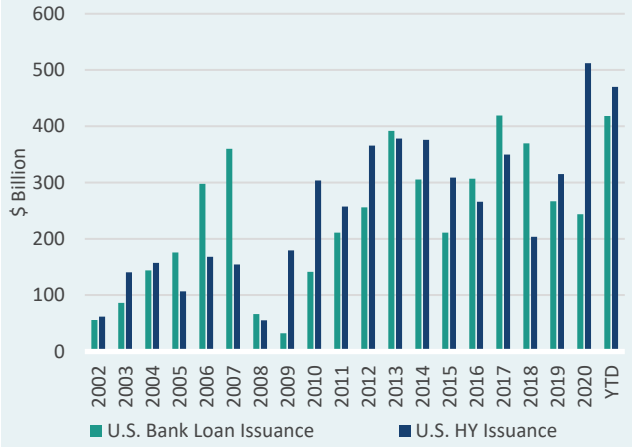
Source: BofA Merrill Lynch, as of 9/30/21

U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 9/30/21 – par weighted

U.S. ISSUANCE ($ BILLIONS)



Source: BofA Merrill Lynch, as of 9/30/21

Equity

Equity environment

— Equity markets took a pause in Q3, a notable change from the seemingly non-stop rally year-to-date. U.S. equities delivered 0.6%, while international equities experienced slight losses of -0.4% and emerging market equities saw a larger selloff of -8.1%, on an unhedged currency basis.

— Size and value factor performance was negative during the quarter, as large capitalization stocks outperformed small capitalization stocks by a wide margin (Russell 1000 +0.2%, Russell 2000 -4.4%) and growth stocks beat value (Russell 1000 Growth +1.2%, Russell 1000 Value -0.8%).

— As we observed last quarter, it does seem that investors have put the 2020 pandemic-induced recession and its associated risks behind them. However, it is not clear that market risks have completely subsided, as the Delta-variant continues to spread, high inflation could indeed persist, and most governments are set to pull back generous stimulus programs.

— The U.S. is facing acute supply chain issues, and 71% of S&P 500 companies reported negative impacts to their business during quarterly earnings calls, as reported by FactSet.

— Weakness in Chinese equities (MSCI China -18.2%) was the major driver of emerging market equity underperformance, as a wave of new regulations were implemented by the Communist Party of China which cascaded across a number of sectors including Technology, Property Management, and Financials.

— Within MSCI's long-short U.S. factor portfolios, momentum (+1.3%) led the way while volatility (-1.7%) posted a negative total return.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (S&P 500)	0.6%		30.0%	
US Small Cap (Russell 2000)	(4.4%)		47.7%	
US Large Value (Russell 1000 Value)	(0.8%)		35.0%	
US Large Growth (Russell 1000 Growth)	1.2%		27.3%	
International Large (MSCI EAFE)	(0.4%)	1.5%	25.7%	28.2%
Eurozone (Euro Stoxx 50)	(2.4%)	0.1%	27.6%	30.6%
U.K. (FTSE 100)	(0.5%)	2.0%	30.7%	26.1%
Japan (NIKKEI 225)	2.5%	2.9%	21.9%	29.3%
Emerging Markets (MSCI Emerging Markets)	(8.1%)	(6.9%)	18.2%	15.9%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/21

Domestic equity

U.S. equities performed relatively well in Q2, delivering a slightly positive return of 0.6% (S&P 500). The index is expected to report Q3 earnings growth of 27.6% year-over-year, as indicated by FactSet. The U.S. is facing acute supply chain issues, and 71% of S&P 500 companies reported negative impacts to their business during quarterly earnings calls.

Mildly higher interest rates during the quarter likely supported Financials (+2.7%) while acting as a headwind to growth-oriented sectors such as Information Technology (+1.3%).

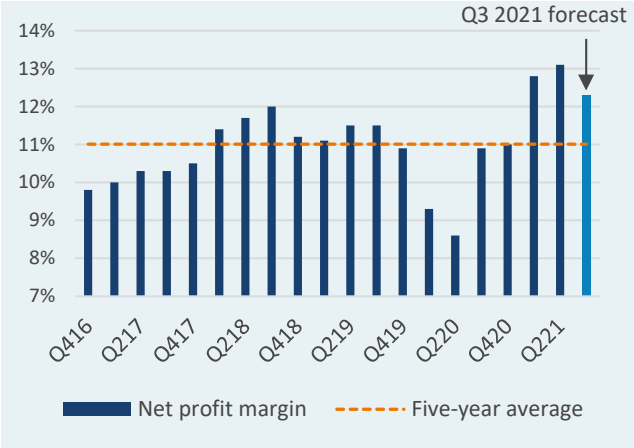
Performance over the near-term may be constrained by a degree of economic slowdown induced by the COVID-19 Delta variant, as well as moderating earnings growth expectations, although the analyst consensus price target for the S&P 500 over the next year is 5051, as of October 6th.

Recent price increases have raised questions around the defensibility of net profit margins, which are expected to moderate in Q3 but remain elevated well above recent averages. Some investors have begun to discuss positioning within sectors that have exhibited more pricing power.

S&P 500 INDEX

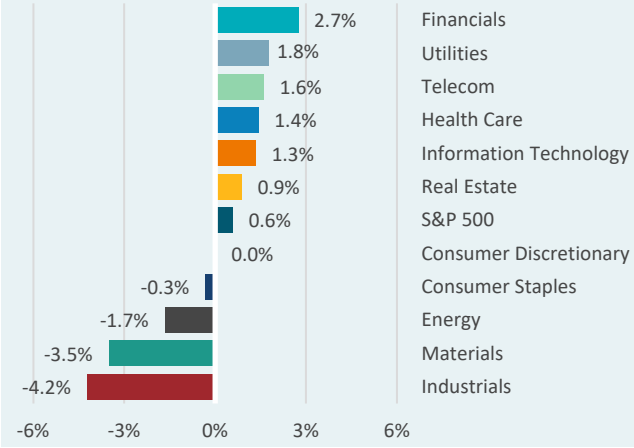
Source: Standard & Poor's, as of 9/30/21

S&P 500 NET PROFIT MARGINS



Source: FactSet, as of 10/18/21

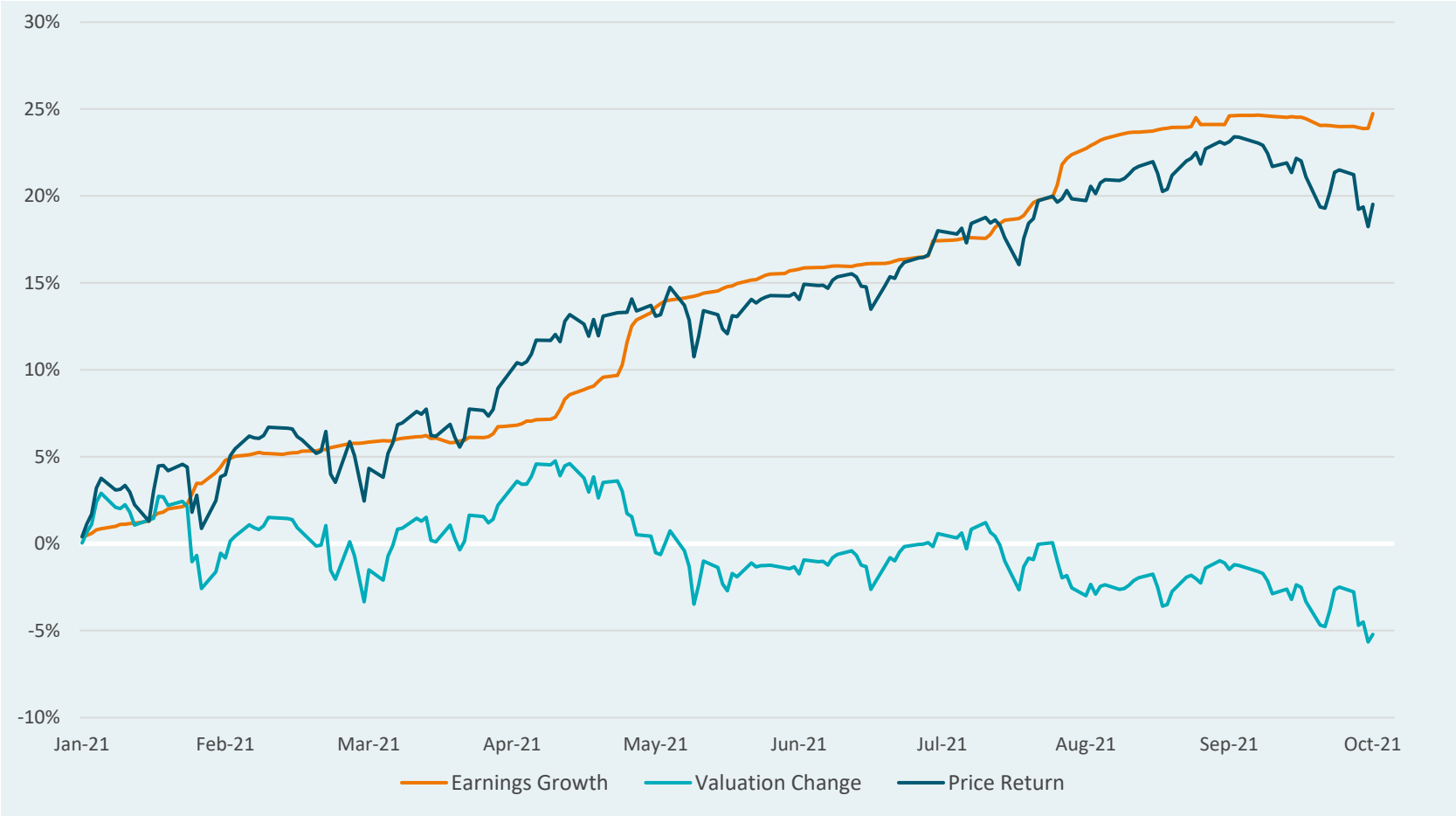
Q3 SECTOR PERFORMANCE



Source: Standard & Poor's, as of 9/30/21

U.S. equity *Price/Earnings*

A very expensive "P" but record-growth of "E"



Corporate earnings growth has been the main driver of U.S. equity returns in 2021

Strong earnings growth expectations have led to slightly cheaper equities, as demonstrated by the *P/E multiple*

Source: Standard & Poor's, Bloomberg, Factset - Forward P/E , as of 9/30/21

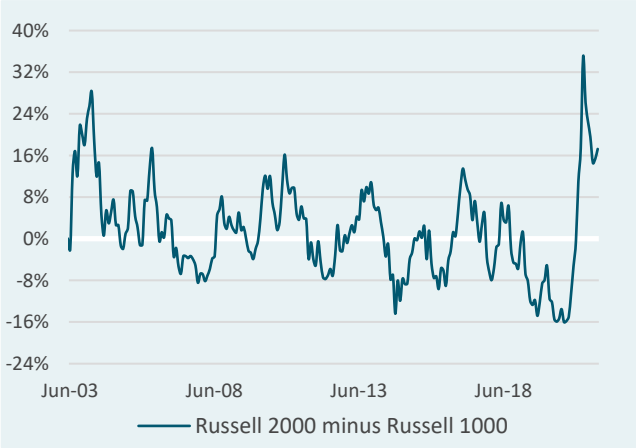
Domestic equity size & style

Large capitalization stocks outperformed small cap during the quarter by a wide margin (Russell 1000 +0.2%, Russell 2000 -4.4%) and growth stocks beat value (Russell 1000 Growth +1.2%, Russell 1000 Value -0.8%).

Following the notable turnaround in value stock performance during Q1, growth stocks took the lead in Q2, dampening excitement for a value comeback. Growth further outperformed in Q3. As we expressed earlier in the year, style performance is often impacted heavily by sector randomness, which suggests that investors should be cautious in assuming that performance is *signal* rather than *noise*. Value stocks continue to be cheap relative to growth stocks, historically speaking. However, there does not appear to be a clear catalyst on the horizon that would imply a value timing opportunity. Factor performance tends to be noisy and difficult to predict, which suggests that style investing should in most cases involve a longer-term focus.

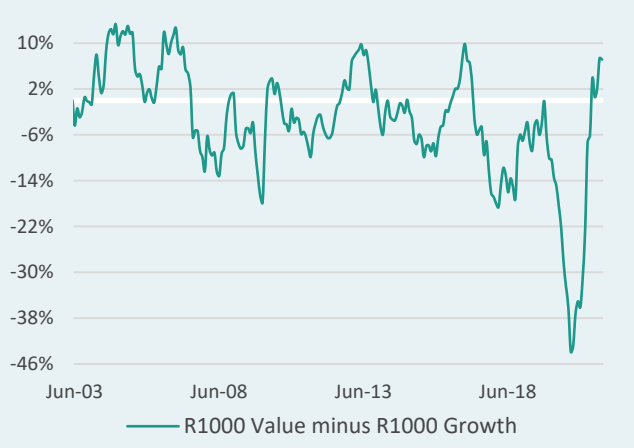
Large cap and growth stocks outperformed during Q3

SMALL CAP VS LARGE CAP (YOY)



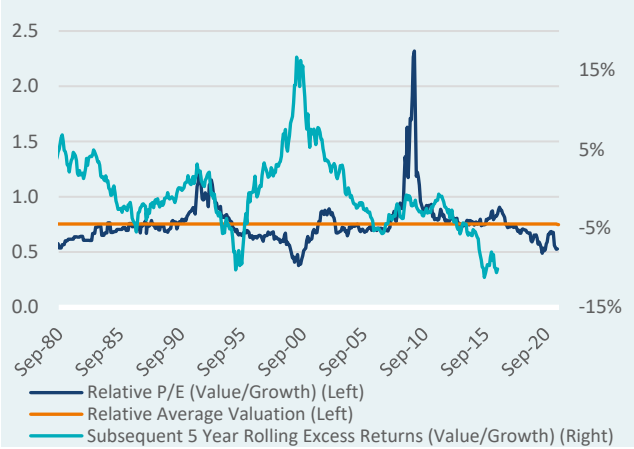
Source: FTSE, as of 9/30/21

VALUE VS GROWTH (YOY)



Source: FTSE, as of 9/30/21

VALUE VS. GROWTH RELATIVE VALUATIONS



Source: Standard & Poor's, as of 9/30/21

International developed equity

International equities experienced slight losses of -0.4% (MSCI EAFE Index) during the quarter on an unhedged currency basis, lagging U.S. equities but outperforming emerging markets. Currency movement during the quarter resulted in a loss of -1.9% relative to those investors with a currency hedging program.

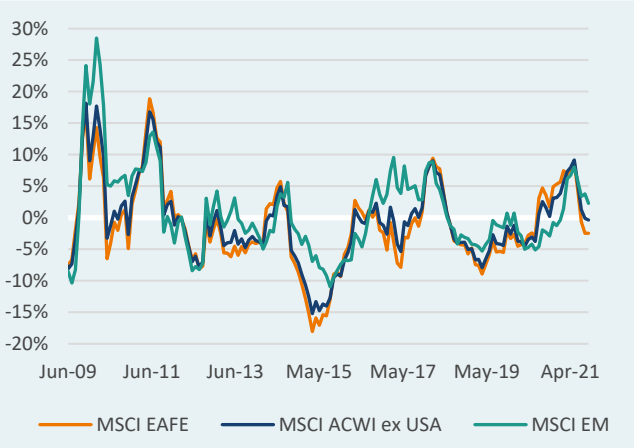
Japanese equities (MSCI Japan +4.6%) rallied on strong earnings, and on the news that Prime Minister Suga's successor, Fumio Kishida, would be less likely to pursue tax hikes on investment income. Japan's vaccination rate also improved considerably, and ended the quarter in line with major European countries, laying the groundwork for a broader reopening of the economy.

The strong performance of Japanese equities helped to offset for international developed equity investors the negative returns delivered by European equities (MSCI Europe -1.6%), which faced headwinds from a significant weakening in the pound sterling (-2.4%) and euro (-2.3%) relative to the U.S. dollar. According to futures market positioning data from the CFTC, more people are betting that the euro will depreciate in value than those betting that it will appreciate in value, for the first time since March 2020.

INTERNATIONAL DEVELOPED EQUITIES

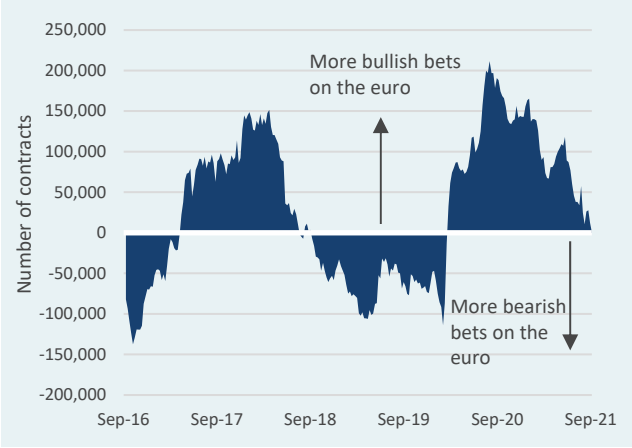
Source: MSCI, as of 9/30/21

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, as of 9/30/21

EURO NET FUTURES POSITIONING



Source: CFTC, non-commercial positioning, as of 9/28/21

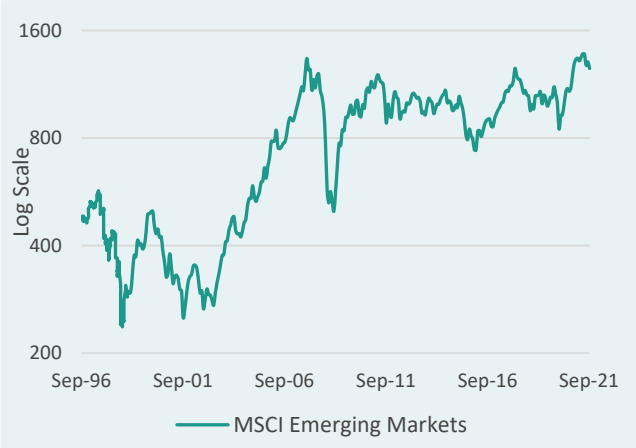
Emerging market equity

Emerging market equities saw large losses (MSCI EM -8.1%) on an unhedged currency basis, underperforming other markets during the third quarter. China has dragged down emerging markets performance considerably, producing losses of -18.2% in Q3 relative to ex-China emerging market performance of -2.0%, and producing losses of -7.2% over the past year relative to ex-China emerging market performance of 36.9% (MSCI China vs. MSCI Emerging Markets ex-China). China comprises 34% of the MSCI Emerging Markets Index.

Latin American emerging markets have taken the lead over Asian emerging markets over the past year, a notable change from strong Asian leadership in recent years (MSCI EM Latin America +27.3%, MSCI EM Asia +13.9%)

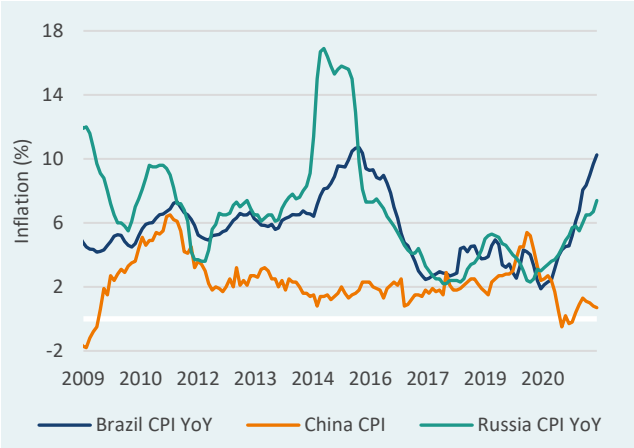
Inflation in Brazil has risen to 10.3%, and in Russia to 7.4%, which has generated responses from central banks. Brazil has hiked their central bank rate from 2.00% to 6.25% to battle rising prices, while Russia has hiked its rate from 4.25% to 6.75% year-to-date. While inflation rate in the U.S. is one of the highest in the developed world, emerging markets are also facing tough decisions regarding the balance between economic recovery and the risks of uncomfortably high inflation.

EMERGING MARKET EQUITY



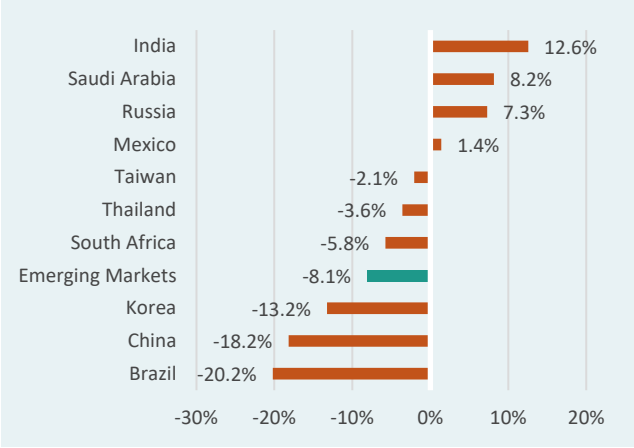
Source: MSCI, as of 9/30/21

INFLATION (YOY)



Source: Bloomberg, as of 9/30/21 or most recent data

Q3 PERFORMANCE – TOP 10 EM CONSTITUENTS



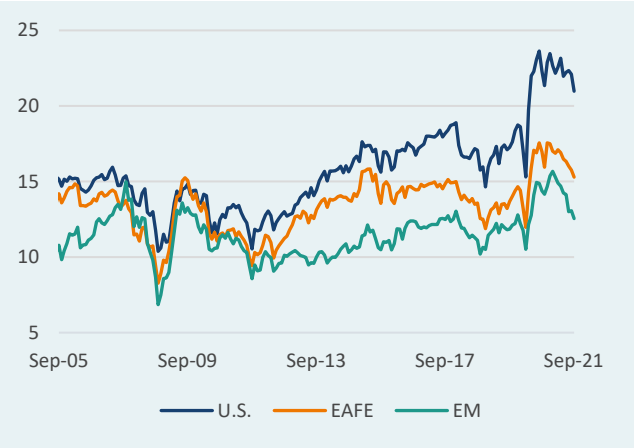
Source: Bloomberg, MSCI, as of 9/30/21, performance in USD terms

Equity valuations

Forward price/earnings equity multiples have been falling around the world, as earnings expectations rise faster than equity prices, though valuations remain very high. U.S. stock valuations are, and have been, incredibly elevated. A larger share of technology stocks in U.S. indices partly explains these historically high prices, as technology stocks tend to demand a higher P/E than most other industry sectors. Investors appear to agree that high prices of domestic stocks will likely translate to below-average future performance over the long-term, as reflected in industry capital market assumptions.

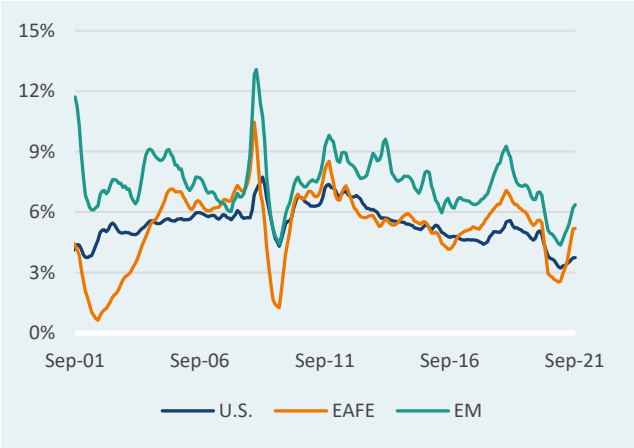
Global equity earnings yields improved considerably, as trailing 12-month earnings have rebounded from low levels. Price growth has moderated in the U.S. and has moved into negative territory across international developed and emerging market equities. The question moving ahead will be whether valuations (which remain rich) are sustainable absent further above-average earnings growth. Rising prices of major input costs, including labor and energy, have dampened the outlook for margins, which may lead companies to raise prices where possible. This pricing power varies by sector and by region.

FORWARD P/E RATIOS



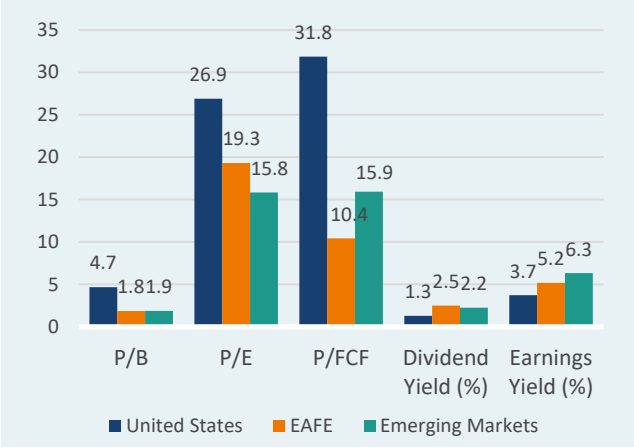
Source: MSCI, 12m forward P/E, as of 9/30/21

CURRENT EARNINGS YIELD (3-MONTH AVERAGE)



Source: Bloomberg, MSCI, as of 9/30/21

VALUATION METRICS (3-MONTH AVERAGE)



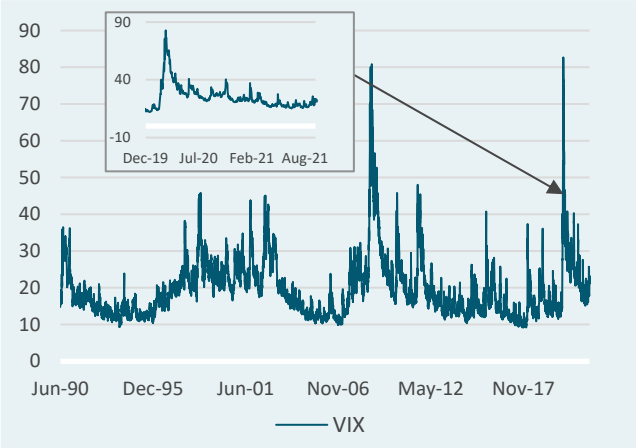
Source: Bloomberg, MSCI as of 9/30/21 - trailing P/E

Equity volatility

The Cboe VIX Index remained below the longer-term average of 19 through July and August, then increased throughout September, ending the quarter at an elevated 23.1. This compares to only 13.9% realized volatility over the past year. As is typical, international developed equity realized volatility has been slightly greater than that of the U.S. market. The realized volatility of emerging market equities, on the other hand, has been on par with the U.S. for a few years—a rare occurrence, historically speaking.

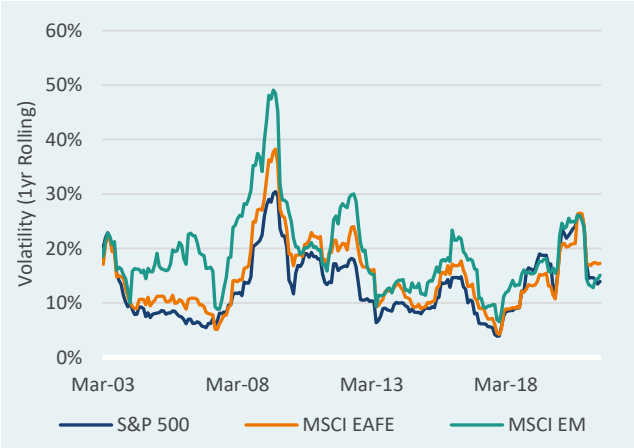
As we observed last quarter, it does seem that investors have put the 2020 pandemic-induced recession and its associated risks behind them. However, it is not clear that market risks have completely subsided, as the Delta-variant continues to spread, high inflation could indeed persist, and most governments are set to pull back generous stimulus programs. While U.S. equities have marched higher with very few road bumps over the year-to-date, the S&P 500 Index closed the quarter 5.1% below its previous record high level, snapping a streak of 231 consecutive trading days where it had not fallen more than 5% beneath the record high.

U.S. IMPLIED VOLATILITY (VIX)



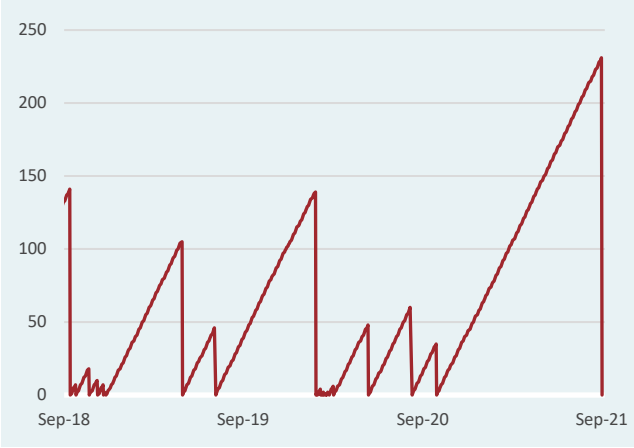
Source: Cboe, as of 9/30/21

REALIZED VOLATILITY



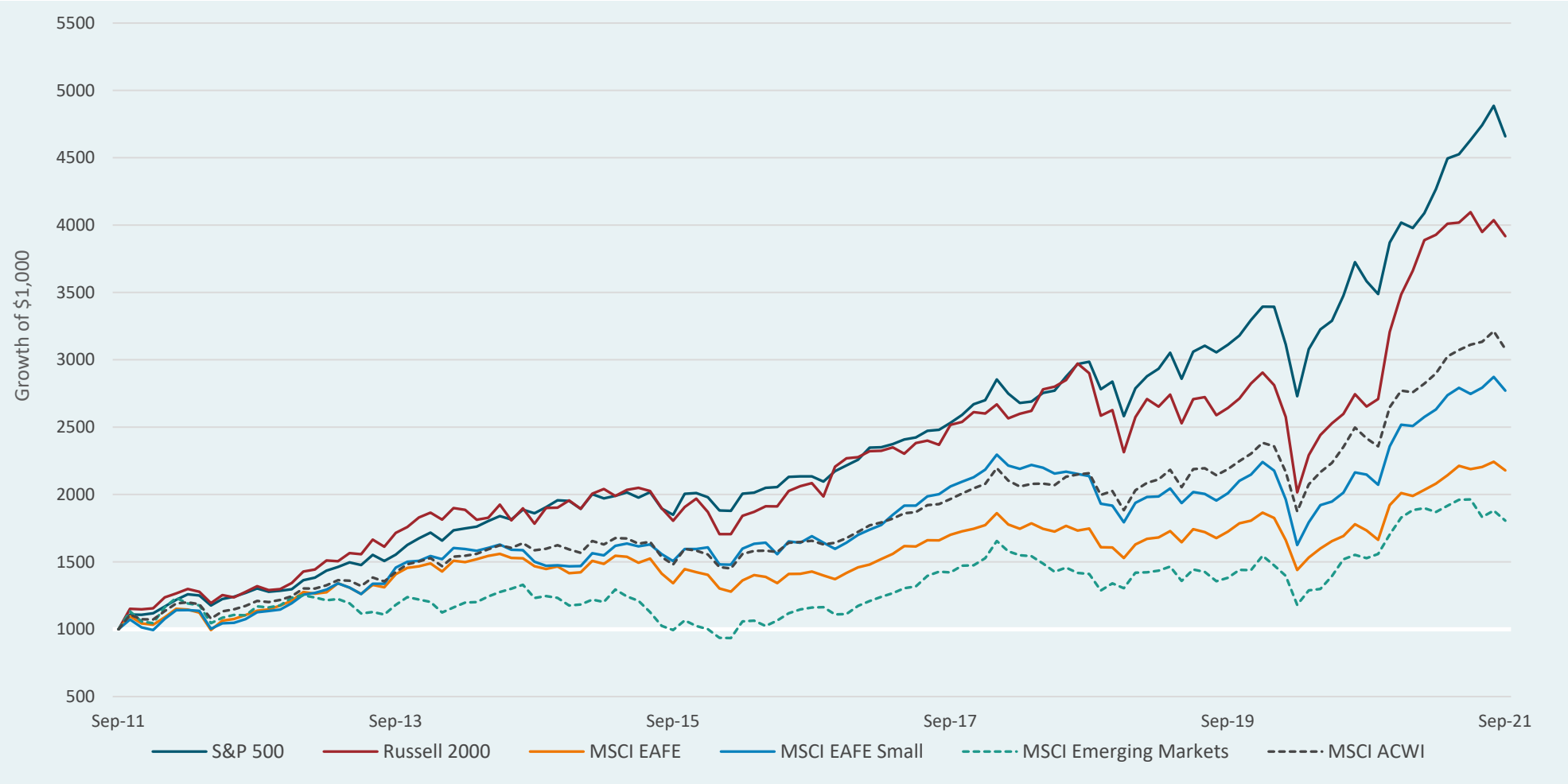
Source: Standard & Poor's, MSCI, as of 9/30/21

DAYS SINCE LAST 5% DRAWDOWN – S&P 500



Source: Standard & Poor's, Verus, as of 9/30/21

Long-term equity performance



Source: Morningstar, as of 9/30/21

Other assets

Currency

The U.S. dollar appreciated 2% during the quarter, continuing its modest rise year-to-date. This move coincided with a slight increase in U.S. Treasury yields and European government bond yields, resulting in little change to interest rate differentials.

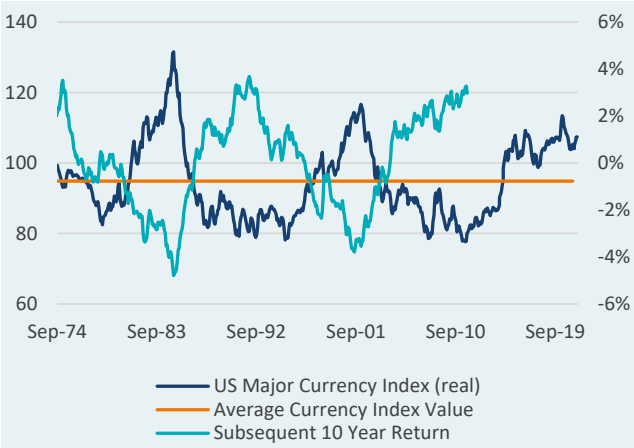
U.S. dollar sentiment reached its most optimistic level since late 2019, while sentiment surrounding the euro and pound turned from optimistic to pessimistic. Differences in monetary policy from country-to-country appear to be driving this shift in sentiment. While the U.S. Federal Reserve is expected to begin tapering asset purchases by year-end, the ECB is planning on simply shifting the complexion of its asset purchase program, and the BOE is planning on adjusting short-term interest rates higher while retaining the majority of its asset purchase program which targets longer-duration bonds.

The MSCI Currency Factor Mix Index, Verus' preferred currency beta benchmark, outperformed the currency portfolio of the MSCI ACWI ex-US Index over the twelve months ending September 30th, while exhibiting 1.1% less volatility.

BLOOMBERG DOLLAR SPOT INDEX

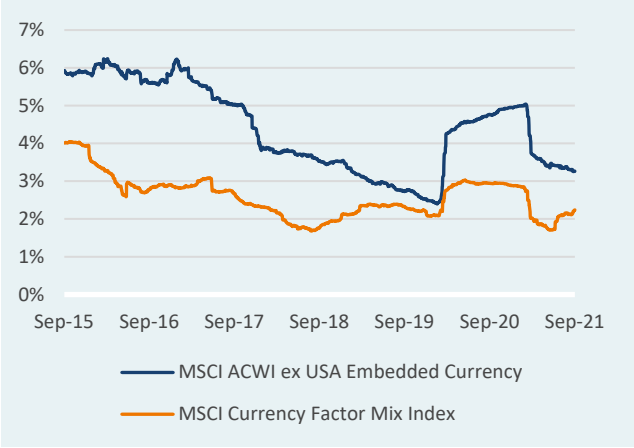
Source: Bloomberg, as of 9/30/21

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 9/30/21

TRAILING ONE-YEAR ANNUALIZED VOLATILITY



Source: Bloomberg, MSCI, as of 9/30/21

Appendix

Periodic table of returns

BEST ↑ ↓ WORST

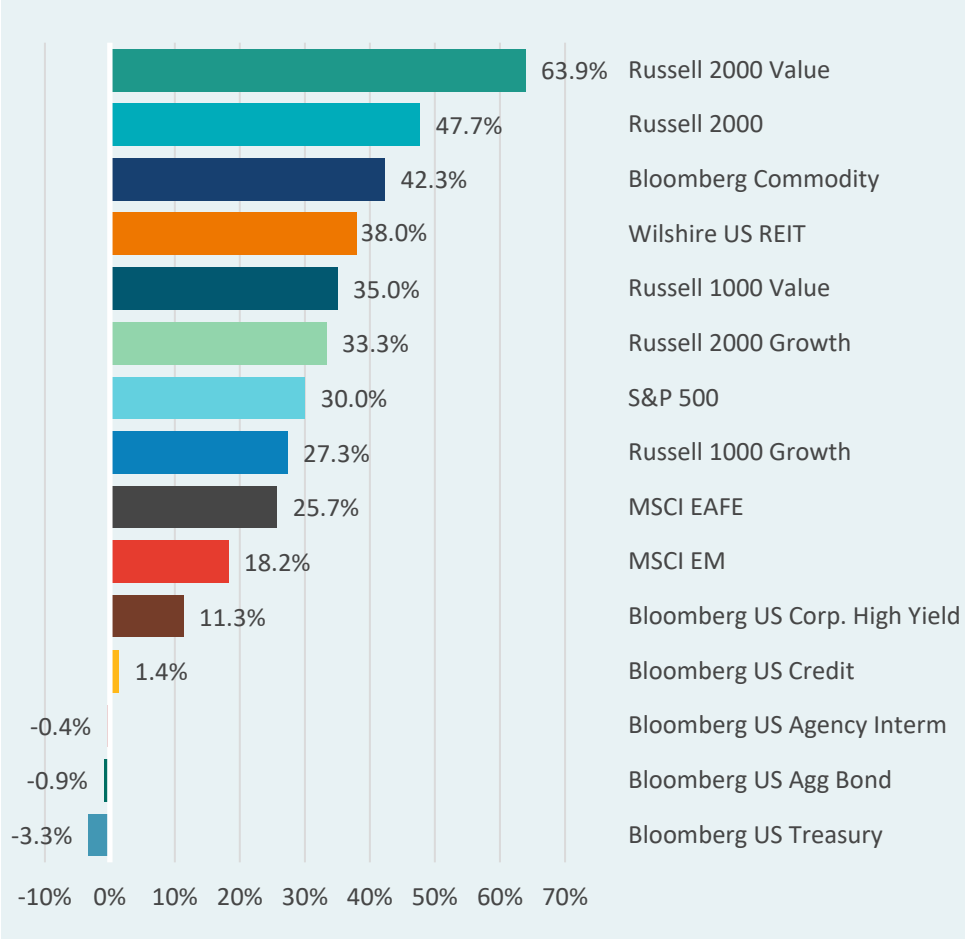
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	5-Year	10-Year
Commodities	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	29.1	22.8	19.7
Small Cap Value	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	22.9	17.1	16.8
Large Cap Value	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	16.1	15.3	15.7
Large Cap Equity	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	15.2	13.5	14.6
Large Cap Growth	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	14.3	11.0	13.5
Small Cap Equity	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.4	14.0	12.4	10.9	13.2
International Equity	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.0	10.3	8.3	9.2	8.8
Hedge Funds of Funds	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	6.4	8.9	8.1
Real Estate	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	5.4	8.8	8.0
60/40 Global Portfolio	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	5.0	6.1	6.1
Small Cap Growth	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	5.9	4.5
Cash	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	4.5	3.0
Emerging Markets Equity	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.2	2.9	0.6
US Bonds	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-1.6	1.1	-2.7

- Large Cap Equity
- Large Cap Value
- Large Cap Growth
- Small Cap Equity
- Small Cap Value
- Small Cap Growth
- International Equity
- Emerging Markets Equity
- US Bonds
- Cash
- Commodities
- Real Estate
- Hedge Funds of Funds
- 60% MSCI ACWI/40% BBgBarc Global Bond

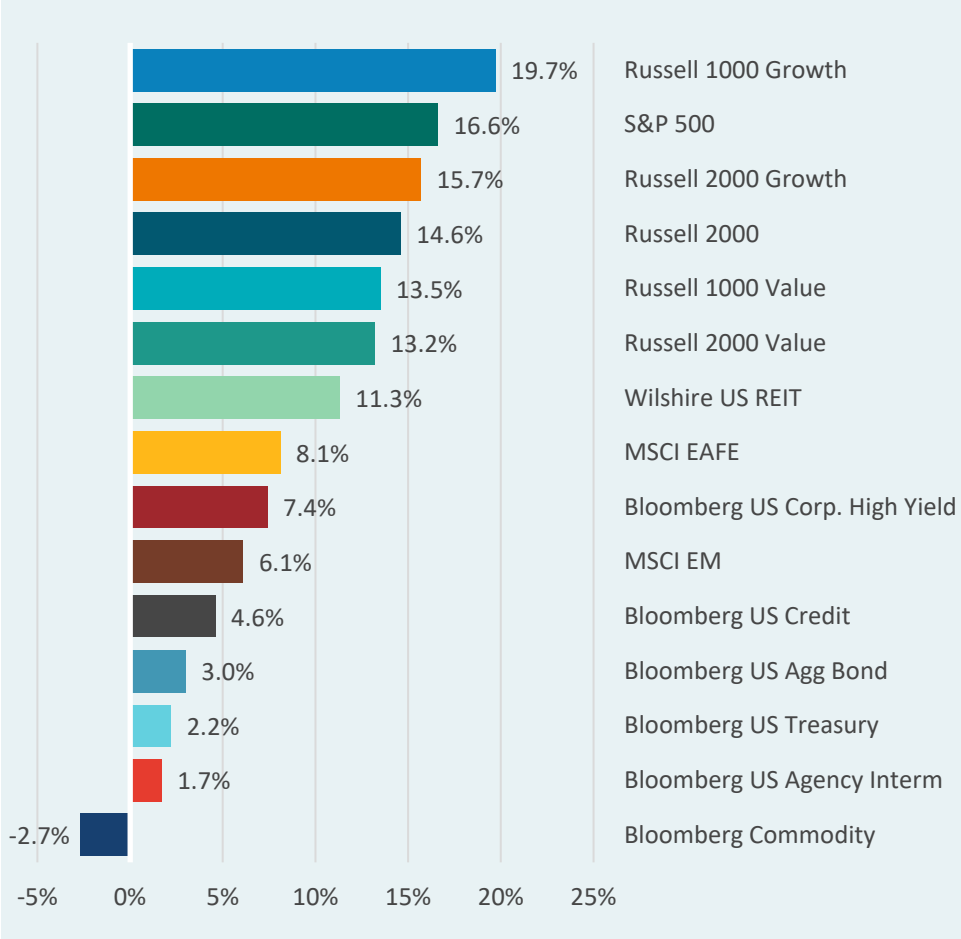
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 6/30/21.

Major asset class returns

ONE YEAR ENDING SEPTEMBER



TEN YEARS ENDING SEPTEMBER



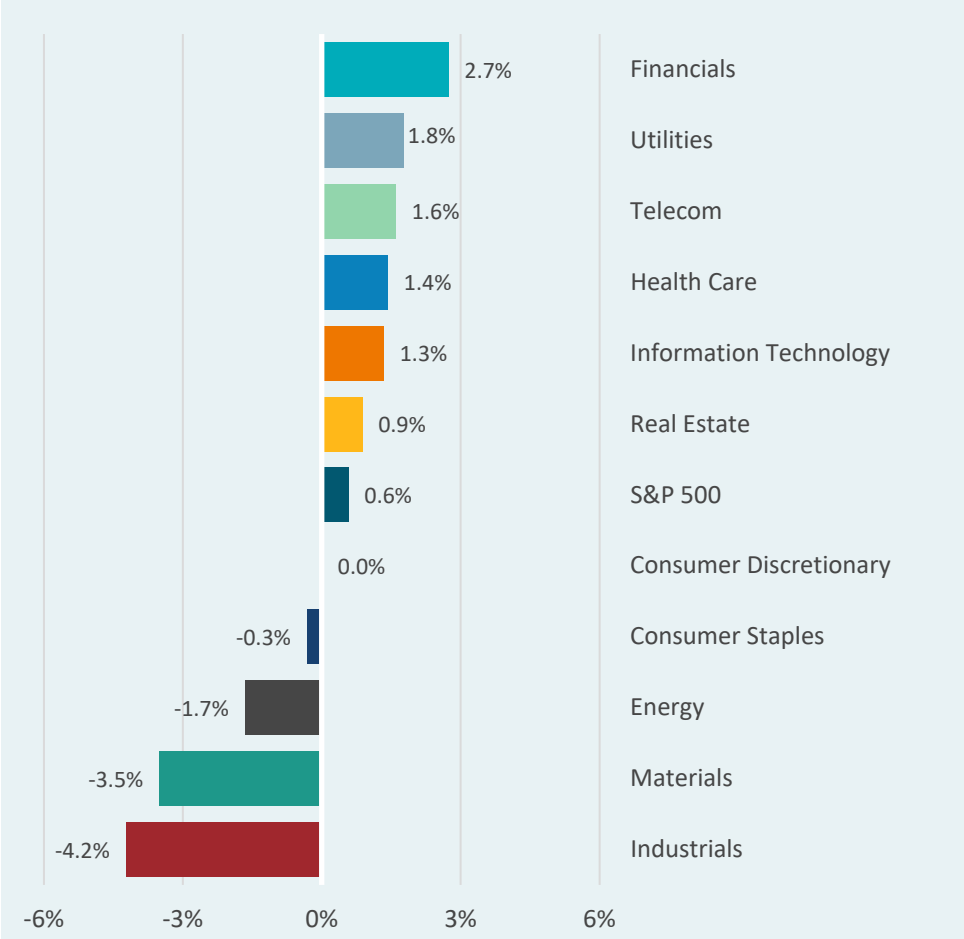
**Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.*

Source: Morningstar, as of 9/30/21

Source: Morningstar, as of 9/30/21

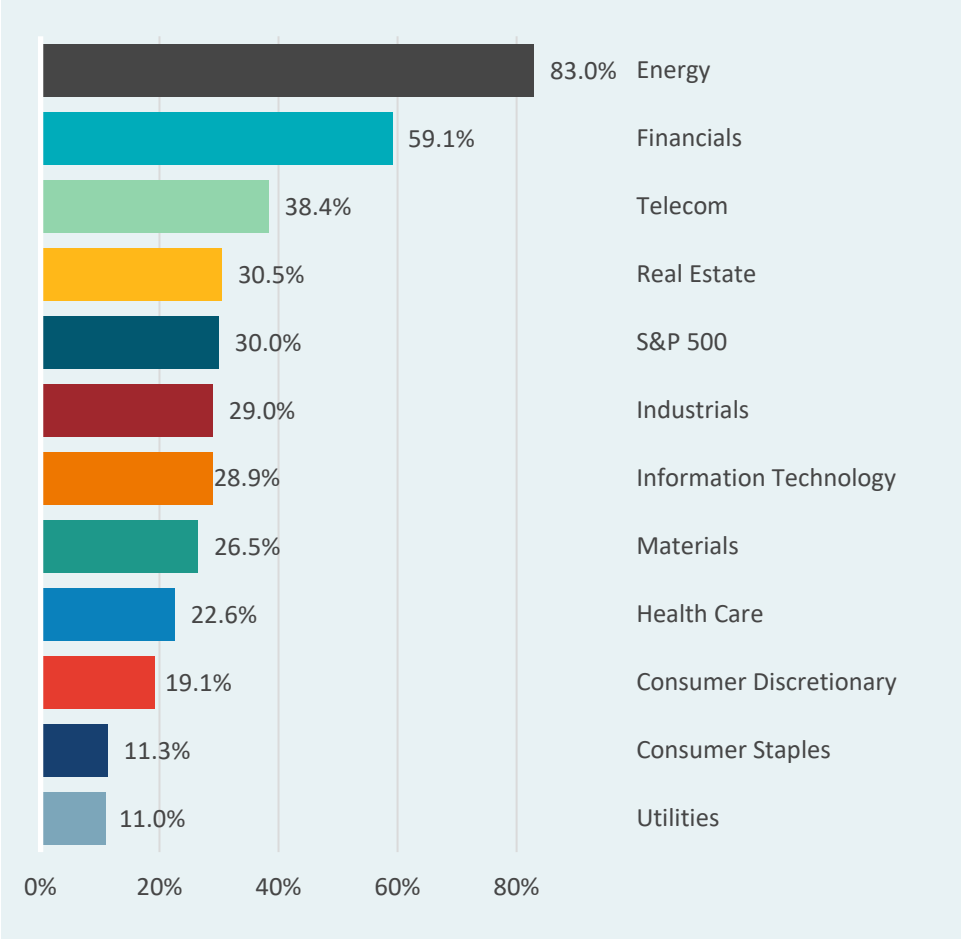
S&P 500 sector returns

Q3 2021



Source: Morningstar, as of 9/30/21

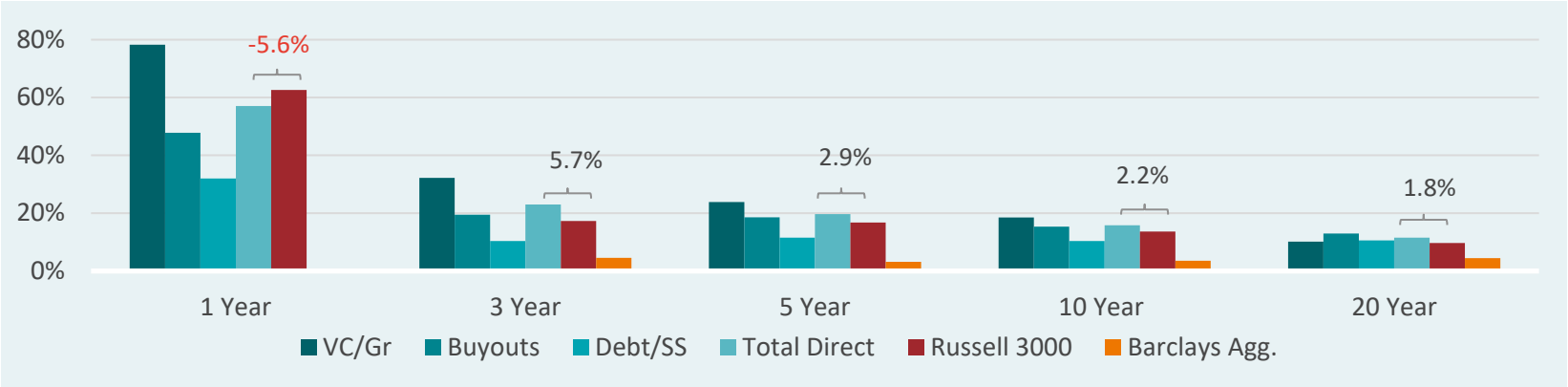
ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/21

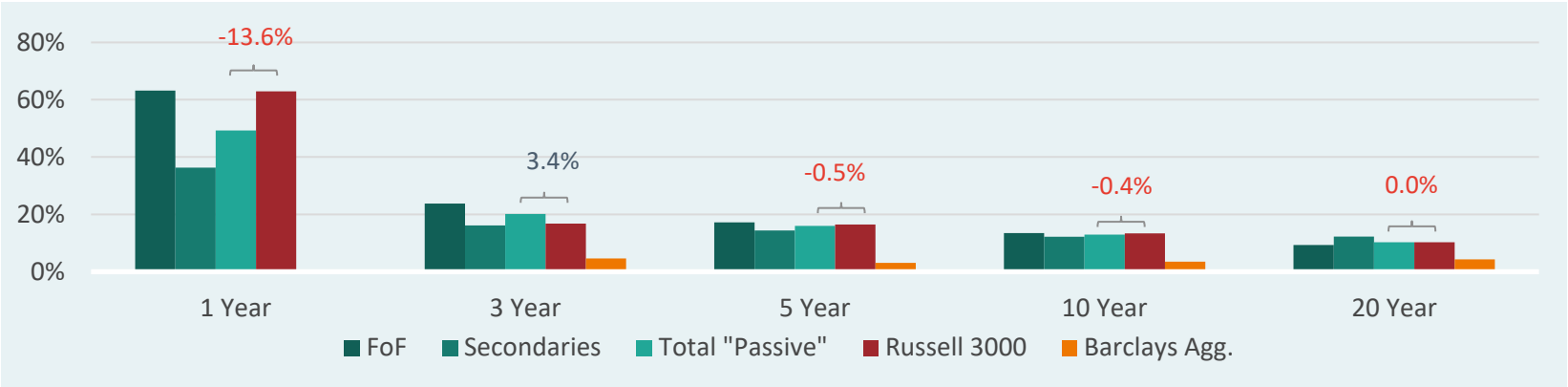
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments outperformed comparable public equites across all time periods, aside from the 1-year basis.

"PASSIVE" STRATEGIES

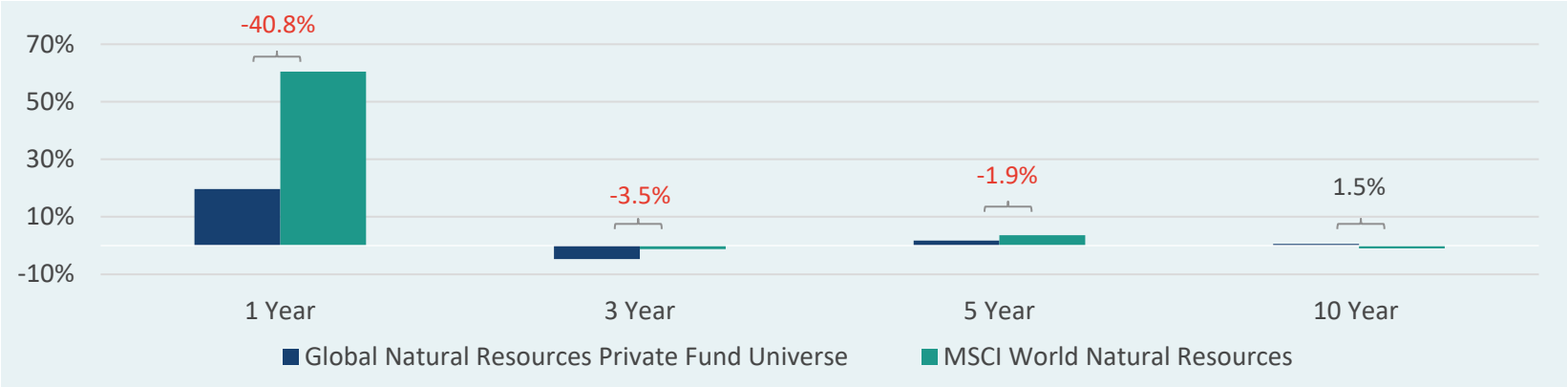


"Passive" strategies underperformed comparable public equities across all time periods, aside from the 3-year basis.

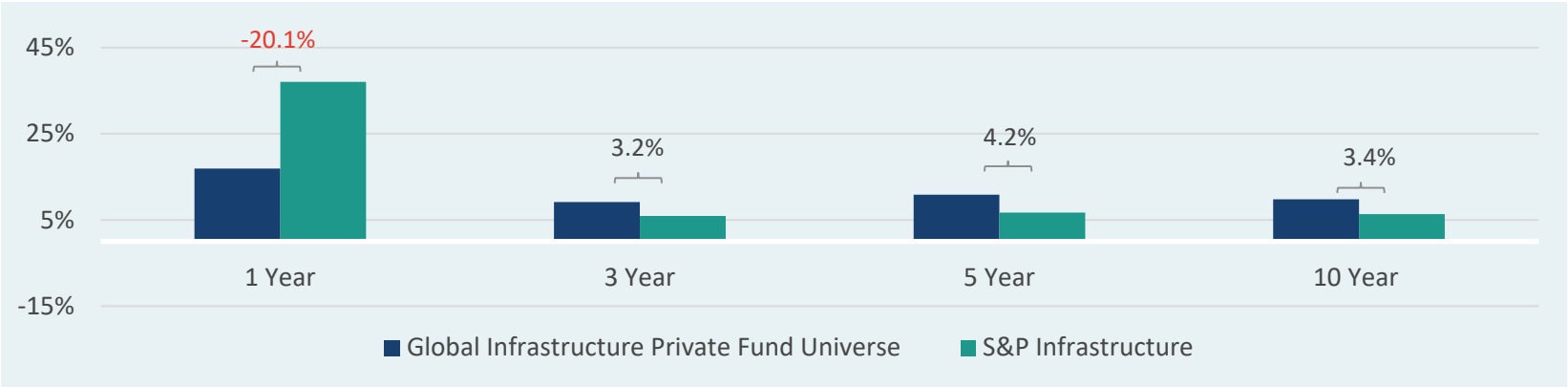
Sources: Refinitiv Cambridge Universe's PME Module: U.S. Private Equity Funds sub asset classes as of March 31, 2021. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.

Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



GLOBAL INFRASTRUCTURE FUNDS



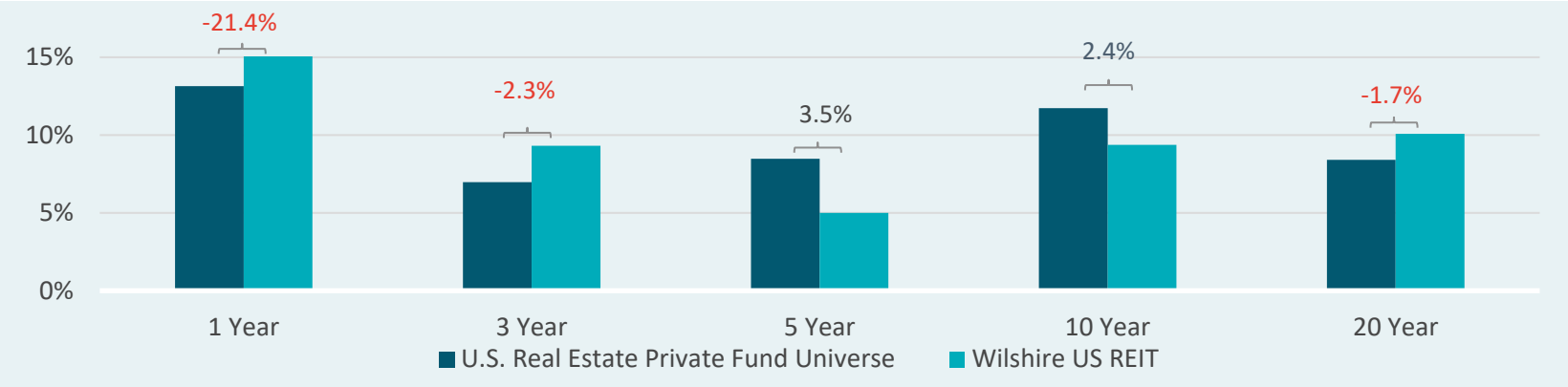
N.R. funds has lagged against the MSCI World Natural Resources benchmark across all time periods, aside from the 10-year.

Infra. funds outperformed the S&P Infra. across all periods, aside from the 1-year.

Sources: Refinitiv C|A PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of March 31, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

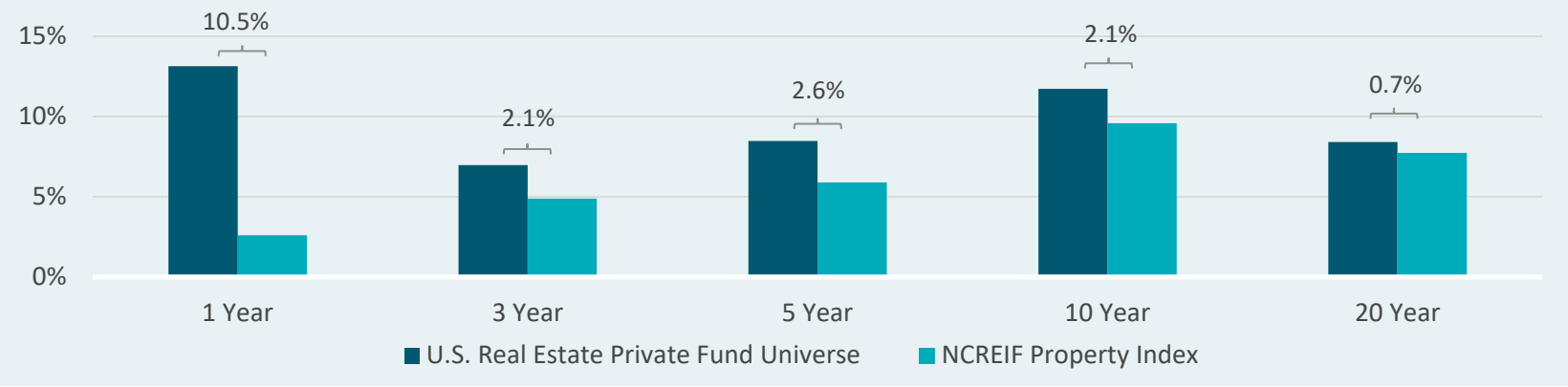
Private vs. liquid and core real estate performance

U.S. PRIVATE REAL ESTATE FUNDS VS. LIQUID UNIVERSE



U.S. Private R.E. funds lagged against the Wilshire U.S. REIT Index across all time periods, aside on the 5 and 10 year-basis.

U.S. PRIVATE REAL ESTATE FUNDS VS. CORE FUNDS



U.S. Private R.E. Funds outperformed the NCREIF Property Index across all time periods.

Sources: Refinitiv C|A PME: Global and U.S. Real Estate universes as of March 31, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(4.7)	0.6	15.9	30.0	16.0	16.9	16.6
S&P 500 Equal Weighted	(3.8)	(0.2)	18.9	40.9	14.3	14.6	16.0
DJ Industrial Average	(4.2)	(1.5)	12.1	24.2	11.0	15.7	14.7
Russell Top 200	(4.8)	0.6	15.2	28.6	17.3	18.2	17.2
Russell 1000	(4.6)	0.2	15.2	31.0	16.4	17.1	16.8
Russell 2000	(2.9)	(4.4)	12.4	47.7	10.5	13.5	14.6
Russell 3000	(4.5)	(0.1)	15.0	31.9	16.0	16.9	16.6
Russell Mid Cap	(4.1)	(0.9)	15.2	38.1	14.2	14.4	15.5
Style Index							
Russell 1000 Growth	(5.6)	1.2	14.3	27.3	22.0	22.8	19.7
Russell 1000 Value	(3.5)	(0.8)	16.1	35.0	10.1	10.9	13.5
Russell 2000 Growth	(3.8)	(5.7)	2.8	33.3	11.7	15.3	15.7
Russell 2000 Value	(2.0)	(3.0)	22.9	63.9	8.6	11.0	13.2

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	(4.1)	(1.1)	11.1	27.4	12.6	13.2	11.9
MSCI ACWI ex US	(3.2)	(3.0)	5.9	23.9	8.0	8.9	7.5
MSCI EAFE	(2.9)	(0.4)	8.3	25.7	7.6	8.8	8.1
MSCI EM	(4.0)	(8.1)	(1.2)	18.2	8.6	9.2	6.1
MSCI EAFE Small Cap	(3.6)	0.9	10.0	29.0	9.0	10.4	10.7
Style Index							
MSCI EAFE Growth	(3.9)	0.1	6.9	20.9	11.9	11.4	10.1
MSCI EAFE Value	(1.8)	(1.0)	9.6	30.7	3.0	6.0	6.0
Regional Index							
MSCI UK	(2.0)	(0.3)	12.2	31.2	2.4	4.8	5.4
MSCI Japan	2.8	4.6	5.9	22.1	7.5	9.4	8.4
MSCI Euro	(5.0)	(2.0)	10.5	29.5	7.9	9.3	8.3
MSCI EM Asia	(4.1)	(9.6)	(4.1)	13.9	10.0	10.7	8.5
MSCI EM Latin American	(10.3)	(13.3)	(5.6)	27.3	(1.4)	1.8	(1.1)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(0.7)	1.8	3.5	5.2	7.4	4.3	3.1
Bloomberg US Treasury Bills	0.0	0.0	0.0	0.1	1.2	1.2	0.7
Bloomberg US Agg Bond	(0.9)	0.1	(1.6)	(0.9)	5.4	2.9	3.0
Bloomberg US Universal	(0.9)	0.1	(1.1)	0.2	5.6	3.3	3.5
Duration							
Bloomberg US Treasury 1-3 Yr	(0.1)	0.1	(0.0)	0.0	2.7	1.6	1.2
Bloomberg US Treasury Long	(2.9)	0.5	(7.5)	(10.3)	9.2	3.3	4.4
Bloomberg US Treasury	(1.1)	0.1	(2.5)	(3.3)	4.9	2.2	2.2
Issuer							
Bloomberg US MBS	(0.4)	0.1	(0.7)	(0.4)	3.9	2.2	2.4
Bloomberg US Corp. High Yield	(0.0)	0.9	4.5	11.3	6.9	6.5	7.4
Bloomberg US Agency Interm	(0.4)	0.1	(0.5)	(0.4)	3.2	1.9	1.7
Bloomberg US Credit	(1.1)	(0.0)	(1.3)	1.4	7.1	4.4	4.6

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	5.0	6.6	29.1	42.3	6.9	4.5	(2.7)
Wilshire US REIT	(5.1)	1.6	24.8	38.0	10.4	7.0	11.3
CS Leveraged Loans	0.5	0.9	4.0	8.5	4.1	4.7	5.0
Alerian MLP	3.0	(5.7)	39.4	84.6	(5.2)	(3.5)	1.2
Regional Index							
JPM EMBI Global Div	(2.1)	(0.7)	(1.4)	4.4	5.7	3.9	5.8
JPM GBI-EM Global Div	(3.4)	(3.1)	(6.4)	2.6	3.7	2.1	1.1
Hedge Funds							
HFRI Composite	0.1	(0.0)	10.1	22.1	8.5	7.3	5.9
HFRI FOF Composite	0.8	1.4	6.4	15.0	6.7	5.9	4.5
Currency (Spot)							
Euro	(1.8)	(2.3)	(5.3)	(1.2)	(0.1)	0.6	(1.5)
Pound Sterling	(2.0)	(2.4)	(1.4)	4.3	1.1	0.7	(1.4)
Yen	(1.5)	(0.5)	(7.5)	(5.4)	0.6	(1.9)	(3.6)

Source: Morningstar, HFRI, as of 9/30/21

Definitions

Bloomberg US Weekly Consumer Comfort Index *- tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.langerresearch.com)*

University of Michigan Consumer Sentiment Index *- A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)*

NFIB Small Business Outlook *- Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (http://www.nfib-sbet.org/about/)*

NAHB Housing Market Index – *the housing market index is a weighted average of separate diffusion induces for three key single-family indices: market conditions for the sale of new homes at the present time, market conditions for the sale of new homes in the next six months, and the traffic of prospective buyers of new homes. The first two series are rated on a scale of Good, Fair, and Poor and the last is rated on a scale of High/Very High, Average, and Low/Very Low. A diffusion index is calculated for each series by applying the formula "(Good-Poor + 100)/2" to the present and future sales series and "(High/Very High-Low/Very Low + 100)/2" to the traffic series. Each resulting index is then seasonally adjusted and weighted to produce the HMI. Based on this calculation, the HMI can range between 0 and 100.*

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Tulare County Employees' Retirement Association

Investment Performance Review

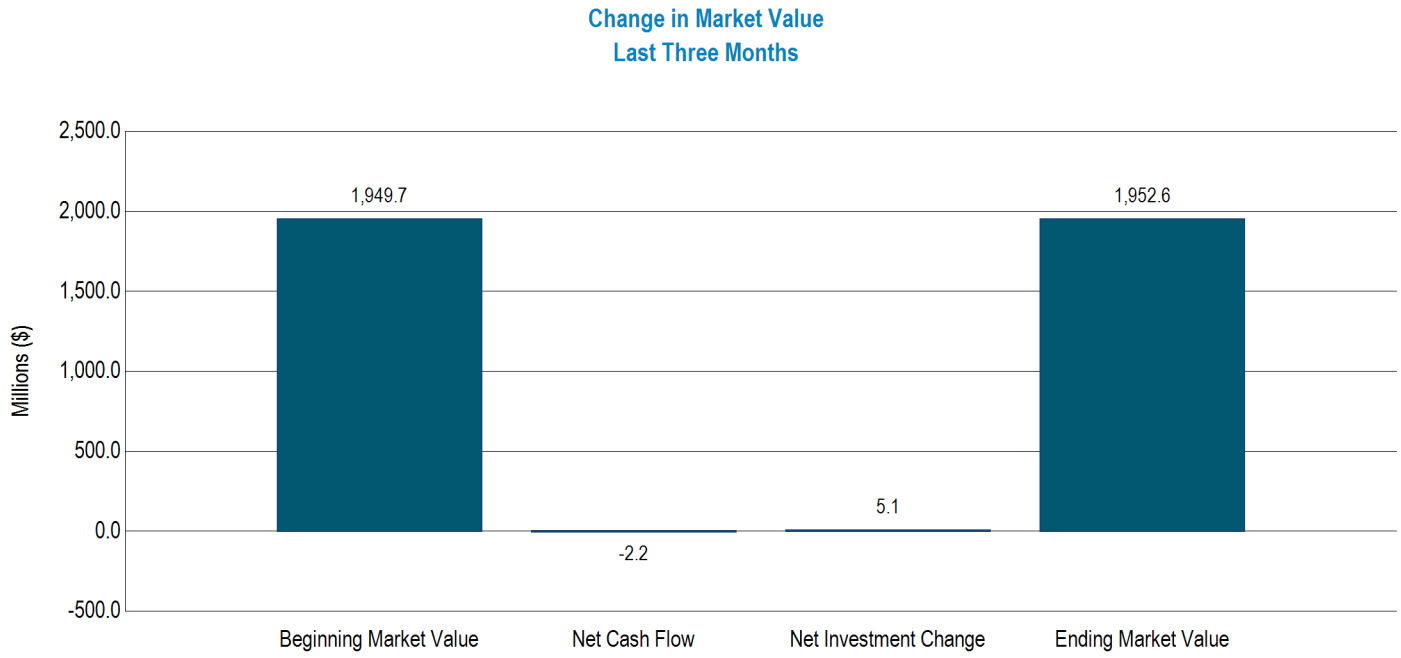
Period Ending: September 30, 2021

Verus

VERUSINVESTMENTS.COM

SEATTLE 206-622-3700
LOS ANGELES 310-297-1777
SAN FRANCISCO 415-362-3484
PITTSBURGH 412-784-6678

	Fiscal Year-To-Date
Beginning Market Value	$1,949,660,335
Net Cash Flow	-$2,152,976
Net Investment Change	$5,074,895
Ending Market Value	$1,952,582,254



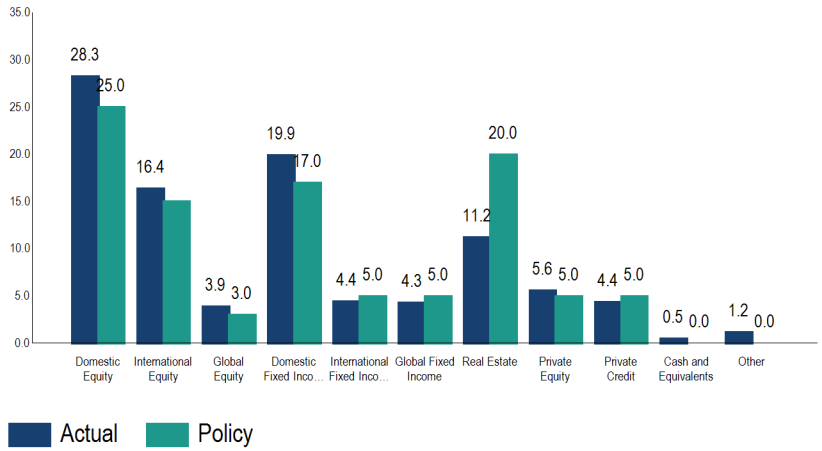
Contributions and withdrawals may include intra-account transfers between managers/funds.

Total Fund
Executive Summary (Net of Fees)

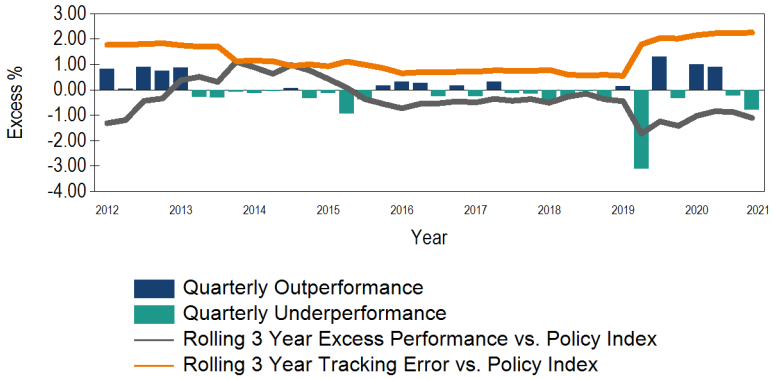
Period Ending: September 30, 2021

	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Total Fund	**0.2**	**8.8**	**0.2**	**19.0**	**8.9**	**8.9**	**8.5**	**5.7**	**6.8**
Policy Index	*1.0*	*9.0*	*1.0*	*18.0*	*10.0*	*9.5*	*8.7*	*6.6*	*7.4*
InvMetrics Public DB > $1B Net Rank	*37*	*65*	*37*	*89*	*85*	*87*	*83*	*92*	*78*
Total Domestic Equity	**-0.3**	**16.0**	**-0.3**	**33.7**	**14.6**	**16.5**	**16.4**	**10.3**	**10.0**
Russell 3000	*-0.1*	*15.0*	*-0.1*	*31.9*	*16.0*	*16.9*	*16.6*	*10.4*	*9.8*
InvMetrics Public DB US Eq Net Rank	*61*	*28*	*61*	*45*	*55*	*27*	*20*	*33*	*31*
Total International Equity	**-2.0**	**8.4**	**-2.0**	**27.5**	**10.1**	**10.2**	**8.0**	**3.5**	**6.8**
MSCI ACWI ex USA Gross	*-2.9*	*6.3*	*-2.9*	*24.4*	*8.5*	*9.4*	*8.0*	*4.9*	*7.6*
InvMetrics Public DB ex-US Eq Net Rank	*29*	*9*	*29*	*14*	*24*	*18*	*60*	*92*	*64*
Total Global Equity	**1.1**	**17.7**	**1.1**	**38.7**	**13.5**	**12.6**	**--**	**--**	**--**
MSCI ACWI Gross	*-1.0*	*11.5*	*-1.0*	*28.0*	*13.1*	*13.8*	*--*	*--*	*--*
InvMetrics Public DB Glbl Eq Net Rank	*1*	*2*	*1*	*9*	*9*	*37*	*--*	*--*	*--*
Total Fixed Income	**-0.4**	**-1.7**	**-0.4**	**1.2**	**4.0**	**2.8**	**3.2**	**4.3**	**4.4**
Bloomberg US Aggregate TR	*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*4.2*	*4.3*
InvMetrics Public DB US Fix Inc Net Rank	*99*	*94*	*99*	*32*	*99*	*54*	*45*	*27*	*39*

Actual vs Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Policy Index



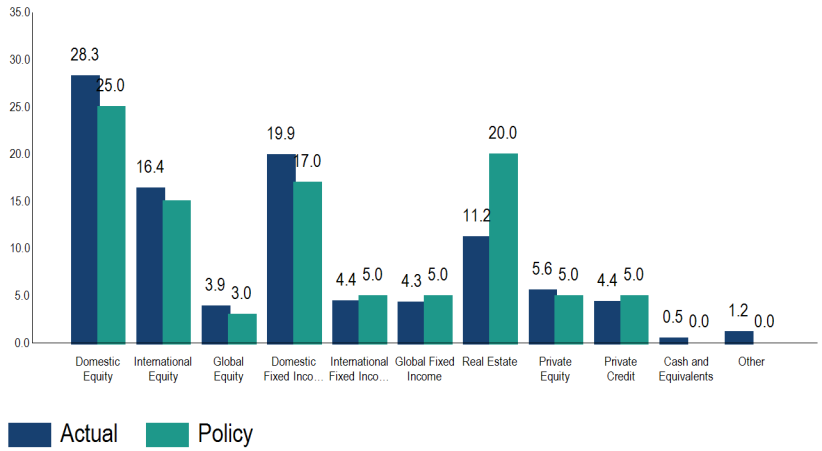
New Policy Index as of 10/1/2020: 25% Russell 3000, 15% MSCI ACWI ex US, 3% MSCI ACWI, 17% BBgBarc US Aggregate, 5% JPM GBI Global, 5% (50% JPM EMBI Global Div/50% JPM GBI EM Global Div), 20% NCREIF-ODCE, 5% Private Equity Returns, 5% Private Credit Returns. All return periods greater than 1-year are rolling annualized returns.

Total Fund
Executive Summary (Net of Fees)

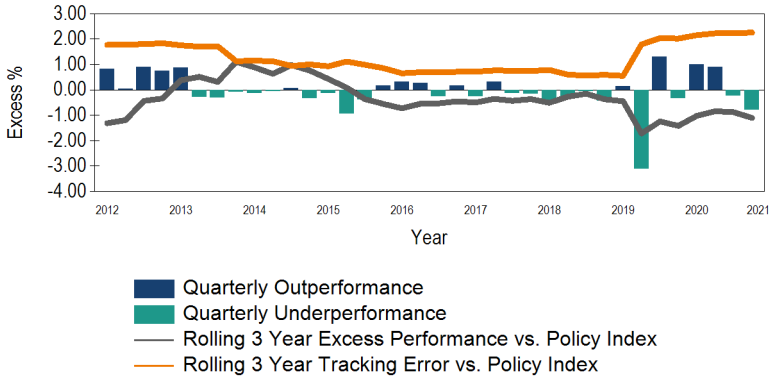
Period Ending: September 30, 2021

	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Total Domestic Fixed Income	**0.1**	**-0.7**	**0.1**	**0.8**	**5.7**	**3.5**	**3.7**	**--**	**--**
Bloomberg US Aggregate TR	*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	--	--
Total Global Fixed Income	**-1.6**	**-4.0**	**-1.6**	**-3.3**	**-2.4**	**0.2**	**--**	**--**	**--**
JPM GBI Global TR USD	*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	--	--	--
Total Emerging Markets Fixed Income	**-1.6**	**-3.6**	**-1.6**	**6.5**	**--**	**--**	**--**	**--**	**--**
50% JPM EMBI Global Div/50% JPM GBI EM Global Div	*-1.9*	*-3.9*	*-1.9*	*3.5*	--	--	--	--	--
Total Real Estate	**3.6**	**6.5**	**3.6**	**6.5**	**5.3**	**5.6**	**8.3**	**4.8**	**7.2**
NCREIF ODCE net 1Q Lag	*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	*5.3*	--
NCREIF-ODCE	*6.6*	*13.1*	*6.6*	*14.6*	*7.1*	*7.5*	*9.9*	*6.5*	*7.9*
Total Private Equity	**5.8**	**33.9**	**5.8**	**44.9**	**22.0**	**18.5**	**15.9**	**--**	**--**
Private Equity Benchmark	*5.8*	*33.9*	*5.8*	*44.9*	*22.0*	*18.5*	*15.1*	--	--
Total Private Credit	**-0.1**	**9.3**	**-0.1**	**16.7**	**9.5**	**--**	**--**	**--**	**--**
Private Credit Benchmark	*-0.1*	*9.3*	*-0.1*	*16.7*	*9.5*	--	--	--	--
Total Opportunistic	**6.2**	**18.7**	**6.2**	**24.4**	**2.2**	**7.2**	**12.3**	**--**	**--**

Actual vs Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Policy Index



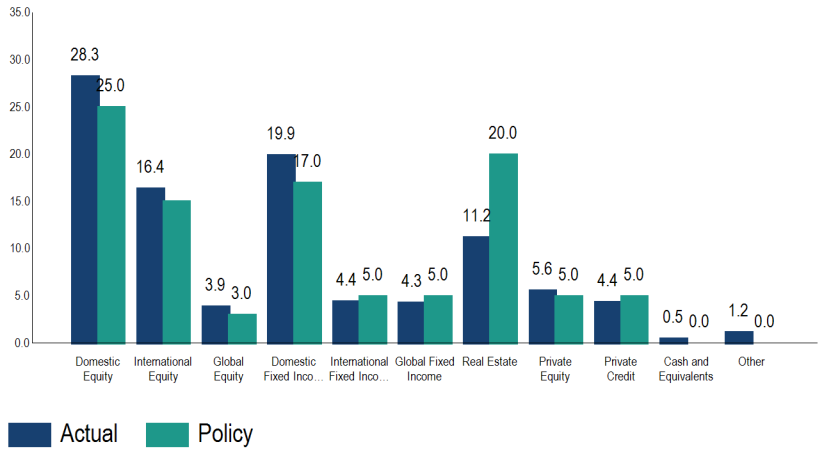
New Policy Index as of 10/1/2020: 25% Russell 3000, 15% MSCI ACWI ex US, 3% MSCI ACWI, 17% BBgBarc US Aggregate, 5% JPM GBI Global, 5% (50% JPM EMBI Global Div/50% JPM GBI EM Global Div), 20% NCREIF-ODCE, 5% Private Equity Returns, 5% Private Credit Returns. All return periods greater than 1-year are rolling annualized returns.

Total Fund
Executive Summary (Gross of Fees)

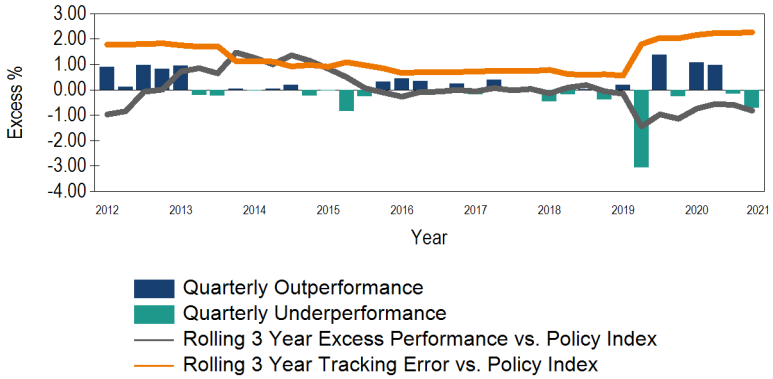
Period Ending: September 30, 2021

	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Total Fund	**0.3**	**9.0**	**0.3**	**19.3**	**9.2**	**9.2**	**8.9**	**--**	**--**
Policy Index	*1.0*	*9.0*	*1.0*	*18.0*	*10.0*	*9.5*	*8.7*	*--*	*--*
Total Domestic Equity	**-0.2**	**16.2**	**-0.2**	**34.1**	**15.0**	**16.9**	**16.9**	**--**	**--**
Russell 3000	*-0.1*	*15.0*	*-0.1*	*31.9*	*16.0*	*16.9*	*16.6*	*--*	*--*
Total International Equity	**-1.9**	**8.7**	**-1.9**	**28.0**	**10.5**	**10.5**	**8.4**	**--**	**--**
MSCI ACWI ex USA Gross	*-2.9*	*6.3*	*-2.9*	*24.4*	*8.5*	*9.4*	*8.0*	*--*	*--*
Total Global Equity	**1.3**	**18.3**	**1.3**	**39.8**	**14.4**	**13.5**	**--**	**--**	**--**
MSCI ACWI Gross	*-1.0*	*11.5*	*-1.0*	*28.0*	*13.1*	*13.8*	*--*	*--*	*--*
Total Fixed Income	**-0.3**	**-1.4**	**-0.3**	**1.5**	**4.3**	**3.2**	**3.6**	**--**	**--**
Bloomberg US Aggregate TR	*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*--*	*--*
Total Domestic Fixed Income	**0.2**	**-0.4**	**0.2**	**1.1**	**6.0**	**3.8**	**4.0**	**--**	**--**
Bloomberg US Aggregate TR	*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*--*	*--*
Total Global Fixed Income	**-1.5**	**-3.7**	**-1.5**	**-2.9**	**-2.0**	**0.7**	**--**	**--**	**--**
JPM GBI Global TR USD	*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	*--*	*--*	*--*

Actual vs Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Policy Index



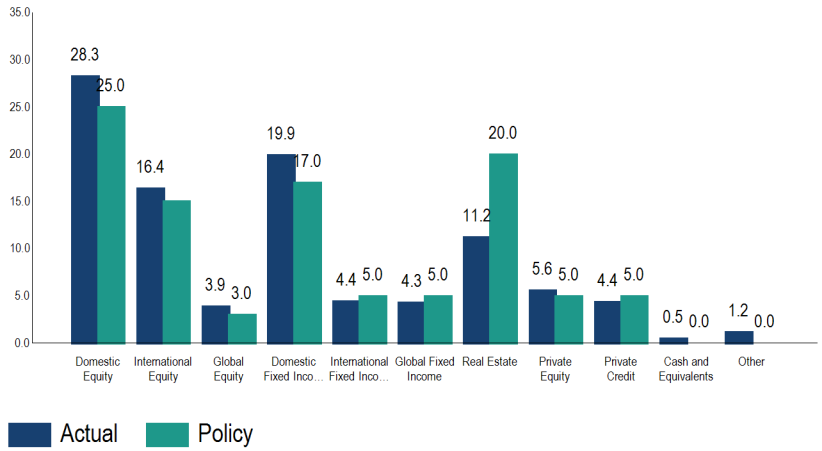
New Policy Index as of 10/1/2020: 25% Russell 3000, 15% MSCI ACWI ex US, 3% MSCI ACWI, 17% BBgBarc US Aggregate, 5% JPM GBI Global, 5% (50% JPM EMBI Global Div/50% JPM GBI EM Global Div), 20% NCREIF-ODCE, 5% Private Equity Returns, 5% Private Credit Returns. All return periods greater than 1-year are rolling annualized returns.

Total Fund
Executive Summary (Gross of Fees)

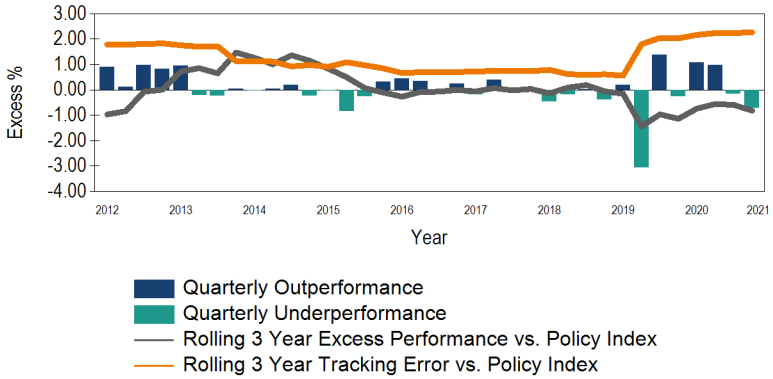
Period Ending: September 30, 2021

	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
Total Emerging Markets Fixed Income	**-1.4**	**-3.2**	**-1.4**	**7.1**	**--**	**--**	**--**	**--**	**--**
50% JPM EMBI Global Div/50% JPM GBI EM Global Div	*-1.9*	*-3.9*	*-1.9*	*3.5*	--	--	--	--	--
Total Real Estate	**3.6**	**6.5**	**3.6**	**6.5**	**5.3**	**5.7**	**8.6**	**--**	**--**
NCREIF ODCE net 1Q Lag	*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	--	--
NCREIF-ODCE	*6.6*	*13.1*	*6.6*	*14.6*	*7.1*	*7.5*	*9.9*	--	--
Total Private Equity	**5.8**	**33.9**	**5.8**	**44.9**	**22.0**	**18.6**	**15.6**	**--**	**--**
Private Equity Benchmark	*5.8*	*33.9*	*5.8*	*44.9*	*22.0*	*18.5*	*15.1*	--	--
Total Private Credit	**-0.1**	**9.3**	**-0.1**	**16.7**	**9.5**	**--**	**--**	**--**	**--**
Private Credit Benchmark	*-0.1*	*9.3*	*-0.1*	*16.7*	*9.5*	--	--	--	--
Total Opportunistic	**6.2**	**18.7**	**6.2**	**24.4**	**2.2**	**7.3**	**12.8**	**--**	**--**

Actual vs Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error Total Fund vs. Policy Index



New Policy Index as of 10/1/2020: 25% Russell 3000, 15% MSCI ACWI ex US, 3% MSCI ACWI, 17% BBgBarc US Aggregate, 5% JPM GBI Global, 5% (50% JPM EMBI Global Div/50% JPM GBI EM Global Div), 20% NCREIF-ODCE, 5% Private Equity Returns, 5% Private Credit Returns. All return periods greater than 1-year are rolling annualized returns.

Attribution Effects
3 Months Ending September 30, 2021

Performance Attribution

	Last 3 Mo.
Wtd. Actual Return	0.2%
Wtd. Index Return *	1.0%
Excess Return	**-0.8%**
Selection Effect	-0.5%
Allocation Effect	-0.7%
Interaction Effect	0.3%

*Calculated from policy benchmark returns and policy weightings of each compenent of the policy benchmark.

Attribution Summary
3 Months Ending September 30, 2021

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Domestic Equity	-0.3%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	-0.1%
Total International Equity	-2.0%	-2.9%	0.9%	0.1%	-0.1%	0.0%	0.1%
Total Global Equity	1.1%	-1.0%	2.0%	0.1%	0.0%	0.0%	0.1%
Total Domestic Fixed Income	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Total Global Fixed Income	-1.6%	-1.1%	-0.5%	0.0%	0.0%	0.0%	0.0%
Total Emerging Markets Fixed Income	-1.6%	-1.9%	0.3%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	3.6%	6.6%	-3.0%	-0.6%	-0.7%	0.3%	-1.0%
Total Private Equity	5.8%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Private Credit	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Cash	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Total	**0.2%**	**1.0%**	**-0.8%**	**-0.5%**	**-0.7%**	**0.3%**	**-0.8%**

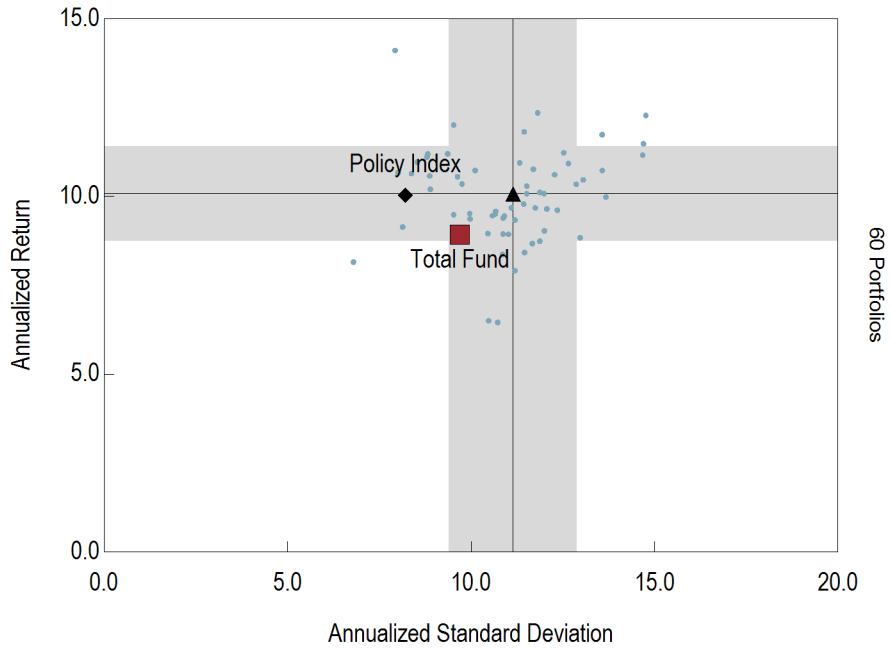
Weighted returns shown in attribution analysis may differ from actual returns. Wtd. Actual Return is the sum of the products of each group's return and its respective weight at the beginning of the period.

Total Fund
Risk Analysis - 3 Years (Net of Fees)

Period Ending: September 30, 2021

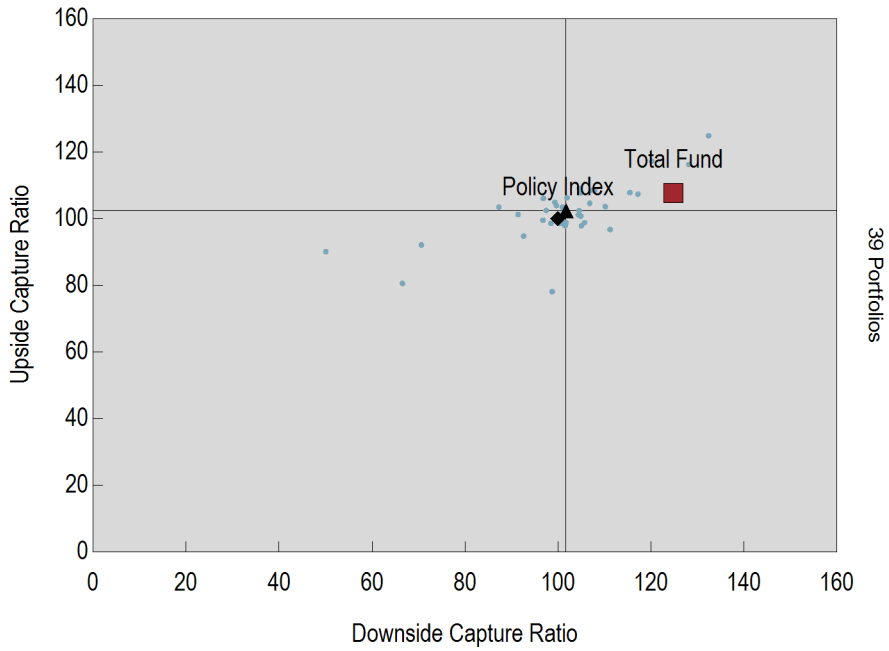
	Anlzd Ret	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	8.92%	9.69%	-2.73%	1.16	2.17%	0.97	0.80	-0.51	107.71%	124.82%

Risk vs. Return



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > $1B Net

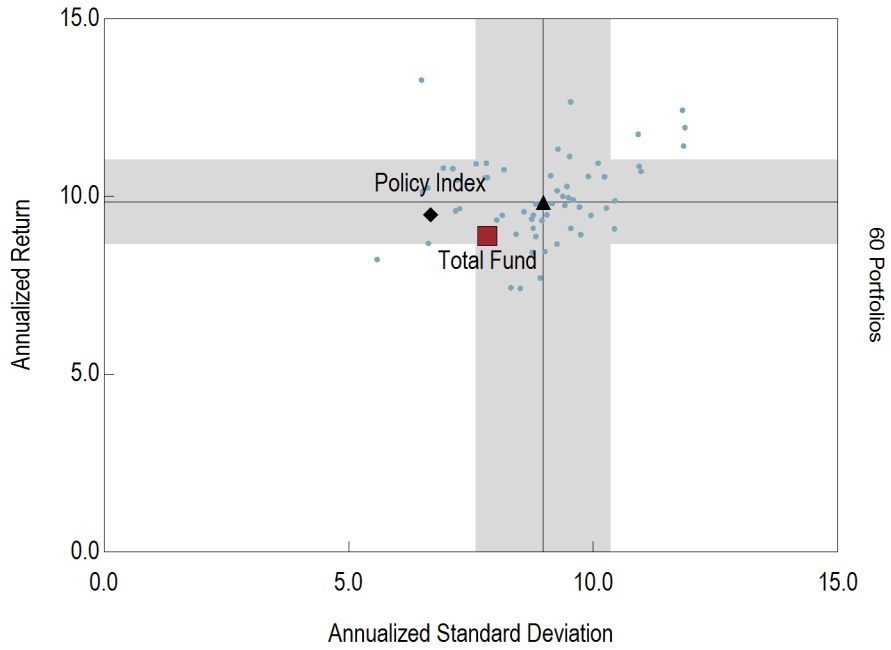
Up Markets vs. Down Markets



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > $1B Net

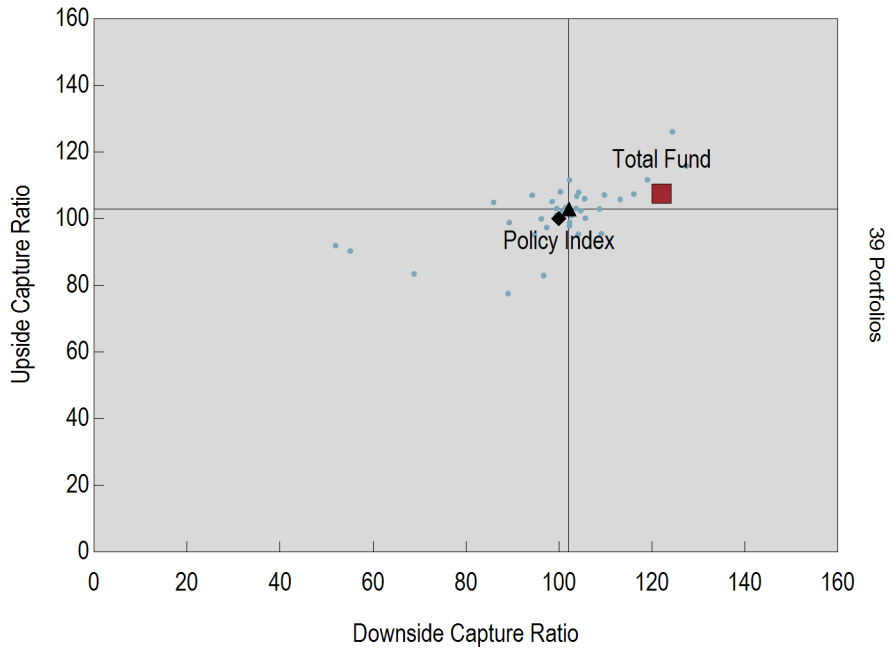
	Anlzd Ret	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	8.88%	7.83%	-2.07%	1.15	1.76%	0.97	0.99	-0.34	107.54%	122.06%

Risk vs. Return



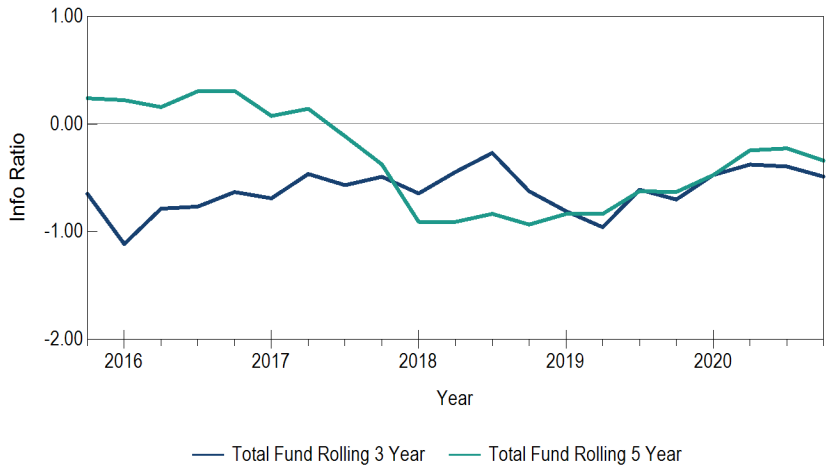
- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > $1B Net

Up Markets vs. Down Markets

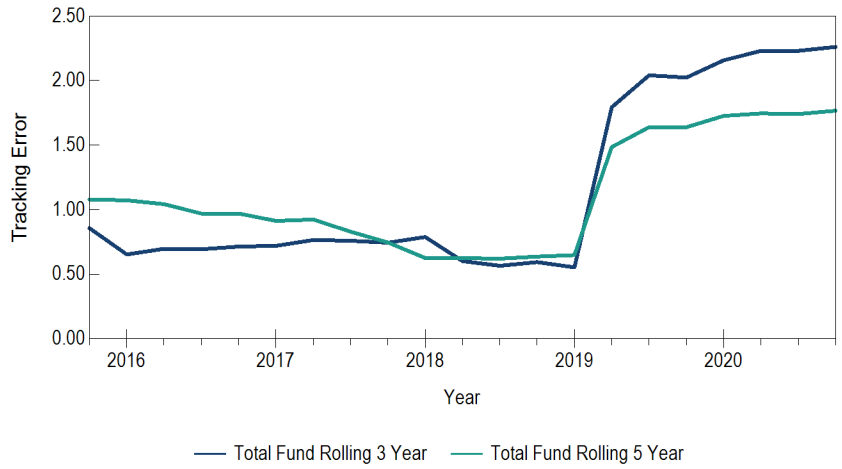


- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > $1B Net

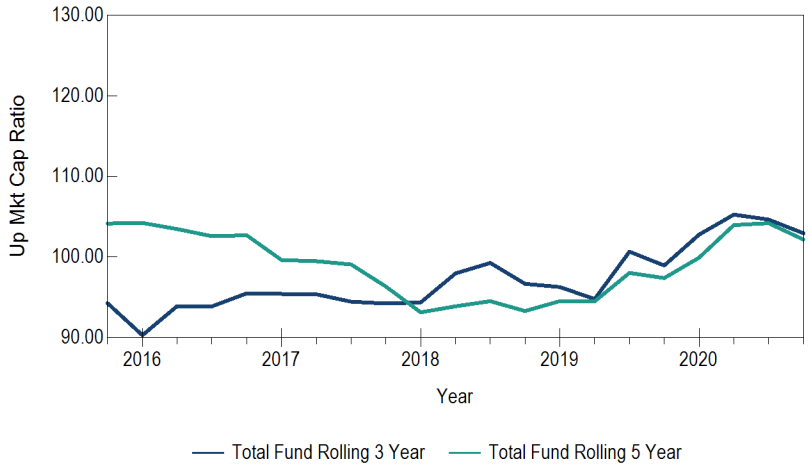
Rolling Information Ratio



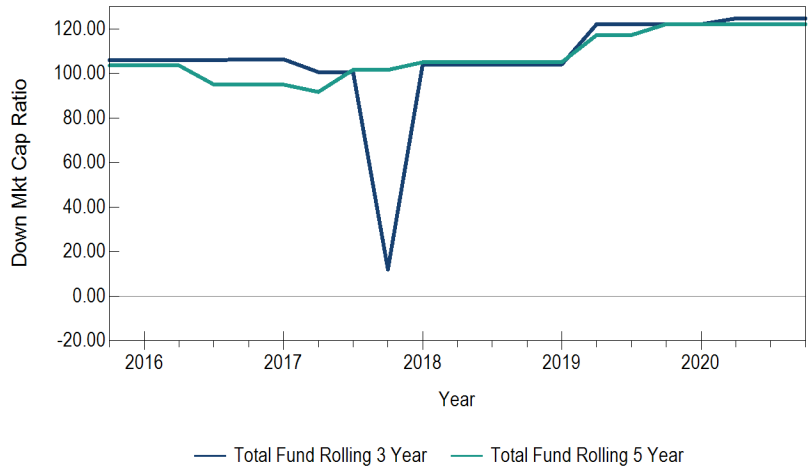
Rolling Tracking Error



Rolling Up Market Capture Ratio (%)



Rolling Down Market Capture Ratio (%)



Total Fund
Performance Summary (Net of Fees)

Period Ending: September 30, 2021

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Total Fund	**1,952,582,254**	**100.0**	**0.2**	**8.8**	**0.2**	**19.0**	**8.9**	**8.9**	**8.5**	**8.9**	**15.4**	**-2.9**	**13.9**	**7.1**
Policy Index			*1.0*	*9.0*	*1.0*	*18.0*	*10.0*	*9.5*	*8.7*	*10.8*	*16.1*	*-2.4*	*14.0*	*8.0*
InvMetrics Public DB > $1B Net Rank			*37*	*65*	*37*	*89*	*85*	*87*	*83*	*80*	*75*	*29*	*79*	*74*
Total Domestic Equity	**551,916,901**	**28.3**	**-0.3**	**16.0**	**-0.3**	**33.7**	**14.6**	**16.5**	**16.4**	**18.2**	**29.8**	**-5.4**	**21.9**	**11.1**
Russell 3000			*-0.1*	*15.0*	*-0.1*	*31.9*	*16.0*	*16.9*	*16.6*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*
InvMetrics Public DB US Eq Net Rank			*61*	*28*	*61*	*45*	*55*	*27*	*20*	*44*	*59*	*34*	*18*	*80*
SSGA S&P 500 Flagship Fund	210,822,110	10.8	0.6	15.9	0.6	29.9	16.0	16.9	16.6	18.3	31.5	-4.4	21.8	12.0
S&P 500			*0.6*	*15.9*	*0.6*	*30.0*	*16.0*	*16.9*	*16.6*	*18.4*	*31.5*	*-4.4*	*21.8*	*12.0*
eV US Large Cap Core Equity Net Rank			*32*	*39*	*32*	*40*	*26*	*19*	*14*	*29*	*29*	*32*	*46*	*20*
QMA Large Cap Core	68,907,279	3.5	0.1	17.7	0.1	31.0	12.8	15.0	16.2	12.0	28.6	-6.8	22.1	12.1
S&P 500			*0.6*	*15.9*	*0.6*	*30.0*	*16.0*	*16.9*	*16.6*	*18.4*	*31.5*	*-4.4*	*21.8*	*12.0*
eV US Large Cap Core Equity Net Rank			*51*	*19*	*51*	*29*	*68*	*54*	*25*	*66*	*56*	*62*	*43*	*19*
Ivy Large Cap Growth	75,728,494	3.9	1.3	16.3	1.3	26.0	21.2	22.2	19.2	30.9	36.6	2.7	29.5	1.6
Russell 1000 Growth			*1.2*	*14.3*	*1.2*	*27.3*	*22.0*	*22.8*	*19.7*	*38.5*	*36.4*	*-1.5*	*30.2*	*7.1*
eV US Large Cap Growth Equity Net Rank			*30*	*19*	*30*	*54*	*42*	*38*	*25*	*64*	*25*	*16*	*46*	*70*
Boston Partners Large Cap Value	68,636,362	3.5	-1.7	19.2	-1.7	41.5	9.2	12.2	14.1	2.4	23.8	-9.0	19.6	14.2
Russell 1000 Value			*-0.8*	*16.1*	*-0.8*	*35.0*	*10.1*	*10.9*	*13.5*	*2.8*	*26.5*	*-8.3*	*13.7*	*17.3*
eV US Large Cap Value Equity Net Rank			*80*	*28*	*80*	*24*	*67*	*43*	*30*	*57*	*75*	*51*	*26*	*47*
SSGA US Extended Market Index	63,388,007	3.2	-3.2	--	-3.2	--	--	--	--	--	--	--	--	--
Dow Jones U.S. Completion Total Stock Market			*-3.3*	*--*	*-3.3*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
William Blair SMID Cap Growth	32,532,518	1.7	-1.2	7.0	-1.2	29.7	14.9	19.4	17.8	32.6	31.1	-1.7	29.3	7.2
Russell 2500 Growth			*-3.5*	*4.8*	*-3.5*	*32.0*	*16.0*	*18.2*	*17.2*	*40.5*	*32.7*	*-7.5*	*24.5*	*9.7*
eV US Mid Cap Growth Equity Net Rank			*79*	*77*	*79*	*59*	*95*	*54*	*42*	*64*	*78*	*30*	*14*	*28*
Lee Munder Small Value	31,902,130	1.6	-0.3	21.9	-0.3	58.1	8.6	10.2	12.7	3.0	26.3	-15.5	7.7	27.3
Russell 2000 Value			*-3.0*	*22.9*	*-3.0*	*63.9*	*8.6*	*11.0*	*13.2*	*4.6*	*22.4*	*-12.9*	*7.8*	*31.7*
eV US Small Cap Value Equity Net Rank			*19*	*53*	*19*	*51*	*50*	*62*	*70*	*56*	*25*	*56*	*71*	*38*
Total International Equity	**319,652,692**	**16.4**	**-2.0**	**8.4**	**-2.0**	**27.5**	**10.1**	**10.2**	**8.0**	**13.4**	**22.7**	**-14.5**	**26.5**	**5.9**
MSCI ACWI ex USA Gross			*-2.9*	*6.3*	*-2.9*	*24.4*	*8.5*	*9.4*	*8.0*	*11.1*	*22.1*	*-13.8*	*27.8*	*5.0*
InvMetrics Public DB ex-US Eq Net Rank			*29*	*9*	*29*	*14*	*24*	*18*	*60*	*41*	*54*	*42*	*77*	*19*

Shenkman High Yield liquidated 3/11/2019. PGIM EMD funded 8/26/19. Gresham Commodity and Wellington Commodity liquidated 9/27/19. American Realty funded 12/20/2019. Titan and Aetos liquidated 1Q 2020. SSGA Russell Small Cap replaced with SSGA US Extended Market Index on 6/10/21. Invesco Commercial Mortgage funded 9/1/21.

Total Fund
Performance Summary (Net of Fees)

Period Ending: September 30, 2021

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
SSGA MSCI ACWI Ex US Index Fund	117,055,191	6.0	-3.0	6.0	-3.0	24.0	8.2	9.1	7.7	10.9	21.8	-14.0	27.5	4.7
MSCI ACWI ex USA			*-3.0*	*5.9*	*-3.0*	*23.9*	*8.0*	*8.9*	*7.5*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*
eV All EAFE Equity Net Rank			*88*	*78*	*88*	*62*	*47*	*50*	*82*	*36*	*54*	*38*	*45*	*15*
PIMCO RAE Fundamental Global Ex US Fund	102,539,813	5.3	-2.9	11.4	-2.9	37.1	5.2	7.7	--	1.7	16.1	-15.1	26.0	13.0
MSCI ACWI ex USA Value			*-2.3*	*9.1*	*-2.3*	*31.4*	*3.8*	*6.4*	--	*-0.8*	*15.7*	*-14.0*	*22.7*	*8.9*
eV EAFE Value Equity Net Rank			*81*	*33*	*81*	*29*	*50*	*38*	--	*61*	*86*	*38*	*38*	*1*
SGA Global Growth	100,057,689	5.1	0.2	8.5	0.2	23.5	16.3	--	--	26.0	30.5	--	--	--
MSCI ACWI ex USA Growth			*-3.6*	*2.7*	*-3.6*	*17.0*	*11.9*	--	--	*22.2*	*27.3*	--	--	--
eV ACWI ex-US Growth Equity Net Rank			*43*	*41*	*43*	*50*	*32*	--	--	*50*	*42*	--	--	--
Total Global Equity	**76,329,922**	**3.9**	**1.1**	**17.7**	**1.1**	**38.7**	**13.5**	**12.6**	**--**	**14.3**	**24.2**	**-15.9**	**32.6**	**15.1**
MSCI ACWI Gross			*-1.0*	*11.5*	*-1.0*	*28.0*	*13.1*	*13.8*	--	*16.8*	*27.3*	*-8.9*	*24.6*	*8.5*
InvMetrics Public DB Glbl Eq Net Rank			*1*	*2*	*1*	*9*	*9*	*37*	--	*48*	*59*	*95*	*1*	*3*
Skellig Water Fund (aka KBI)	76,329,922	3.9	1.1	17.7	1.1	38.7	13.5	12.6	--	14.3	24.2	-15.9	32.6	15.1
MSCI ACWI			*-1.1*	*11.1*	*-1.1*	*27.4*	*12.6*	*13.2*	--	*16.3*	*26.6*	*-9.4*	*24.0*	*7.9*
eV Global All Cap Equity Net Rank			*11*	*8*	*11*	*18*	*47*	*58*	--	*59*	*65*	*91*	*12*	*6*
Total Fixed Income	**558,348,455**	**28.6**	**-0.4**	**-1.7**	**-0.4**	**1.2**	**4.0**	**2.8**	**3.2**	**4.7**	**8.1**	**0.1**	**3.9**	**5.1**
Bloomberg US Aggregate TR			*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
InvMetrics Public DB US Fix Inc Net Rank			*99*	*94*	*99*	*32*	*99*	*54*	*45*	*99*	*49*	*60*	*46*	*36*
Total Domestic Fixed Income	**388,760,174**	**19.9**	**0.1**	**-0.7**	**0.1**	**0.8**	**5.7**	**3.5**	**3.7**	**7.9**	**9.0**	**-0.2**	**4.1**	**4.8**
Bloomberg US Aggregate TR			*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
BlackRock Fixed Income	147,713,802	7.6	0.0	-1.4	0.0	-0.5	5.8	3.2	3.4	8.4	8.7	0.1	3.6	2.9
Bloomberg US Aggregate TR			*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV All US Fixed Inc Net Rank			*57*	*86*	*57*	*88*	*38*	*53*	*53*	*26*	*44*	*53*	*56*	*54*
Doubleline Core Plus	117,816,600	6.0	0.3	0.0	0.3	1.4	4.6	2.9	--	5.2	8.3	-0.3	3.9	4.6
Bloomberg US Aggregate TR			*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	--	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV US Core Plus Fixed Inc Net Rank			*25*	*36*	*25*	*56*	*98*	*99*	--	*98*	*90*	*34*	*87*	*53*
MacKay Shields Core Plus	123,229,773	6.3	0.1	-0.4	0.1	1.9	6.5	3.9	--	9.9	9.6	-1.0	4.5	4.7
Bloomberg US Aggregate TR			*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	--	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV US Core Plus Fixed Inc Net Rank			*75*	*50*	*75*	*42*	*37*	*51*	--	*22*	*56*	*74*	*62*	*47*
Total Global Fixed Income	**83,592,527**	**4.3**	**-1.6**	**-4.0**	**-1.6**	**-3.3**	**-2.4**	**0.2**	**--**	**-5.7**	**0.9**	**1.9**	**2.4**	**6.4**
JPM GBI Global TR USD			*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	--	*9.7*	*6.0*	*-0.7*	*6.8*	*1.6*

Shenkman High Yield liquidated 3/11/2019. PGIM EMD funded 8/26/19. Gresham Commodity and Wellington Commodity liquidated 9/27/19. American Realty funded 12/20/2019. Titan and Aetos liquidated 1Q 2020. SSGA Russell Small Cap replaced with SSGA US Extended Market Index on 6/10/21. Invesco Commercial Mortgage funded 9/1/21.

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Franklin Templeton Global Bond Plus	83,592,527	4.3	-1.6	-4.0	-1.6	-3.3	-2.4	0.2	--	-5.7	0.9	1.9	2.4	6.1
JPM GBI Global TR USD			*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	--	*9.7*	*6.0*	*-0.7*	*6.8*	*1.6*
eV Global Government Fixed Inc Net Rank			*73*	*22*	*73*	*72*	*99*	*93*	--	*99*	*99*	*11*	*93*	*6*
Total Emerging Markets Fixed Income	**85,995,754**	**4.4**	**-1.6**	**-3.6**	**-1.6**	**6.5**	**--**	**--**	**--**	**4.6**	**--**	**--**	**--**	**--**
50% JPM EMBI Global Div/50% JPM GBI EM Global Div			*-1.9*	*-3.9*	*-1.9*	*3.5*	--	--	--	*4.0*	--	--	--	--
PGIM Emerging Markets Debt	85,995,754	4.4	-1.6	-3.6	-1.6	6.5	--	--	--	4.6	--	--	--	--
50% JPM EMBI Global Div/50% JPM GBI EM Global Div			*-1.9*	*-3.9*	*-1.9*	*3.5*	--	--	--	*4.0*	--	--	--	--
eV Emg Mkts Fixed Inc - Blended Currency Net Rank			*57*	*73*	*57*	*26*	--	--	--	*67*	--	--	--	--
Total Real Estate	**218,640,576**	**11.2**	**3.6**	**6.5**	**3.6**	**6.5**	**5.3**	**5.6**	**8.3**	**1.8**	**5.2**	**8.8**	**4.3**	**8.0**
NCREIF ODCE net 1Q Lag			*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	*0.5*	*4.6*	*7.7*	*6.7*	*9.1*
NCREIF-ODCE			*6.6*	*13.1*	*6.6*	*14.6*	*7.1*	*7.5*	*9.9*	*1.2*	*5.3*	*8.3*	*7.6*	*8.8*
RREEF America II	172,005,375	8.8	3.7	6.5	3.7	6.5	5.3	5.8	9.1	1.8	5.3	8.6	4.4	8.2
NCREIF ODCE net 1Q Lag			*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	*0.5*	*4.6*	*7.7*	*6.7*	*9.1*
NCREIF Property Index			*5.2*	*10.9*	*5.2*	*12.2*	*6.7*	*6.8*	*9.0*	*1.6*	*6.4*	*6.7*	*7.0*	*8.0*
American Realty	30,058,326	1.5	3.1	6.2	3.1	6.9	--	--	--	1.1	--	--	--	--
NCREIF ODCE net 1Q Lag			*3.7*	*6.8*	*3.7*	*7.1*	--	--	--	*0.5*	--	--	--	--
NCREIF-ODCE			*6.6*	*13.1*	*6.6*	*14.6*	--	--	--	*1.2*	--	--	--	--
Invesco Commercial Mortgage Income Fund	16,576,875	0.8	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF ODCE net 1Q Lag			--	--	--	--	--	--	--	--	--	--	--	--
NCREIF-ODCE			--	--	--	--	--	--	--	--	--	--	--	--

Shenkman High Yield liquidated 3/11/2019. PGIM EMD funded 8/26/19. Gresham Commodity and Wellington Commodity liquidated 9/27/19. American Realty funded 12/20/2019. Titan and Aetos liquidated 1Q 2020. SSGA Russell Small Cap replaced with SSGA US Extended Market Index on 6/10/21. Invesco Commercial Mortgage funded 9/1/21.

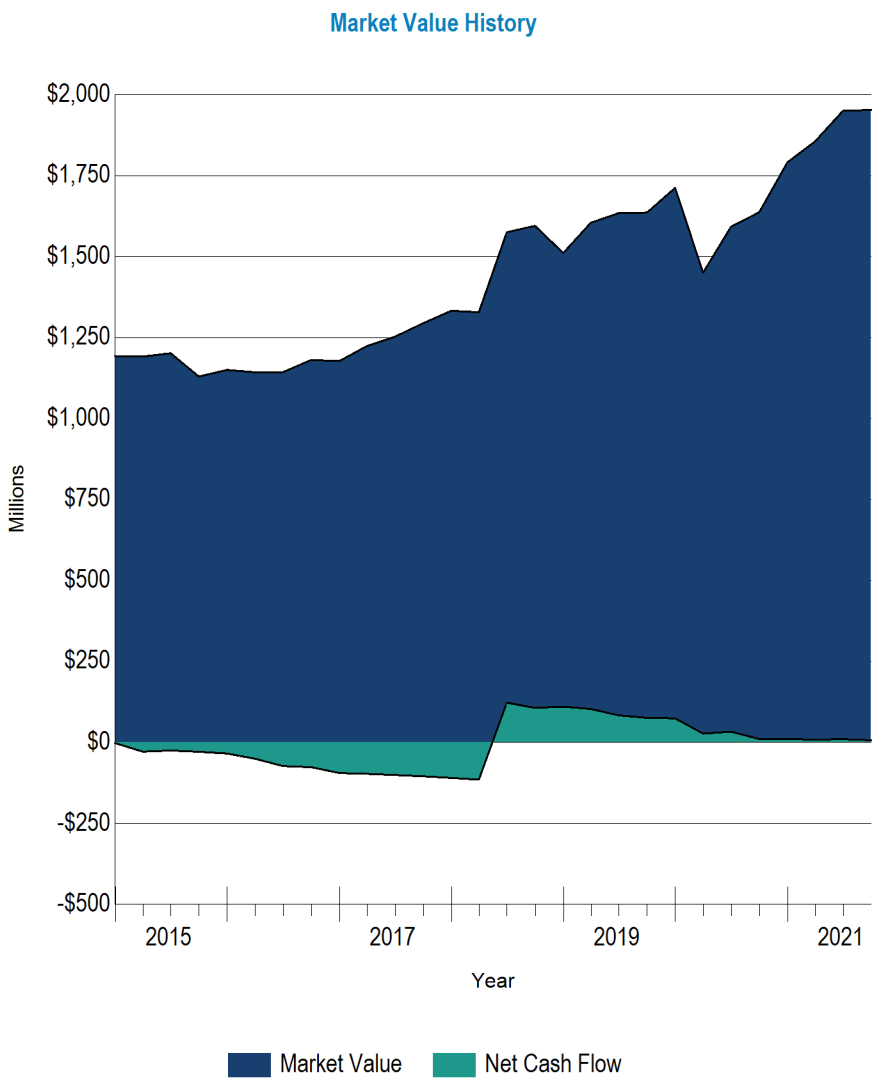
Performance Analysis - 5 Years (Net of Fees)

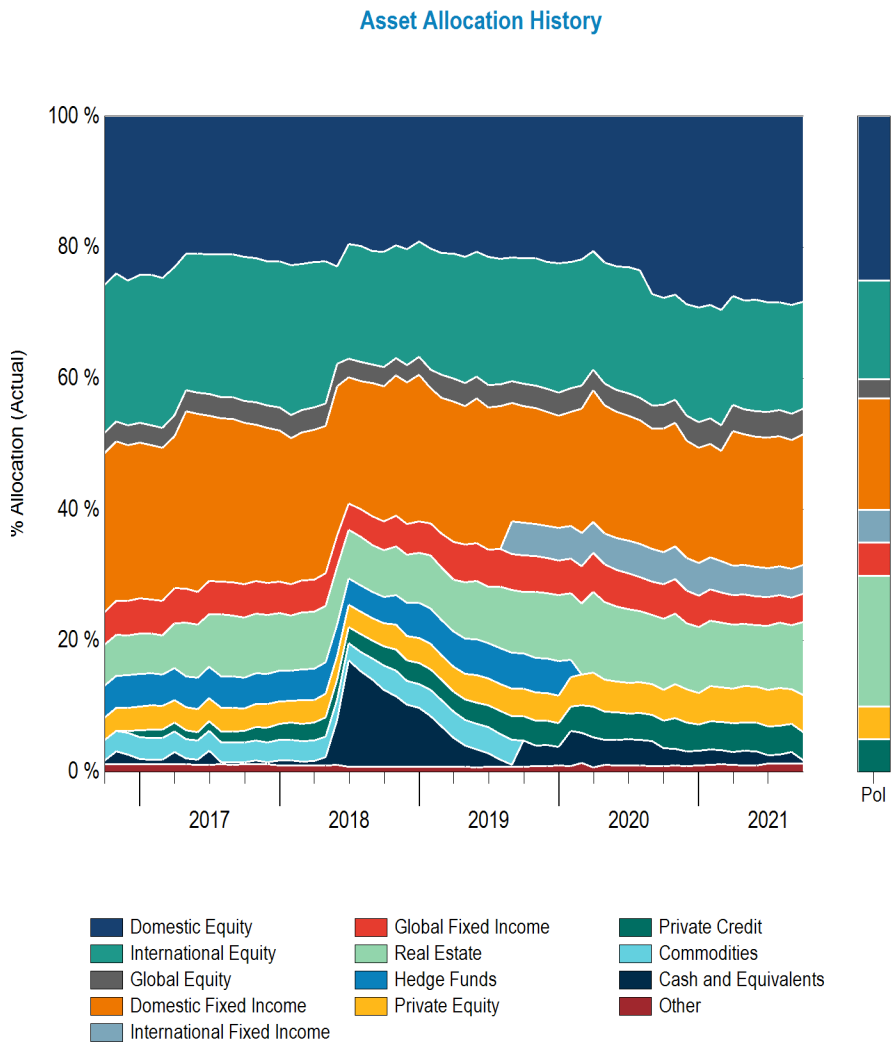
Period Ending: September 30, 2021

	Anlzd Ret	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
SSGA S&P 500 Flagship Fund	16.87%	15.20%	-0.03%	1.00	0.02%	1.00	1.04	-0.89	99.94%	100.05%
QMA Large Cap Core	14.99%	16.06%	-2.71%	1.05	2.19%	0.98	0.86	-0.87	98.62%	107.24%
Ivy Large Cap Growth	22.23%	15.30%	1.27%	0.92	3.09%	0.97	1.38	-0.20	90.15%	93.66%
Boston Partners Large Cap Value	12.20%	17.58%	0.55%	1.07	2.98%	0.97	0.63	0.42	111.15%	101.80%
William Blair SMID Cap Growth	19.40%	17.68%	3.58%	0.87	4.79%	0.95	1.03	0.25	85.83%	86.25%
Lee Munder Small Value	10.20%	21.24%	-0.04%	0.93	4.63%	0.96	0.43	-0.18	83.91%	94.92%
SSGA MSCI ACWI Ex US Index Fund	9.15%	14.61%	0.23%	1.00	0.12%	1.00	0.55	1.70	100.83%	99.68%
PIMCO RAE Fundamental Global Ex US Fund	7.74%	17.19%	1.11%	1.03	2.56%	0.98	0.38	0.51	107.46%	99.25%
Skellig Water Fund (aka KBI)	12.64%	16.92%	-1.67%	1.08	5.94%	0.88	0.68	-0.09	105.35%	106.39%
BlackRock Fixed Income	3.20%	3.42%	0.24%	1.01	0.74%	0.95	0.61	0.35	105.88%	101.45%
Doubleline Core Plus	2.89%	3.89%	0.33%	0.87	2.65%	0.55	0.46	-0.02	98.30%	98.97%
MacKay Shields Core Plus	3.90%	3.85%	0.83%	1.04	1.71%	0.80	0.73	0.56	120.91%	103.76%
Franklin Templeton Global Bond Plus	0.24%	5.77%	0.58%	-0.25	8.51%	0.05	-0.15	-0.13	-14.35%	-31.16%
RREEF America II	5.78%	3.00%	6.87%	-0.19	4.65%	0.04	1.55	0.03	7.22%	--

Vintage Year	Manager Name/Fund Name	Estimated Market Value as of 9/30/2021 [3]	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI)[1]	Tot. Value/ Paid-In (TVPI)[2]	Net IRR Since Inception[5]	IRR Date
			IRR Analysis as of IRR date									
Private Equity												
2004	Pantheon USA Fund VI	$420,959	$15,000,000	$14,175,000	95%	$825,000	$21,515,924	$443,622	*151.8%*	*154.8%*	*6.8%*	06/30/21
2005	BlackRock Private Capital II[6]	$527,330	$15,000,000	$15,000,000	100%	$0	$23,878,829	$2,124,498	*159.2%*	*162.7%*	*6.8%*	06/30/21
2011	Stepstone Secondary Opportunities Fund II	$9,956,072	$27,500,000	$27,500,000	100%	$0	$28,094,070	$12,259,925	*102.2%*	*138.4%*	*11.0%*	06/30/21
2016	Ocean Avenue Fund III	$17,537,099	$20,000,000	$17,400,000	87%	$2,600,000	$14,400,000	$23,537,099	*82.8%*	*183.5%*	*25.0%*	06/30/21
2016	Pathway Private Equity Fund Investors 8	$32,324,346	$20,000,000	$14,273,407	71%	$5,726,593	$5,057,766	$33,759,147	*35.4%*	*261.9%*	*27.4%*	06/30/21
2017	Pathway Private Equity Fund Investors 9	$21,642,234	$20,000,000	$12,901,360	65%	$7,098,640	$979,705	$21,355,773	*7.6%*	*175.3%*	*29.8%*	03/31/21
2019	Ocean Avenue Fund IV	$18,521,057	$26,000,000	$15,371,964	59%	$10,628,036	$1,690,000	$18,521,057	*11.0%*	*131.5%*	*44.3%*	06/30/21
2020	Pathway Private Equity Fund Investors 10[4]	$8,505,967	$10,000,000	$8,373,590	84%	$1,626,410	$281,959	$0	*3.4%*	*104.9%*	*N/A*	N/A
Private Credit												
2016	Sixth Street DCP	$85,519,768	$140,000,000	$75,213,496	54%	$64,786,504	$10,472,017	$86,195,153	*13.9%*	*127.6%*	*11.2%*	06/30/21
Opportunistic												
2010	KKR Mezzanine Partners	$3,697,003	$15,000,000	$13,535,064	90%	$1,464,936	$18,023,835	$3,701,033	*133.2%*	*160.5%*	*6.9%*	06/30/21
2011	PIMCO Bravo	$10,418	$15,000,000	$15,000,000	100%	$0	$27,216,525	$148,451	*181.4%*	*181.5%*	*22.1%*	09/30/19
2020	Sixth Street TAO Contingent	$19,301,183	$50,000,000	$19,075,301	38%	$30,924,699	$3,984,317	$20,840,985	*20.9%*	*122.1%*	*11.0%*	06/30/21
	Total Private Markets	**$217,963,436**	$373,500,000	$247,819,182	66%	$125,680,818	$155,594,946	$222,886,743	*62.8%*	*150.7%*		
	% of Portfolio (Market Value)	***11.2%***										

[1](DPI) is equal to (capital returned / capital called)
[2](TVPI) is equal to (market value + capital returned) / capital called
[3]Last known market value + capital calls - distributions
[4]IRR currently unavailable for these funds.
[5]Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.
[6]BlackRock: Total capital called is $15,519,967 which includes recycled distributions.

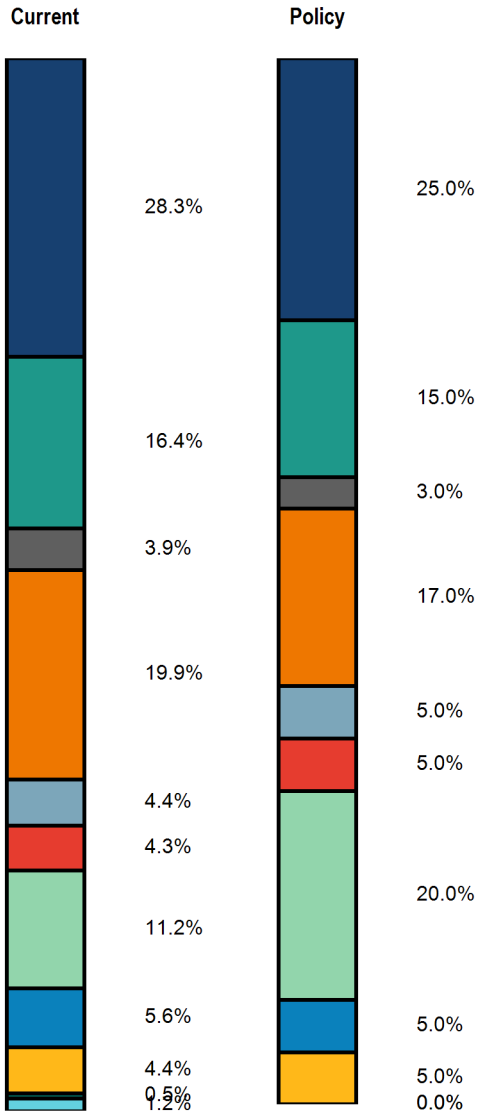




Net Cash flow history prior to 4Q 2010 is not available due to lack of data from previous consultant.

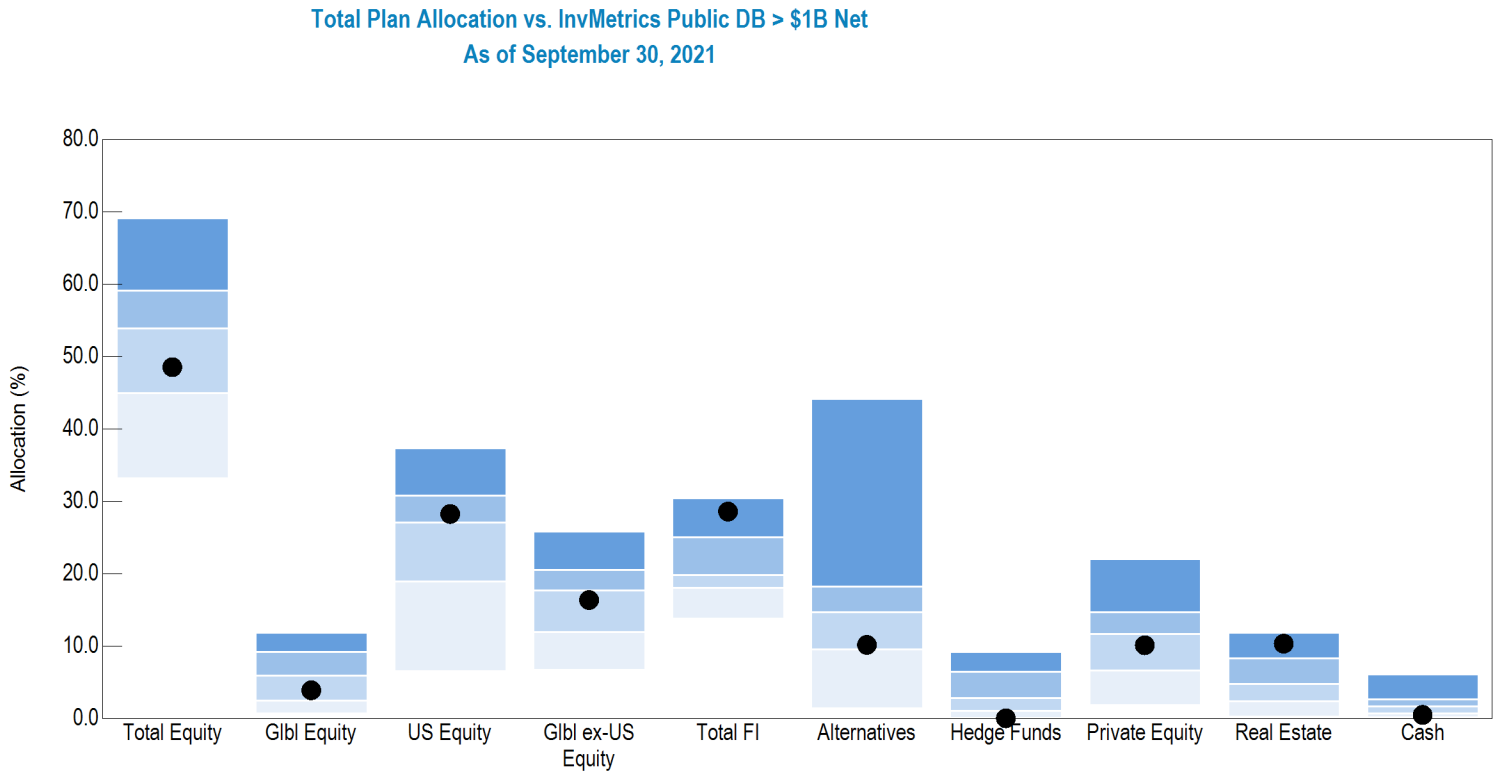
Total Fund
Asset Allocation vs. Policy

Period Ending: September 30, 2021



	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
Domestic Equity	$551,916,901	28.3%	25.0%	$63,771,337	10.0% - 30.0%	Yes
International Equity	$319,652,692	16.4%	15.0%	$26,765,354	10.0% - 30.0%	Yes
Global Equity	$76,329,922	3.9%	3.0%	$17,752,454	0.0% - 5.0%	Yes
Domestic Fixed Income	$388,760,174	19.9%	17.0%	$56,821,191	10.0% - 30.0%	Yes
International Fixed Income	$85,995,754	4.4%	5.0%	-$11,633,359	0.0% - 10.0%	Yes
Global Fixed Income	$83,592,527	4.3%	5.0%	-$14,036,586	0.0% - 10.0%	Yes
Real Estate	$218,640,576	11.2%	20.0%	-$171,875,875	10.0% - 30.0%	Yes
Private Equity	$109,435,064	5.6%	5.0%	$11,805,951	0.0% - 10.0%	Yes
Private Credit	$85,519,768	4.4%	5.0%	-$12,109,345	0.0% - 10.0%	Yes
Cash and Equivalents	$9,730,272	0.5%	--	$9,730,272	--	No
Other	$23,008,604	1.2%	--	$23,008,604	--	No
Total	**$1,952,582,254**	**100.0%**	**100.0%**			

Aetos holdback of $93,982 not included in total market value.



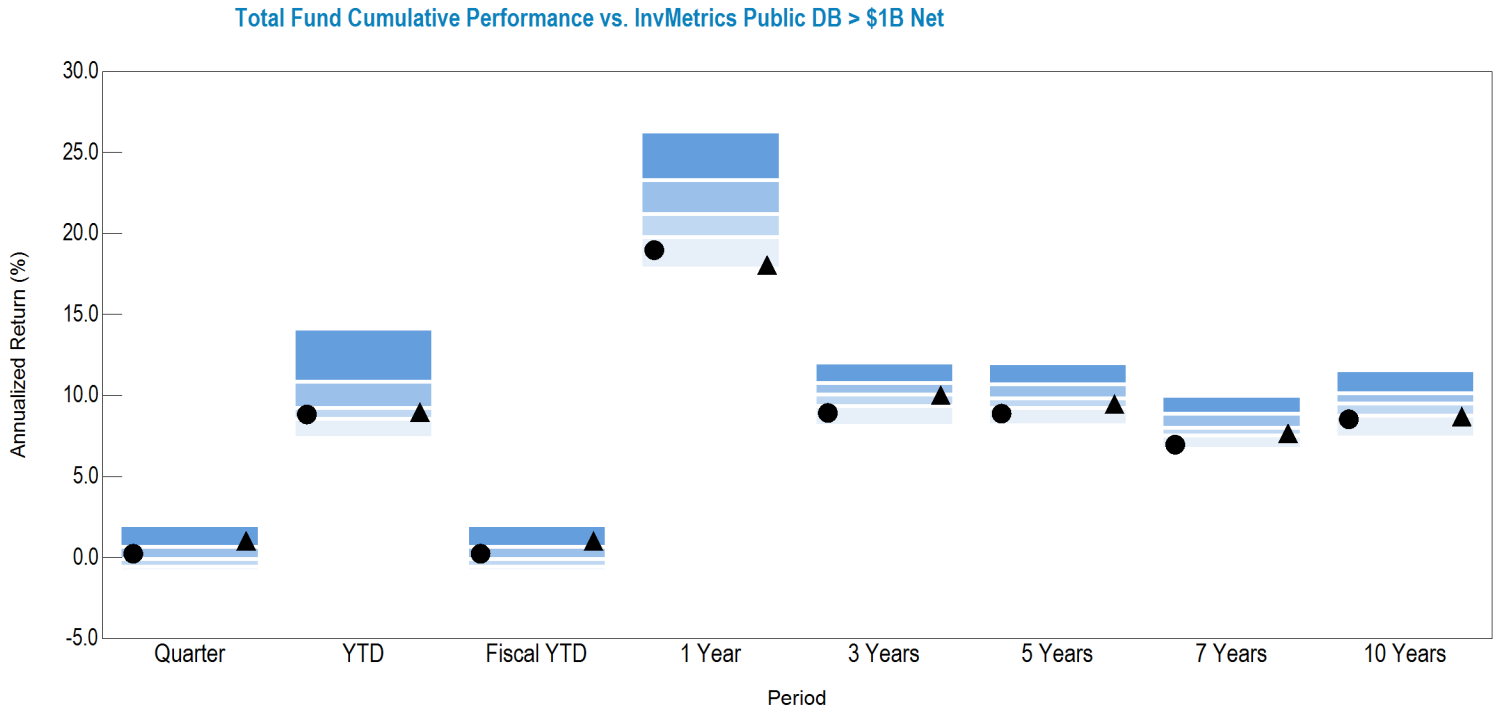
	Total Equity	Glbl Equity	US Equity	Glbl ex-US Equity	Total FI	Alternatives	Hedge Funds	Private Equity	Real Estate	Cash	
	Allocation (Rank)										
5th Percentile	69.2	11.8	37.4	25.9	30.5	44.2	9.2	22.0	11.8	6.1	-
25th Percentile	59.2	9.3	30.9	20.6	25.1	18.3	6.5	14.8	8.4	2.7	-
Median	54.0	6.0	27.1	17.8	19.9	14.8	2.9	11.8	4.9	1.8	-
75th Percentile	45.0	2.5	19.1	12.1	18.2	9.7	1.2	6.7	2.5	0.8	-
95th Percentile	33.3	0.8	6.6	6.8	13.9	1.5	0.2	1.9	0.4	0.3	-
# of Portfolios	41	20	34	37	41	39	25	35	37	41	-
● **Total Fund**	48.5 (61)	3.9 (64)	28.3 (38)	16.4 (60)	28.6 (9)	10.2 (73)	0.0 (99)	10.1 (60)	10.3 (14)	0.5 (87)	-

Account	Fee Schedule	Market Value As of 9/30/2021	% of Portfolio	Estimated Annual Fee ($)	Estimated Annual Fee (%)
American Realty	1.25% of First 10.0 Mil, 1.20% of Next 15.0 Mil, 1.10% of Next 25.0 Mil, 1.00% Thereafter	$30,058,326	1.5%	$360,642	1.20%
BlackRock Alternative Advisors	120,000 Annually	$527,330	0.0%	$120,000	22.76%
BlackRock Fixed Income	0.25% of First 100.0 Mil, 0.25% of Next 100.0 Mil	$147,713,802	7.6%	$369,285	0.25%
Boston Partners Large Cap Value	0.45% of First 50.0 Mil, 0.35% of Next 50.0 Mil, 0.30% Thereafter	$68,636,362	3.5%	$290,227	0.42%
Doubleline Core Plus	0.28% of First 100.0 Mil, 0.25% Thereafter	$117,816,600	6.0%	$324,542	0.28%
Franklin Templeton Global Bond Plus	0.40% of First 50.0 Mil, 0.30% of Next 50.0 Mil, 0.25% Thereafter	$83,592,527	4.3%	$300,778	0.36%
Invesco Commercial Mortgage Income Fund	1.00% of First 50.0 Mil, 0.90% of Next 50.0 Mil, 0.80% Thereafter	$16,576,875	0.8%	$165,769	1.00%
Ivy Large Cap Growth	0.60% of First 25.0 Mil, 0.50% of Next 25.0 Mil, 0.40% Thereafter	$75,728,494	3.9%	$377,914	0.50%
KKR Mezzanine Partners I	0.38% of Assets	$3,697,003	0.2%	$13,864	0.38%
Lee Munder Small Value	0.70% of Assets	$31,902,130	1.6%	$223,315	0.70%
MacKay Shields Core Plus	0.30% of Assets	$123,229,773	6.3%	$369,689	0.30%
Mellon Capital Cash Account	No Fee	$9,730,272	0.5%	--	--
Ocean Avenue Fund III	0.85% of Assets	$17,537,099	0.9%	$149,065	0.85%
Ocean Avenue Fund IV	1.25% of Assets	$18,521,057	0.9%	$231,513	1.25%
Pantheon Ventures	0.47% of Assets	$420,959	0.0%	$1,995	0.47%
Pathway Private Equity Fund Investors 10	0.58% of Assets	$8,505,967	0.4%	$49,335	0.58%
Pathway Private Equity Fund Investors 8	0.61% of Assets	$32,324,346	1.7%	$197,179	0.61%
Pathway Private Equity Fund Investors 9	0.58% of Assets	$21,642,234	1.1%	$125,525	0.58%
PGIM Emerging Markets Debt	0.44% of Assets	$85,995,754	4.4%	$378,381	0.44%
PIMCO Bravo	1.60% of Assets	$10,418	0.0%	$667	6.40%
PIMCO RAE Fundamental Global Ex US Fund	0.78% of First 25.0 Mil, 0.43% of Next 75.0 Mil, 0.38% Thereafter	$102,539,813	5.3%	$527,151	0.51%

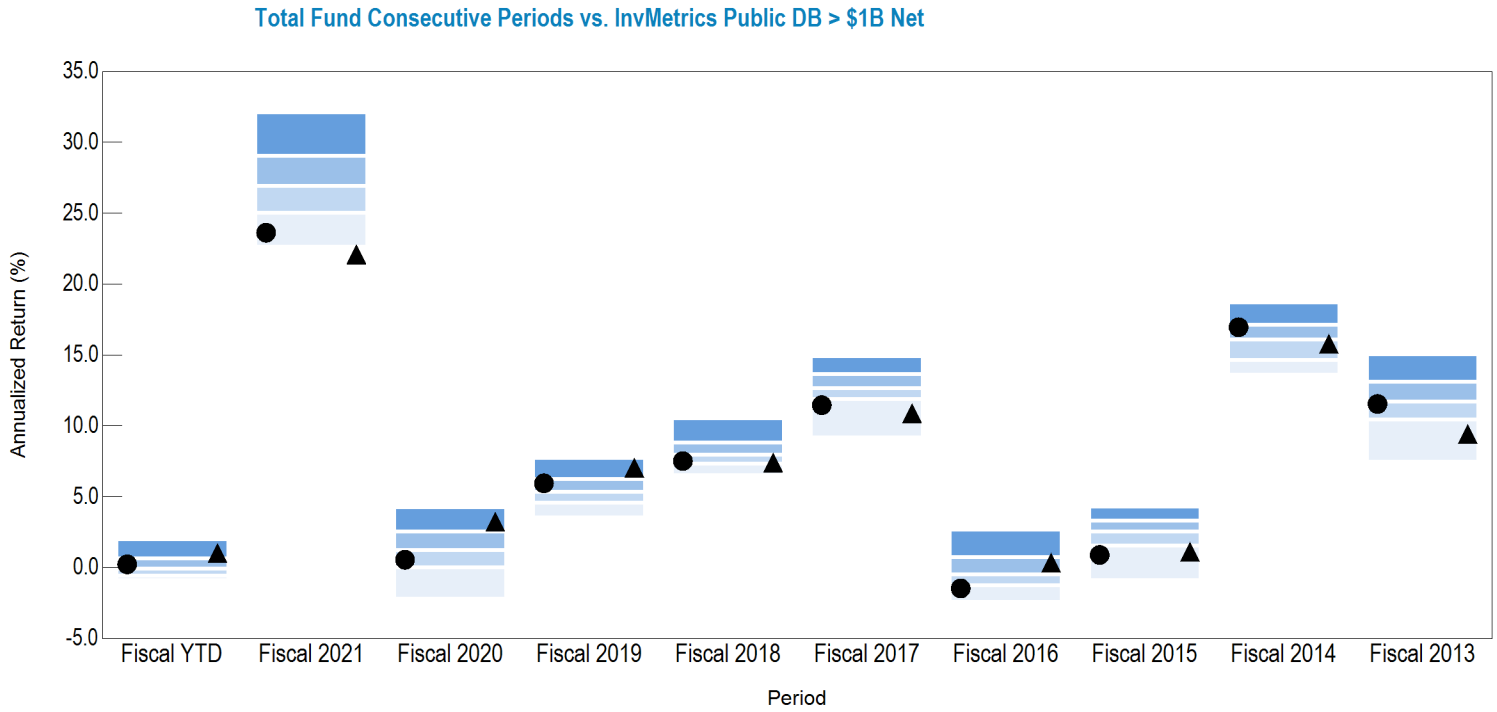
Fees shown for Pathway are estimated effective average fees over 15-year fund lifespan.

Account	Fee Schedule	Market Value As of 9/30/2021	% of Portfolio	Estimated Annual Fee ($)	Estimated Annual Fee (%)
QMA Large Cap Core	Performance-based 0.00 and 25.00	$68,907,279	3.5%	$0	0.00%
RREEF America II	0.95% of Assets	$172,005,375	8.8%	$1,634,051	0.95%
SGA Global Growth	0.45% of Assets	$100,057,689	5.1%	$450,260	0.45%
Sixth Street DCP (frmrly TSSP DCP)	1.11% of Assets	$85,519,768	4.4%	$949,269	1.11%
Sixth Street TAO Contingent (frmrly TSSP TAO Contingent)	1.35% of Assets	$19,301,183	1.0%	$260,566	1.35%
Skellig Water Fund (aka KBI)	0.77% of Assets	$76,329,922	3.9%	$583,924	0.76%
SSGA MSCI ACWI Ex US Index Fund	0.08% of First 25.0 Mil, 0.07% of Next 25.0 Mil, 0.06% Thereafter	$117,055,191	6.0%	$77,733	0.07%
SSGA S&P 500 Flagship Fund	0.03% of Assets	$210,822,110	10.8%	$63,247	0.03%
SSGA US Extended Market Index	0.03% of First 50.0 Mil, 0.03% of Next 50.0 Mil, 0.02% Thereafter	$63,388,007	3.2%	$18,481	0.03%
Stepstone Secondary Opportunities Fund II	343,750 Annually	$9,956,072	0.5%	$343,750	3.45%
William Blair SMID Cap Growth	0.95% of First 10.0 Mil, 0.80% of Next 20.0 Mil, 0.75% of Next 20.0 Mil, 0.70% of Next 50.0 Mil, 0.65% of Next 100.0 Mil, 0.60% Thereafter	$32,532,518	1.7%	$273,994	0.84%
Investment Management Fee		**$1,952,582,254**	**100.0%**	**$9,232,109**	**0.47%**

**Sixth Street Partners fee schedule is as follows: No management fee at SMA level. Subject to the annual fees of each of the underlying TSSP funds. (1) TAO 65bps on unfunded commitments and 1.35% on remaining capital contributions (long-term investor designation) (2) TSLE 1.5% on commitments, 1.25% on remaining capital contributions post commitment period (3) TICP 30bps on remaining capital contributions. TAO Contingent fee schedule is 65bps on unfunded commitments and 1.35% on remaining capital contributions.*

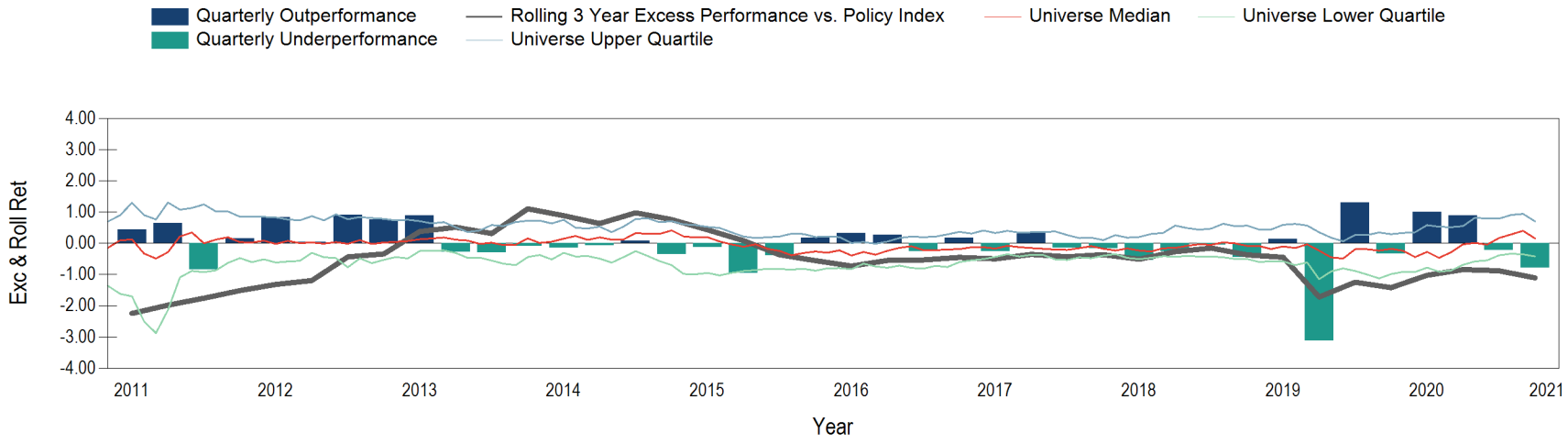


	Return (Rank)															
5th Percentile	2.0		14.1		2.0		26.3		12.0		12.0		9.9		11.6	
25th Percentile	0.7		10.9		0.7		23.3		10.8		10.7		8.9		10.2	
Median	-0.1		9.3		-0.1		21.2		10.1		9.8		8.0		9.5	
75th Percentile	-0.5		8.6		-0.5		19.8		9.4		9.3		7.5		8.8	
95th Percentile	-0.8		7.4		-0.8		17.8		8.1		8.2		6.7		7.4	
# of Portfolios	60		60		60		60		60		60		59		54	
● Total Fund	0.2	(37)	8.8	(65)	0.2	(37)	19.0	(89)	8.9	(85)	8.9	(87)	7.0	(92)	8.5	(83)
▲ Policy Index	1.0	(18)	9.0	(61)	1.0	(18)	18.0	(95)	10.0	(52)	9.5	(65)	7.7	(73)	8.7	(80)

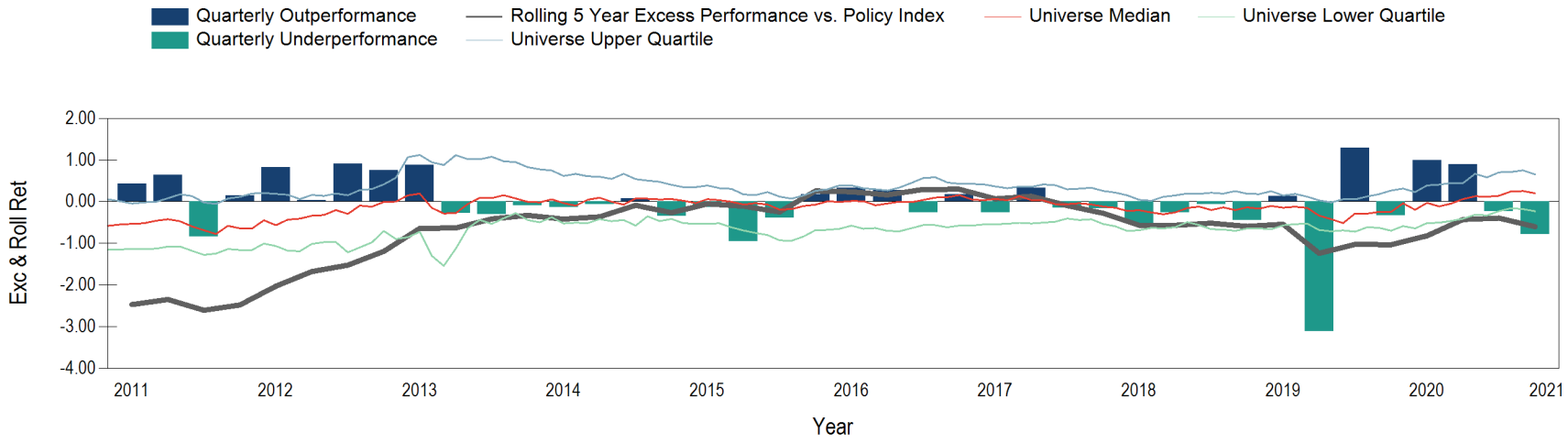


	Return (Rank)																			
5th Percentile	2.0		32.1		4.2		7.7		10.5		14.9		2.7		4.3		18.7		15.0	
25th Percentile	0.7		29.1		2.6		6.3		8.8		13.7		0.8		3.3		17.2		13.1	
Median	-0.1		27.0		1.3		5.4		8.0		12.7		-0.5		2.6		16.1		11.8	
75th Percentile	-0.5		25.1		0.0		4.6		7.3		11.9		-1.2		1.6		14.7		10.5	
95th Percentile	-0.8		22.7		-2.2		3.5		6.5		9.2		-2.4		-0.9		13.6		7.5	
# of Portfolios	60		77		71		77		51		65		55		53		43		56	
● **Total Fund**	0.2	(37)	23.6	(91)	0.6	(65)	6.0	(35)	7.5	(69)	11.5	(82)	-1.5	(81)	0.9	(87)	17.0	(30)	11.5	(53)
▲ **Policy Index**	1.0	(18)	22.1	(98)	3.2	(16)	7.0	(14)	7.4	(74)	10.9	(87)	0.3	(37)	1.1	(86)	15.8	(56)	9.4	(86)

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance

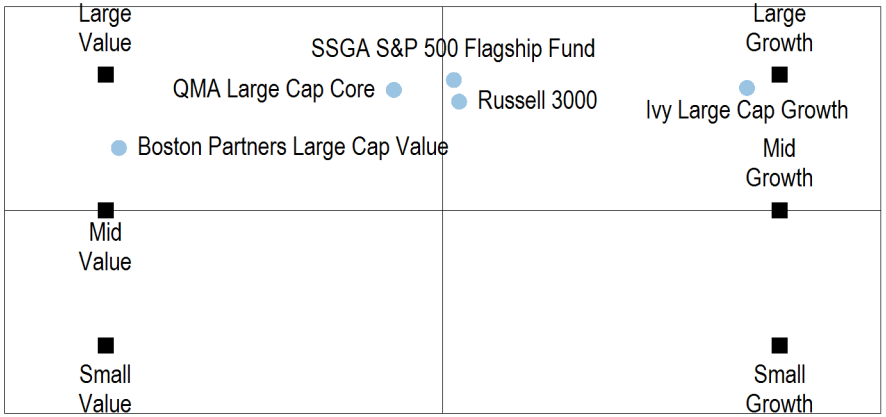


Total Domestic Equity
Asset Class Overview (Net of Fees)

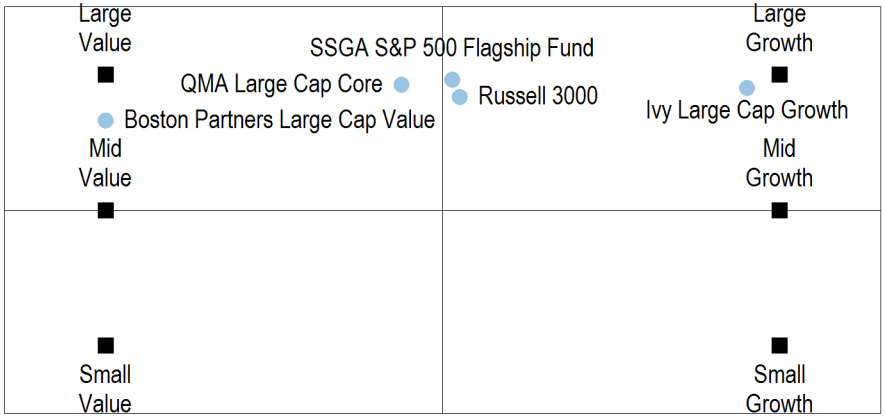
Period Ending: September 30, 2021

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Total Domestic Equity	**551,916,901**	**-0.3**	**16.0**	**-0.3**	**33.7**	**14.6**	**16.5**	**16.4**	**18.2**	**29.8**	**-5.4**	**21.9**	**11.1**
Russell 3000		*-0.1*	*15.0*	*-0.1*	*31.9*	*16.0*	*16.9*	*16.6*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*
InvMetrics Public DB US Eq Net Rank		*61*	*28*	*61*	*45*	*55*	*27*	*20*	*44*	*59*	*34*	*18*	*80*
SSGA S&P 500 Flagship Fund	210,822,110	0.6	15.9	0.6	29.9	16.0	16.9	16.6	18.3	31.5	-4.4	21.8	12.0
S&P 500		*0.6*	*15.9*	*0.6*	*30.0*	*16.0*	*16.9*	*16.6*	*18.4*	*31.5*	*-4.4*	*21.8*	*12.0*
eV US Large Cap Core Equity Net Rank		*32*	*39*	*32*	*40*	*26*	*19*	*14*	*29*	*29*	*32*	*46*	*20*
QMA Large Cap Core	68,907,279	0.1	17.7	0.1	31.0	12.8	15.0	16.2	12.0	28.6	-6.8	22.1	12.1
S&P 500		*0.6*	*15.9*	*0.6*	*30.0*	*16.0*	*16.9*	*16.6*	*18.4*	*31.5*	*-4.4*	*21.8*	*12.0*
eV US Large Cap Core Equity Net Rank		*51*	*19*	*51*	*29*	*68*	*54*	*25*	*66*	*56*	*62*	*43*	*19*
Ivy Large Cap Growth	75,728,494	1.3	16.3	1.3	26.0	21.2	22.2	19.2	30.9	36.6	2.7	29.5	1.6
Russell 1000 Growth		*1.2*	*14.3*	*1.2*	*27.3*	*22.0*	*22.8*	*19.7*	*38.5*	*36.4*	*-1.5*	*30.2*	*7.1*
eV US Large Cap Growth Equity Net Rank		*30*	*19*	*30*	*54*	*42*	*38*	*25*	*64*	*25*	*16*	*46*	*70*
Boston Partners Large Cap Value	68,636,362	-1.7	19.2	-1.7	41.5	9.2	12.2	14.1	2.4	23.8	-9.0	19.6	14.2
Russell 1000 Value		*-0.8*	*16.1*	*-0.8*	*35.0*	*10.1*	*10.9*	*13.5*	*2.8*	*26.5*	*-8.3*	*13.7*	*17.3*
eV US Large Cap Value Equity Net Rank		*80*	*28*	*80*	*24*	*67*	*43*	*30*	*57*	*75*	*51*	*26*	*47*

U.S. Effective Style Map
3 Years

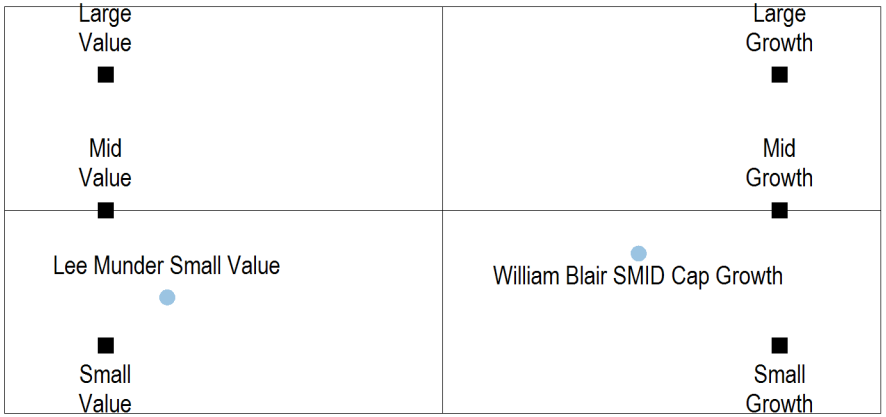


U.S. Effective Style Map
5 Years



	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
SSGA US Extended Market Index	63,388,007	-3.2	--	-3.2	--	--	--	--	--	--	--	--	--
Dow Jones U.S. Completion Total Stock Market		*-3.3*	--	*-3.3*	--	--	--	--	--	--	--	--	--
William Blair SMID Cap Growth	32,532,518	-1.2	7.0	-1.2	29.7	14.9	19.4	17.8	32.6	31.1	-1.7	29.3	7.2
Russell 2500 Growth		*-3.5*	*4.8*	*-3.5*	*32.0*	*16.0*	*18.2*	*17.2*	*40.5*	*32.7*	*-7.5*	*24.5*	*9.7*
eV US Mid Cap Growth Equity Net Rank		*79*	*77*	*79*	*59*	*95*	*54*	*42*	*64*	*78*	*30*	*14*	*28*
Lee Munder Small Value	31,902,130	-0.3	21.9	-0.3	58.1	8.6	10.2	12.7	3.0	26.3	-15.5	7.7	27.3
Russell 2000 Value		*-3.0*	*22.9*	*-3.0*	*63.9*	*8.6*	*11.0*	*13.2*	*4.6*	*22.4*	*-12.9*	*7.8*	*31.7*
eV US Small Cap Value Equity Net Rank		*19*	*53*	*19*	*51*	*50*	*62*	*70*	*56*	*25*	*56*	*71*	*38*

U.S. Effective Style Map
3 Years



U.S. Effective Style Map
5 Years

	SSGA S&P 500 Flagship Fund		QMA Large Cap Core		Ivy Large Cap Growth		Boston Partners Large Cap Value		William Blair SMID Cap Growth		Lee Munder Small Value		SSGA Russell Small Cap Completeness Index	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
SSGA S&P 500 Flagship Fund	--	--	159	92.0	35	93.4	71	84.1	6	9.5	0	0.0	0	--
QMA Large Cap Core	159	70.2	--	--	25	73.6	41	57.7	0	0.0	3	1.5	0	--
Ivy Large Cap Growth	35	33.8	25	33.7	--	--	4	6.3	0	0.0	0	0.0	0	--
Boston Partners Large Cap Value	71	22.3	41	25.7	4	12.9	--	--	0	0.0	0	0.0	0	--
William Blair SMID Cap Growth	6	0.3	0	0.0	0	0.0	0	0.0	--	--	3	4.2	0	--
Lee Munder Small Value	0	0.0	3	0.2	0	0.0	0	0.0	3	4.4	--	--	0	--
SSGA Russell Small Cap Completeness Index	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	--	--

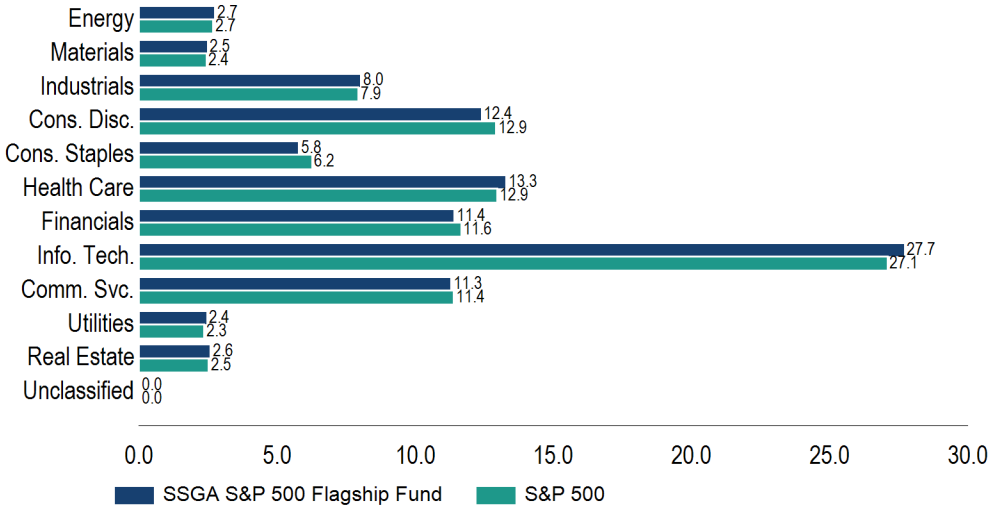
Correlation Matrix
9 Months Ending September 30, 2021

	SSGA S&P 500 Flagship Fund	QMA Large Cap Core	Ivy Large Cap Growth	Boston Partners Large Cap Value	William Blair SMID Cap Growth	Lee Munder Small Value	SSGA Russell Small Cap Completeness Index	S&P 500
SSGA S&P 500 Flagship Fund	1.00	--	--	--	--	--	--	--
QMA Large Cap Core	0.96	1.00	--	--	--	--	--	--
Ivy Large Cap Growth	0.92	0.80	1.00	--	--	--	--	--
Boston Partners Large Cap Value	0.67	0.75	0.35	1.00	--	--	--	--
William Blair SMID Cap Growth	0.57	0.43	0.64	0.19	1.00	--	--	--
Lee Munder Small Value	0.46	0.50	0.17	0.90	0.33	1.00	--	--
SSGA Russell Small Cap Completeness Index	--	--	--	--	--	--	--	--
S&P 500	1.00	0.96	0.92	0.67	0.57	0.45	--	1.00

Characteristics

	Portfolio	S&P 500
Number of Holdings	505	505
Weighted Avg. Market Cap. ($B)	555.96	558.71
Median Market Cap. ($B)	30.73	30.71
Price To Earnings	25.57	25.54
Price To Book	4.54	4.53
Price To Sales	3.54	3.47
Return on Equity (%)	29.83	29.67
Yield (%)	1.42	1.39
Beta	1.00	1.00

Sector Allocation (%) vs S&P 500



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

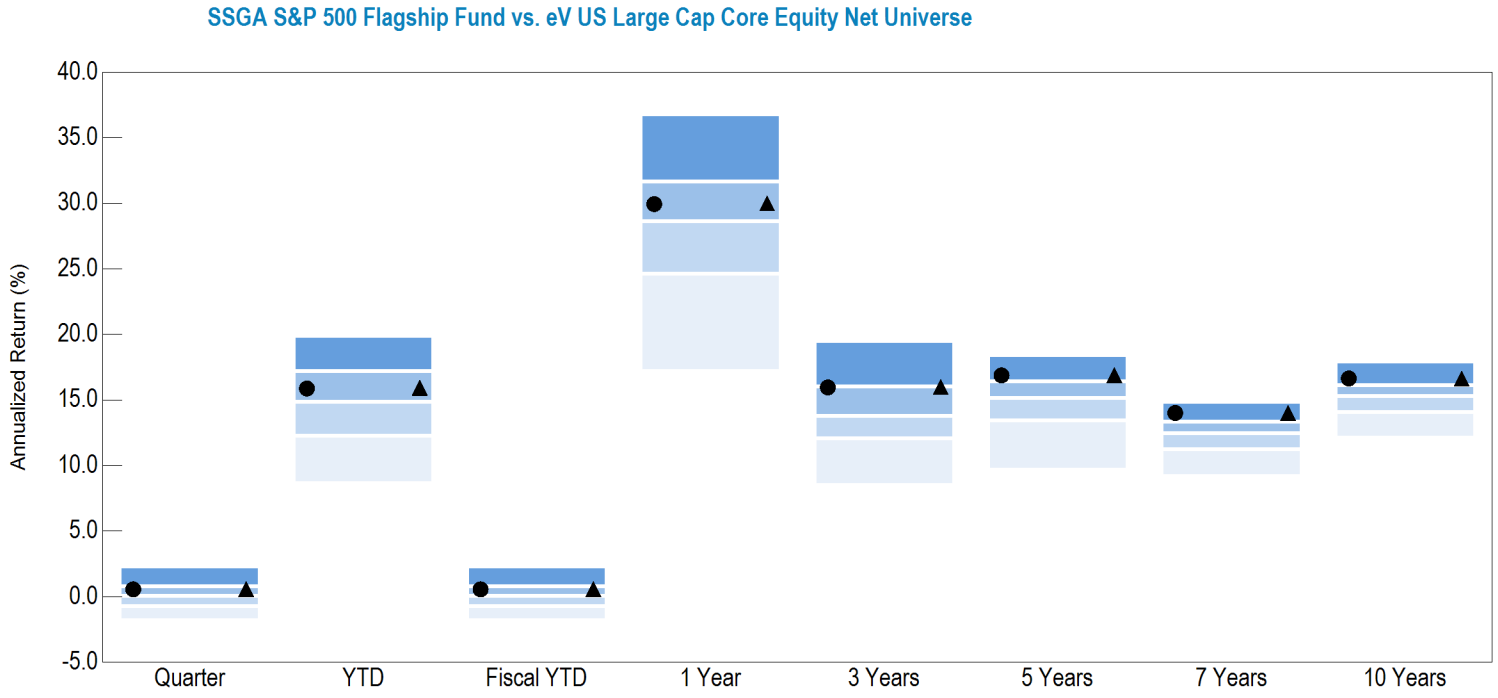
APPLE INC	6.09%
MICROSOFT CORP	5.80%
AMAZON.COM INC	3.92%
META PLATFORMS INC	2.22%
ALPHABET INC	2.21%
ALPHABET INC	2.06%
TESLA INC	1.73%
NVIDIA CORPORATION	1.42%
BERKSHIRE HATHAWAY INC	1.39%
JPMORGAN CHASE & CO	1.34%
Total	**28.17%**

Top Contributors

	Avg Wgt	Return	Contribution
MICROSOFT CORP	5.63	4.27	0.24
APPLE INC	5.93	3.47	0.21
TESLA INC	1.44	14.09	0.20
ALPHABET INC	2.03	9.49	0.19
ALPHABET INC	1.97	6.34	0.12
NETFLIX INC	0.65	15.55	0.10
JPMORGAN CHASE & CO	1.30	5.85	0.08
THERMO FISHER SCIENTIFIC INC	0.55	13.31	0.07
SALESFORCE.COM INC	0.63	11.03	0.07
COSTCO WHOLESALE CORP	0.48	13.78	0.07

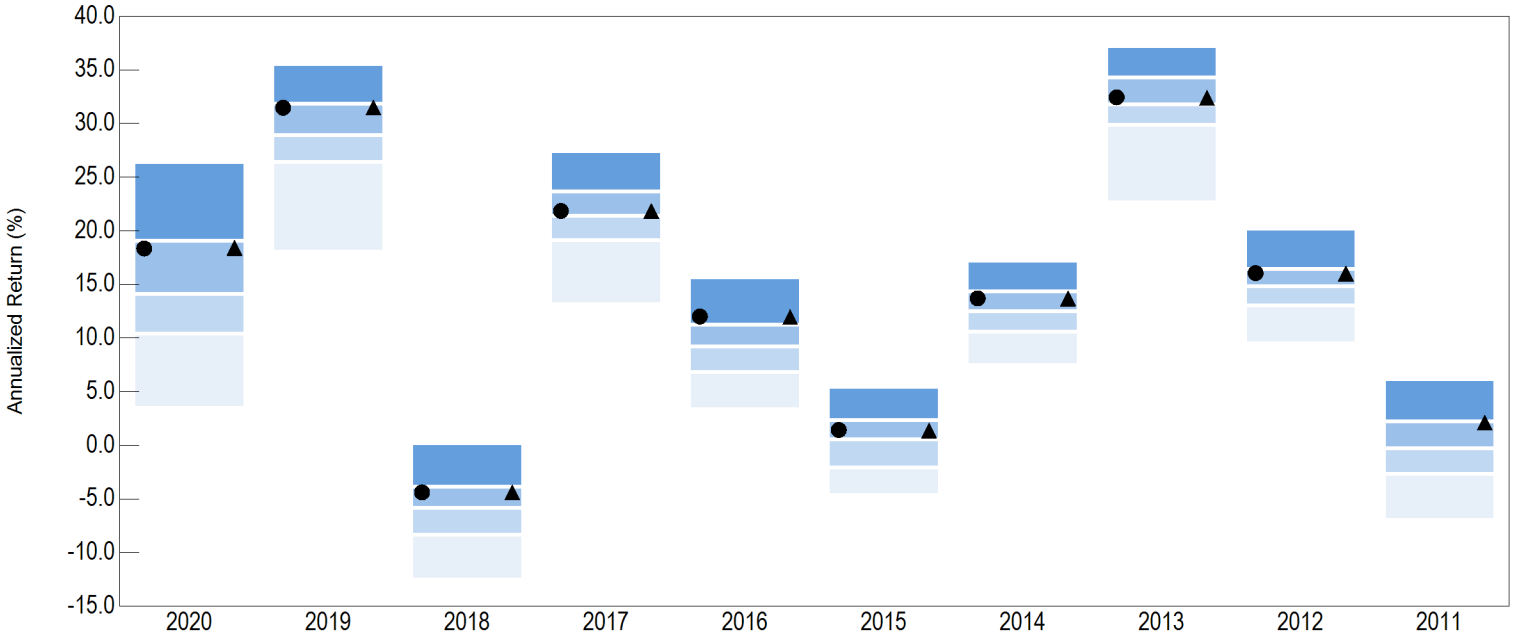
Bottom Contributors

	Avg Wgt	Return	Contribution
AMAZON.COM INC	4.07	-4.51	-0.18
PAYPAL HOLDINGS INC	0.95	-10.73	-0.10
META PLATFORMS INC	2.30	-2.39	-0.06
FEDEX CORP.	0.20	-26.29	-0.05
VISA INC	1.09	-4.60	-0.05
UNITED PARCEL SERVICE INC	0.42	-11.98	-0.05
AMGEN INC	0.39	-12.09	-0.05
MICRON TECHNOLOGY INC.	0.26	-16.36	-0.04
UNION PACIFIC CORP	0.41	-10.44	-0.04
QUALCOMM INC.	0.45	-9.34	-0.04

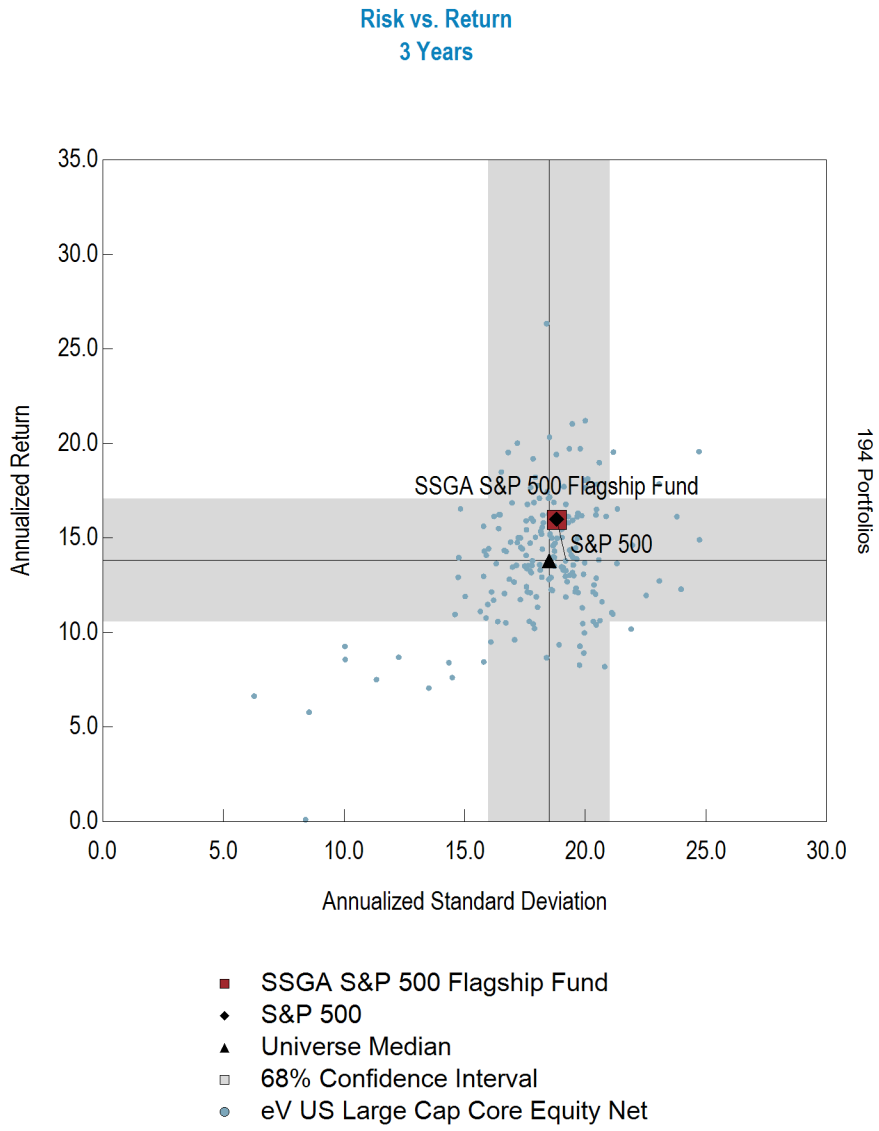


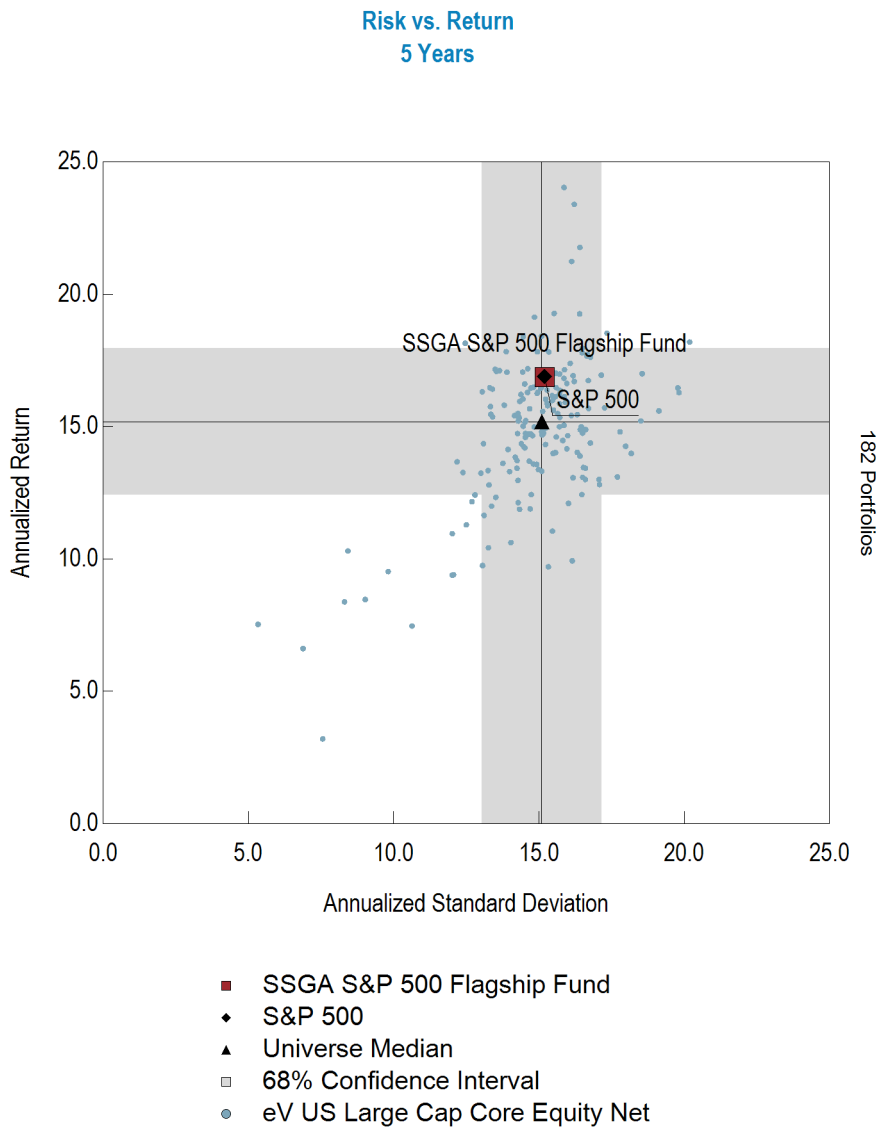
	Return (Rank)															
5th Percentile	2.3		19.9		2.3		36.8		19.5		18.4		14.8		17.9	
25th Percentile	0.8		17.2		0.8		31.7		16.0		16.5		13.4		16.2	
Median	0.1		14.9		0.1		28.7		13.8		15.2		12.5		15.3	
75th Percentile	-0.7		12.3		-0.7		24.7		12.1		13.5		11.3		14.1	
95th Percentile	-1.8		8.7		-1.8		17.3		8.5		9.7		9.2		12.2	
# of Portfolios	204		204		204		203		194		182		167		139	
● SSGA S&P 500 Flagship Fund	0.6	(32)	15.9	(39)	0.6	(32)	29.9	(40)	16.0	(26)	16.9	(19)	14.0	(15)	16.6	(14)
▲ S&P 500	0.6	(31)	15.9	(38)	0.6	(31)	30.0	(40)	16.0	(26)	16.9	(19)	14.0	(15)	16.6	(14)

SSGA S&P 500 Flagship Fund vs. eV US Large Cap Core Equity Net Universe



	Return (Rank)																			
5th Percentile	26.4		35.5		0.1		27.4		15.6		5.4		17.2		37.2		20.2		6.1	
25th Percentile	19.1		31.9		-3.8		23.7		11.3		2.4		14.4		34.3		16.5		2.2	
Median	14.1		28.9		-5.8		21.4		9.3		0.6		12.5		31.8		14.8		-0.3	
75th Percentile	10.4		26.5		-8.3		19.2		6.9		-2.0		10.6		29.9		13.0		-2.7	
95th Percentile	3.5		18.1		-12.5		13.2		3.4		-4.6		7.5		22.7		9.5		-6.9	
# of Portfolios	216		203		189		188		177		142		140		125		111		97	
● SSGA S&P 500 Flagship Fund	18.3	(29)	31.5	(29)	-4.4	(32)	21.8	(46)	12.0	(20)	1.4	(36)	13.7	(33)	32.4	(42)	16.0	(30)	--	(--)
▲ S&P 500	18.4	(29)	31.5	(28)	-4.4	(32)	21.8	(46)	12.0	(21)	1.4	(37)	13.7	(33)	32.4	(43)	16.0	(30)	2.1	(26)

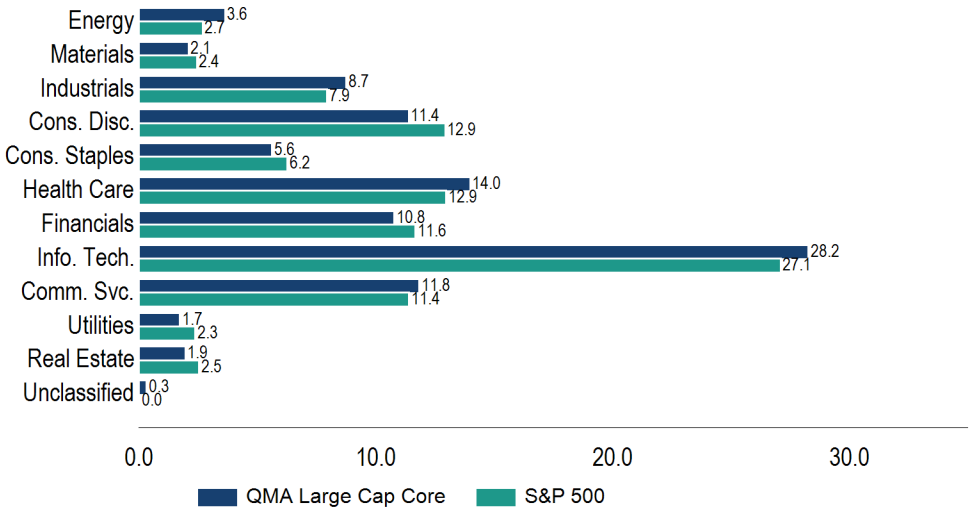

Risk vs. Return
3 Years
Annualized Return
Annualized Standard Deviation
SSGA S&P 500 Flagship Fund
S&P 500
194 Portfolios
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
SSGA S&P 500 Flagship Fund
S&P 500
Universe Median
68% Confidence Interval
eV US Large Cap Core Equity Net


Risk vs. Return
5 Years
Annualized Return
Annualized Standard Deviation
SSGA S&P 500 Flagship Fund
S&P 500
182 Portfolios
25.0
20.0
15.0
10.0
5.0
0.0
0.0
5.0
10.0
15.0
20.0
25.0
SSGA S&P 500 Flagship Fund
S&P 500
Universe Median
68% Confidence Interval
eV US Large Cap Core Equity Net

Characteristics

	Portfolio	S&P 500
Number of Holdings	214	505
Weighted Avg. Market Cap. ($B)	534.16	558.71
Median Market Cap. ($B)	45.78	30.71
Price To Earnings	20.66	25.54
Price To Book	3.92	4.53
Price To Sales	2.57	3.47
Return on Equity (%)	29.25	29.67
Yield (%)	1.66	1.39
Beta	1.07	1.00

Sector Allocation (%) vs S&P 500



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

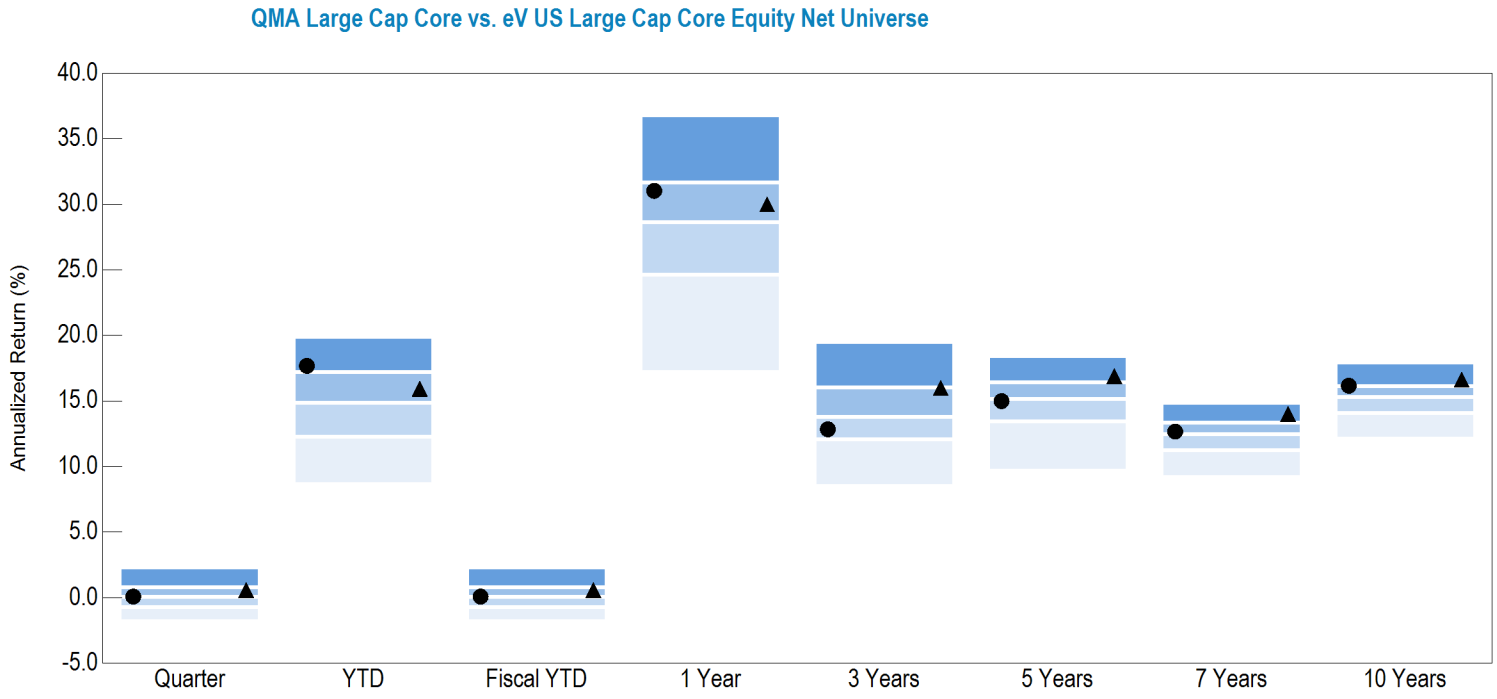
MICROSOFT CORP	5.93%
APPLE INC	5.56%
AMAZON.COM INC	3.36%
ALPHABET INC	2.48%
ALPHABET INC	2.45%
META PLATFORMS INC	2.38%
JOHNSON & JOHNSON	1.71%
VISA INC	1.52%
EXXON MOBIL CORP	1.36%
INTEL CORP	1.28%
Total	**28.04%**

Top Contributors

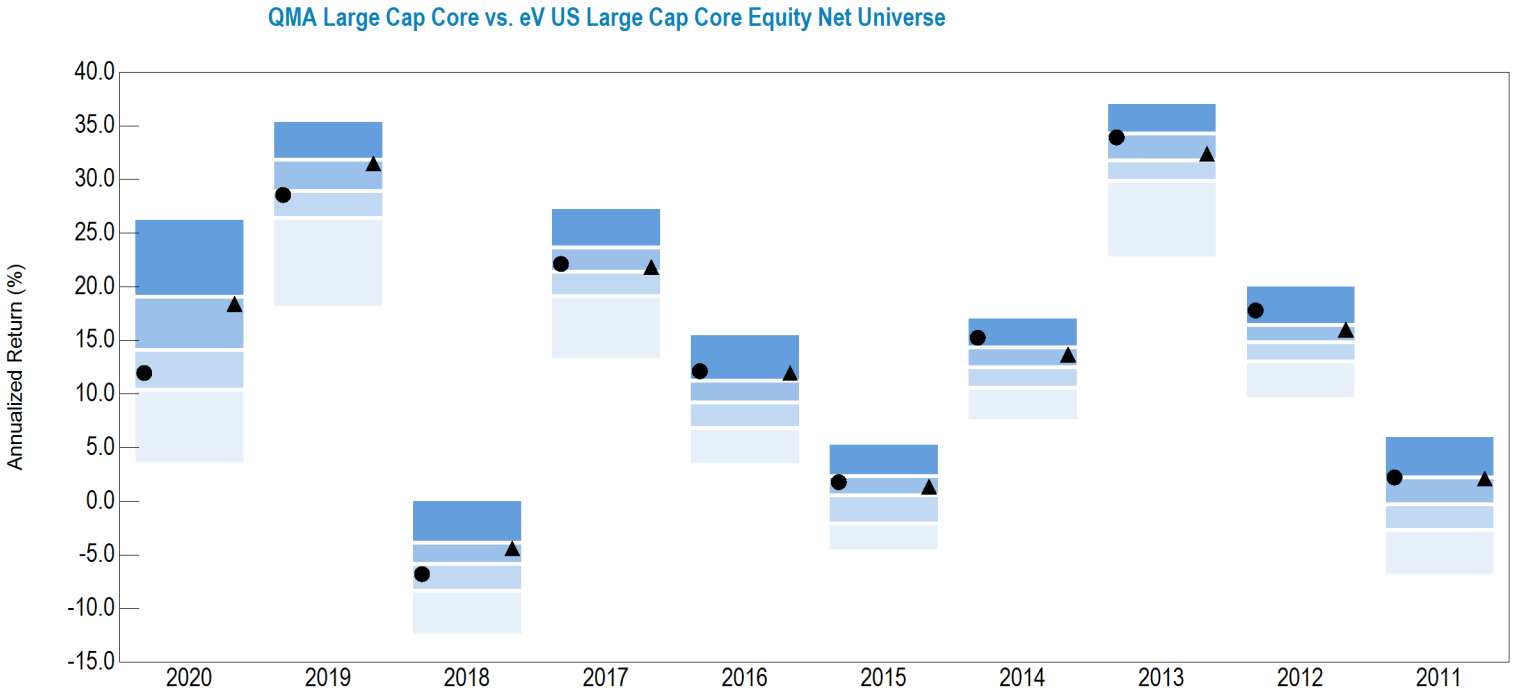
	Avg Wgt	Return	Contribution
MICROSOFT CORP	6.20	4.27	0.26
ALPHABET INC	2.24	9.49	0.21
APPLE INC	4.83	3.47	0.17
THERMO FISHER SCIENTIFIC INC	1.07	13.31	0.14
ALPHABET INC	2.21	6.34	0.14
DANAHER CORP	0.93	13.52	0.13
ORACLE CORP	0.93	12.34	0.11
HCA HEALTHCARE INC	0.65	17.62	0.11
CONOCOPHILLIPS	0.82	12.15	0.10
PFIZER INC	0.89	10.83	0.10

Bottom Contributors

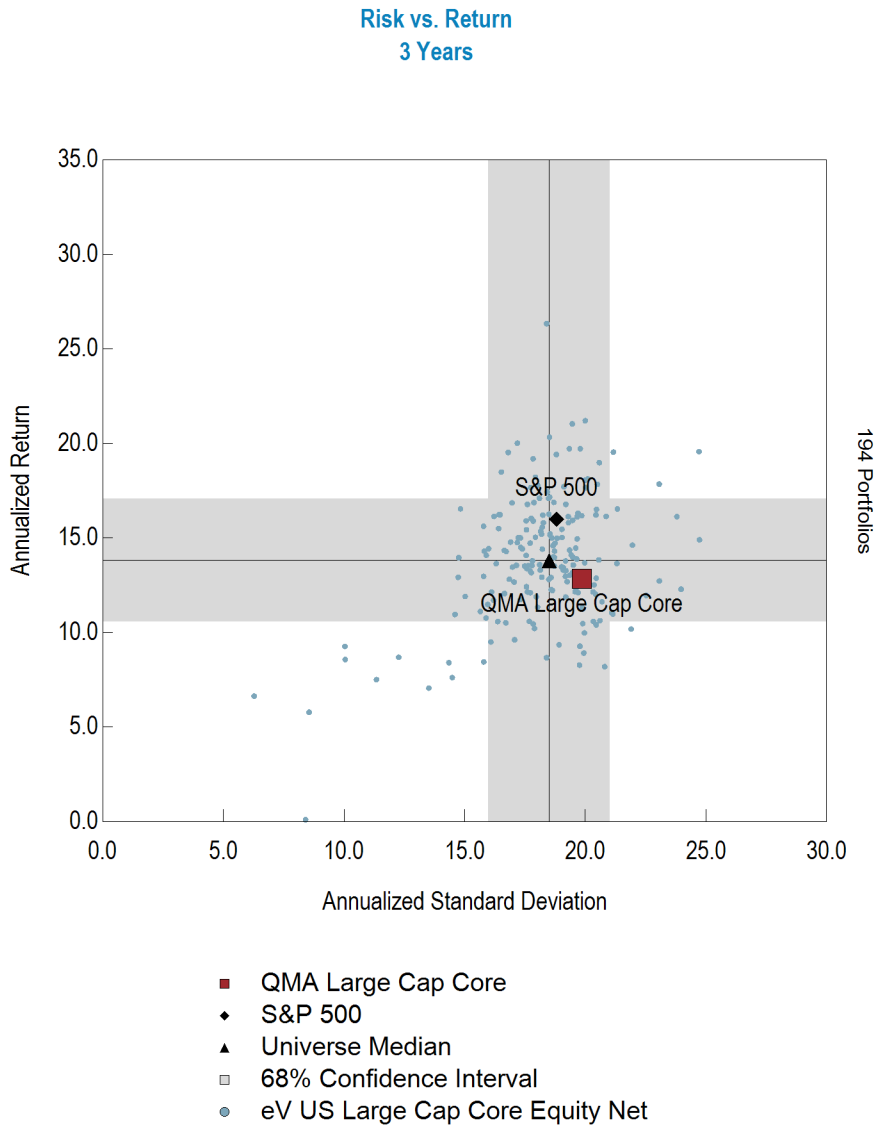
	Avg Wgt	Return	Contribution
AMAZON.COM INC	4.24	-4.51	-0.19
ACTIVISION BLIZZARD INC	0.68	-18.91	-0.13
APPLIED MATERIALS INC	1.09	-9.44	-0.10
LAM RESEARCH CORP	0.77	-12.32	-0.09
BRISTOL-MYERS SQUIBB CO	0.93	-10.08	-0.09
QUALCOMM INC.	0.99	-9.34	-0.09
3M CO	0.81	-11.01	-0.09
GENERAL MOTORS CO	0.65	-10.92	-0.07
PAYPAL HOLDINGS INC	0.64	-10.73	-0.07
META PLATFORMS INC	2.75	-2.39	-0.07

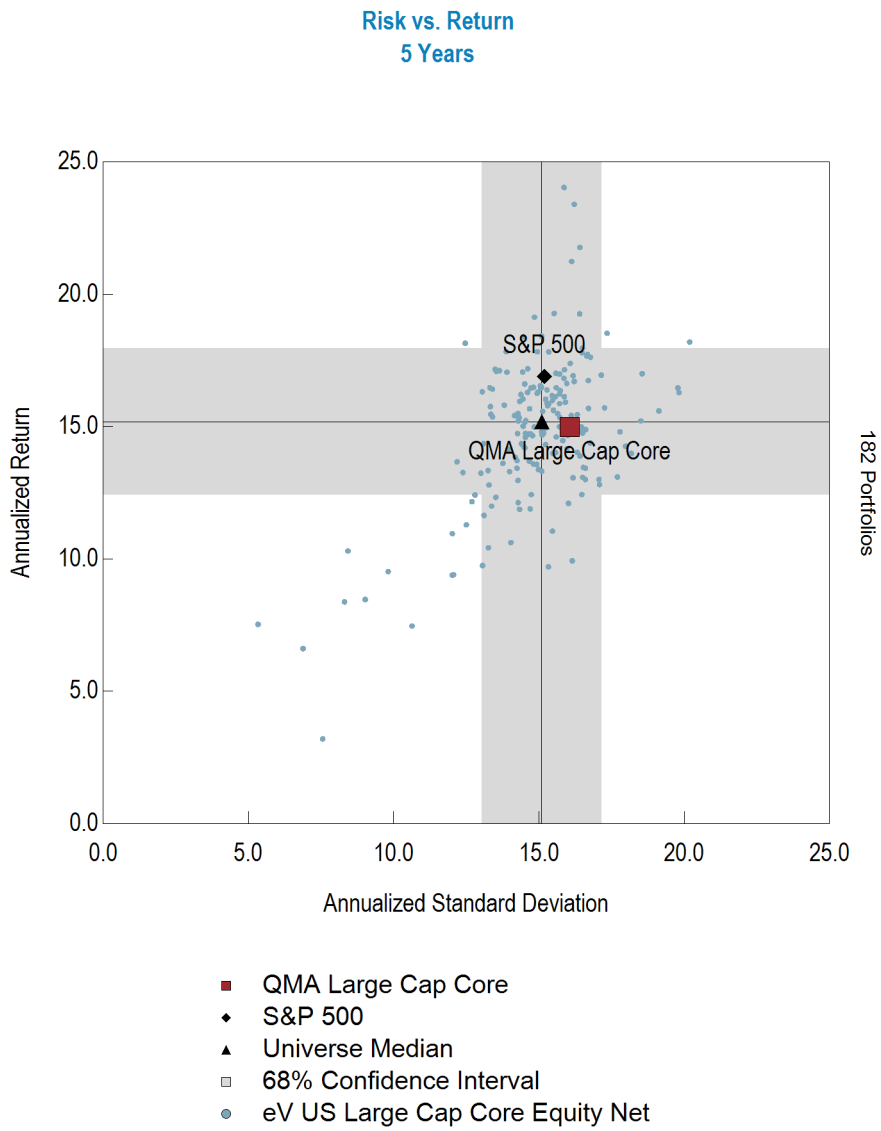


	Return (Rank)															
5th Percentile	2.3		19.9		2.3		36.8		19.5		18.4		14.8		17.9	
25th Percentile	0.8		17.2		0.8		31.7		16.0		16.5		13.4		16.2	
Median	0.1		14.9		0.1		28.7		13.8		15.2		12.5		15.3	
75th Percentile	-0.7		12.3		-0.7		24.7		12.1		13.5		11.3		14.1	
95th Percentile	-1.8		8.7		-1.8		17.3		8.5		9.7		9.2		12.2	
# of Portfolios	204		204		204		203		194		182		167		139	
● QMA Large Cap Core	0.1	(51)	17.7	(19)	0.1	(51)	31.0	(29)	12.8	(68)	15.0	(54)	12.7	(48)	16.2	(25)
▲ S&P 500	0.6	(31)	15.9	(38)	0.6	(31)	30.0	(40)	16.0	(26)	16.9	(19)	14.0	(15)	16.6	(14)



	Return (Rank)																			
5th Percentile	26.4		35.5		0.1		27.4		15.6		5.4		17.2		37.2		20.2		6.1	
25th Percentile	19.1		31.9		-3.8		23.7		11.3		2.4		14.4		34.3		16.5		2.2	
Median	14.1		28.9		-5.8		21.4		9.3		0.6		12.5		31.8		14.8		-0.3	
75th Percentile	10.4		26.5		-8.3		19.2		6.9		-2.0		10.6		29.9		13.0		-2.7	
95th Percentile	3.5		18.1		-12.5		13.2		3.4		-4.6		7.5		22.7		9.5		-6.9	
# of Portfolios	216		203		189		188		177		142		140		125		111		97	
● QMA Large Cap Core	12.0	(66)	28.6	(56)	-6.8	(62)	22.1	(43)	12.1	(19)	1.8	(30)	15.2	(18)	33.9	(29)	17.8	(13)	2.2	(26)
▲ S&P 500	18.4	(29)	31.5	(28)	-4.4	(32)	21.8	(46)	12.0	(21)	1.4	(37)	13.7	(33)	32.4	(43)	16.0	(30)	2.1	(26)


Risk vs. Return
3 Years
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Annualized Return
S&P 500
QMA Large Cap Core
194 Portfolios
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Annualized Standard Deviation
QMA Large Cap Core
S&P 500
Universe Median
68% Confidence Interval
eV US Large Cap Core Equity Net


Risk vs. Return
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25.0
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15.0
10.0
5.0
0.0
Annualized Return
S&P 500
QMA Large Cap Core
182 Portfolios
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5.0
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Annualized Standard Deviation
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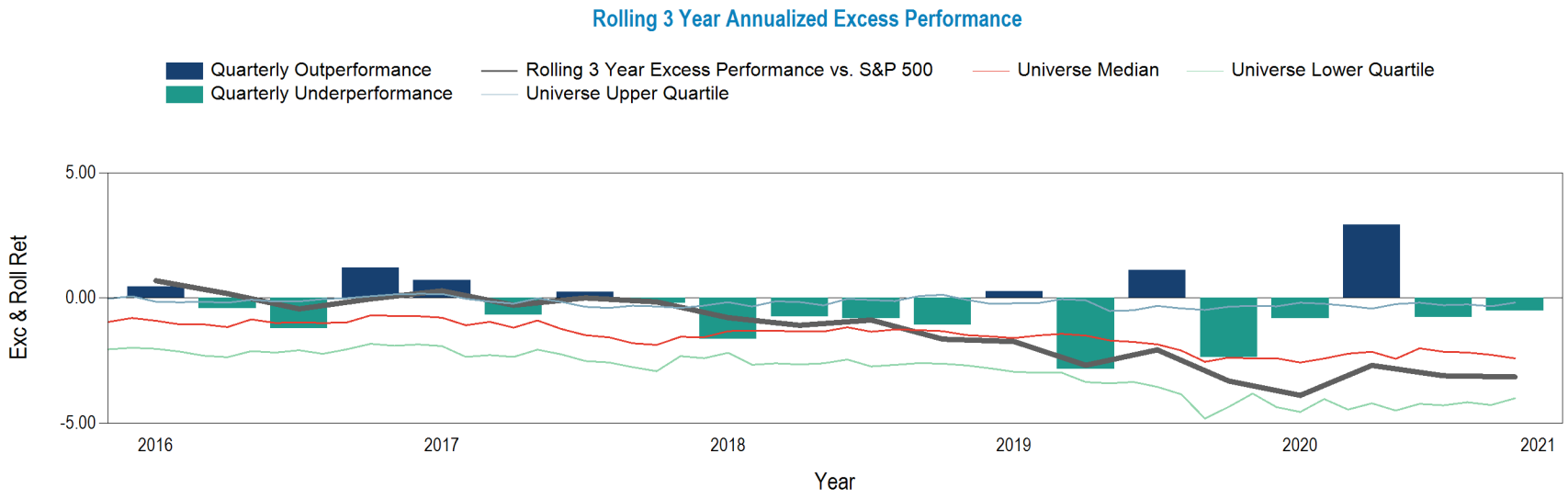
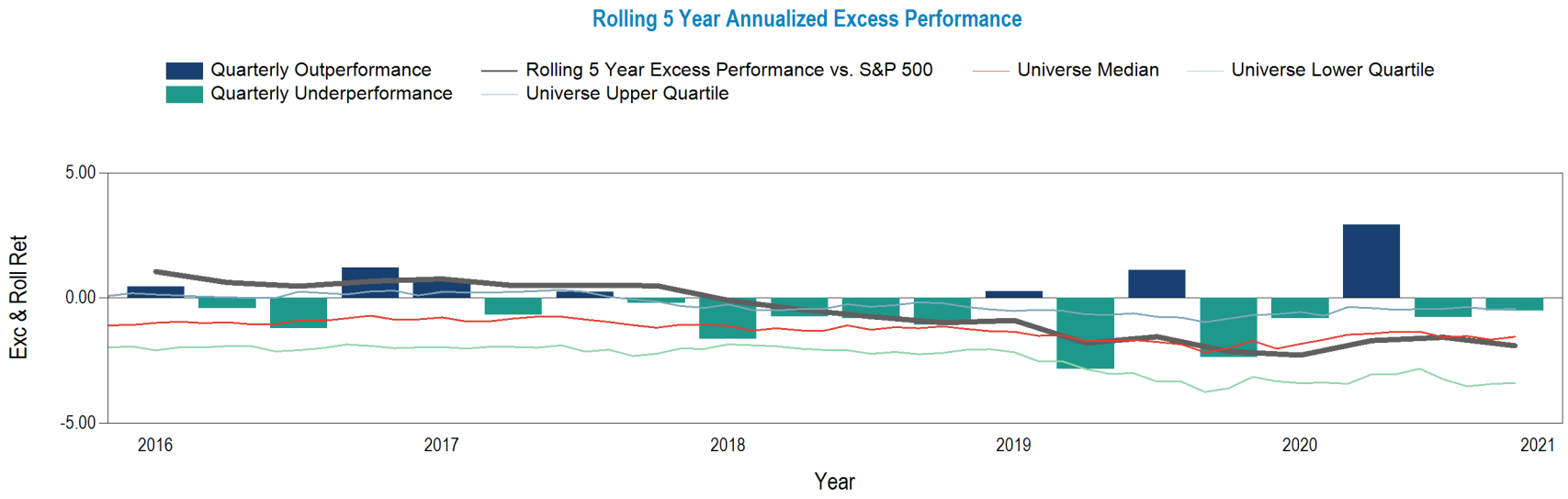
eV US Large Cap Core Equity Net

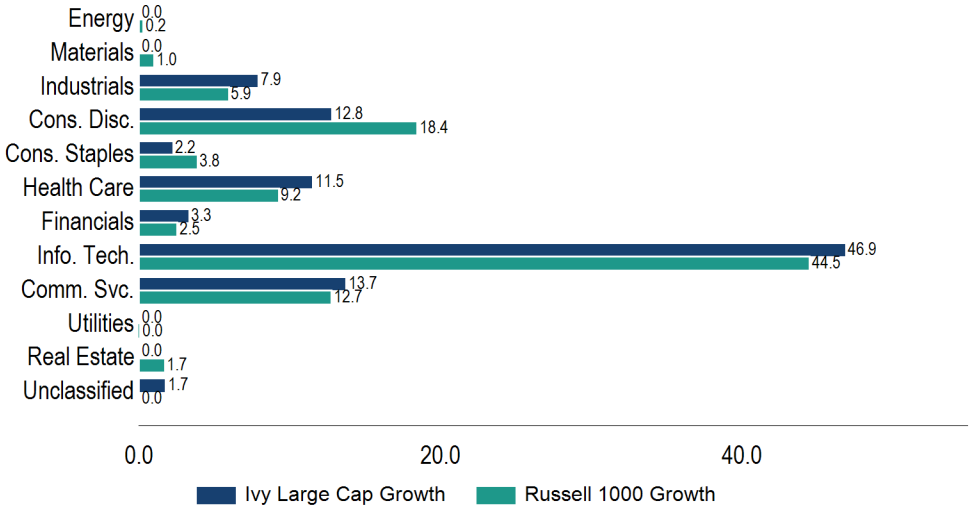

Rolling 3 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 3 Year Excess Performance vs. S&P 500
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year


Rolling 5 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 5 Year Excess Performance vs. S&P 500
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	40	500
Weighted Avg. Market Cap. ($B)	774.21	815.28
Median Market Cap. ($B)	102.40	19.50
Price To Earnings	36.43	34.56
Price To Book	9.79	12.85
Price To Sales	6.97	6.18
Return on Equity (%)	44.99	43.05
Yield (%)	0.58	0.74
Beta	0.90	1.00

Sector Allocation (%) vs Russell 1000 Growth



*Unclassified includes Cash

Top Holdings
Ending Period Weight

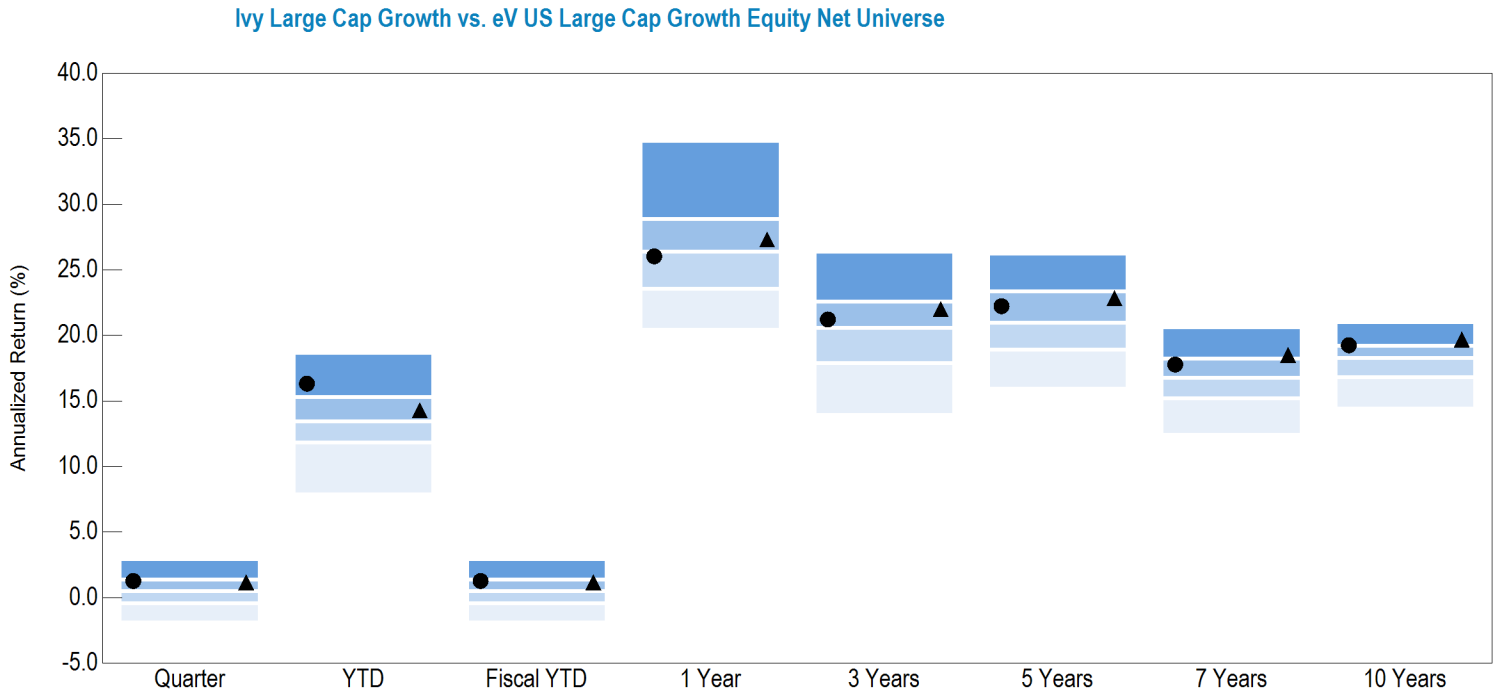
MICROSOFT CORP	10.51%
APPLE INC	7.89%
AMAZON.COM INC	6.98%
ALPHABET INC	5.63%
VISA INC	4.43%
MOTOROLA SOLUTIONS INC	3.81%
META PLATFORMS INC	3.56%
NVIDIA CORPORATION	3.49%
ELECTRONIC ARTS INC	2.90%
UNITEDHEALTH GROUP INC	2.87%
Total	**52.06%**

Top Contributors

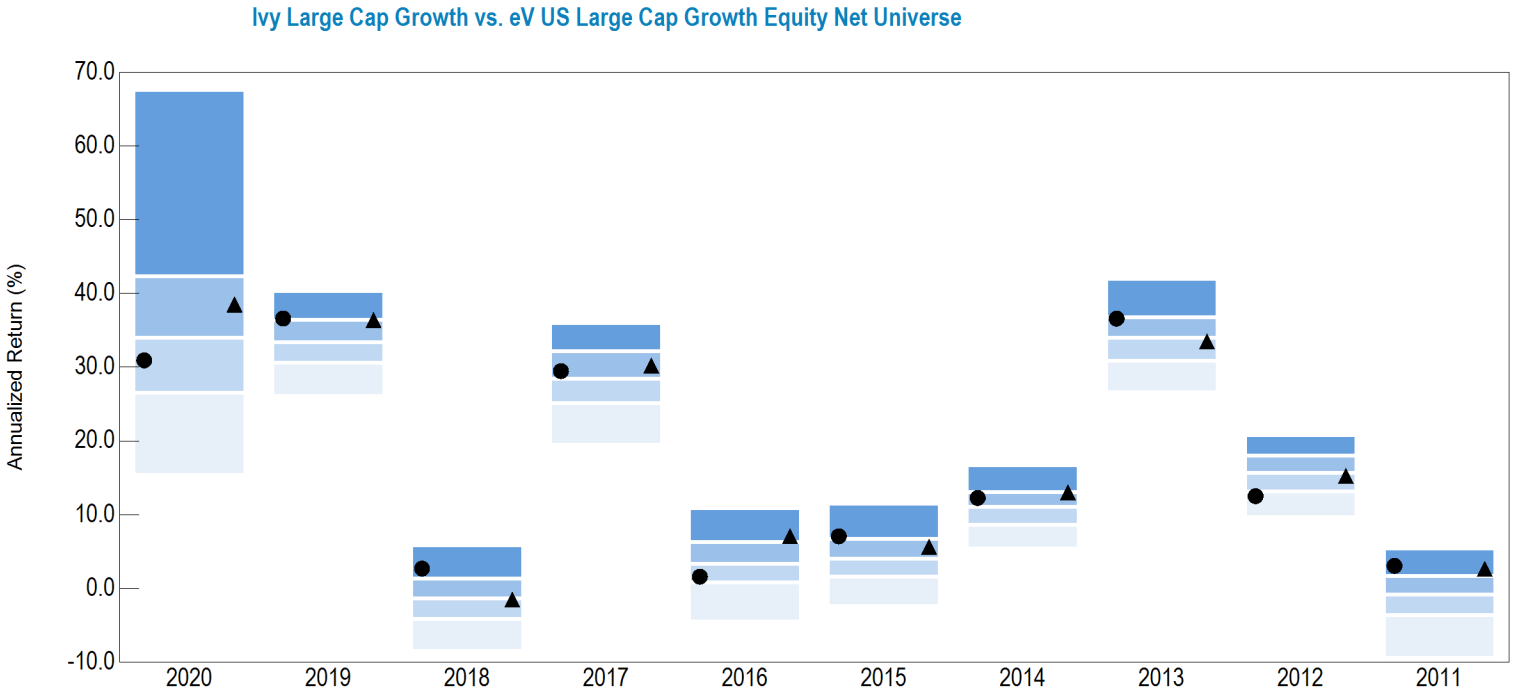
	Avg Wgt	Return	Contribution
GARTNER INC	2.23	25.47	0.57
ALPHABET INC	5.16	9.49	0.49
MICROSOFT CORP	9.78	4.27	0.42
INTUIT INC.	3.37	10.19	0.34
APPLE INC	7.78	3.47	0.27
MOTOROLA SOLUTIONS INC	3.58	7.45	0.27
SALESFORCE.COM INC	1.80	11.03	0.20
DANAHER CORP	1.21	13.52	0.16
VERISK ANALYTICS INC	1.08	14.79	0.16
NVIDIA CORPORATION	3.45	3.59	0.12

Bottom Contributors

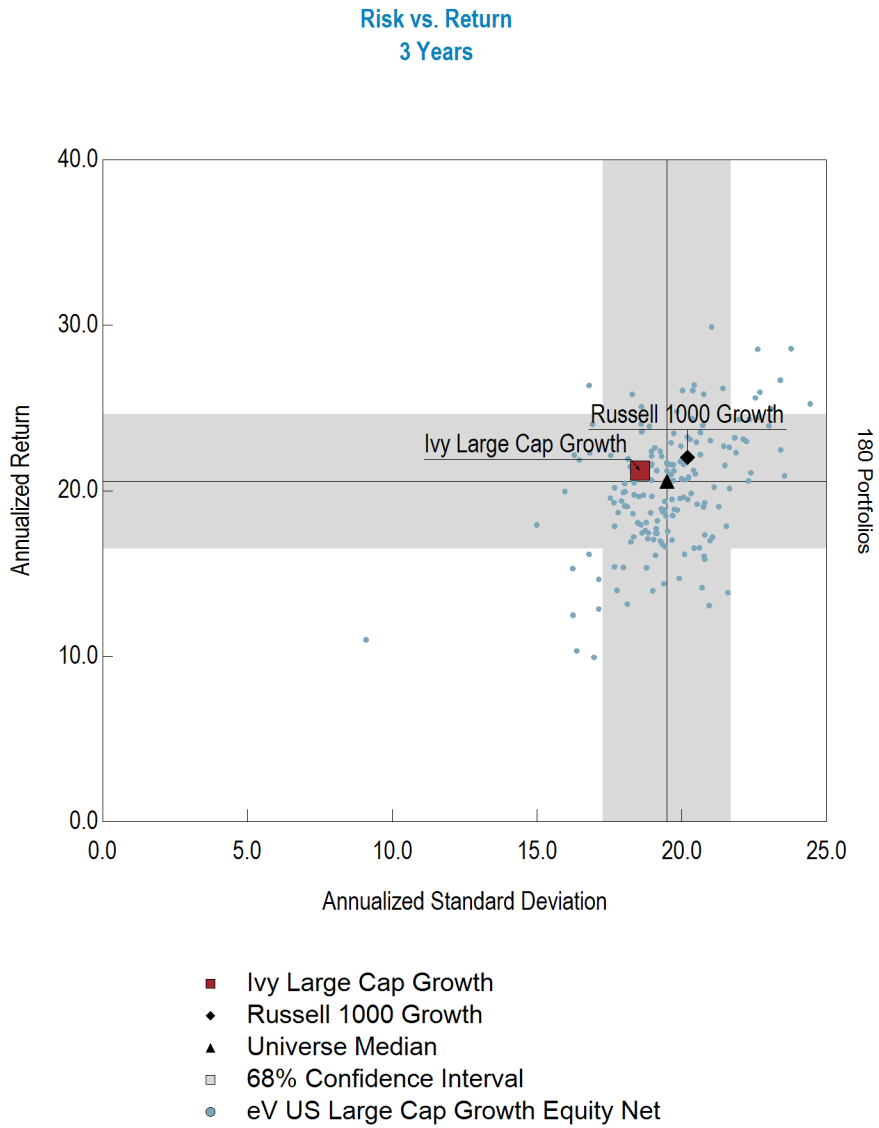
	Avg Wgt	Return	Contribution
PINTEREST INC	0.93	-35.47	-0.33
PAYPAL HOLDINGS INC	3.01	-10.73	-0.32
AMAZON.COM INC	6.77	-4.51	-0.31
STANLEY BLACK & DECKER INC	1.87	-14.12	-0.26
VERISIGN INC	2.47	-9.96	-0.25
CERNER CORP	2.54	-9.50	-0.24
VISA INC	4.66	-4.60	-0.21
UNION PACIFIC CORP	0.94	-10.44	-0.10
META PLATFORMS INC	3.86	-2.39	-0.09
NIKE INC	1.18	-5.84	-0.07

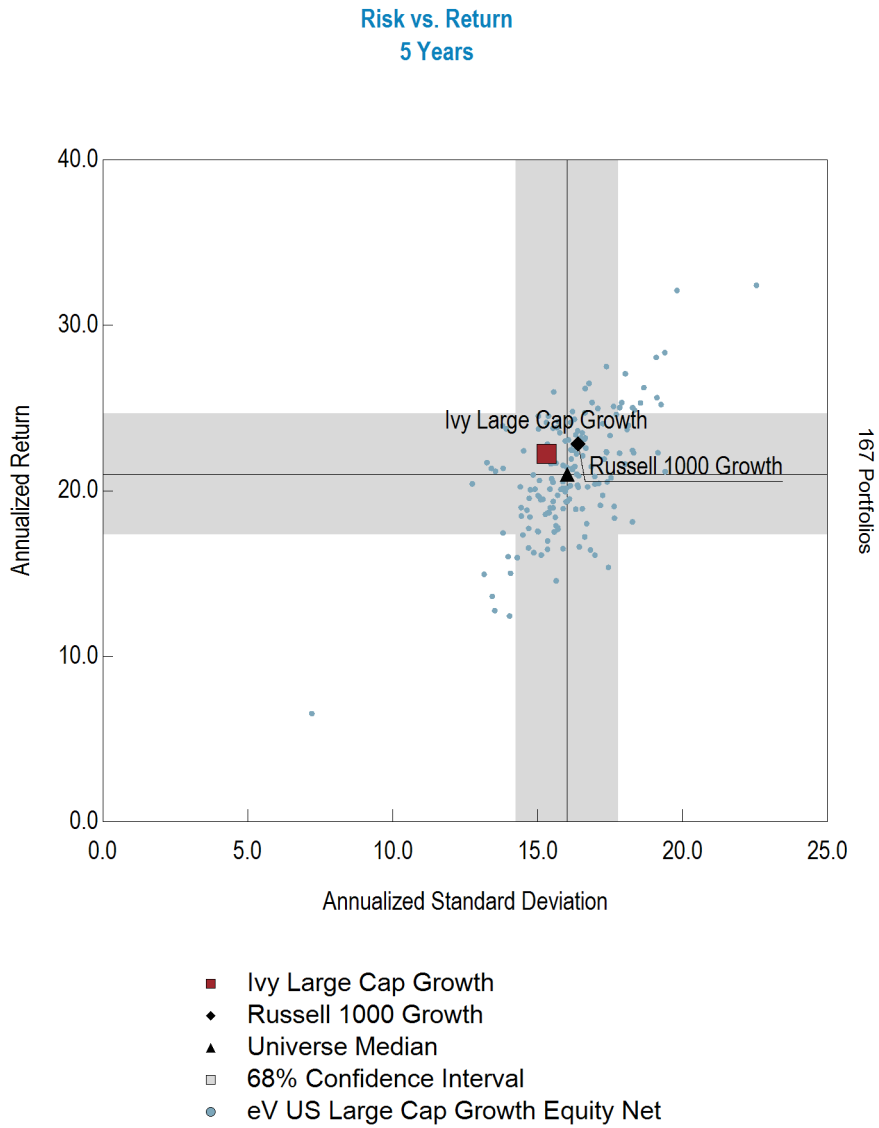


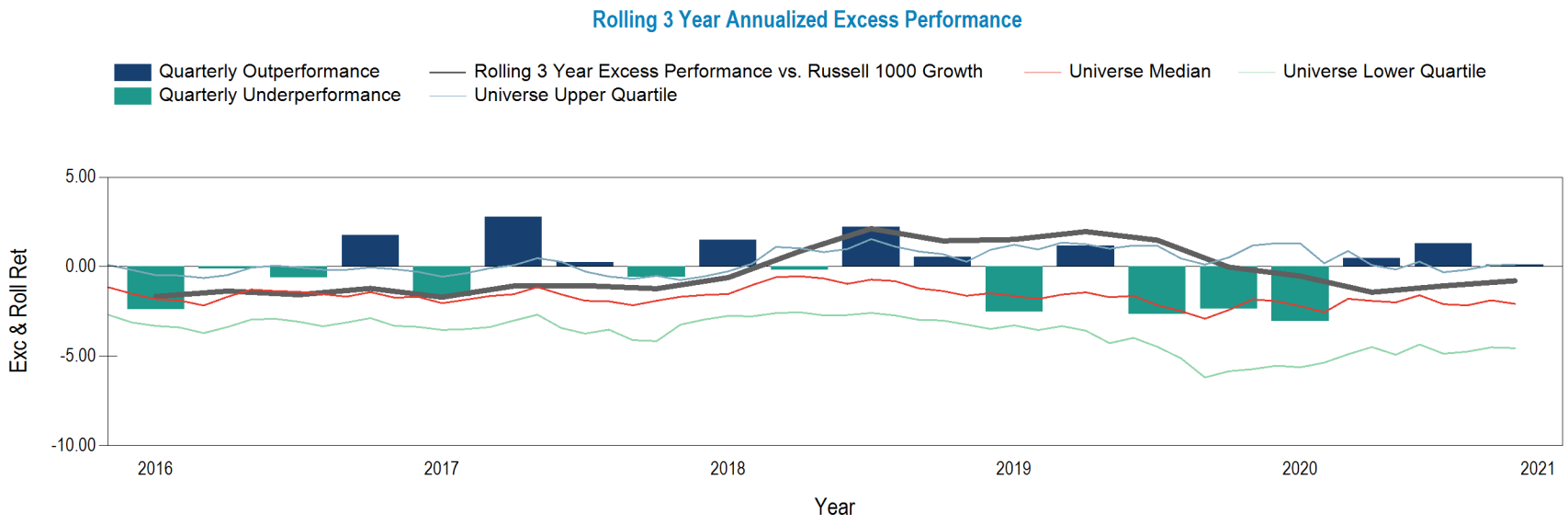
	Return (Rank)															
5th Percentile	2.9		18.7		2.9		34.8		26.4		26.2		20.6		21.0	
25th Percentile	1.4		15.3		1.4		28.9		22.6		23.4		18.2		19.2	
Median	0.5		13.5		0.5		26.4		20.6		21.0		16.8		18.3	
75th Percentile	-0.4		11.8		-0.4		23.6		17.9		18.9		15.2		16.8	
95th Percentile	-1.9		7.9		-1.9		20.5		14.0		16.0		12.4		14.5	
# of Portfolios	188		188		188		188		180		167		154		138	
● Ivy Large Cap Growth	1.3	(30)	16.3	(19)	1.3	(30)	26.0	(54)	21.2	(42)	22.2	(38)	17.8	(33)	19.2	(25)
▲ Russell 1000 Growth	1.2	(33)	14.3	(40)	1.2	(33)	27.3	(40)	22.0	(32)	22.8	(29)	18.5	(20)	19.7	(18)

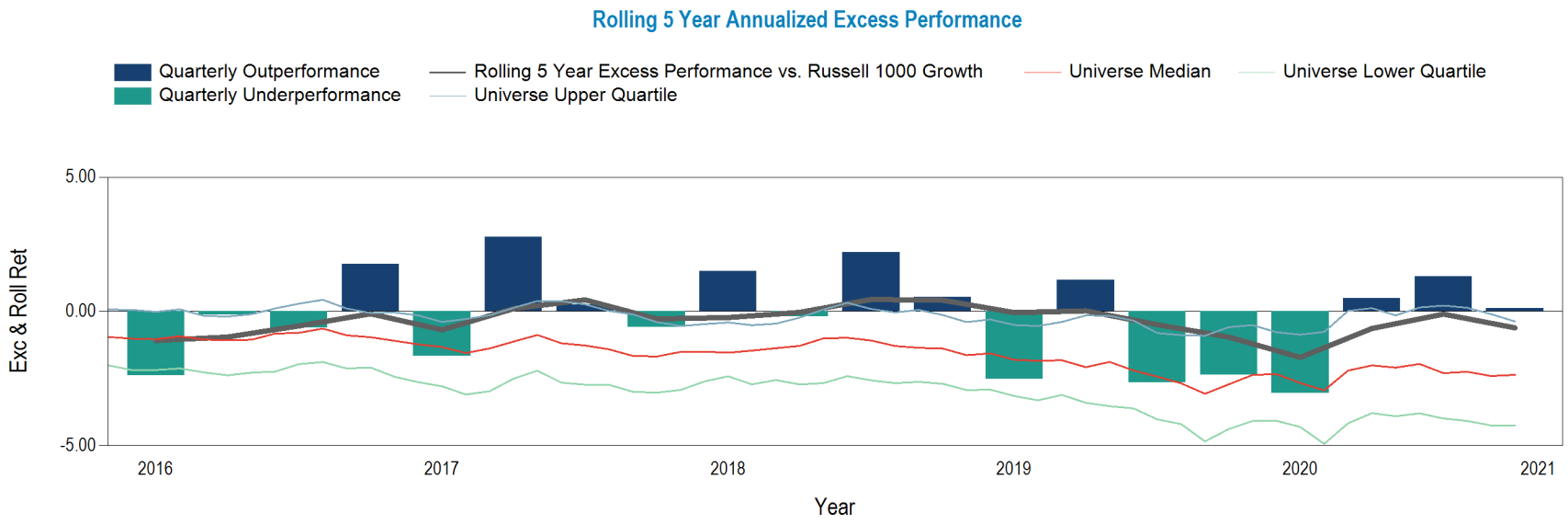


	Return (Rank)									
5th Percentile	67.5	40.3	5.8	36.0	10.8	11.4	16.7	41.9	20.7	5.4
25th Percentile	42.4	36.5	1.4	32.2	6.3	6.8	13.1	36.8	18.1	1.7
Median	34.1	33.4	-1.3	28.5	3.4	4.1	11.1	34.0	15.7	-0.8
75th Percentile	26.6	30.6	-4.1	25.2	0.8	1.6	8.7	30.9	13.2	-3.5
95th Percentile	15.5	26.1	-8.4	19.5	-4.5	-2.3	5.5	26.6	9.7	-9.4
# of Portfolios	198	186	179	182	182	175	180	158	140	133
● Ivy Large Cap Growth	30.9 (64)	36.6 (25)	2.7 (16)	29.5 (46)	1.6 (70)	7.1 (23)	12.3 (36)	36.6 (28)	12.5 (80)	3.1 (17)
▲ Russell 1000 Growth	38.5 (33)	36.4 (27)	-1.5 (52)	30.2 (38)	7.1 (20)	5.7 (35)	13.0 (28)	33.5 (54)	15.3 (58)	2.6 (20)


Risk vs. Return
3 Years
40.0
30.0
20.0
10.0
0.0
Annualized Return
0.0
5.0
10.0
15.0
20.0
25.0
Annualized Standard Deviation
Russell 1000 Growth
Ivy Large Cap Growth
180 Portfolios
Ivy Large Cap Growth
Russell 1000 Growth
Universe Median
68% Confidence Interval
eV US Large Cap Growth Equity Net


Risk vs. Return
5 Years
40.0
30.0
20.0
10.0
0.0
Annualized Return
0.0
5.0
10.0
15.0
20.0
25.0
Annualized Standard Deviation
Ivy Large Cap Growth
Russell 1000 Growth
167 Portfolios
Ivy Large Cap Growth
Russell 1000 Growth
Universe Median
68% Confidence Interval
eV US Large Cap Growth Equity Net

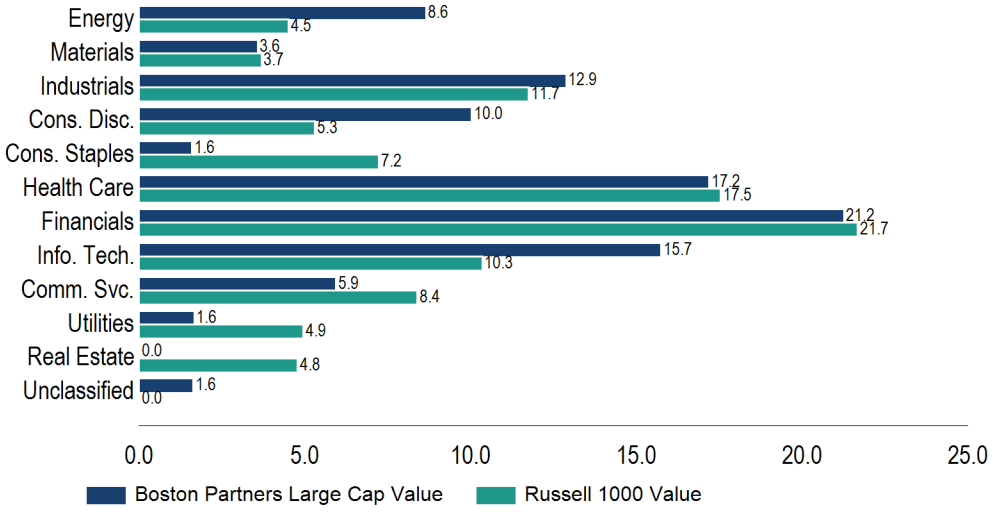

Rolling 3 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 3 Year Excess Performance vs. Russell 1000 Growth
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
-10.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year


Rolling 5 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 5 Year Excess Performance vs. Russell 1000 Growth
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	93	848
Weighted Avg. Market Cap. ($B)	177.19	156.27
Median Market Cap. ($B)	47.18	13.84
Price To Earnings	17.04	18.70
Price To Book	2.50	2.62
Price To Sales	1.89	2.37
Return on Equity (%)	17.41	14.94
Yield (%)	1.62	2.03
Beta	1.10	1.00

Sector Allocation (%) vs Russell 1000 Value



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

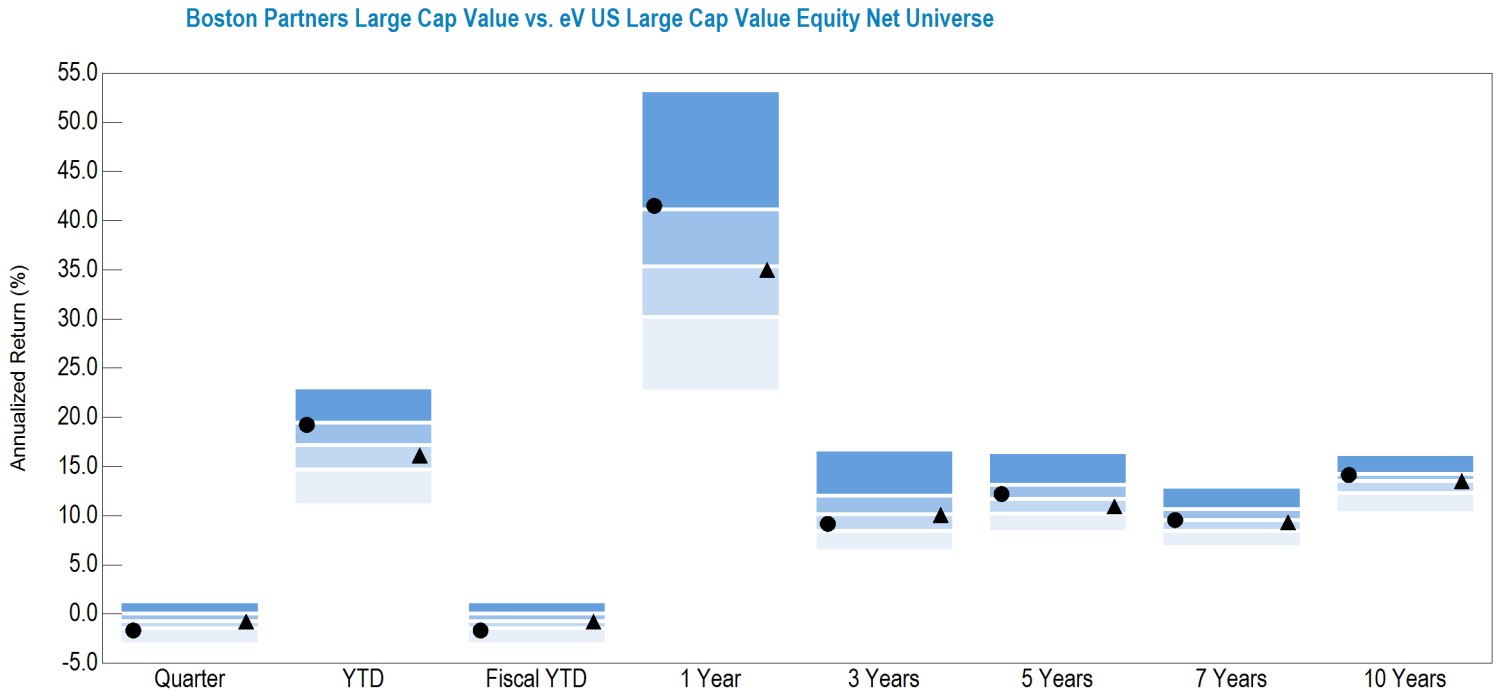
JPMORGAN CHASE & CO	3.26%
JOHNSON & JOHNSON	3.03%
BERKSHIRE HATHAWAY INC	2.85%
CISCO SYSTEMS INC	2.49%
CONOCOPHILLIPS	2.43%
ALPHABET INC	2.33%
AUTOZONE INC	2.20%
WELLS FARGO & CO	2.10%
BANK OF AMERICA CORP	1.98%
CIGNA CORP	1.86%
Total	**24.52%**

Top Contributors

	Avg Wgt	Return	Contribution
AUTOZONE INC	2.05	13.79	0.28
CONOCOPHILLIPS	2.16	12.15	0.26
ALPHABET INC	2.10	9.49	0.20
AVANTOR INC	1.26	15.18	0.19
JPMORGAN CHASE & CO	3.06	5.85	0.18
CHUBB LTD	1.55	9.63	0.15
SONY GROUP CORPORATION	1.03	13.74	0.14
ORACLE CORP	1.11	12.34	0.14
PFIZER INC	1.15	10.83	0.12
AMERICAN INTERNATIONAL GROUP INC	0.71	15.99	0.11

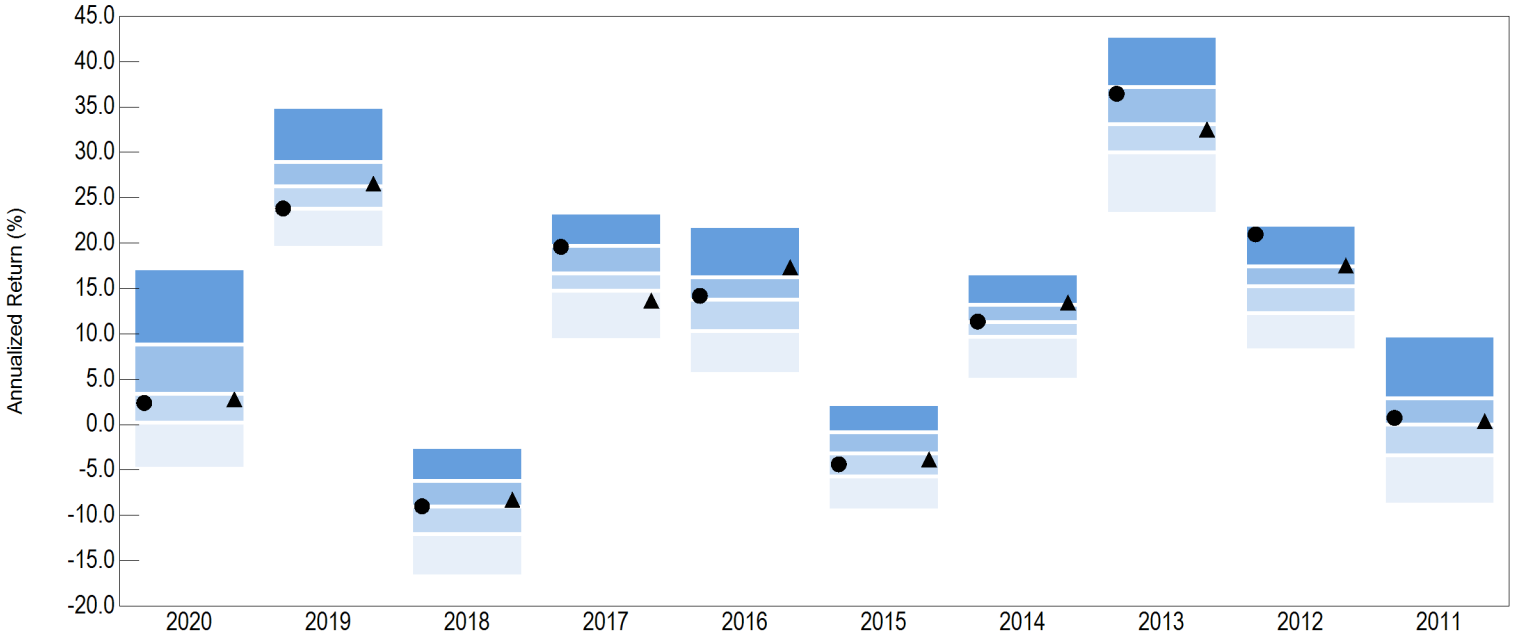
Bottom Contributors

	Avg Wgt	Return	Contribution
CIGNA CORP	1.92	-15.18	-0.29
MICRON TECHNOLOGY INC.	1.67	-16.36	-0.27
LAS VEGAS SANDS CORP	0.70	-30.54	-0.21
DUPONT DE NEMOURS INC	1.72	-11.82	-0.20
APPLIED MATERIALS INC	1.90	-9.44	-0.18
CENTENE CORP	1.17	-14.56	-0.17
TAPESTRY INC	1.13	-14.33	-0.16
CATERPILLAR INC	1.34	-11.31	-0.15
NOVARTIS AG	1.45	-10.37	-0.15
FIDELITY NATIONAL INFORMATION SERVICES INC	1.07	-13.85	-0.15

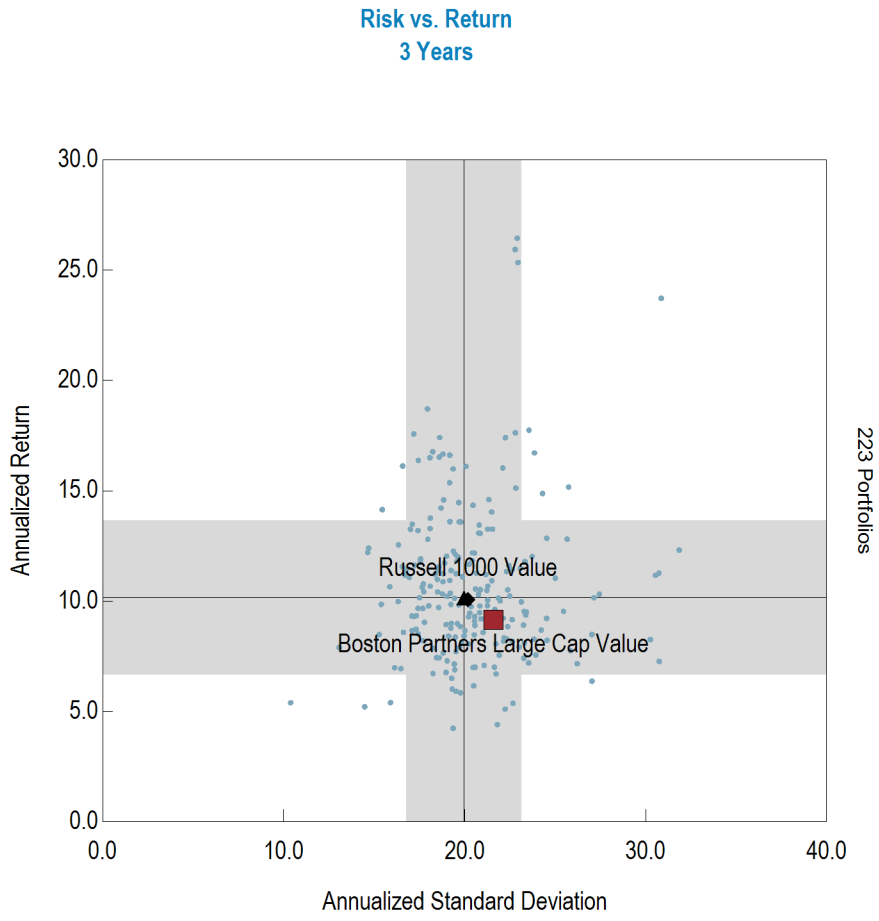


	Return (Rank)															
5th Percentile	1.3		23.0		1.3		53.3		16.7		16.4		12.9		16.3	
25th Percentile	0.1		19.5		0.1		41.2		12.1		13.1		10.7		14.3	
Median	-0.7		17.2		-0.7		35.4		10.2		11.8		9.6		13.6	
75th Percentile	-1.4		14.7		-1.4		30.2		8.5		10.3		8.5		12.4	
95th Percentile	-3.0		11.1		-3.0		22.7		6.4		8.4		6.8		10.3	
# of Portfolios	229		229		229		229		223		212		201		175	
● **Boston Partners Large Cap Value**	-1.7	(80)	19.2	(28)	-1.7	(80)	41.5	(24)	9.2	(67)	12.2	(43)	9.6	(51)	14.1	(30)
▲ **Russell 1000 Value**	-0.8	(53)	16.1	(60)	-0.8	(53)	35.0	(53)	10.1	(52)	10.9	(66)	9.3	(55)	13.5	(55)

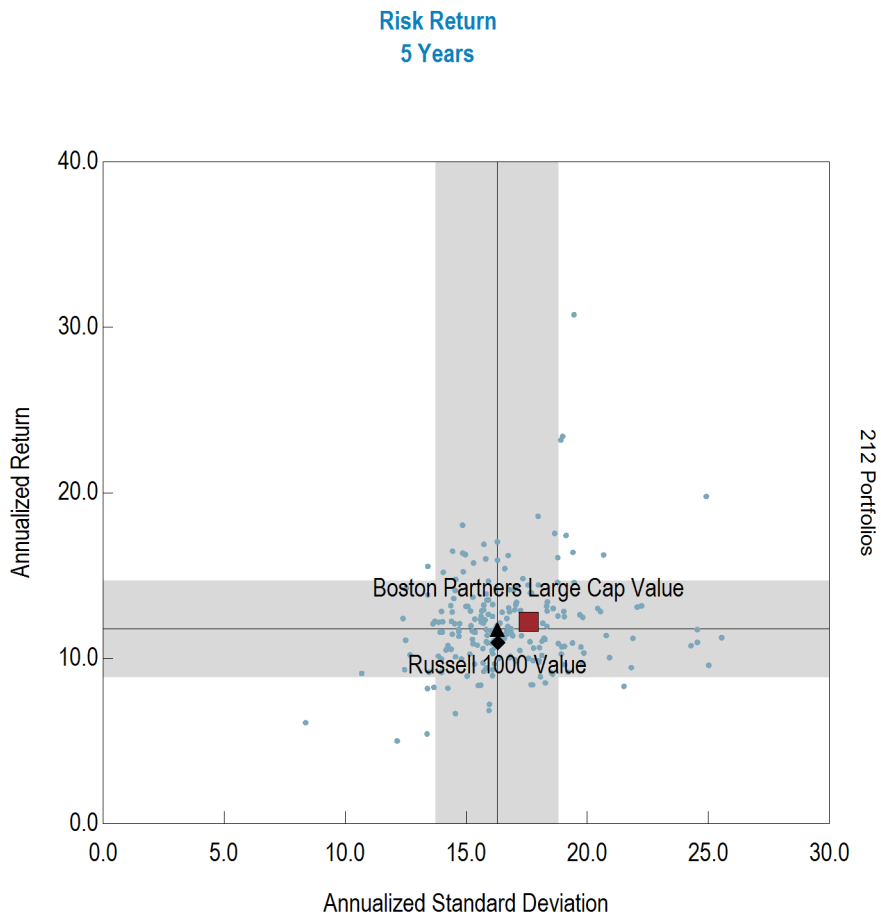
Boston Partners Large Cap Value vs. eV US Large Cap Value Equity Net Universe



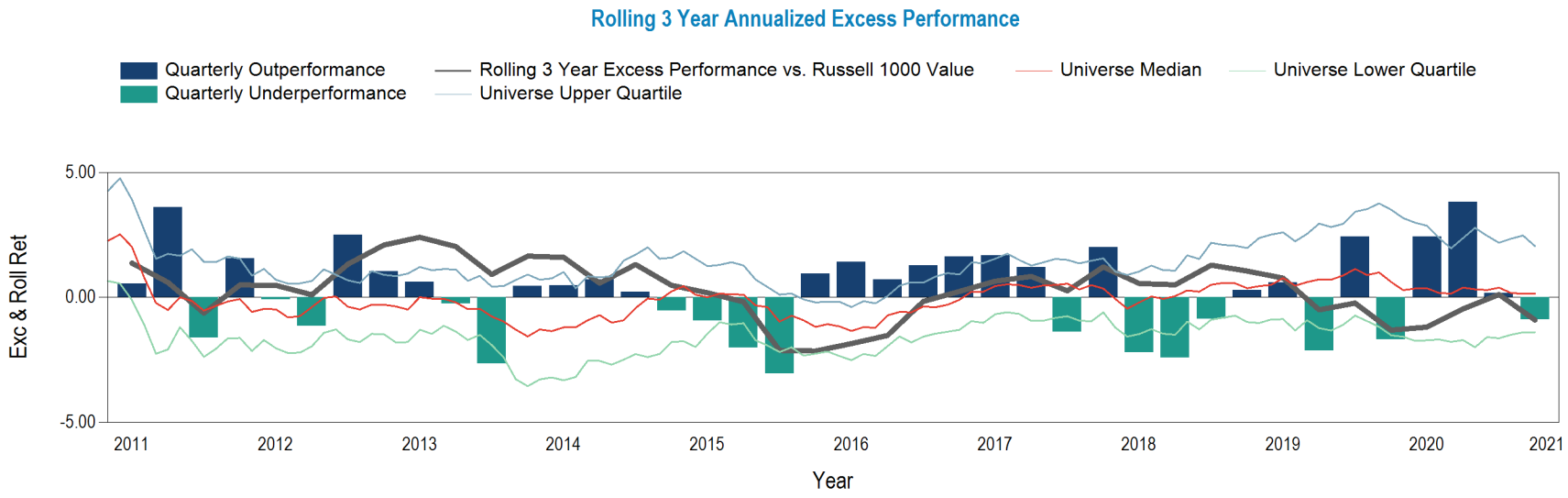
	Return (Rank)																			
5th Percentile	17.2		34.9		-2.5		23.3		21.8		2.2		16.6		42.8		22.0		9.8	
25th Percentile	8.9		28.9		-6.1		19.7		16.3		-0.8		13.3		37.3		17.5		2.9	
Median	3.4		26.3		-9.0		16.7		13.8		-3.1		11.3		33.1		15.3		0.0	
75th Percentile	0.2		23.8		-12.0		14.8		10.4		-5.7		9.7		30.0		12.3		-3.4	
95th Percentile	-4.8		19.5		-16.7		9.4		5.6		-9.4		5.0		23.2		8.2		-8.8	
# of Portfolios	239		249		239		231		225		195		197		184		164		149	
● Boston Partners Large Cap Value	2.4	(57)	23.8	(75)	-9.0	(51)	19.6	(26)	14.2	(47)	-4.4	(63)	11.4	(50)	36.4	(30)	21.0	(7)	0.7	(44)
▲ Russell 1000 Value	2.8	(54)	26.5	(49)	-8.3	(43)	13.7	(86)	17.3	(19)	-3.8	(59)	13.5	(24)	32.5	(54)	17.5	(25)	0.4	(48)

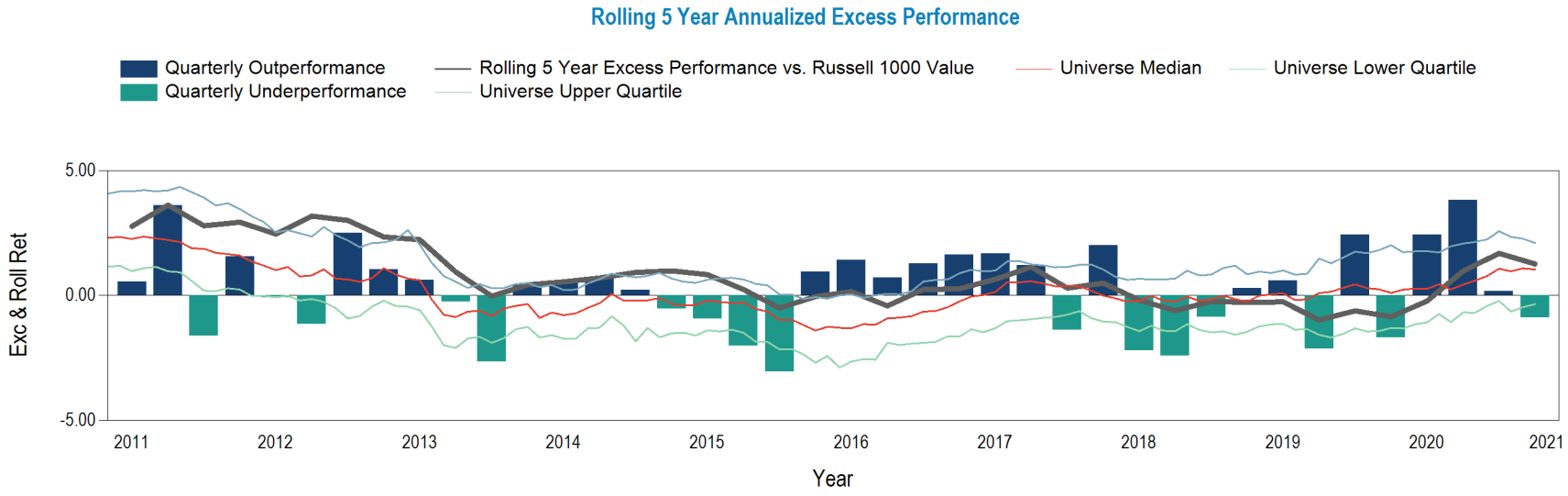


- Boston Partners Large Cap Value
- Russell 1000 Value
- Universe Median
- 68% Confidence Interval
- eV US Large Cap Value Equity Net



- Boston Partners Large Cap Value
- Russell 1000 Value
- Universe Median
- 68% Confidence Interval
- eV US Large Cap Value Equity Net

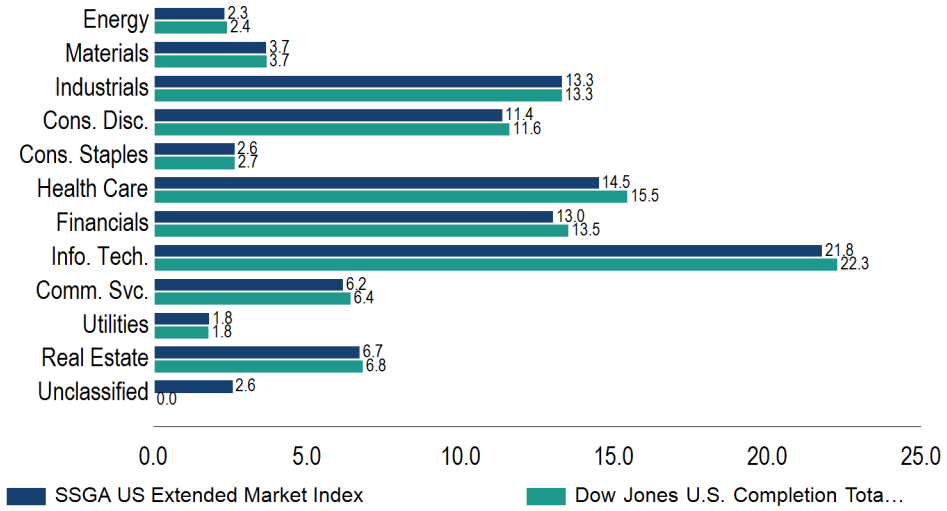

Rolling 3 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 3 Year Excess Performance vs. Russell 1000 Value
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year


Rolling 5 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 5 Year Excess Performance vs. Russell 1000 Value
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year

Characteristics

	Portfolio	Dow Jones U.S. Completion Total Stock Market
Number of Holdings	2,060	3,612
Weighted Avg. Market Cap. ($B)	15.54	15.26
Median Market Cap. ($B)	0.91	0.87
Price To Earnings	19.18	19.02
Price To Book	3.43	3.40
Price To Sales	2.45	2.49
Return on Equity (%)	1.92	1.51
Yield (%)	0.94	0.93
Beta		1.00

Sector Allocation (%) vs Dow Jones U.S. Completion Total Stock Market



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

SQUARE INC	1.19%
BLACKSTONE GROUP INC	1.00%
SNAP INC	0.97%
UBER TECHNOLOGIES INC	0.91%
SNOWFLAKE INC	0.86%
AIRBNB INC	0.71%
ZOOM VIDEO COMMUNICATIONS INC	0.71%
TWILIO INC	0.67%
DOCUSIGN INC.	0.63%
CROWDSTRIKE HOLDINGS INC	0.62%
Total	**8.26%**

Top Contributors

	End Weight	Return	Contribution
BLACKSTONE GROUP INC	0.99	20.49	0.20
PALO ALTO NETWORKS INC	0.58	29.09	0.17
DATADOG INC	0.42	35.81	0.15
BILL.COM HOLDINGS INC	0.29	45.73	0.13
MONGODB INC	0.38	30.42	0.11
AFFIRM HOLDINGS INC	0.13	76.88	0.10
REPLIGEN CORP	0.18	44.77	0.08
SNAP INC	0.96	8.41	0.08
AIRBNB INC	0.70	9.54	0.07
LULULEMON ATHLETICA INC	0.60	10.89	0.07

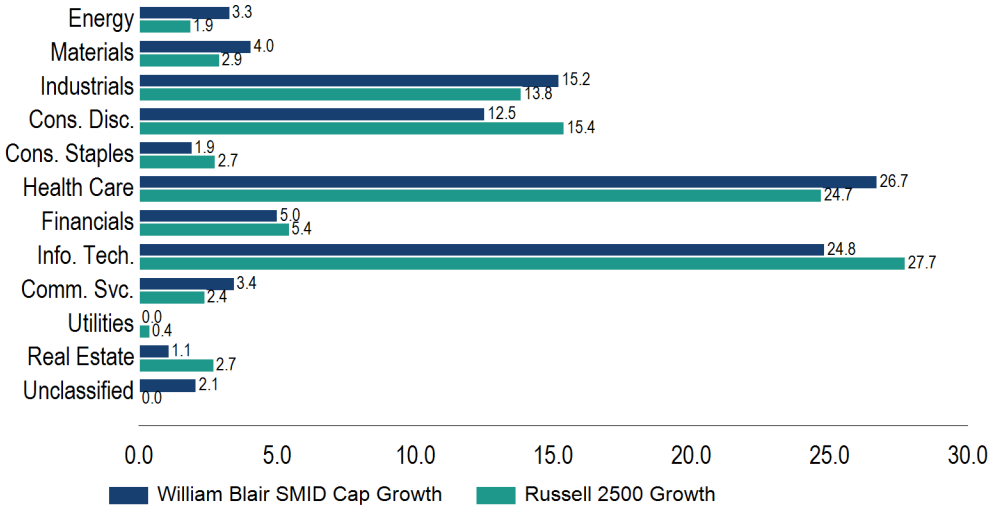
Bottom Contributors

	End Weight	Return	Contribution
ZOOM VIDEO COMMUNICATIONS INC	0.70	-32.43	-0.23
ROKU INC	0.46	-31.77	-0.15
PINTEREST INC	0.36	-35.47	-0.13
TWILIO INC	0.66	-19.06	-0.13
UBER TECHNOLOGIES INC	0.91	-10.61	-0.10
PELOTON INTERACTIVE INC	0.30	-29.81	-0.09
AMC ENTERTAINMENT HOLDINGS INC	0.24	-32.85	-0.08
NOVOCURE LTD	0.13	-47.63	-0.06
TELADOC HEALTH INC	0.25	-23.74	-0.06
RINGCENTRAL INC	0.22	-25.15	-0.06

Characteristics

	Portfolio	Russell 2500 Growth
Number of Holdings	76	1,450
Weighted Avg. Market Cap. ($B)	10.06	7.77
Median Market Cap. ($B)	7.27	1.84
Price To Earnings	39.57	29.13
Price To Book	5.62	6.32
Price To Sales	4.28	3.33
Return on Equity (%)	7.70	2.33
Yield (%)	0.37	0.47
Beta	0.83	1.00

Sector Allocation (%) vs Russell 2500 Growth



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

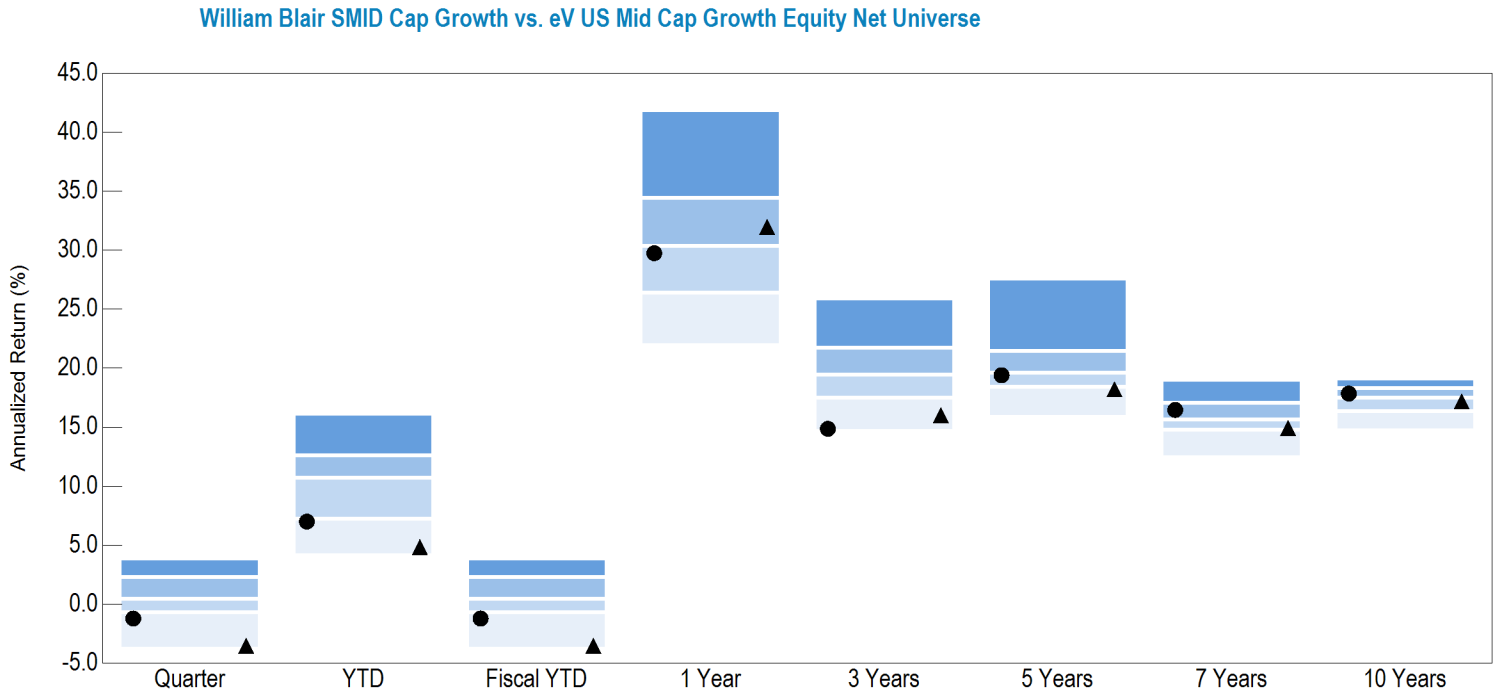
DYNATRACE INC	2.61%
BUILDERS FIRSTSOURCE INC	2.48%
CROWN HOLDINGS INC	2.19%
CHARLES RIVER LABORATORIES INTERNATIONAL INC	2.18%
BROOKS AUTOMATION INC	2.17%
BWX TECHNOLOGIES INC	2.12%
BIO-TECHNE CORP	2.11%
TREX CO INC	2.09%
AXON ENTERPRISE INC	2.05%
PURE STORAGE INC	2.05%
Total	**22.06%**

Top Contributors

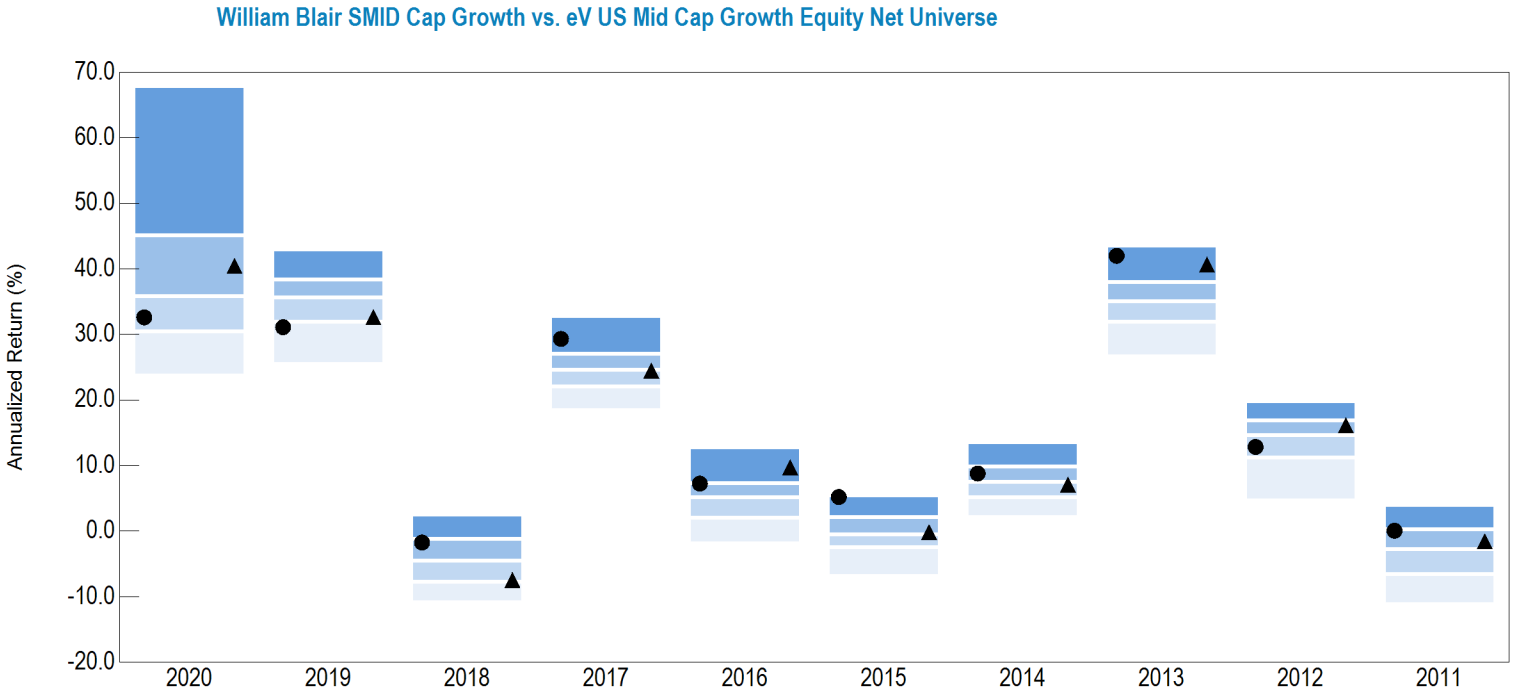
	Avg Wgt	Return	Contribution
DYNATRACE INC	2.08	21.48	0.45
PURE STORAGE INC	1.54	28.83	0.44
BUILDERS FIRSTSOURCE INC	1.94	21.28	0.41
HORIZON THERAPEUTICS PUBLIC LTD CO	2.32	16.98	0.39
NICE LTD	1.66	14.78	0.25
WORKIVA INC	0.87	26.61	0.23
CHARLES RIVER LABORATORIES INTERNATIONAL INC	1.97	11.56	0.23
ARES MANAGEMENT CORP	1.19	16.79	0.20
CAMECO CORP	1.45	13.50	0.20
WESTERN ALLIANCE BANCORPORATION	1.10	17.61	0.19

Bottom Contributors

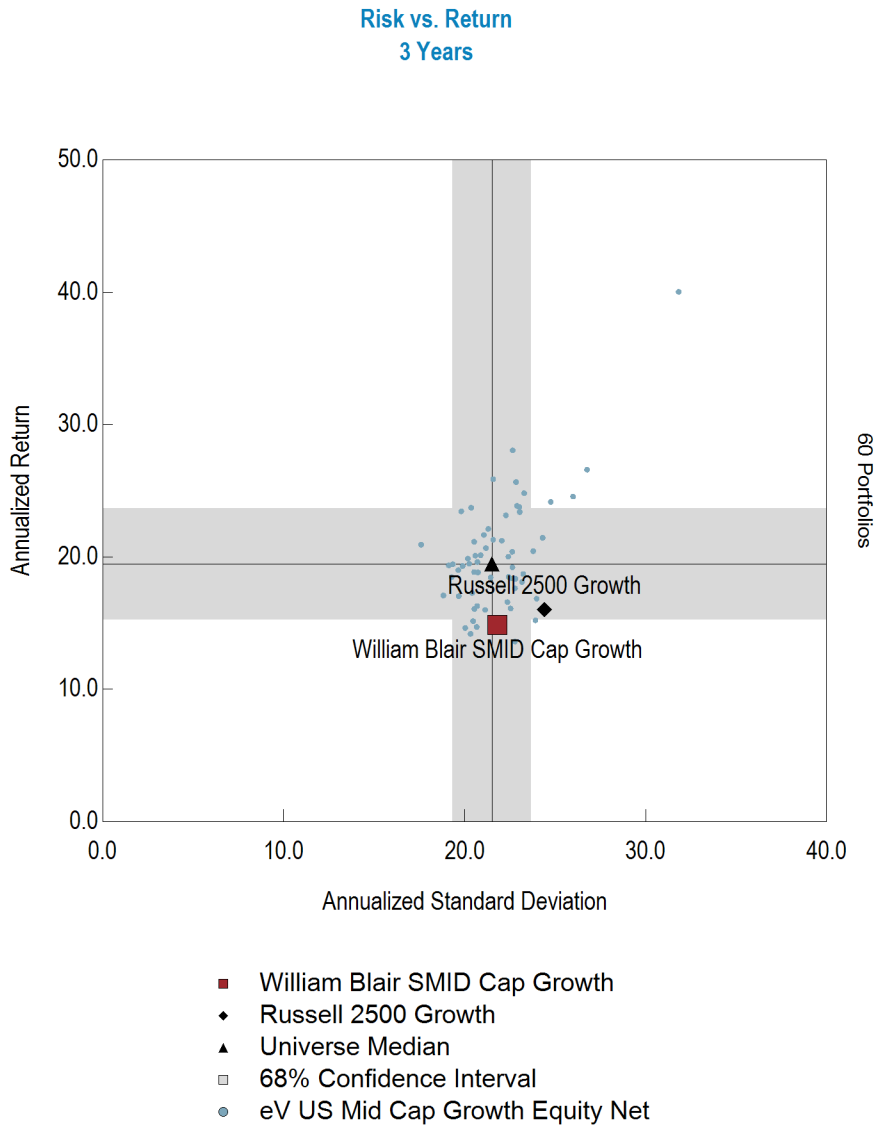
	Avg Wgt	Return	Contribution
AMEDISYS INC	1.22	-39.12	-0.48
ZYNGA INC	1.30	-29.16	-0.38
MERCURY SYSTEMS INC	1.31	-28.45	-0.37
BRINK'S CO (THE)	2.06	-17.40	-0.36
10X GENOMICS INC	1.39	-25.66	-0.36
HEALTHEQUITY INC	1.76	-19.53	-0.34
GODADDY INC	1.26	-19.85	-0.25
ZENDESK INC	1.24	-19.36	-0.24
NEW FORTRESS ENERGY INC	0.70	-26.50	-0.18
BWX TECHNOLOGIES INC	2.23	-6.97	-0.16

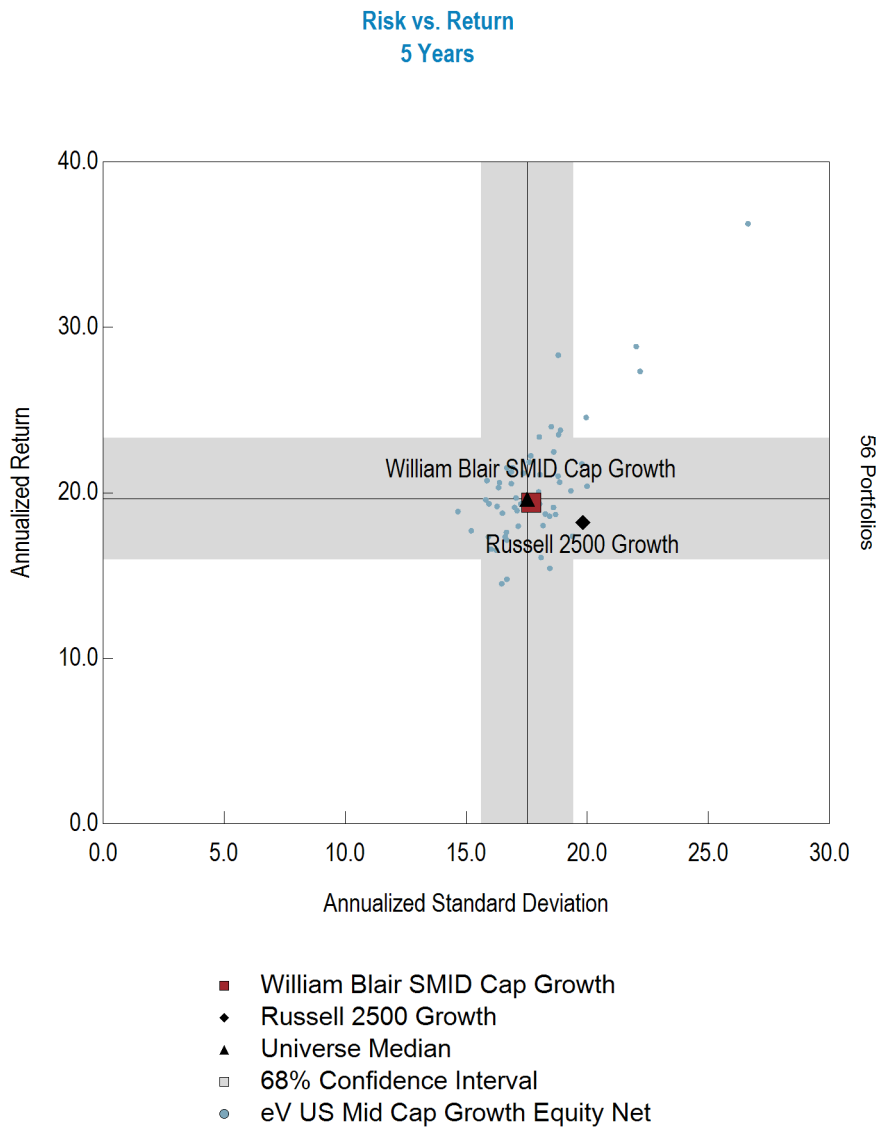


	Return (Rank)															
5th Percentile	3.8		16.1		3.8		41.8		25.9		27.6		19.0		19.1	
25th Percentile	2.3		12.6		2.3		34.5		21.8		21.5		17.1		18.3	
Median	0.5		10.7		0.5		30.4		19.5		19.6		15.7		17.5	
75th Percentile	-0.7		7.2		-0.7		26.4		17.5		18.4		14.8		16.4	
95th Percentile	-3.7		4.2		-3.7		22.0		14.7		15.9		12.5		14.7	
# of Portfolios	64		64		64		64		60		56		53		49	
● **William Blair SMID Cap Growth**	-1.2	(79)	7.0	(77)	-1.2	(79)	29.7	(59)	14.9	(95)	19.4	(54)	16.5	(35)	17.8	(42)
▲ **Russell 2500 Growth**	-3.5	(94)	4.8	(93)	-3.5	(94)	32.0	(40)	16.0	(90)	18.2	(76)	14.9	(71)	17.2	(58)

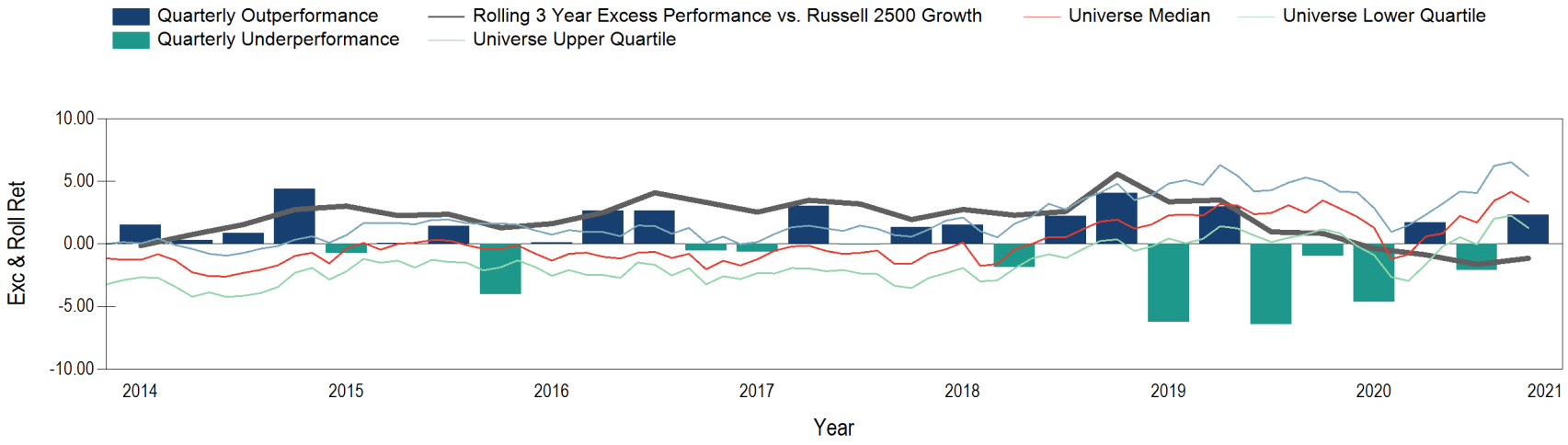


	Return (Rank)									
5th Percentile	67.8	42.9	2.5	32.8	12.7	5.4	13.5	43.5	19.8	3.9
25th Percentile	45.2	38.4	-1.2	27.1	7.3	2.2	9.9	38.0	16.9	0.4
Median	35.9	35.7	-4.4	24.7	5.2	-0.5	7.6	35.1	14.7	-2.7
75th Percentile	30.5	32.0	-7.7	22.1	2.1	-2.4	5.2	32.0	11.3	-6.5
95th Percentile	23.8	25.6	-10.8	18.5	-1.8	-6.8	2.2	26.7	4.7	-11.1
# of Portfolios	71	65	70	73	72	63	75	68	64	58
● William Blair SMID Cap Growth	32.6 (64)	31.1 (78)	-1.7 (30)	29.3 (14)	7.2 (28)	5.2 (6)	8.8 (36)	42.0 (9)	12.8 (69)	0.1 (27)
▲ Russell 2500 Growth	40.5 (40)	32.7 (70)	-7.5 (74)	24.5 (52)	9.7 (12)	-0.2 (48)	7.1 (59)	40.7 (14)	16.1 (33)	-1.6 (40)

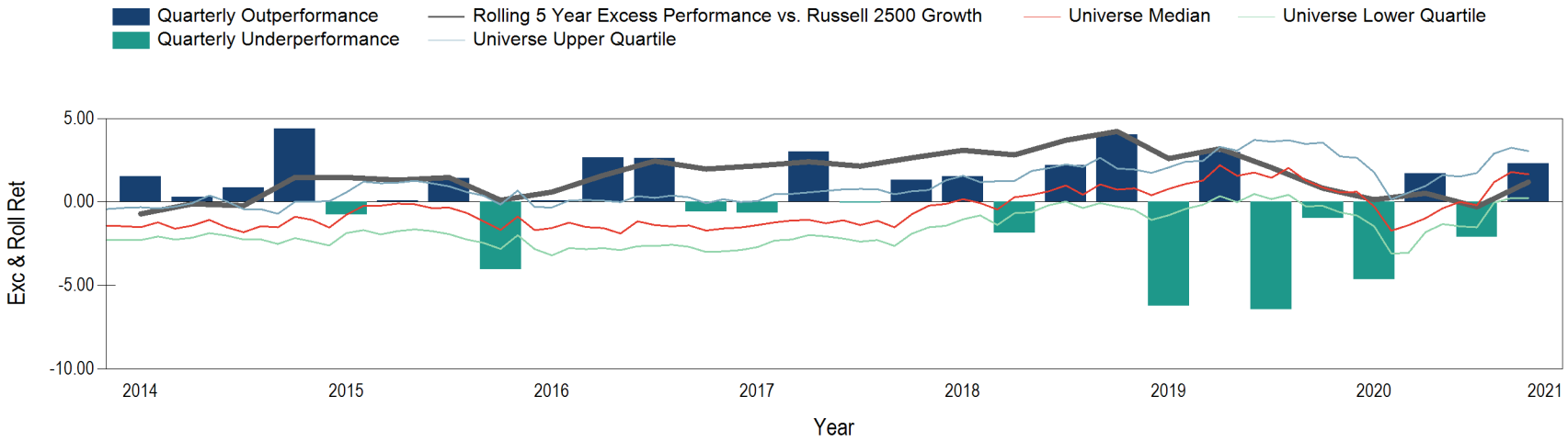

Risk vs. Return
3 Years
Annualized Return
Annualized Standard Deviation
50.0
40.0
30.0
20.0
10.0
0.0
0.0
10.0
20.0
30.0
40.0
Russell 2500 Growth
William Blair SMID Cap Growth
60 Portfolios
William Blair SMID Cap Growth
Russell 2500 Growth
Universe Median
68% Confidence Interval
eV US Mid Cap Growth Equity Net


Risk vs. Return
5 Years
Annualized Return
Annualized Standard Deviation
40.0
30.0
20.0
10.0
0.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
William Blair SMID Cap Growth
Russell 2500 Growth
56 Portfolios
William Blair SMID Cap Growth
Russell 2500 Growth
Universe Median
68% Confidence Interval
eV US Mid Cap Growth Equity Net

Rolling 3 Year Annualized Excess Performance



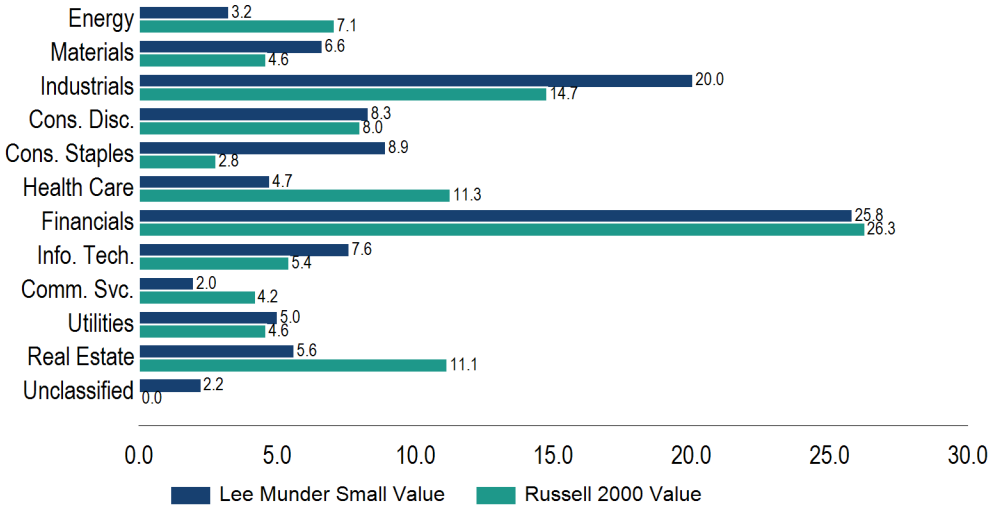
Rolling 5 Year Annualized Excess Performance



Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	90	1,426
Weighted Avg. Market Cap. ($B)	4.09	2.89
Median Market Cap. ($B)	3.70	1.09
Price To Earnings	16.42	13.82
Price To Book	2.12	1.78
Price To Sales	1.73	1.44
Return on Equity (%)	12.24	3.83
Yield (%)	1.61	1.71
Beta	0.93	1.00

Sector Allocation (%) vs Russell 2000 Value



**Unclassified includes Cash*

Top Holdings
Ending Period Weight

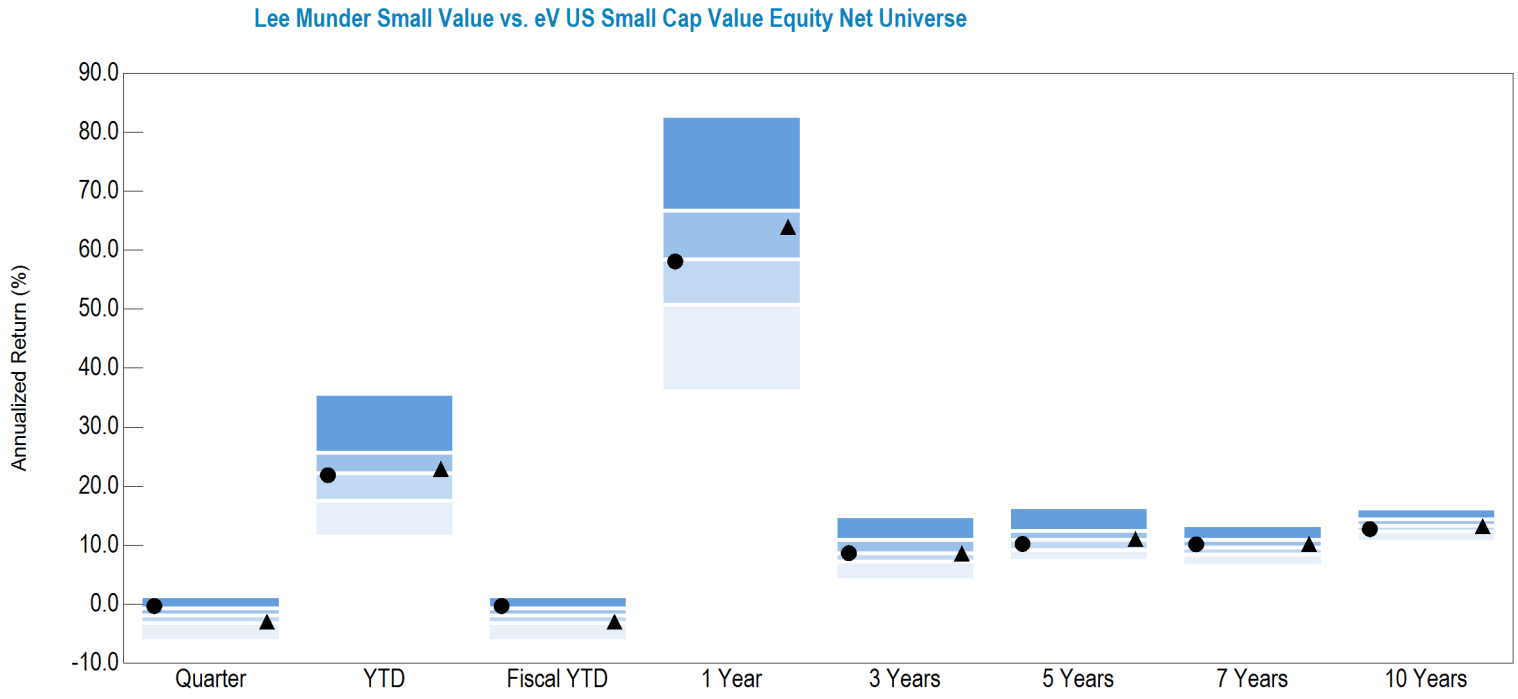
PINNACLE FINANCIAL PARTNERS INC	2.74%
WESTERN ALLIANCE BANCORPORATION	2.63%
STERLING BANCORP	2.42%
HOSTESS BRANDS INC	2.27%
NEWMARK GROUP INC	2.25%
BANKUNITED INC	2.23%
PORTLAND GENERAL ELECTRIC CO	2.22%
MURPHY USA INC	2.06%
MGIC INVESTMENT CORP	2.01%
UMPQUA HOLDINGS CORP	1.98%
Total	**22.80%**

Top Contributors

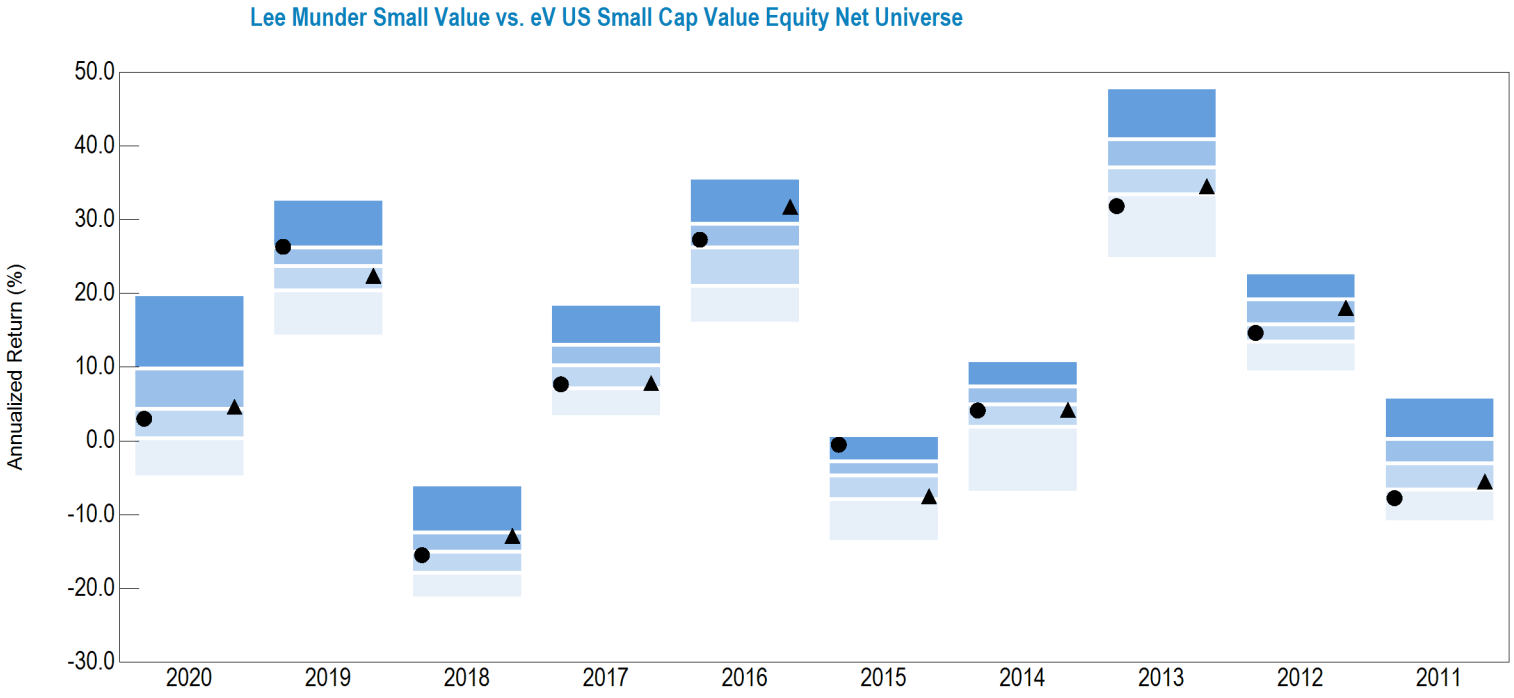
	Avg Wgt	Return	Contribution
MURPHY USA INC	1.60	25.61	0.41
WESTERN ALLIANCE BANCORPORATION	2.10	17.61	0.37
REGAL REXNORD CORPORATION	1.80	18.32	0.33
LIVENT CORP	1.50	19.37	0.29
NEWMARK GROUP INC	1.50	19.25	0.29
ZURN WATER SOLUTIONS CORPORATION	0.70	28.67	0.20
UMPQUA HOLDINGS CORP	1.70	10.95	0.19
CLEAN HARBORS INC	1.60	11.52	0.18
MGIC INVESTMENT CORP	1.70	10.60	0.18
PINNACLE FINANCIAL PARTNERS INC	2.40	6.77	0.16

Bottom Contributors

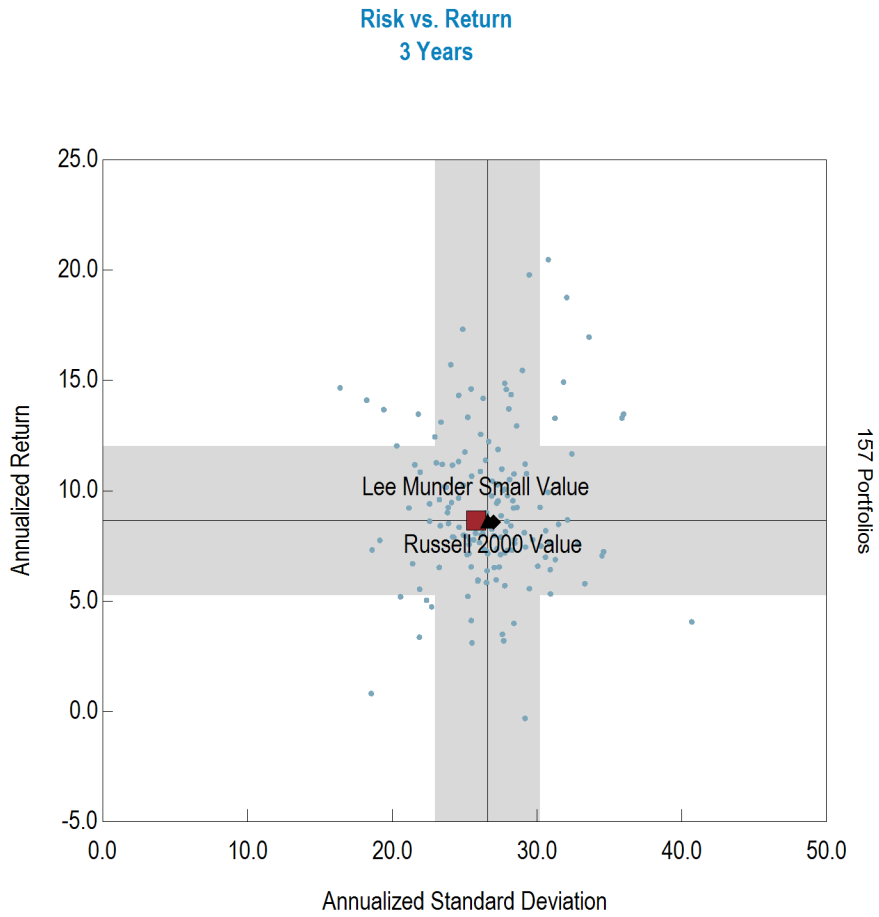
	Avg Wgt	Return	Contribution
RACKSPACE TECHNOLOGY INC	1.10	-27.49	-0.30
AMERICAN EAGLE OUTFITTERS INC.	0.90	-30.90	-0.28
ALTRA INDUSTRIAL MOTION CORP	1.50	-14.75	-0.22
TEAM INC	0.40	-55.07	-0.22
VIAVI SOLUTIONS INC	1.60	-10.87	-0.17
URBAN OUTFITTERS INC	0.60	-27.97	-0.17
TREEHOUSE FOODS INC	1.60	-10.42	-0.17
ENERPAC TOOL GROUP CORP	0.70	-21.98	-0.15
DMC GLOBAL INC	0.40	-34.34	-0.14
HARSCO CORP	0.80	-16.99	-0.14



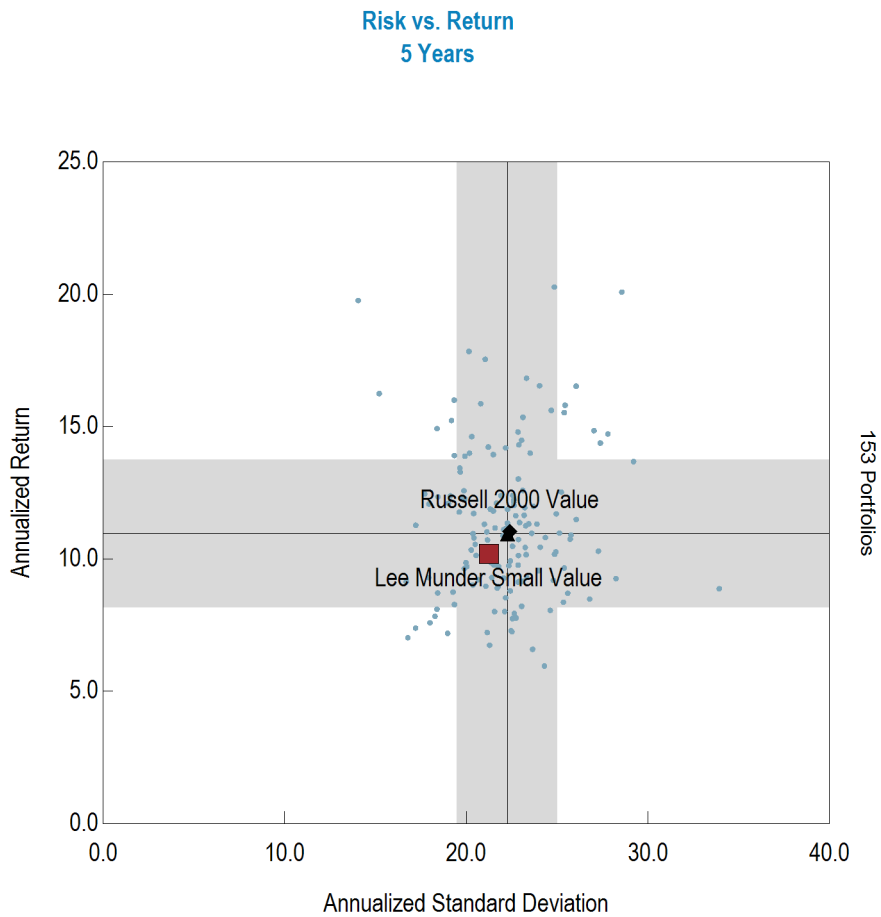
	Return (Rank)															
5th Percentile	1.2		35.6		1.2		82.7		14.9		16.4		13.3		16.2	
25th Percentile	-0.6		25.7		-0.6		66.8		11.0		12.5		11.0		14.4	
Median	-1.9		22.3		-1.9		58.5		8.6		11.0		9.7		13.4	
75th Percentile	-3.1		17.6		-3.1		50.8		7.3		9.3		8.4		12.4	
95th Percentile	-6.1		11.6		-6.1		36.2		4.1		7.4		6.5		10.6	
# of Portfolios	163		163		163		162		157		153		141		129	
● Lee Munder Small Value	-0.3	(19)	21.9	(53)	-0.3	(19)	58.1	(51)	8.6	(50)	10.2	(62)	10.1	(41)	12.7	(70)
▲ Russell 2000 Value	-3.0	(72)	22.9	(48)	-3.0	(72)	63.9	(34)	8.6	(52)	11.0	(48)	10.2	(39)	13.2	(53)



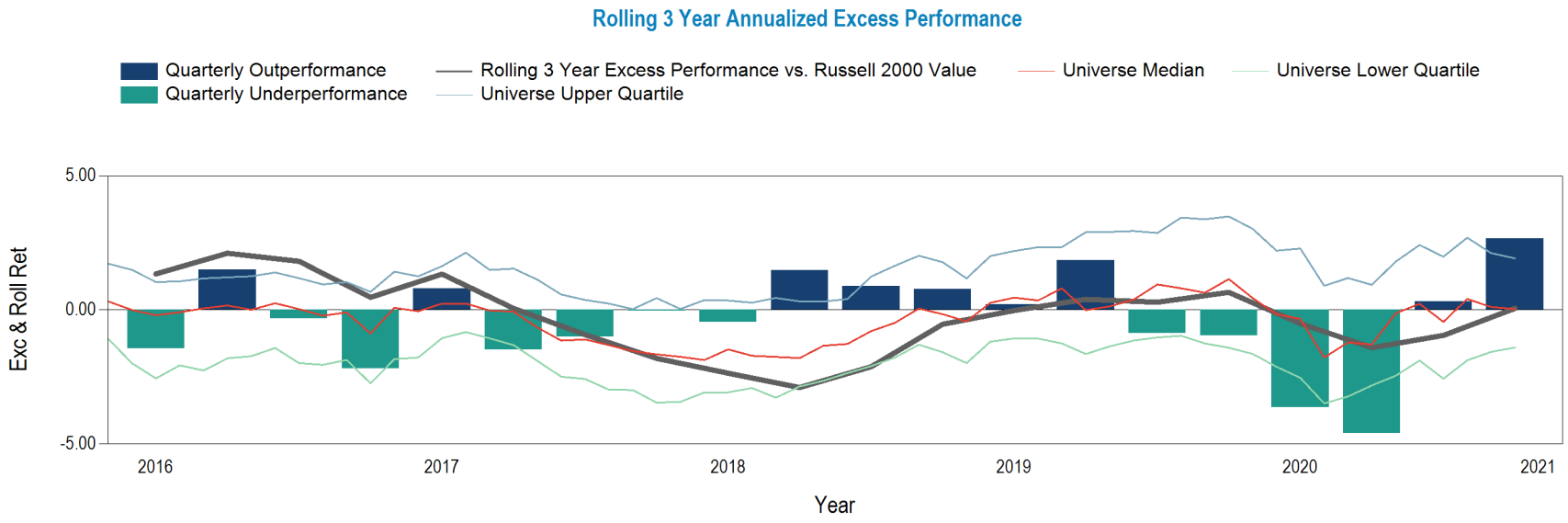
	Return (Rank)																			
5th Percentile	19.9		32.8		-6.0		18.6		35.7		0.8		10.9		47.9		22.8		6.0	
25th Percentile	9.9		26.3		-12.4		13.1		29.5		-2.7		7.4		41.0		19.2		0.3	
Median	4.4		23.8		-15.0		10.3		26.2		-4.6		5.0		37.1		15.9		-3.0	
75th Percentile	0.4		20.4		-17.8		7.2		21.1		-7.8		2.0		33.4		13.5		-6.5	
95th Percentile	-4.9		14.2		-21.3		3.3		15.9		-13.7		-7.0		24.7		9.4		-11.0	
# of Portfolios	178		176		168		170		151		137		135		125		104		85	
● Lee Munder Small Value	3.0	(56)	26.3	(25)	-15.5	(56)	7.7	(71)	27.3	(38)	-0.5	(10)	4.1	(59)	31.8	(86)	14.6	(59)	-7.8	(85)
▲ Russell 2000 Value	4.6	(50)	22.4	(60)	-12.9	(31)	7.8	(70)	31.7	(15)	-7.5	(73)	4.2	(58)	34.5	(70)	18.1	(34)	-5.5	(70)

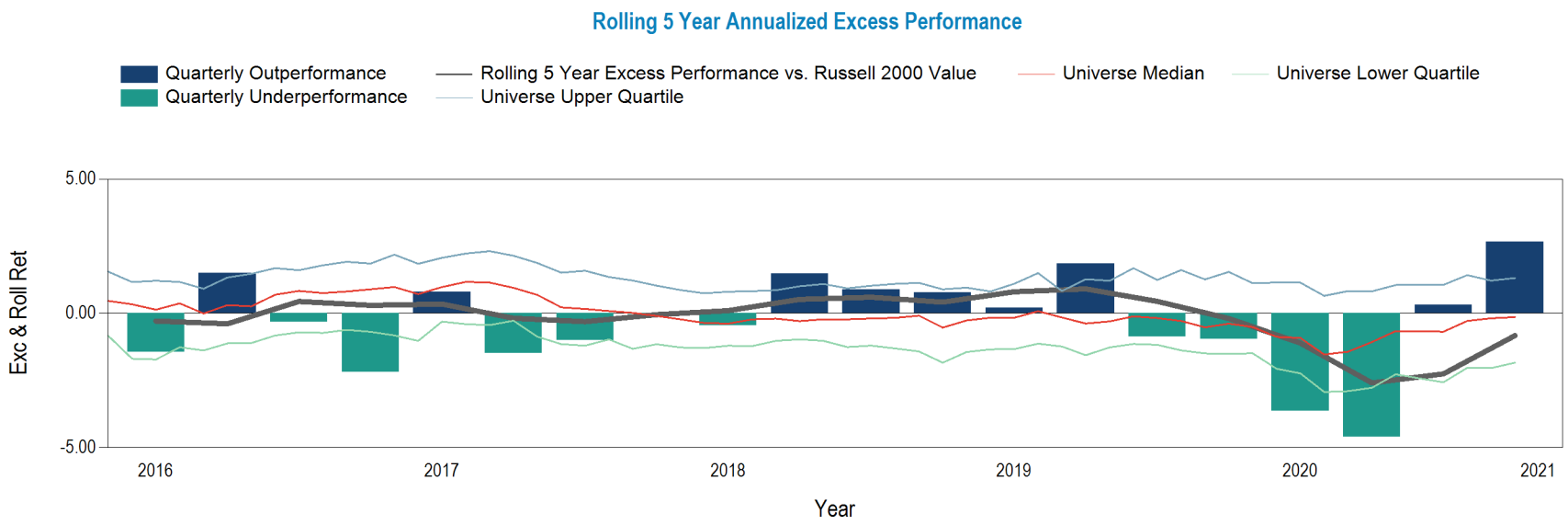


- Lee Munder Small Value
- Russell 2000 Value
- Universe Median
- 68% Confidence Interval
- eV US Small Cap Value Equity Net



- Lee Munder Small Value
- Russell 2000 Value
- Universe Median
- 68% Confidence Interval
- eV US Small Cap Value Equity Net


Rolling 3 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 3 Year Excess Performance vs. Russell 2000 Value
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year

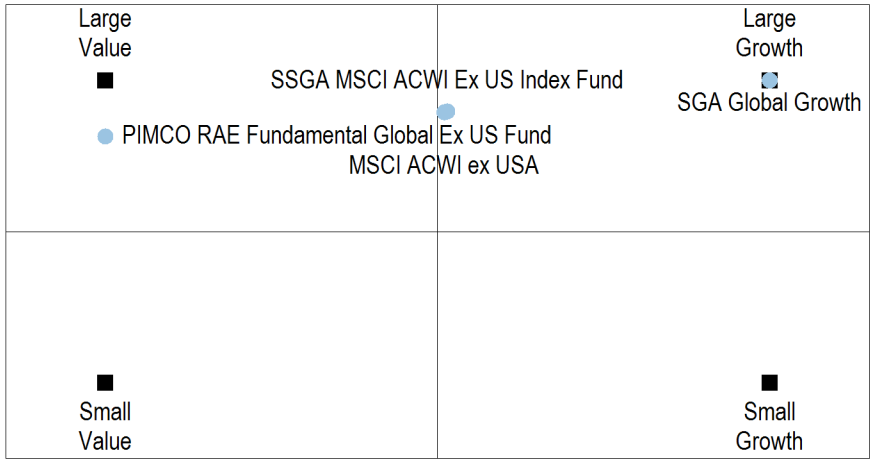

Rolling 5 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 5 Year Excess Performance vs. Russell 2000 Value
Universe Upper Quartile
Universe Median
Universe Lower Quartile
5.00
0.00
-5.00
Exc & Roll Ret
2016
2017
2018
2019
2020
2021
Year

Total International Equity
Asset Class Overview (Net of Fees)

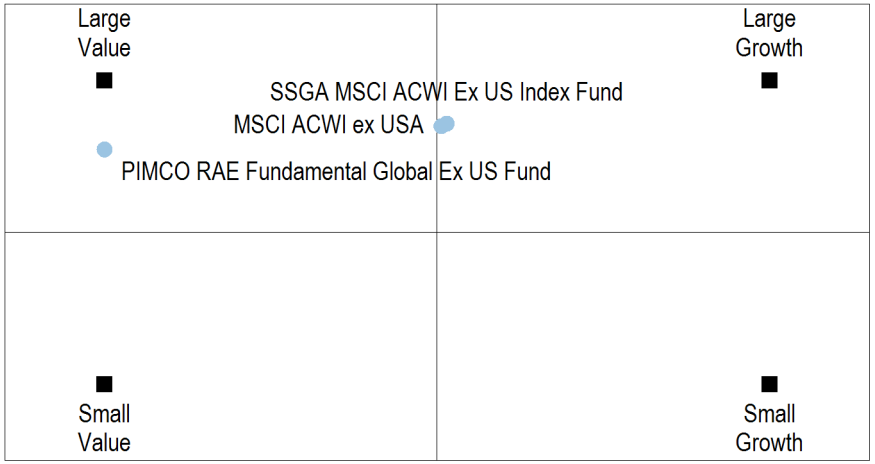
Period Ending: September 30, 2021

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Total International Equity	**319,652,692**	**-2.0**	**8.4**	**-2.0**	**27.5**	**10.1**	**10.2**	**8.0**	**13.4**	**22.7**	**-14.5**	**26.5**	**5.9**
MSCI ACWI ex USA Gross		*-2.9*	*6.3*	*-2.9*	*24.4*	*8.5*	*9.4*	*8.0*	*11.1*	*22.1*	*-13.8*	*27.8*	*5.0*
InvMetrics Public DB ex-US Eq Net Rank		*29*	*9*	*29*	*14*	*24*	*18*	*60*	*41*	*54*	*42*	*77*	*19*
SSGA MSCI ACWI Ex US Index Fund	117,055,191	-3.0	6.0	-3.0	24.0	8.2	9.1	7.7	10.9	21.8	-14.0	27.5	4.7
MSCI ACWI ex USA		*-3.0*	*5.9*	*-3.0*	*23.9*	*8.0*	*8.9*	*7.5*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*
eV All EAFE Equity Net Rank		*88*	*78*	*88*	*62*	*47*	*50*	*82*	*36*	*54*	*38*	*45*	*15*
PIMCO RAE Fundamental Global Ex US Fund	102,539,813	-2.9	11.4	-2.9	37.1	5.2	7.7	--	1.7	16.1	-15.1	26.0	13.0
MSCI ACWI ex USA Value		*-2.3*	*9.1*	*-2.3*	*31.4*	*3.8*	*6.4*	--	*-0.8*	*15.7*	*-14.0*	*22.7*	*8.9*
eV EAFE Value Equity Net Rank		*81*	*33*	*81*	*29*	*50*	*38*	--	*61*	*86*	*38*	*38*	*1*
SGA Global Growth	100,057,689	0.2	8.5	0.2	23.5	16.3	--	--	26.0	30.5	--	--	--
MSCI ACWI ex USA Growth		*-3.6*	*2.7*	*-3.6*	*17.0*	*11.9*	--	--	*22.2*	*27.3*	--	--	--
eV ACWI ex-US Growth Equity Net Rank		*43*	*41*	*43*	*50*	*32*	--	--	*50*	*42*	--	--	--

EAFE Effective Style Map
3 Years

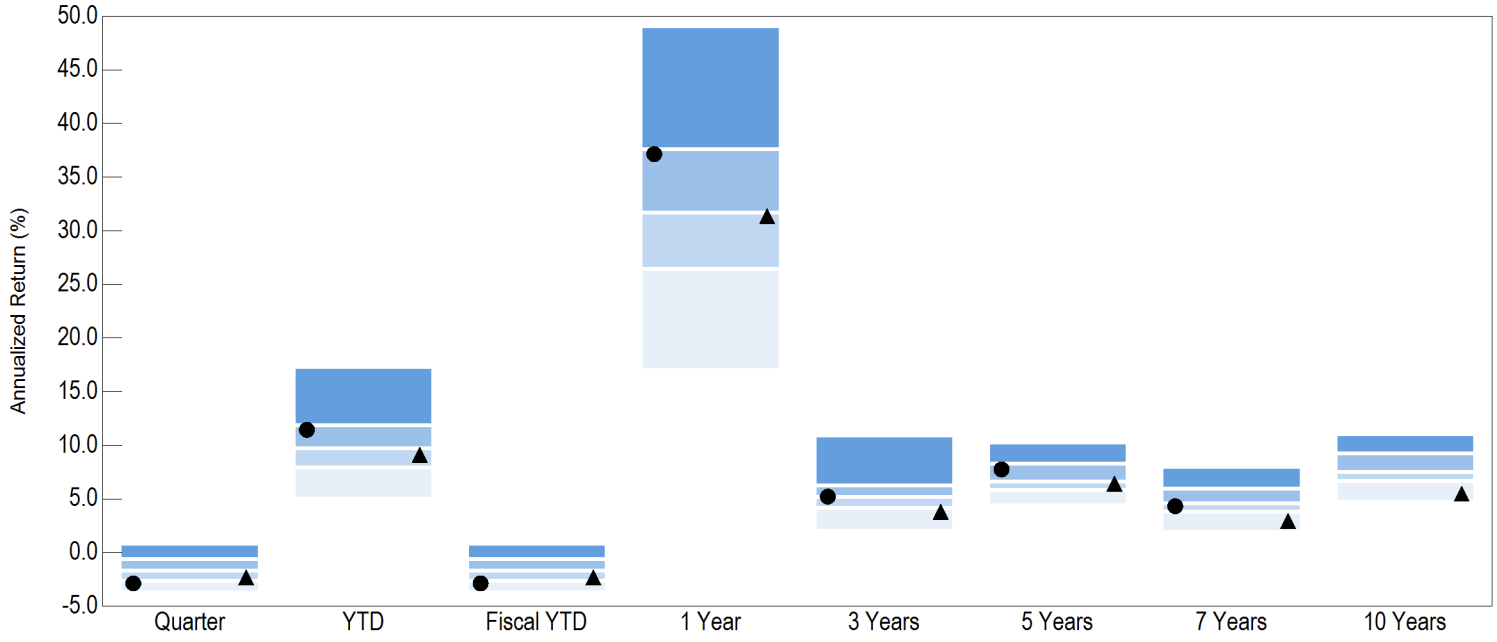


EAFE Effective Style Map
5 Years



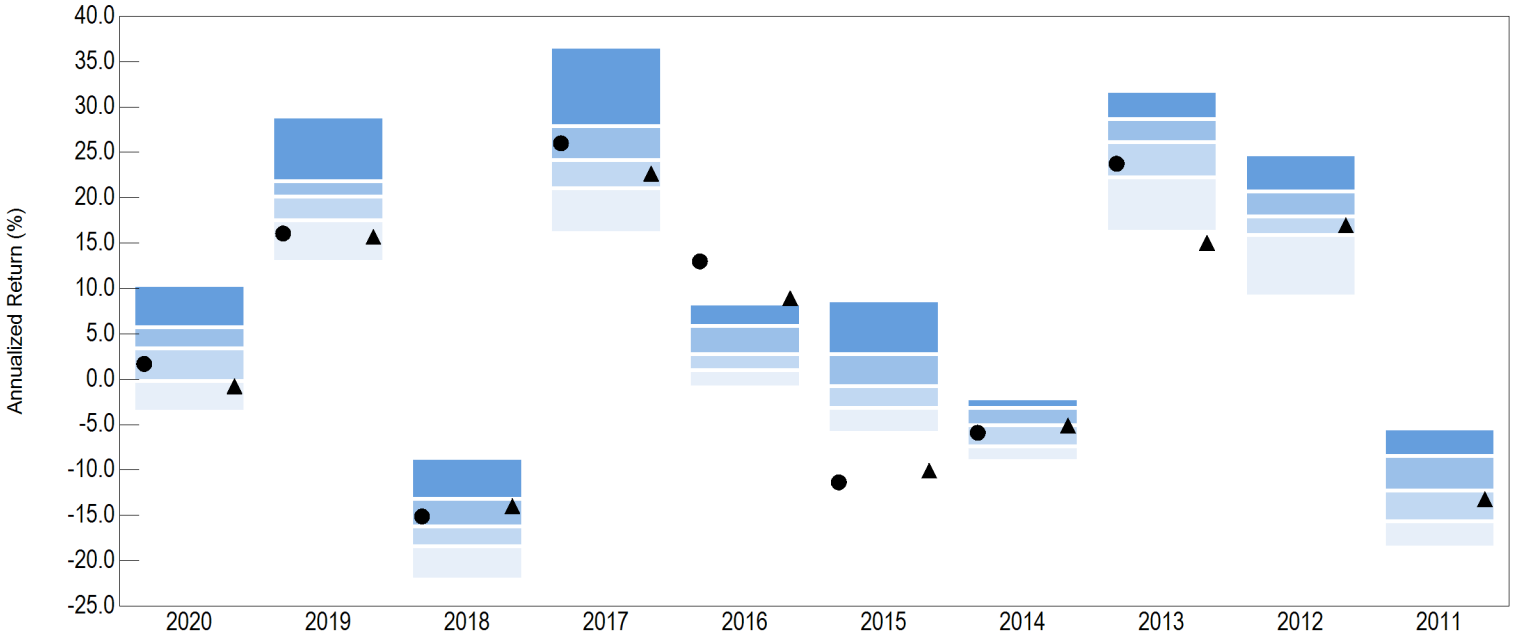
Research Affiliates converted to PIMCO RAE Fundamental Global Ex US Fund on 6/5/15 (performance prior to this date represents previously held Enhanced RAFI Global ex US).

PIMCO RAE Fundamental Global Ex US Fund vs. eV EAFE Value Equity Net Universe

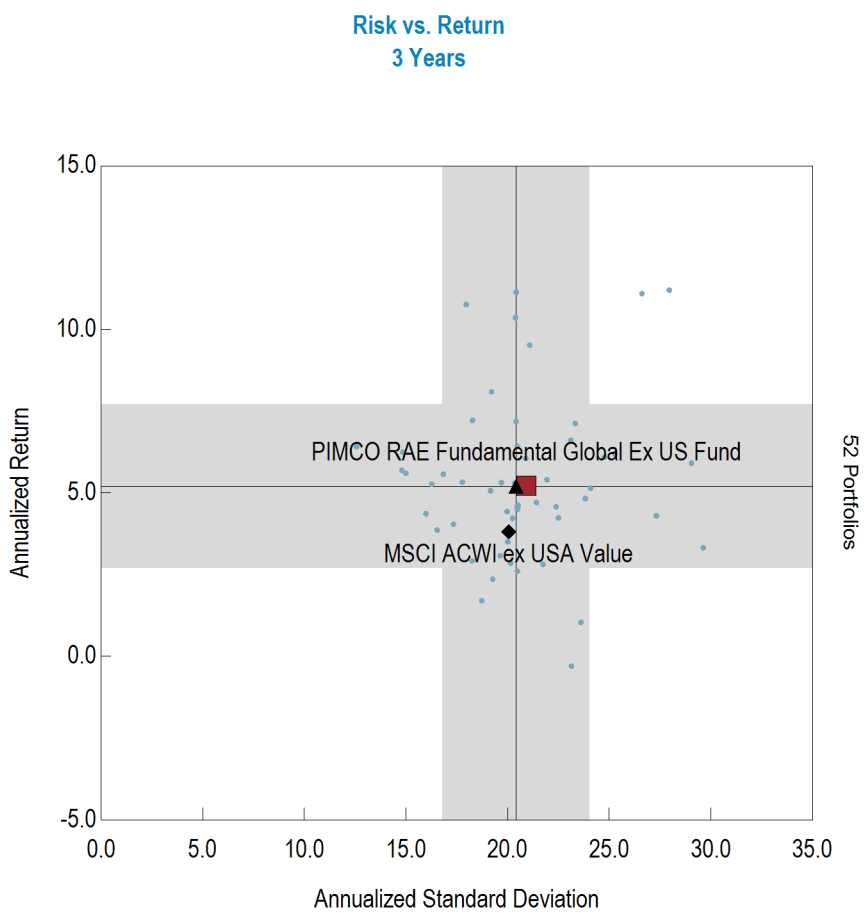


	Return (Rank)															
5th Percentile	0.8		17.3		0.8		49.0		10.9		10.2		7.9		11.0	
25th Percentile	-0.6		11.9		-0.6		37.6		6.3		8.3		6.0		9.2	
Median	-1.6		9.7		-1.6		31.7		5.2		6.7		4.6		7.5	
75th Percentile	-2.6		7.9		-2.6		26.5		4.2		5.8		3.9		6.7	
95th Percentile	-3.7		5.1		-3.7		17.0		2.1		4.4		1.9		4.7	
# of Portfolios	60		60		60		60		52		45		41		37	
● PIMCO RAE Fundamental Global Ex US Fund	-2.9	(81)	11.4	(33)	-2.9	(81)	37.1	(29)	5.2	(50)	7.7	(38)	4.3	(67)	--	(--)
▲ MSCI ACWI ex USA Value	-2.3	(64)	9.1	(61)	-2.3	(64)	31.4	(53)	3.8	(79)	6.4	(58)	2.9	(88)	5.5	(91)

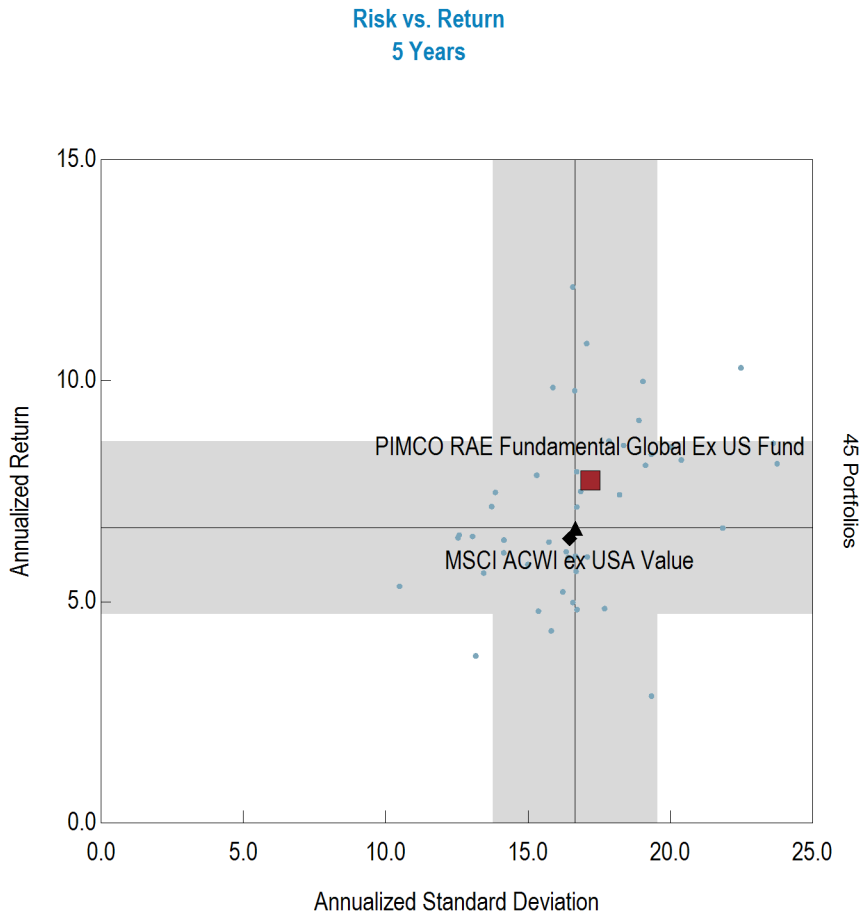
PIMCO RAE Fundamental Global Ex US Fund vs. eV EAFE Value Equity Net Universe



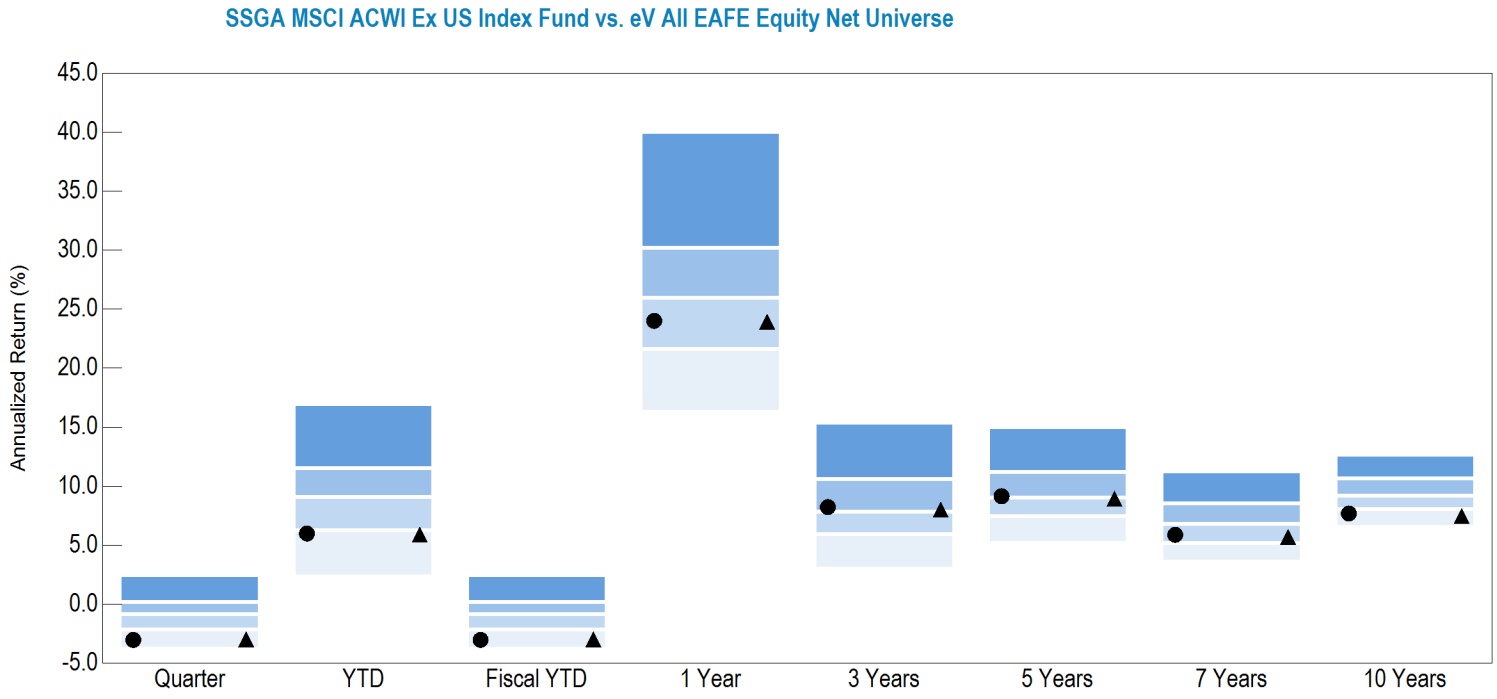
	Return (Rank)																					
5th Percentile	10.3		28.9		-8.7		36.6		8.3		8.7		-2.1		31.8		24.7		-5.4	
25th Percentile	5.7		21.9		-13.2		27.9		5.9		2.8		-3.1		28.7		20.8		-8.4	
Median	3.5		20.2		-16.2		24.2		2.8		-0.7		-5.0		26.1		18.0		-12.2	
75th Percentile	-0.1		17.5		-18.3		21.1		1.0		-3.1		-7.3		22.3		15.9		-15.6	
95th Percentile	-3.6		13.0		-22.0		16.1		-0.9		-5.9		-9.0		16.3		9.2		-18.5	
# of Portfolios	59		56		53		53		58		55		52		49		47		48	
● PIMCO RAE Fundamental Global Ex US Fund	1.7	(61)	16.1	(86)	-15.1	(38)	26.0	(38)	13.0	(1)	-11.4	(99)	-5.9	(65)	23.7	(64)	--	(--)	--	(--)
▲ MSCI ACWI ex USA Value	-0.8	(80)	15.7	(88)	-14.0	(34)	22.7	(58)	8.9	(4)	-10.1	(99)	-5.1	(53)	15.0	(97)	17.0	(64)	-13.2	(56)



- PIMCO RAE Fundamental Global Ex US Fund
- MSCI ACWI ex USA Value
- Universe Median
- 68% Confidence Interval
- eV EAFE Value Equity Net

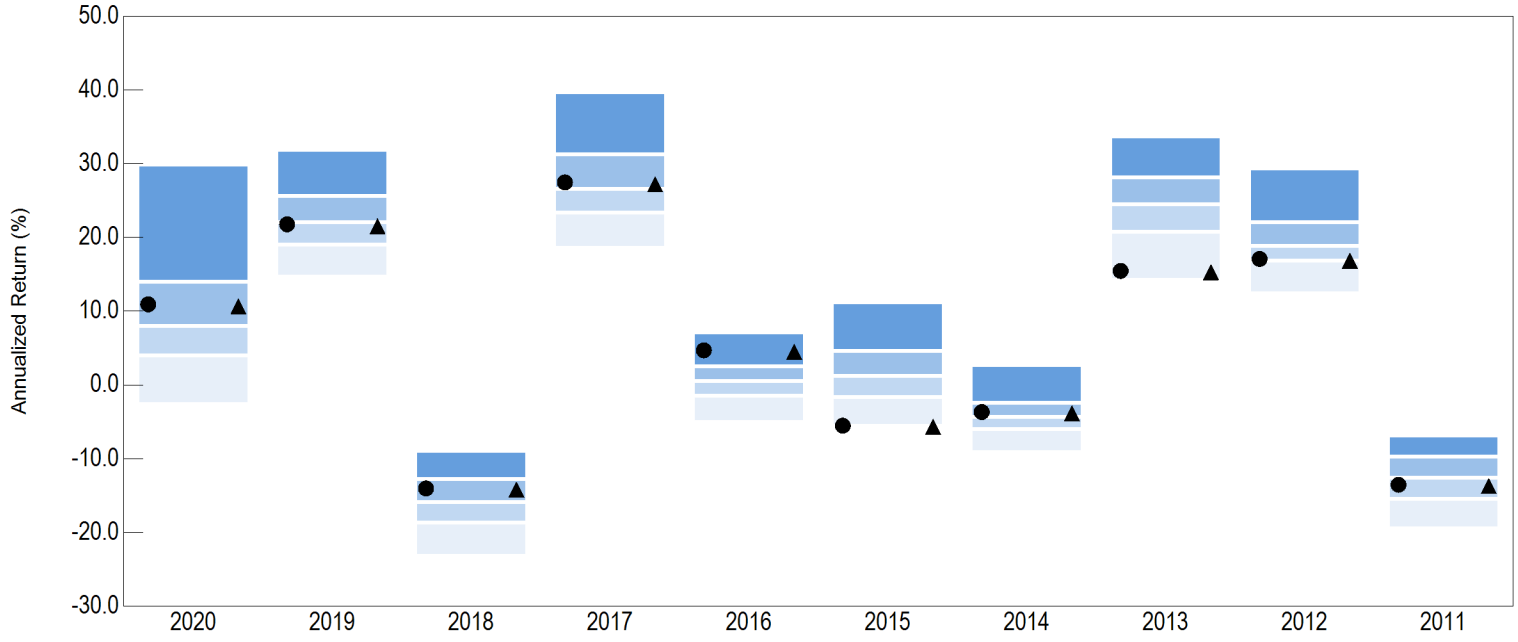


- PIMCO RAE Fundamental Global Ex US Fund
- MSCI ACWI ex USA Value
- Universe Median
- 68% Confidence Interval
- eV EAFE Value Equity Net

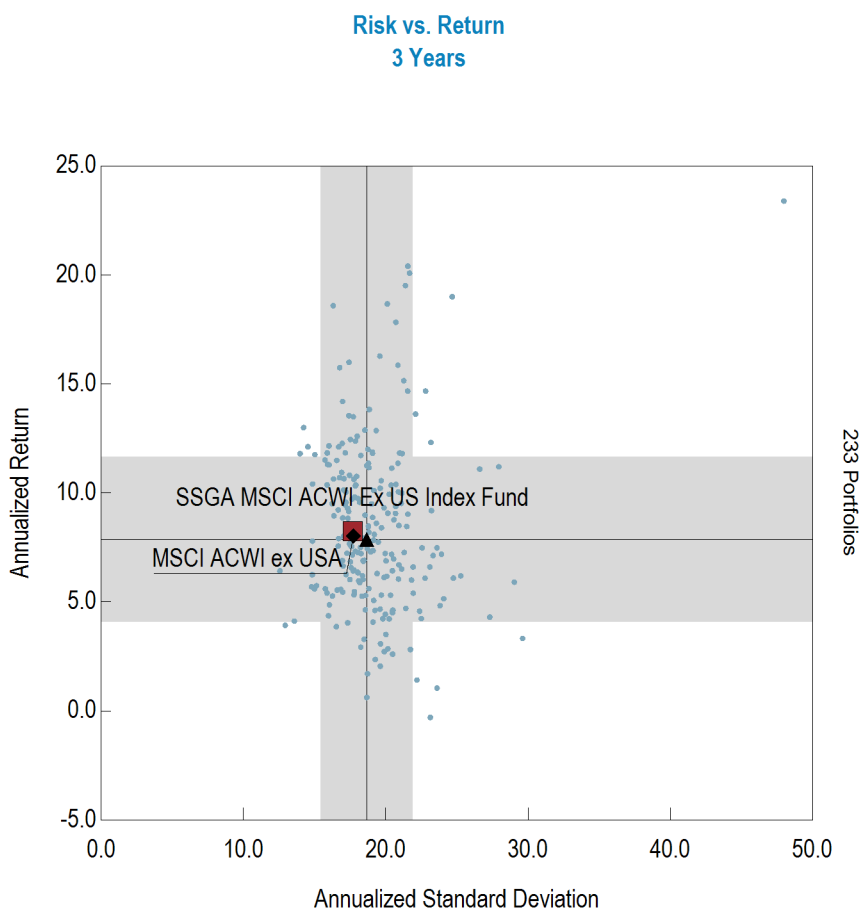


	Return (Rank)															
5th Percentile	2.4		16.9		2.4		40.0		15.4		15.0		11.2		12.6	
25th Percentile	0.2		11.6		0.2		30.2		10.6		11.2		8.6		10.7	
Median	-0.8		9.1		-0.8		26.0		7.9		9.1		6.8		9.2	
75th Percentile	-2.1		6.3		-2.1		21.6		6.0		7.5		5.2		8.1	
95th Percentile	-3.7		2.4		-3.7		16.3		3.0		5.2		3.6		6.6	
# of Portfolios	243		243		243		243		233		216		183		149	
● **SSGA MSCI ACWI Ex US Index Fund**	-3.0	(88)	6.0	(78)	-3.0	(88)	24.0	(62)	8.2	(47)	9.1	(50)	5.9	(65)	7.7	(82)
▲ **MSCI ACWI ex USA**	-3.0	(87)	5.9	(78)	-3.0	(87)	23.9	(62)	8.0	(49)	8.9	(52)	5.7	(69)	7.5	(85)

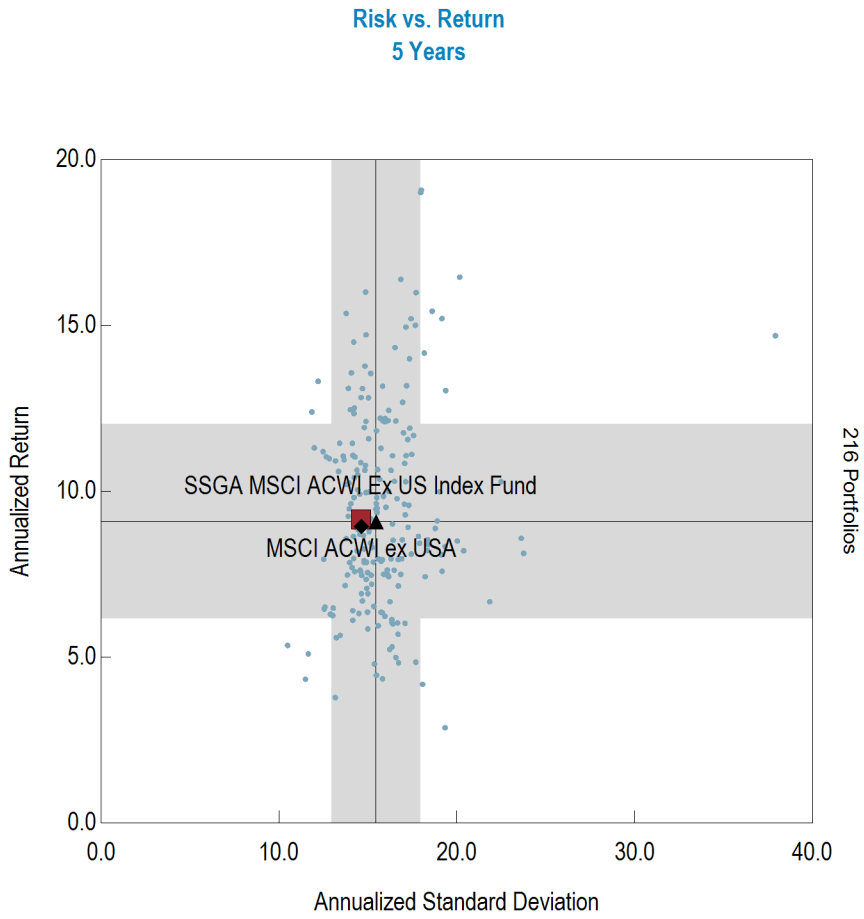
SSGA MSCI ACWI Ex US Index Fund vs. eV All EAFE Equity Net Universe



	Return (Rank)									
5th Percentile	29.8	31.9	-9.0	39.6	7.1	11.2	2.6	33.6	29.3	-6.9
25th Percentile	14.0	25.7	-12.7	31.3	2.6	4.7	-2.4	28.2	22.1	-9.7
Median	8.0	22.1	-15.8	26.6	0.6	1.2	-4.3	24.5	18.9	-12.6
75th Percentile	4.0	19.1	-18.6	23.4	-1.5	-1.6	-6.0	20.8	16.9	-15.4
95th Percentile	-2.6	14.7	-23.1	18.6	-5.0	-5.5	-9.1	14.3	12.5	-19.4
# of Portfolios	255	255	243	232	215	188	164	151	144	129
● SSGA MSCI ACWI Ex US Index Fund	10.9 (36)	21.8 (54)	-14.0 (38)	27.5 (45)	4.7 (15)	-5.5 (96)	-3.7 (42)	15.5 (92)	17.1 (74)	-13.5 (57)
▲ MSCI ACWI ex USA	10.7 (37)	21.5 (58)	-14.2 (39)	27.2 (46)	4.5 (16)	-5.7 (96)	-3.9 (45)	15.3 (92)	16.8 (77)	-13.7 (60)



- SSGA MSCI ACWI Ex US Index Fund
- MSCI ACWI ex USA
- Universe Median
- 68% Confidence Interval
- eV All EAFE Equity Net



- SSGA MSCI ACWI Ex US Index Fund
- MSCI ACWI ex USA
- Universe Median
- 68% Confidence Interval
- eV All EAFE Equity Net

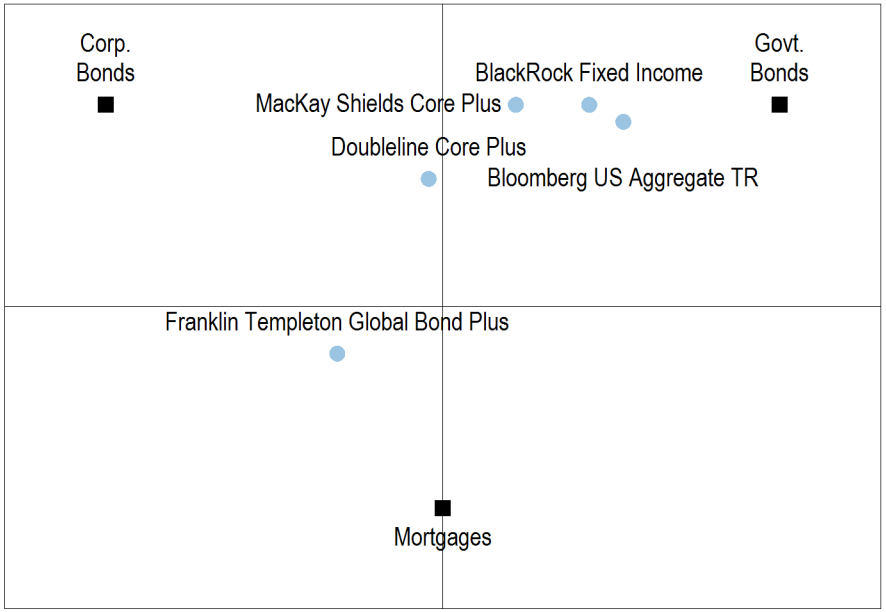
Total Fixed Income
Asset Class Overview (Net of Fees)

Period Ending: September 30, 2021

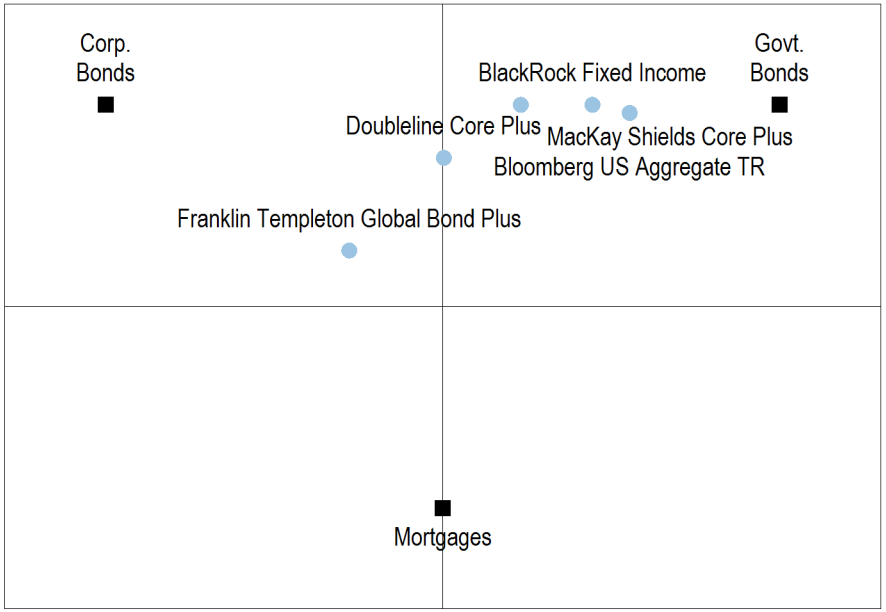
	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Total Fixed Income	**558,348,455**	**-0.4**	**-1.7**	**-0.4**	**1.2**	**4.0**	**2.8**	**3.2**	**4.7**	**8.1**	**0.1**	**3.9**	**5.1**
Bloomberg US Aggregate TR		*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
InvMetrics Public DB US Fix Inc Net Rank		*99*	*94*	*99*	*32*	*99*	*54*	*45*	*99*	*49*	*60*	*46*	*36*
Total Domestic Fixed Income	**388,760,174**	**0.1**	**-0.7**	**0.1**	**0.8**	**5.7**	**3.5**	**3.7**	**7.9**	**9.0**	**-0.2**	**4.1**	**4.8**
Bloomberg US Aggregate TR		*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
BlackRock Fixed Income	147,713,802	0.0	-1.4	0.0	-0.5	5.8	3.2	3.4	8.4	8.7	0.1	3.6	2.9
Bloomberg US Aggregate TR		*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*3.0*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV All US Fixed Inc Net Rank		*57*	*86*	*57*	*88*	*38*	*53*	*53*	*26*	*44*	*53*	*56*	*54*
Doubleline Core Plus	117,816,600	0.3	0.0	0.3	1.4	4.6	2.9	--	5.2	8.3	-0.3	3.9	4.6
Bloomberg US Aggregate TR		*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*--*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV US Core Plus Fixed Inc Net Rank		*25*	*36*	*25*	*56*	*98*	*99*	*--*	*98*	*90*	*34*	*87*	*53*
MacKay Shields Core Plus	123,229,773	0.1	-0.4	0.1	1.9	6.5	3.9	--	9.9	9.6	-1.0	4.5	4.7
Bloomberg US Aggregate TR		*0.1*	*-1.6*	*0.1*	*-0.9*	*5.4*	*2.9*	*--*	*7.5*	*8.7*	*0.0*	*3.5*	*2.6*
eV US Core Plus Fixed Inc Net Rank		*75*	*50*	*75*	*42*	*37*	*51*	*--*	*22*	*56*	*74*	*62*	*47*
Total Global Fixed Income	**83,592,527**	**-1.6**	**-4.0**	**-1.6**	**-3.3**	**-2.4**	**0.2**	**--**	**-5.7**	**0.9**	**1.9**	**2.4**	**6.4**
JPM GBI Global TR USD		*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	*--*	*9.7*	*6.0*	*-0.7*	*6.8*	*1.6*
Franklin Templeton Global Bond Plus	83,592,527	-1.6	-4.0	-1.6	-3.3	-2.4	0.2	--	-5.7	0.9	1.9	2.4	6.1
JPM GBI Global TR USD		*-1.1*	*-5.7*	*-1.1*	*-3.5*	*3.8*	*1.3*	*--*	*9.7*	*6.0*	*-0.7*	*6.8*	*1.6*
eV Global Government Fixed Inc Net Rank		*73*	*22*	*73*	*72*	*99*	*93*	*--*	*99*	*99*	*11*	*93*	*6*
Total Emerging Markets Fixed Income	**85,995,754**	**-1.6**	**-3.6**	**-1.6**	**6.5**	**--**	**--**	**--**	**4.6**	**--**	**--**	**--**	**--**
50% JPM EMBI Global Div/50% JPM GBI EM Global Div		*-1.9*	*-3.9*	*-1.9*	*3.5*	*--*	*--*	*--*	*4.0*	*--*	*--*	*--*	*--*
PGIM Emerging Markets Debt	85,995,754	-1.6	-3.6	-1.6	6.5	--	--	--	4.6	--	--	--	--
50% JPM EMBI Global Div/50% JPM GBI EM Global Div		*-1.9*	*-3.9*	*-1.9*	*3.5*	*--*	*--*	*--*	*4.0*	*--*	*--*	*--*	*--*
eV Emg Mkts Fixed Inc - Blended Currency Net Rank		*57*	*73*	*57*	*26*	*--*	*--*	*--*	*67*	*--*	*--*	*--*	*--*

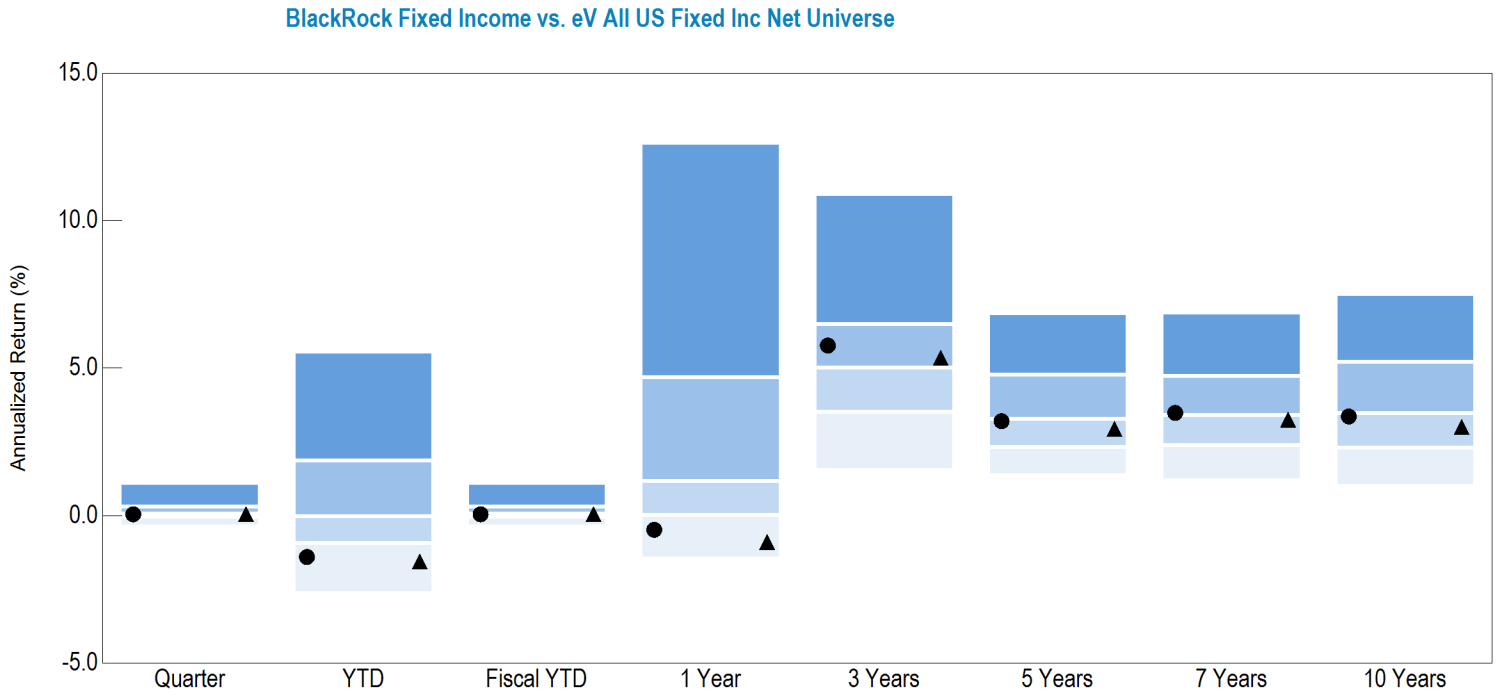
SSGA TIPS liquidated in 12/28/18. Shenkman HY liquidated 3/11/19. PGIM EMD funded 8/26/19.

Fixed Income Style Map
3 Years

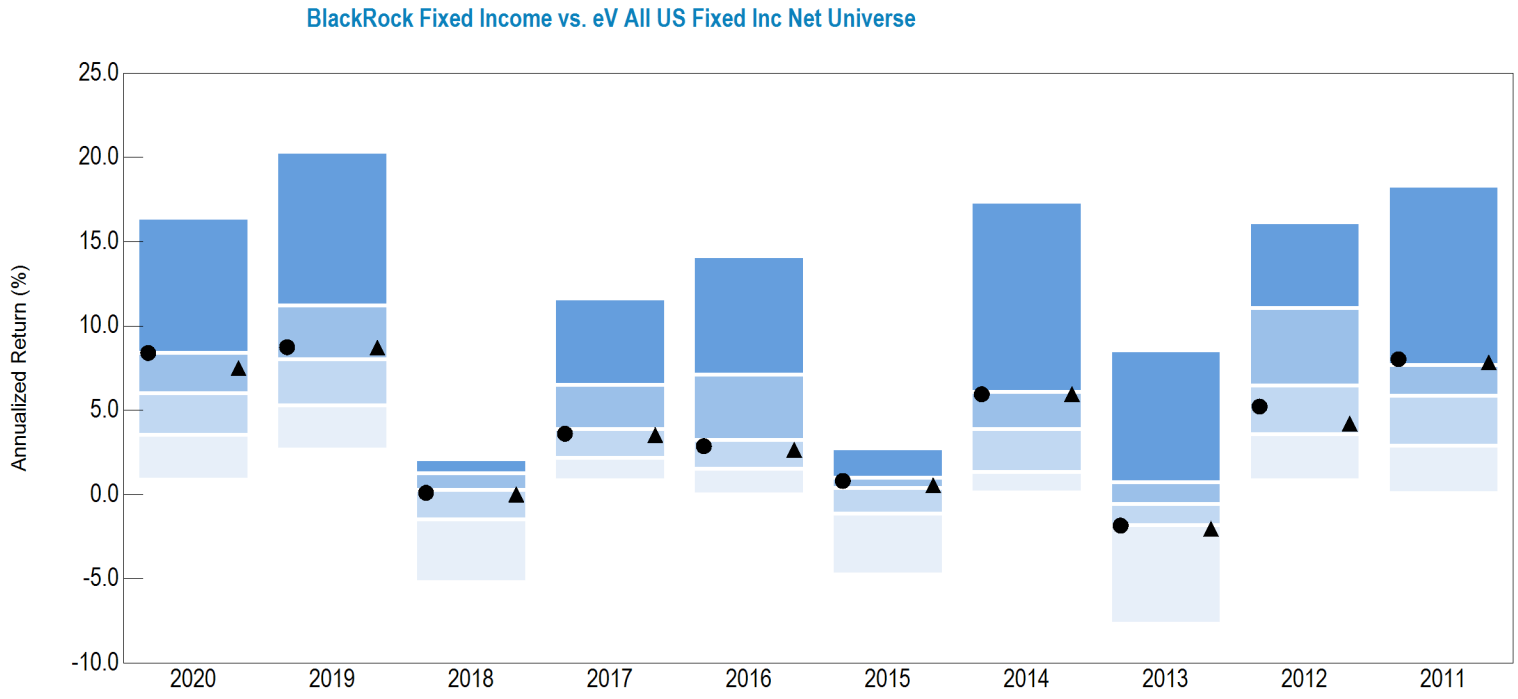


Fixed Income Style Map
5 Years

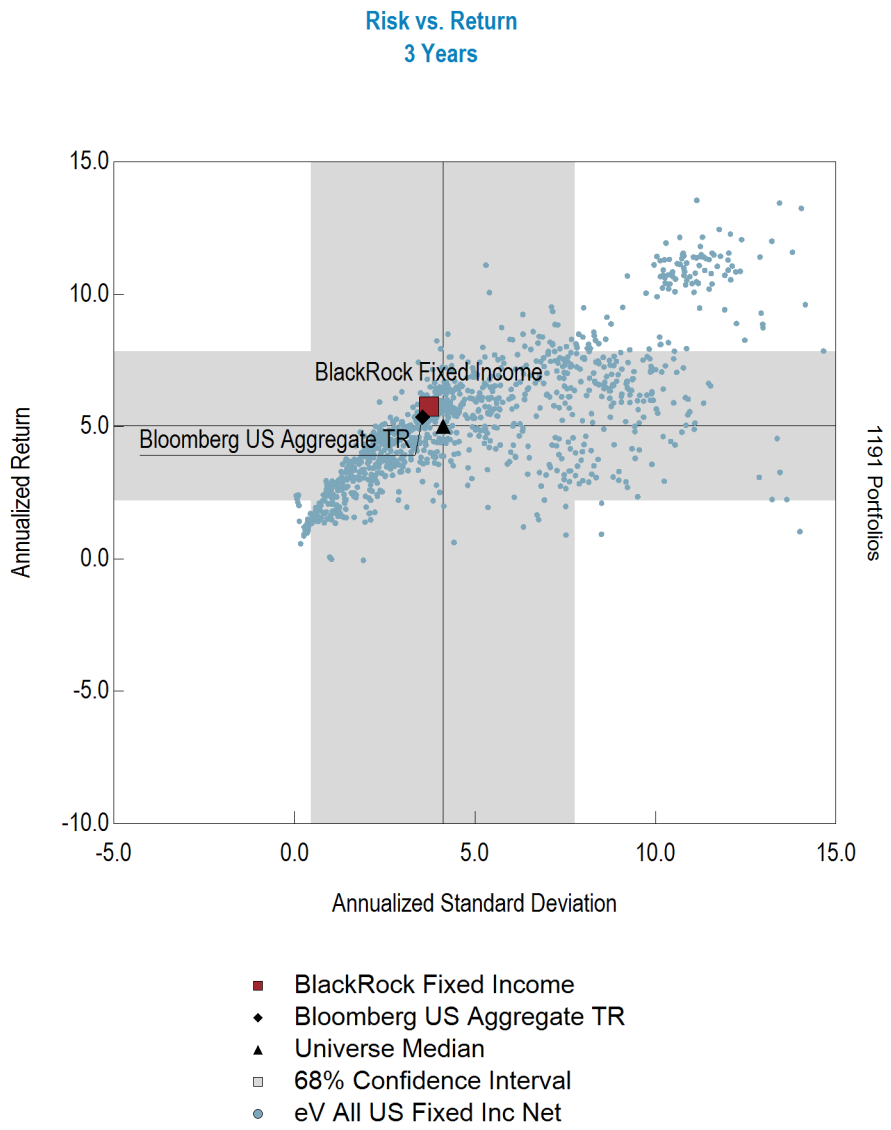


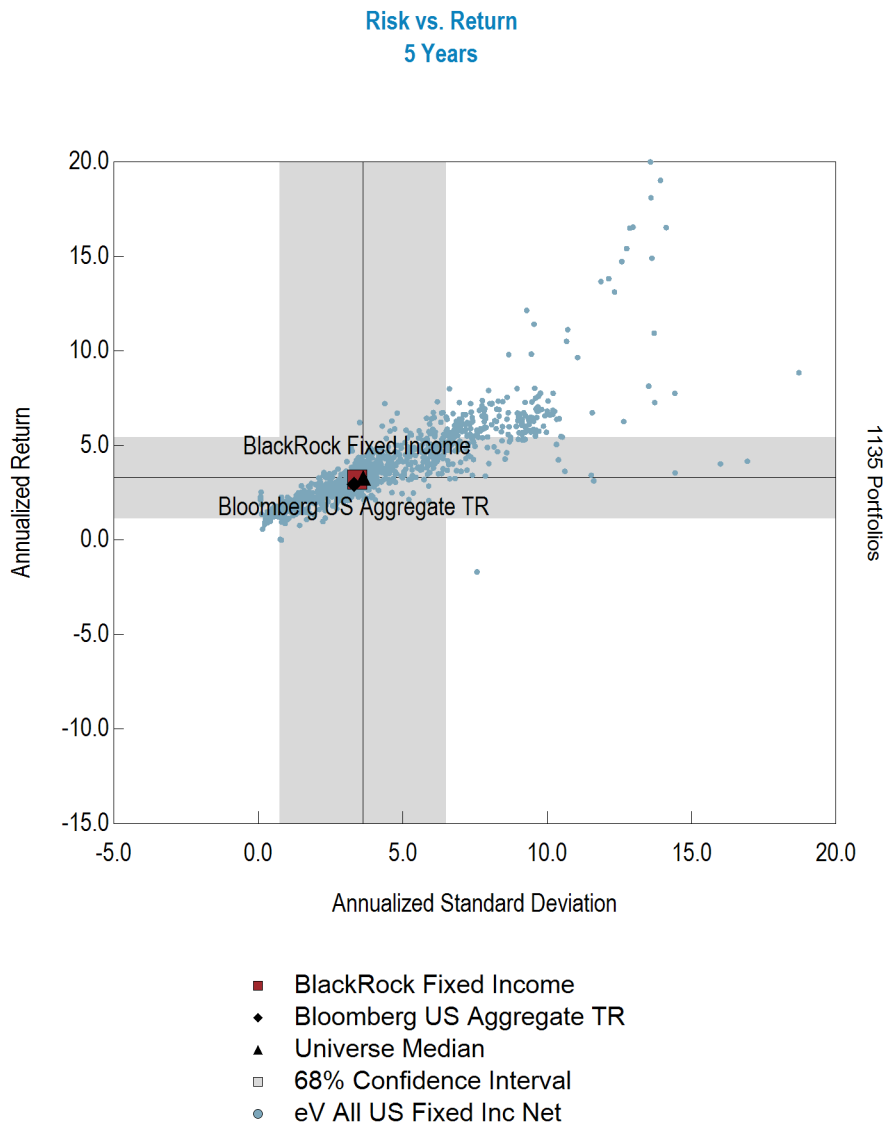


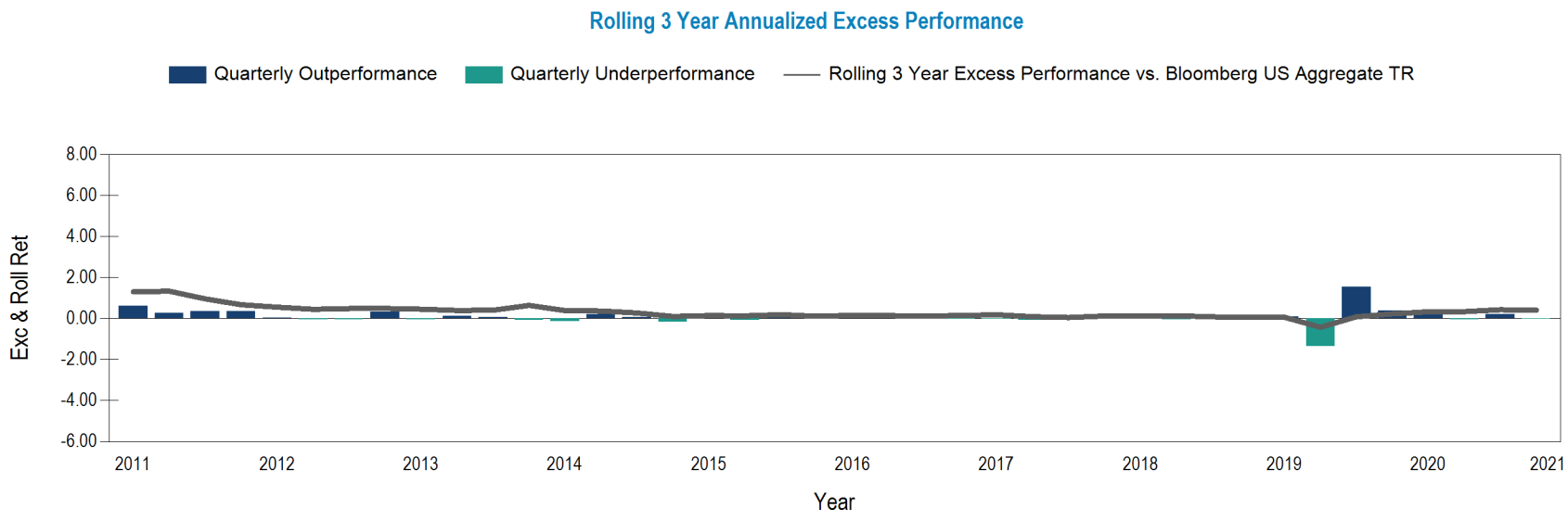
	Return (Rank)															
5th Percentile	1.1		5.6		1.1		12.6		10.9		6.9		6.9		7.5	
25th Percentile	0.3		1.9		0.3		4.7		6.5		4.8		4.7		5.2	
Median	0.1		0.0		0.1		1.2		5.0		3.3		3.4		3.5	
75th Percentile	0.0		-0.9		0.0		0.0		3.5		2.3		2.4		2.3	
95th Percentile	-0.3		-2.6		-0.3		-1.4		1.6		1.4		1.2		1.0	
# of Portfolios	1,245		1,239		1,245		1,237		1,191		1,135		1,062		920	
● **BlackRock Fixed Income**	0.0	(57)	-1.4	(86)	0.0	(57)	-0.5	(88)	5.8	(38)	3.2	(53)	3.5	(49)	3.4	(53)
▲ **Bloomberg US Aggregate TR**	0.1	(56)	-1.6	(88)	0.1	(56)	-0.9	(92)	5.4	(46)	2.9	(60)	3.3	(55)	3.0	(61)

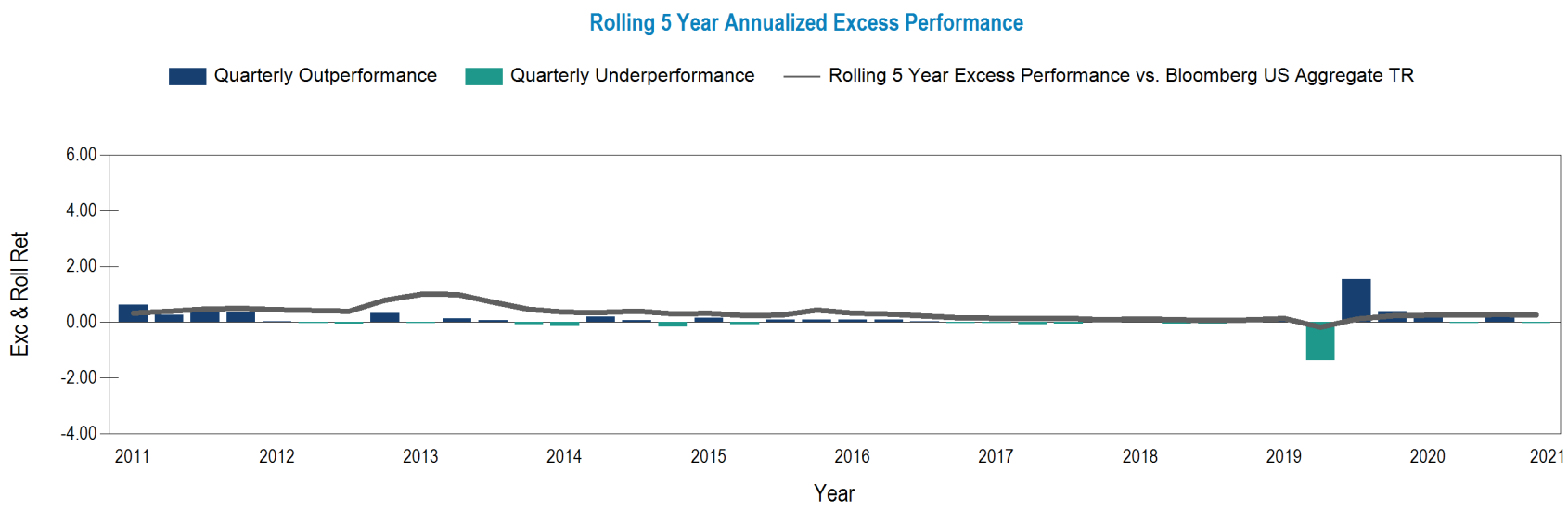


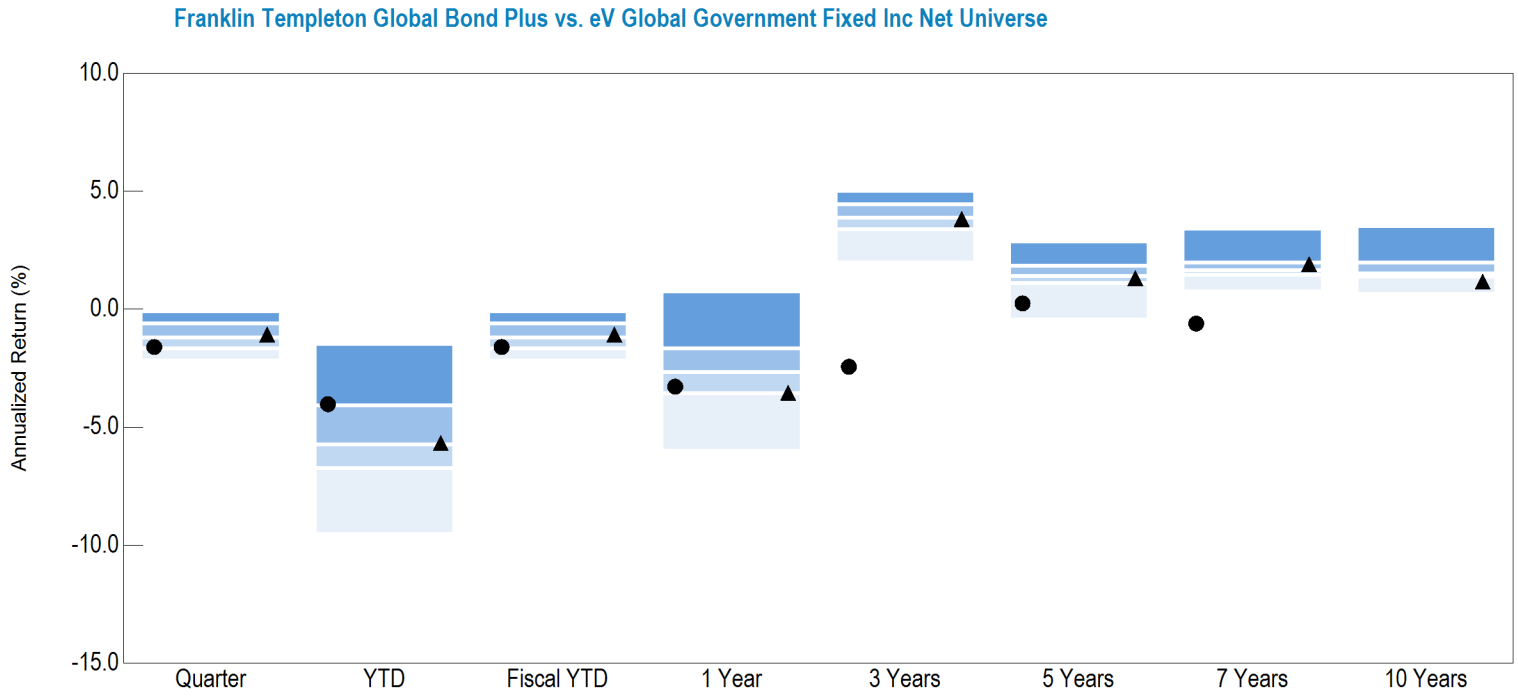
	Return (Rank)									
5th Percentile	16.4	20.3	2.1	11.6	14.1	2.7	17.4	8.5	16.1	18.3
25th Percentile	8.4	11.2	1.3	6.5	7.1	1.0	6.1	0.8	11.1	7.7
Median	6.0	8.1	0.3	3.9	3.3	0.4	3.9	-0.5	6.5	5.9
75th Percentile	3.6	5.3	-1.5	2.2	1.6	-1.1	1.4	-1.8	3.6	2.9
95th Percentile	0.9	2.7	-5.2	0.9	0.0	-4.7	0.2	-7.6	0.9	0.1
# of Portfolios	1,295	1,248	1,173	1,135	1,033	827	758	662	555	483
● BlackRock Fixed Income	8.4 (26)	8.7 (44)	0.1 (53)	3.6 (56)	2.9 (54)	0.8 (35)	6.0 (28)	-1.8 (76)	5.2 (60)	8.0 (20)
▲ Bloomberg US Aggregate TR	7.5 (36)	8.7 (45)	0.0 (55)	3.5 (57)	2.6 (57)	0.6 (45)	6.0 (28)	-2.0 (80)	4.2 (70)	7.8 (24)


Risk vs. Return
3 Years
15.0
10.0
5.0
0.0
-5.0
-10.0
Annualized Return
BlackRock Fixed Income
Bloomberg US Aggregate TR
-5.0
0.0
5.0
10.0
15.0
Annualized Standard Deviation
1191 Portfolios
BlackRock Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV All US Fixed Inc Net


Risk vs. Return
5 Years
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Annualized Return
BlackRock Fixed Income
Bloomberg US Aggregate TR
-5.0
0.0
5.0
10.0
15.0
20.0
Annualized Standard Deviation
1135 Portfolios
BlackRock Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV All US Fixed Inc Net

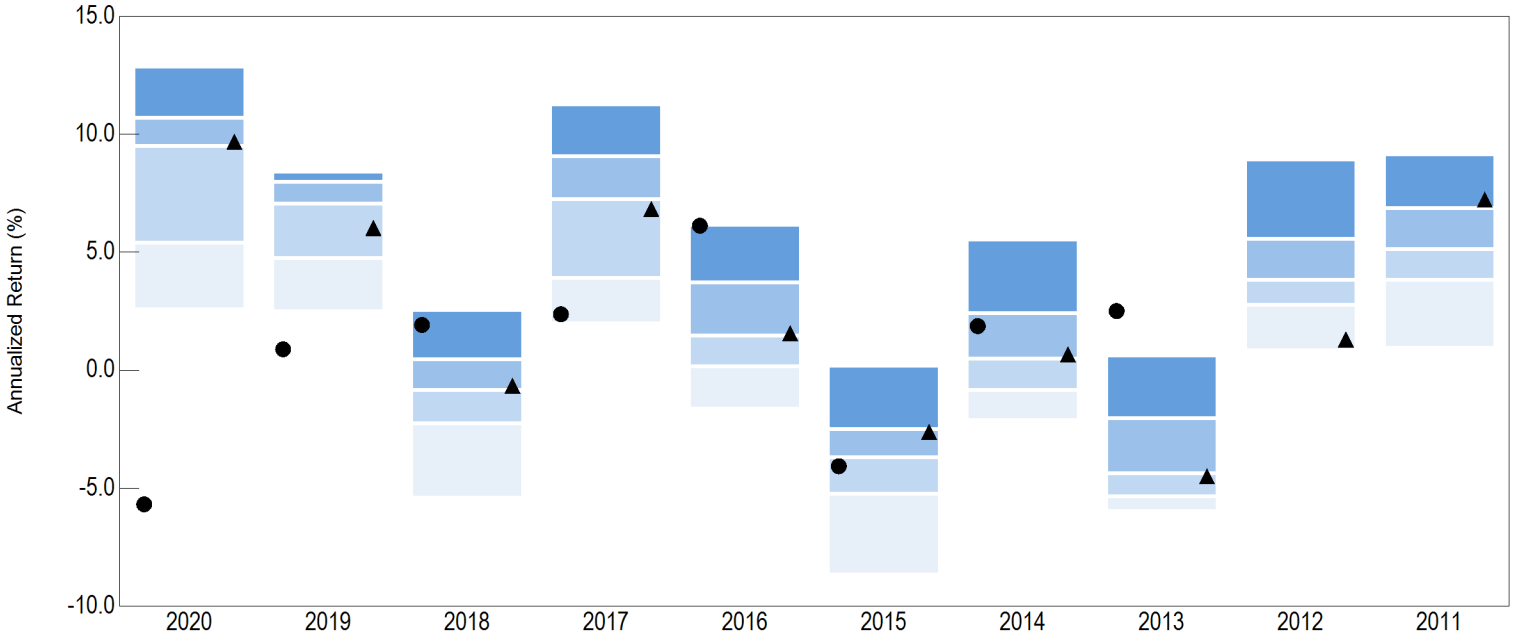

Rolling 3 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 3 Year Excess Performance vs. Bloomberg US Aggregate TR
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
Exc & Roll Ret
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year


Rolling 5 Year Annualized Excess Performance
Quarterly Outperformance
Quarterly Underperformance
Rolling 5 Year Excess Performance vs. Bloomberg US Aggregate TR
6.00
4.00
2.00
0.00
-2.00
-4.00
Exc & Roll Ret
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year

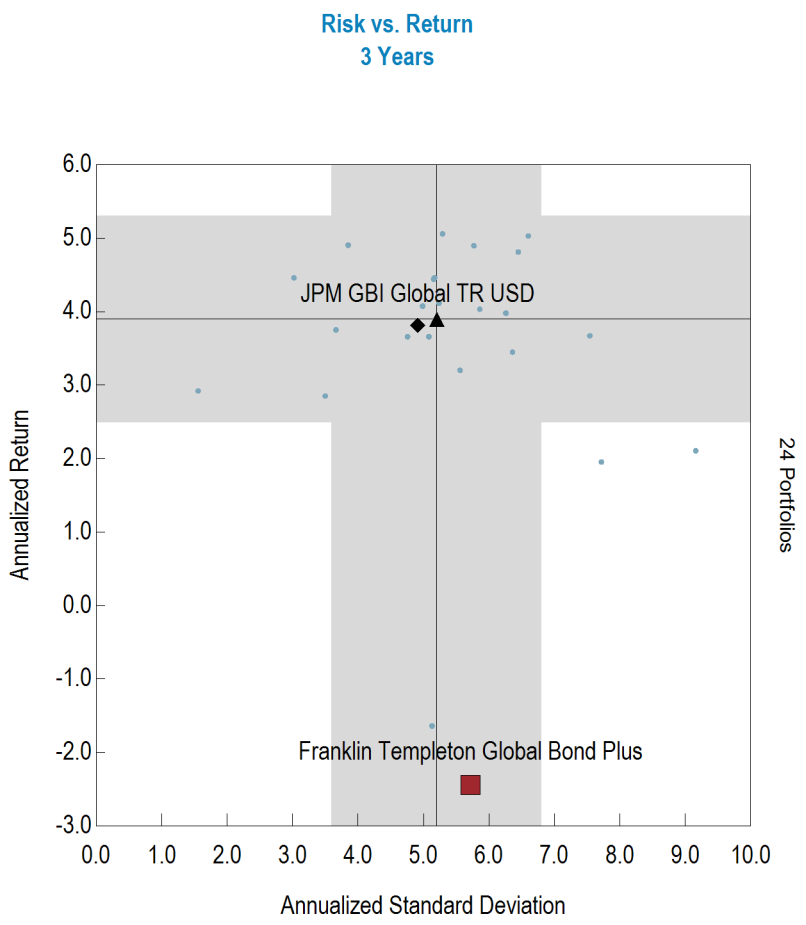


	Return (Rank)															
5th Percentile	-0.1		-1.5		-0.1		0.7		5.0		2.9		3.4		3.5	
25th Percentile	-0.6		-4.1		-0.6		-1.6		4.5		1.9		2.0		2.0	
Median	-1.2		-5.7		-1.2		-2.7		3.9		1.4		1.7		1.5	
75th Percentile	-1.6		-6.7		-1.6		-3.5		3.4		1.1		1.5		1.4	
95th Percentile	-2.2		-9.5		-2.2		-6.0		2.0		-0.4		0.8		0.7	
# of Portfolios	24		24		24		24		24		23		20		19	
● **Franklin Templeton Global Bond Plus**	-1.6	(73)	-4.0	(22)	-1.6	(73)	-3.3	(72)	-2.4	(99)	0.2	(93)	-0.6	(99)	--	(--)
▲ **JPM GBI Global TR USD**	-1.1	(48)	-5.7	(49)	-1.1	(48)	-3.5	(74)	3.8	(53)	1.3	(67)	1.9	(31)	1.2	(87)

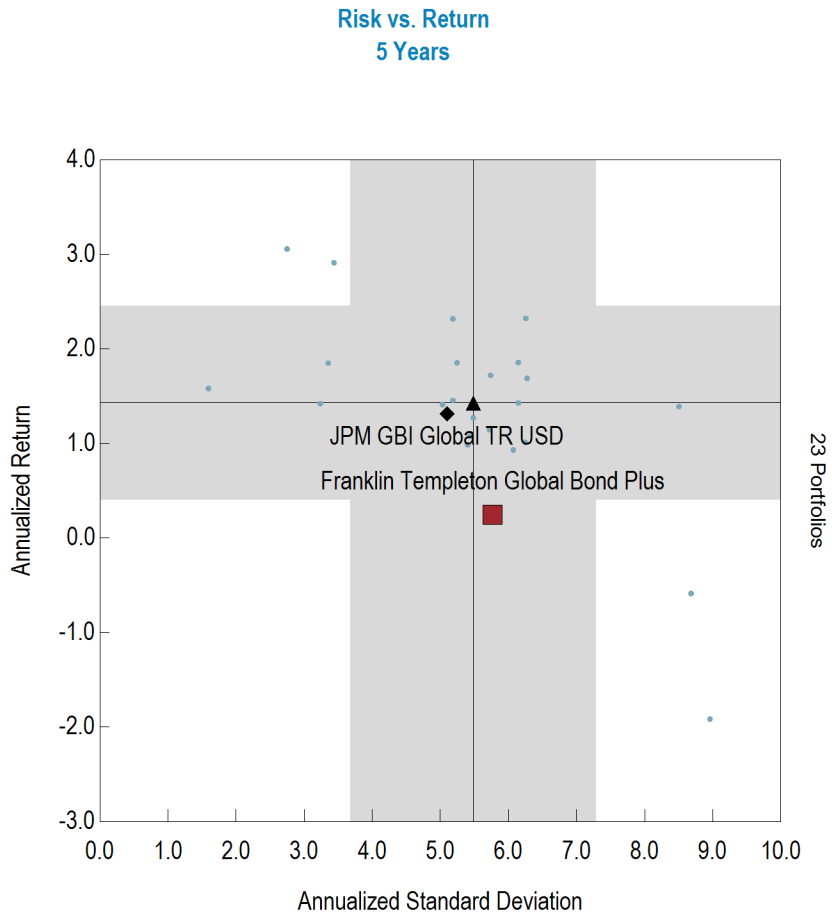
Franklin Templeton Global Bond Plus vs. eV Global Government Fixed Inc Net Universe



	Return (Rank)																			
5th Percentile	12.8		8.4		2.5		11.2		6.1		0.2		5.5		0.6		8.9		9.1	
25th Percentile	10.7		8.0		0.5		9.1		3.7		-2.5		2.4		-2.0		5.6		6.9	
Median	9.5		7.1		-0.8		7.3		1.5		-3.7		0.5		-4.3		3.8		5.2	
75th Percentile	5.4		4.8		-2.2		3.9		0.2		-5.2		-0.8		-5.3		2.8		3.9	
95th Percentile	2.6		2.5		-5.4		2.0		-1.6		-8.6		-2.1		-6.0		0.9		1.0	
# of Portfolios	22		19		21		22		23		19		16		11		14		13	
● Franklin Templeton Global Bond Plus	-5.7	(99)	0.9	(99)	1.9	(11)	2.4	(93)	6.1	(6)	-4.1	(68)	1.9	(30)	2.5	(1)	--	(--)	--	(--)
▲ JPM GBI Global TR USD	9.7	(43)	6.0	(67)	-0.7	(43)	6.8	(60)	1.6	(50)	-2.6	(26)	0.7	(45)	-4.5	(55)	1.3	(92)	7.2	(16)



- Franklin Templeton Global Bond Plus
- JPM GBI Global TR USD
- Universe Median
- 68% Confidence Interval
- eV Global Government Fixed Inc Net



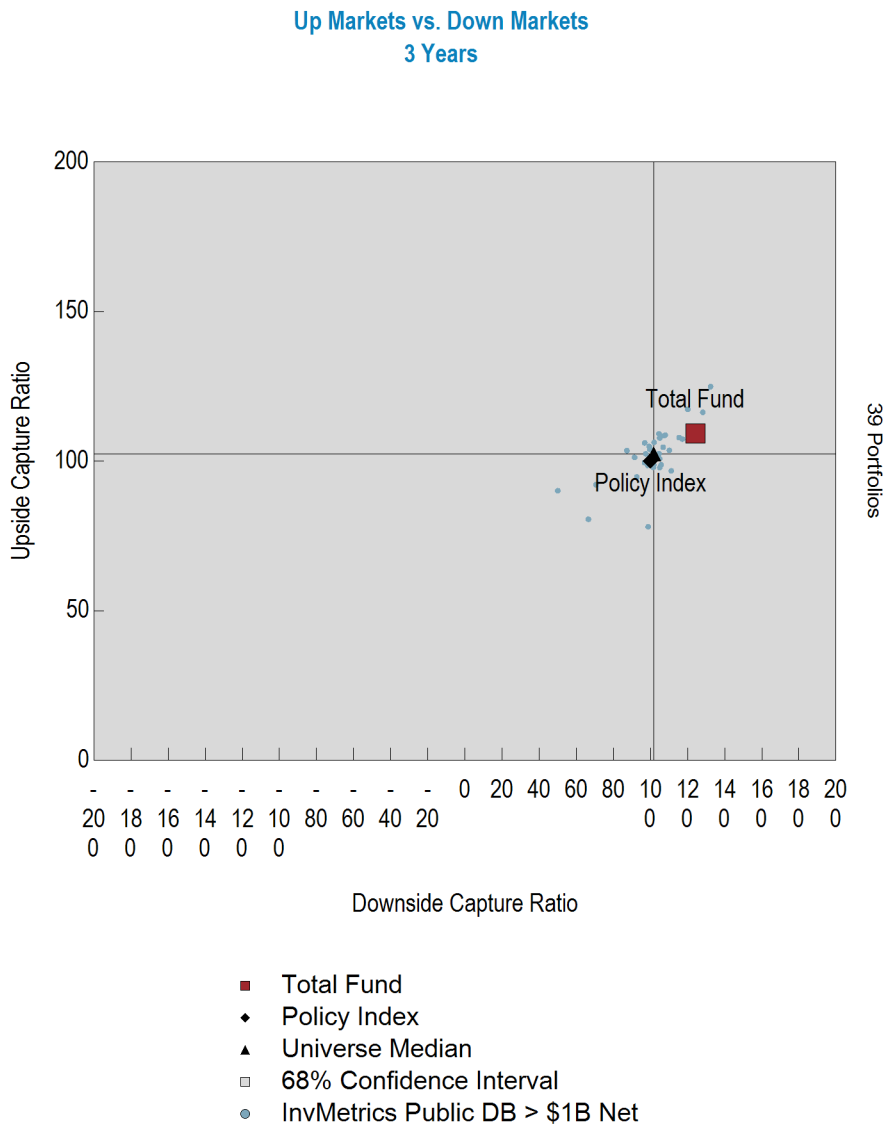
- Franklin Templeton Global Bond Plus
- JPM GBI Global TR USD
- Universe Median
- 68% Confidence Interval
- eV Global Government Fixed Inc Net

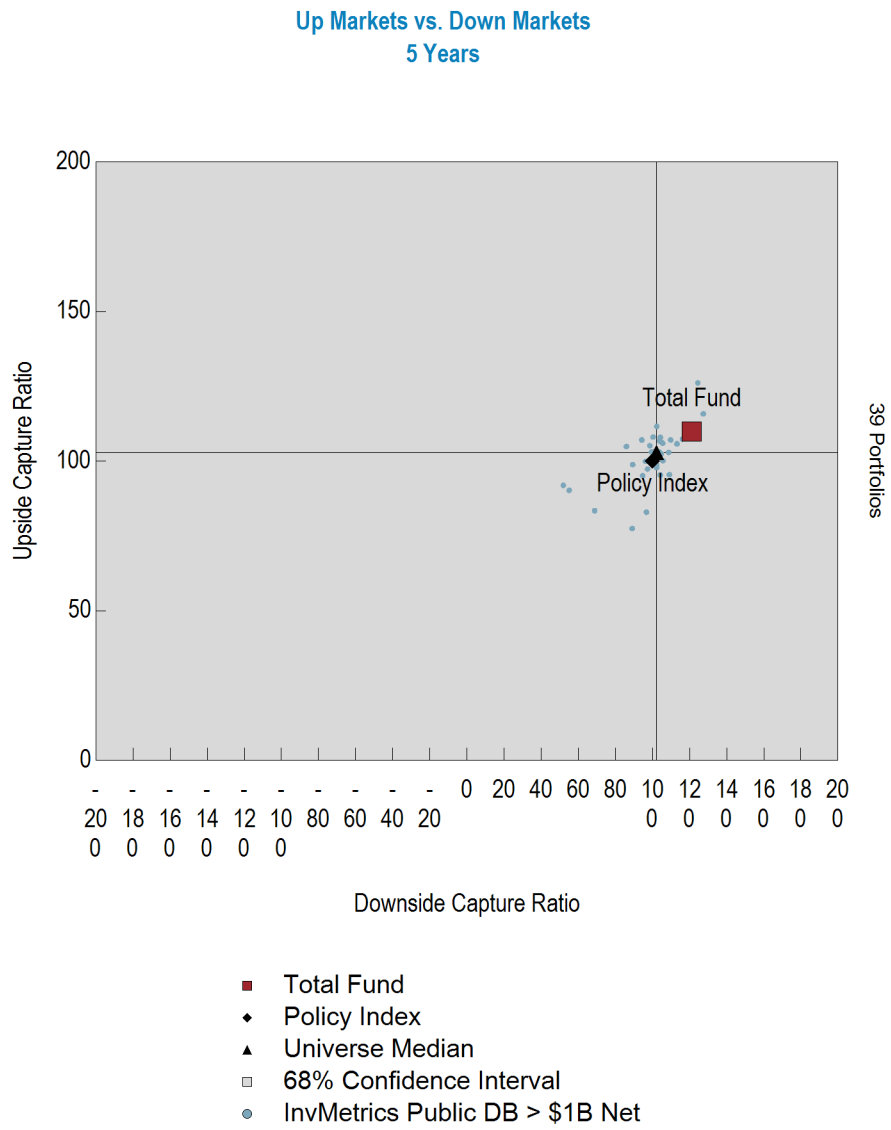
Total Real Estate
Asset Class Overview (Net of Fees)

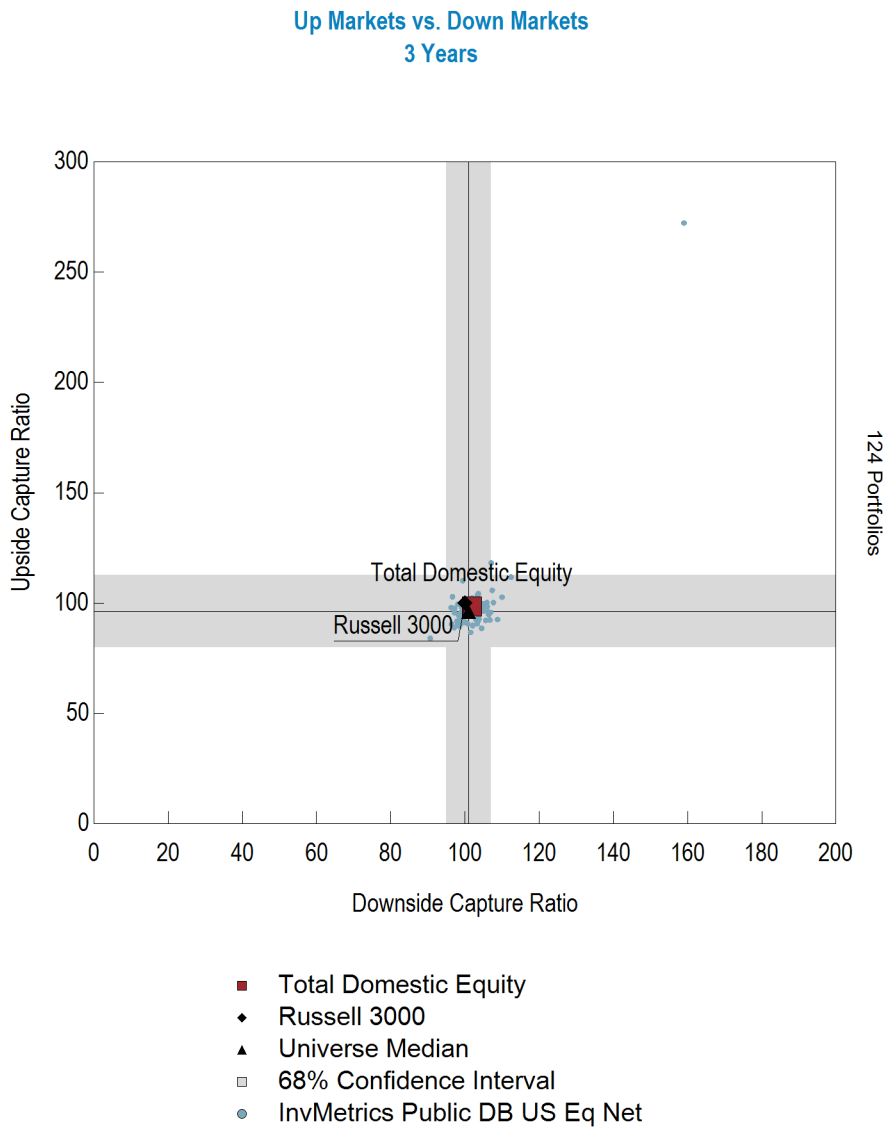
Period Ending: September 30, 2021

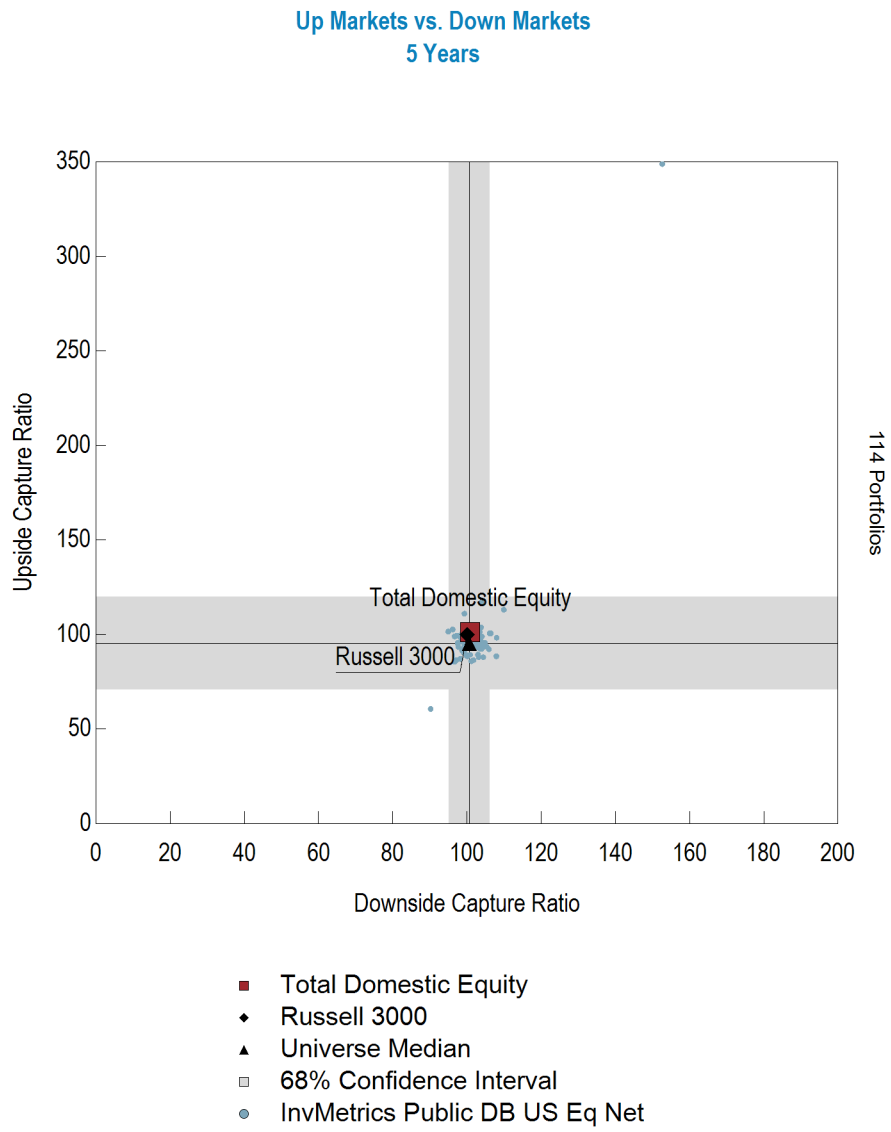
	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2020	2019	2018	2017	2016
Total Real Estate	**218,640,576**	**3.6**	**6.5**	**3.6**	**6.5**	**5.3**	**5.6**	**8.3**	**1.8**	**5.2**	**8.8**	**4.3**	**8.0**
NCREIF ODCE net 1Q Lag		*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	*0.5*	*4.6*	*7.7*	*6.7*	*9.1*
NCREIF-ODCE		*6.6*	*13.1*	*6.6*	*14.6*	*7.1*	*7.5*	*9.9*	*1.2*	*5.3*	*8.3*	*7.6*	*8.8*
RREEF America II	172,005,375	3.7	6.5	3.7	6.5	5.3	5.8	9.1	1.8	5.3	8.6	4.4	8.2
NCREIF ODCE net 1Q Lag		*3.7*	*6.8*	*3.7*	*7.1*	*4.6*	*5.6*	*8.6*	*0.5*	*4.6*	*7.7*	*6.7*	*9.1*
NCREIF Property Index		*5.2*	*10.9*	*5.2*	*12.2*	*6.7*	*6.8*	*9.0*	*1.6*	*6.4*	*6.7*	*7.0*	*8.0*
American Realty	30,058,326	3.1	6.2	3.1	6.9	--	--	--	1.1	--	--	--	--
NCREIF ODCE net 1Q Lag		*3.7*	*6.8*	*3.7*	*7.1*	--	--	--	*0.5*	--	--	--	--
NCREIF-ODCE		*6.6*	*13.1*	*6.6*	*14.6*	--	--	--	*1.2*	--	--	--	--
Invesco Commercial Mortgage Income Fund	16,576,875	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF ODCE net 1Q Lag		--	--	--	--	--	--	--	--	--	--	--	--
NCREIF-ODCE		--	--	--	--	--	--	--	--	--	--	--	--

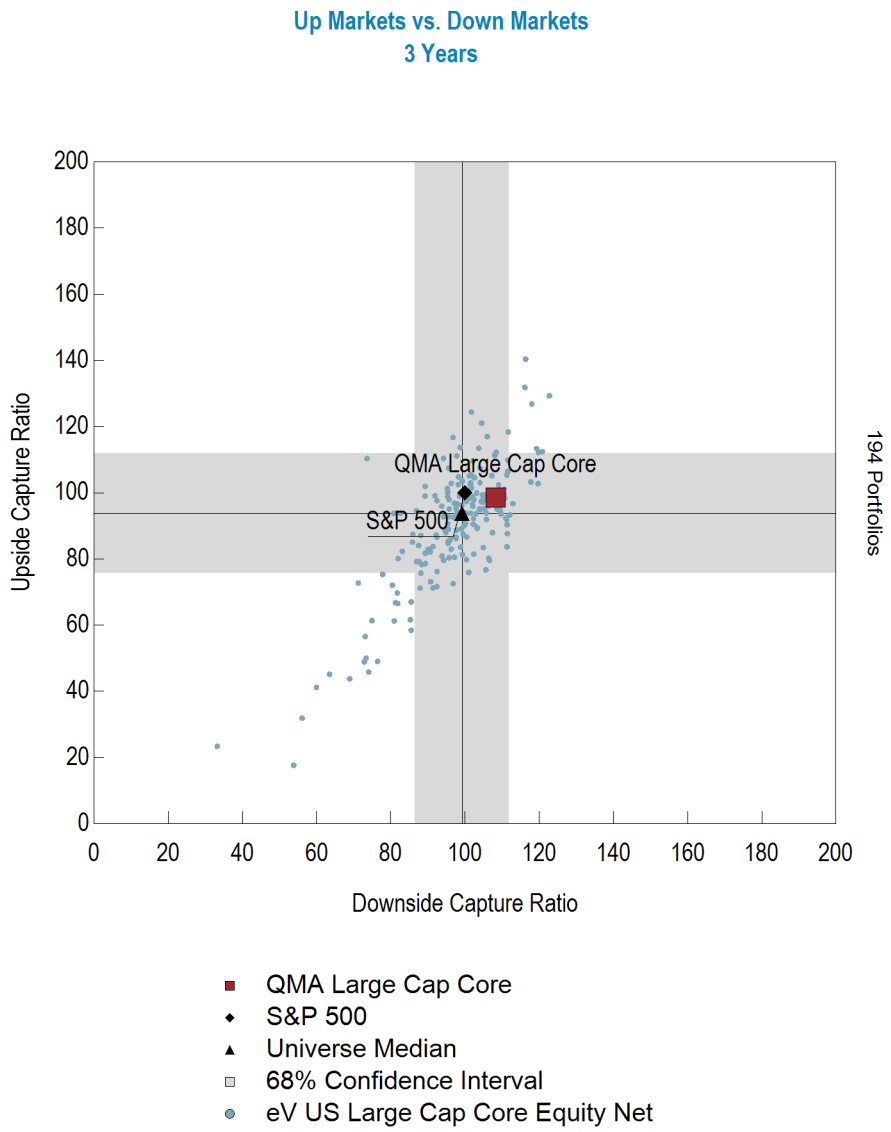
RREEF liquidated in 1Q 2018. American Realty funded 4Q 2019.

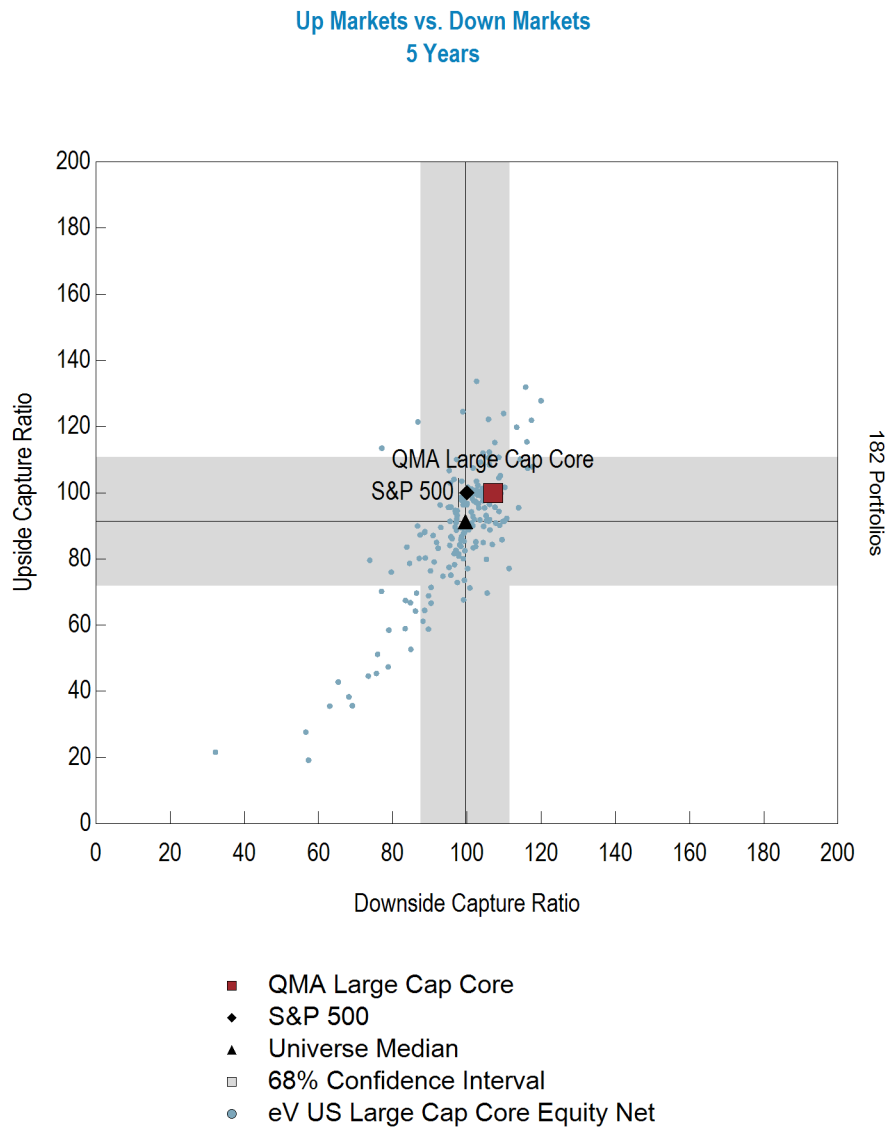

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
200
150
100
50
0
Total Fund
Policy Index
39 Portfolios
-200 -180 -160 -140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140 160 180 200
Downside Capture Ratio
Total Fund
Policy Index
Universe Median
68% Confidence Interval
InvMetrics Public DB > $1B Net

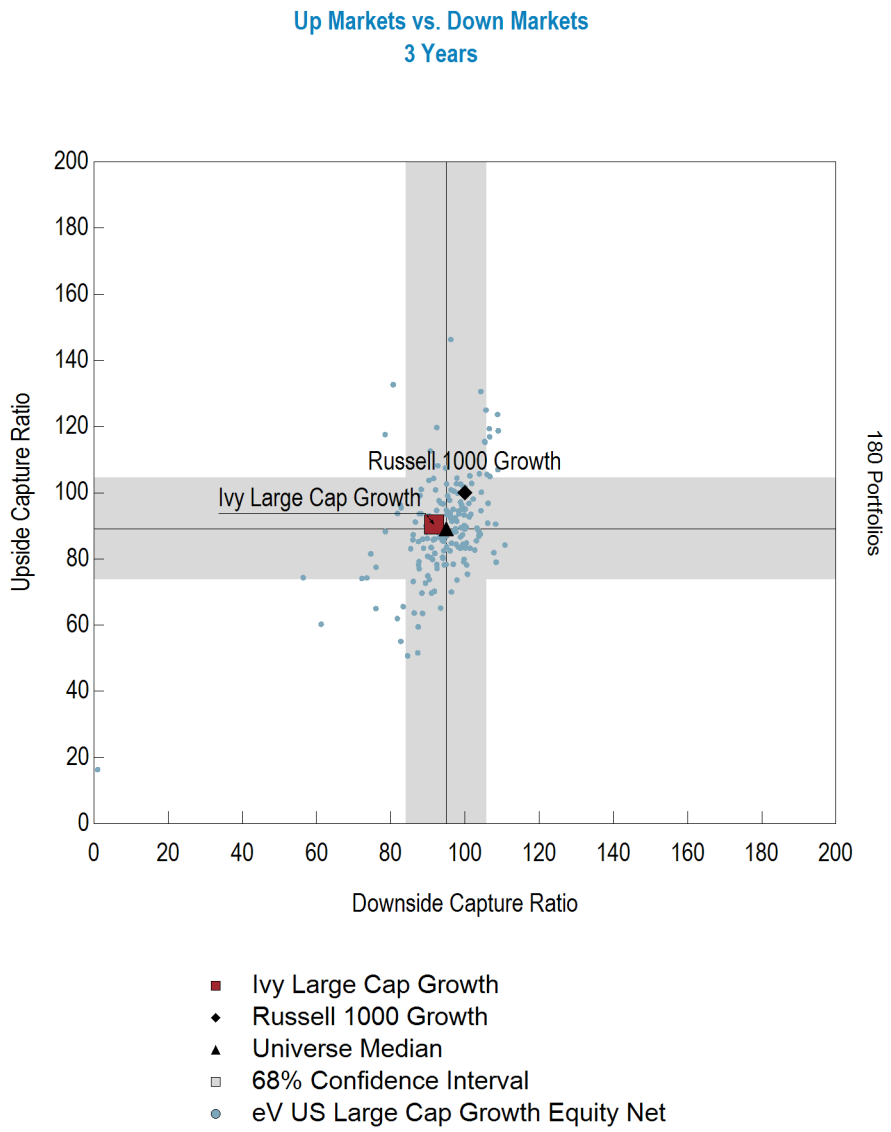

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
200
150
100
50
0
Total Fund
Policy Index
39 Portfolios
-200 -180 -160 -140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140 160 180 200
Downside Capture Ratio
Total Fund
Policy Index
Universe Median
68% Confidence Interval
InvMetrics Public DB > $1B Net

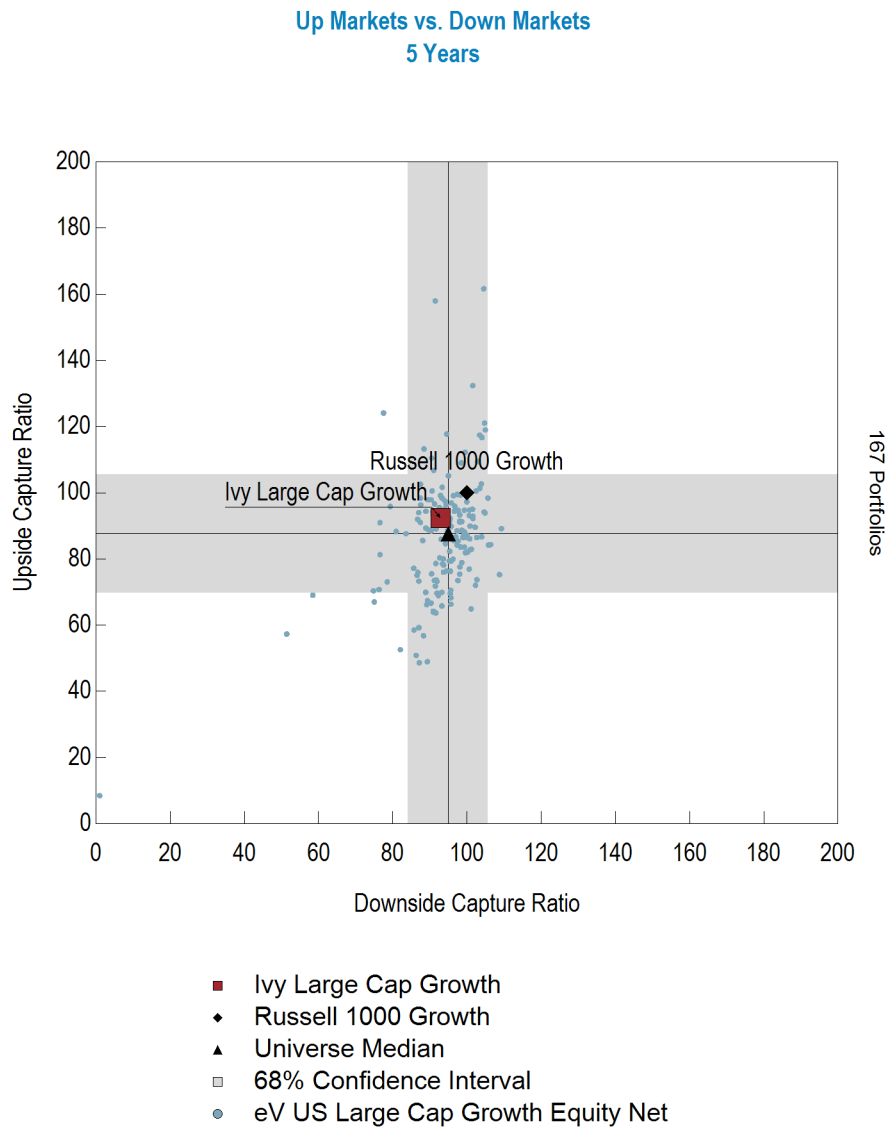

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
124 Portfolios
Total Domestic Equity
Russell 3000
Total Domestic Equity
Russell 3000
Universe Median
68% Confidence Interval
InvMetrics Public DB US Eq Net

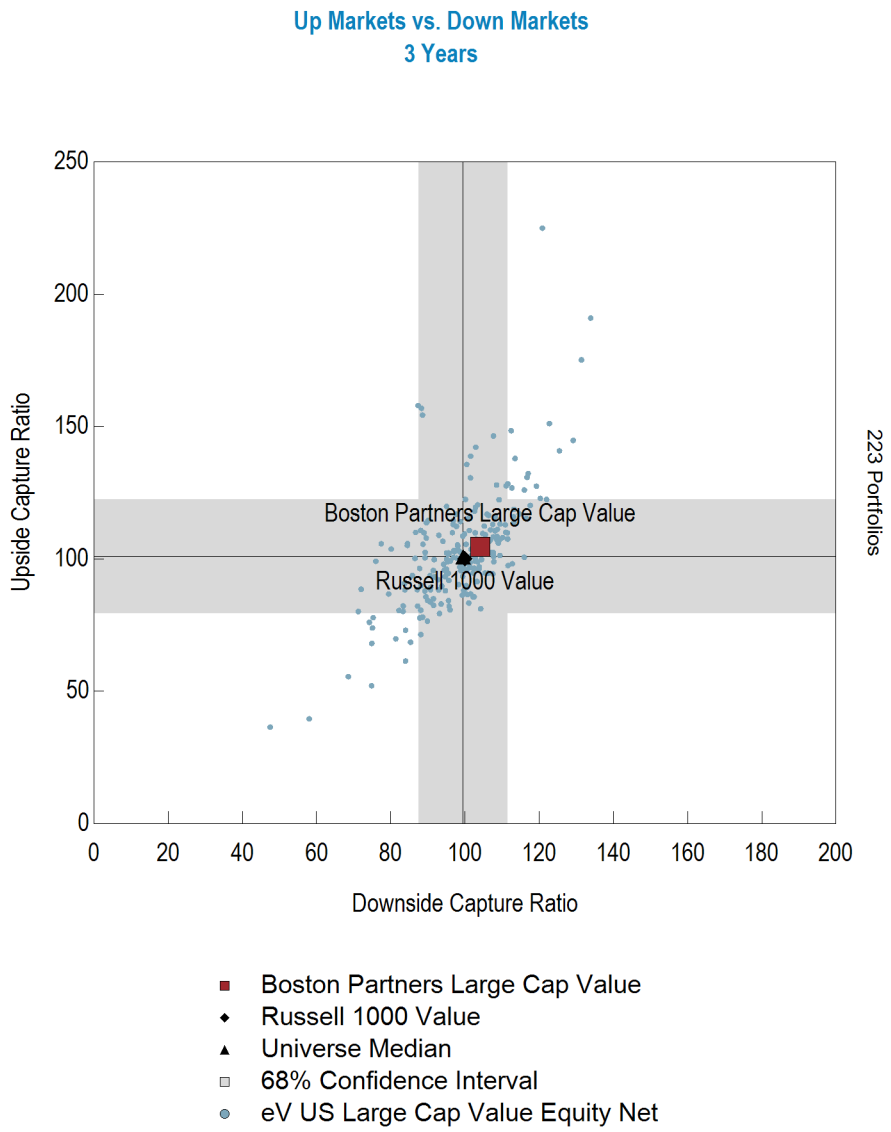

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
114 Portfolios
Total Domestic Equity
Russell 3000
Total Domestic Equity
Russell 3000
Universe Median
68% Confidence Interval
InvMetrics Public DB US Eq Net

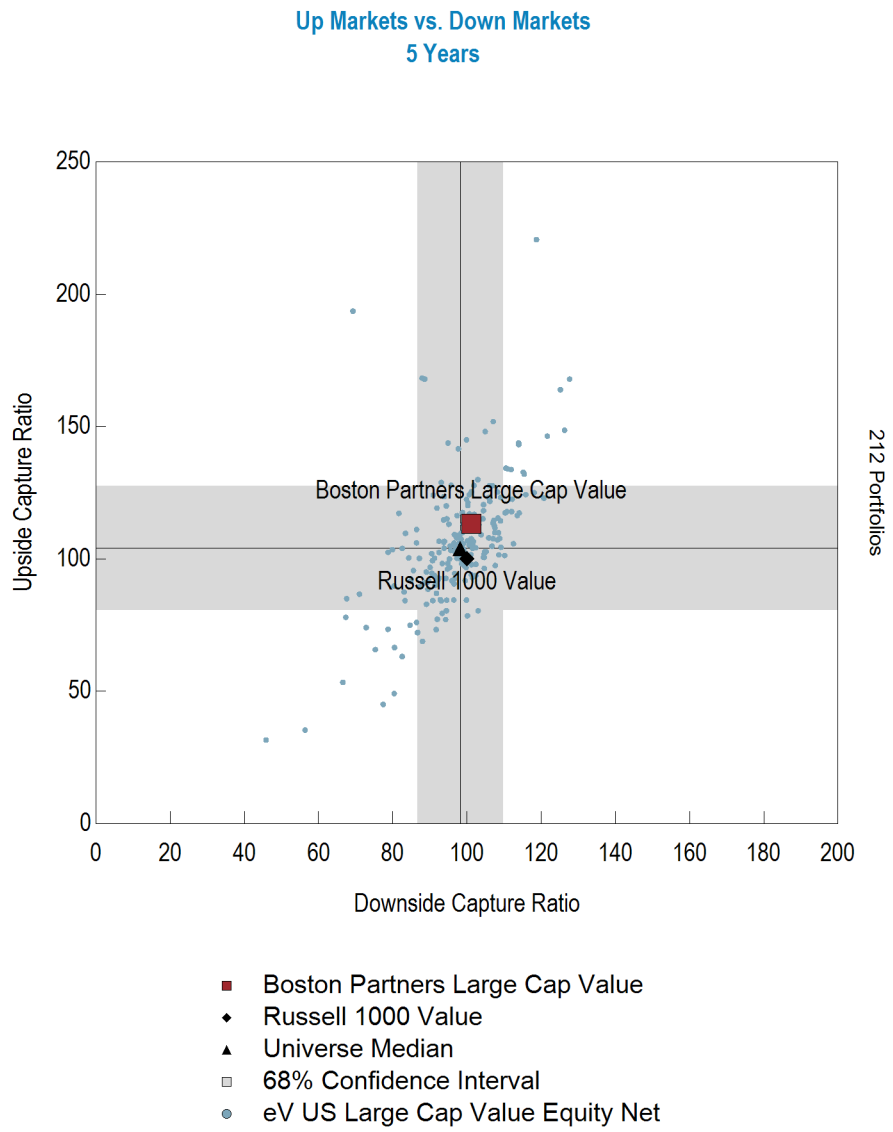

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
QMA Large Cap Core
S&P 500
194 Portfolios
0
20
40
60
80
100
120
140
160
180
200
QMA Large Cap Core
S&P 500
Universe Median
68% Confidence Interval
eV US Large Cap Core Equity Net

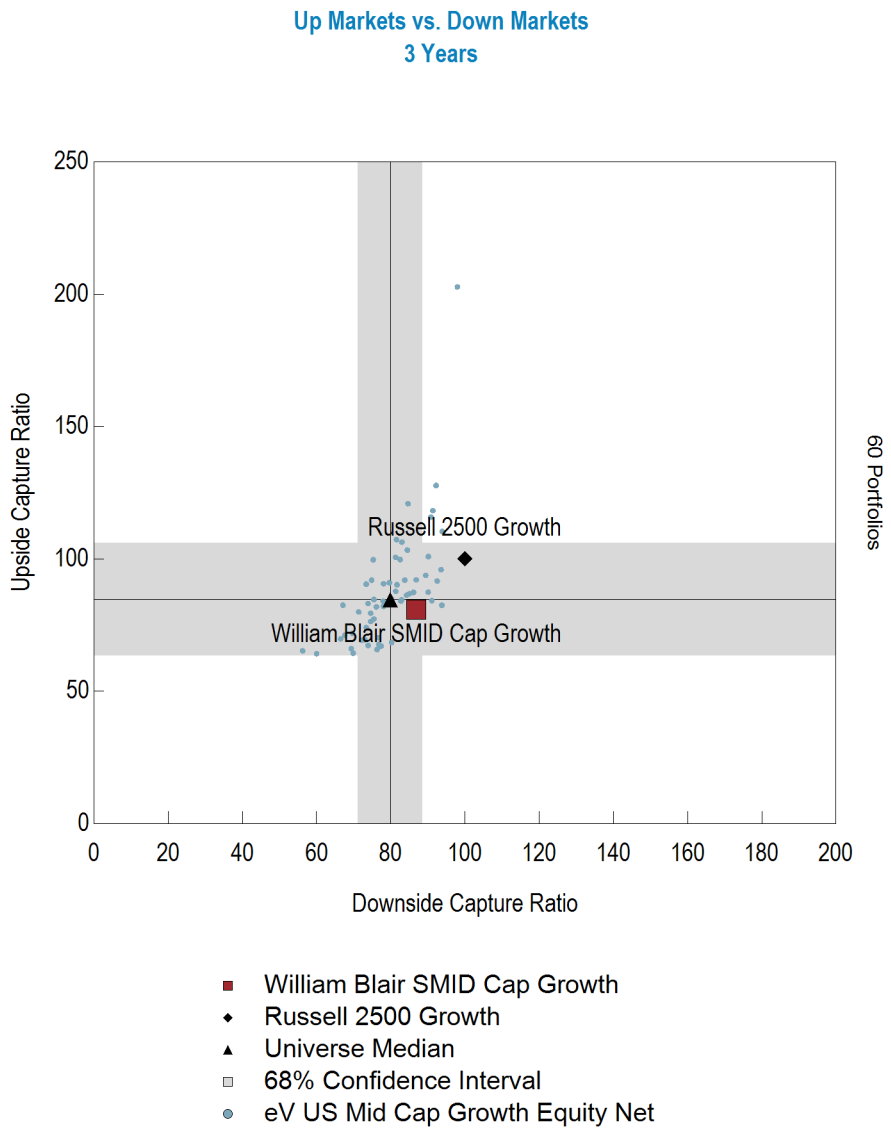

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
QMA Large Cap Core
S&P 500
182 Portfolios
0
20
40
60
80
100
120
140
160
180
200
QMA Large Cap Core
S&P 500
Universe Median
68% Confidence Interval
eV US Large Cap Core Equity Net

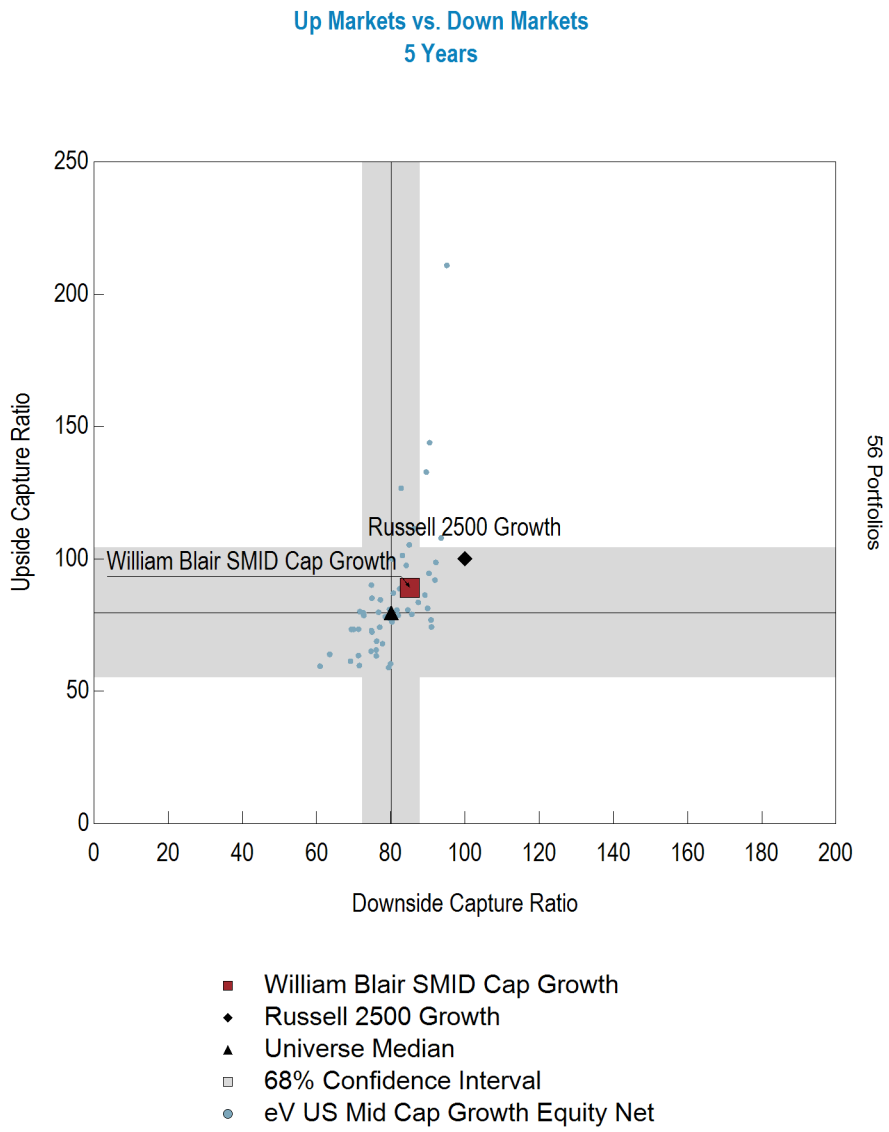

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 1000 Growth
Ivy Large Cap Growth
180 Portfolios
Ivy Large Cap Growth
Russell 1000 Growth
Universe Median
68% Confidence Interval
eV US Large Cap Growth Equity Net

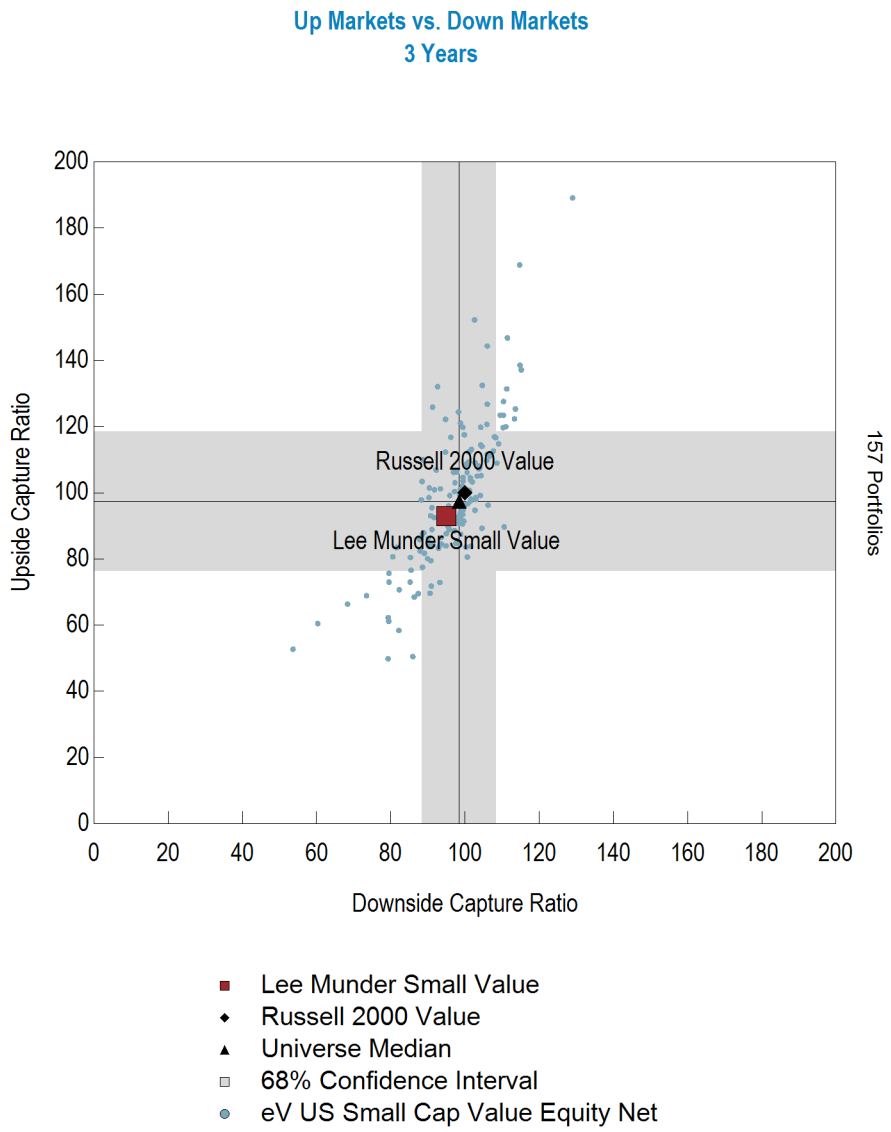

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 1000 Growth
Ivy Large Cap Growth
167 Portfolios
Ivy Large Cap Growth
Russell 1000 Growth
Universe Median
68% Confidence Interval
eV US Large Cap Growth Equity Net


Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Boston Partners Large Cap Value
Russell 1000 Value
223 Portfolios
0
50
100
150
200
250
0
20
40
60
80
100
120
140
160
180
200
Boston Partners Large Cap Value
Russell 1000 Value
Universe Median
68% Confidence Interval
eV US Large Cap Value Equity Net

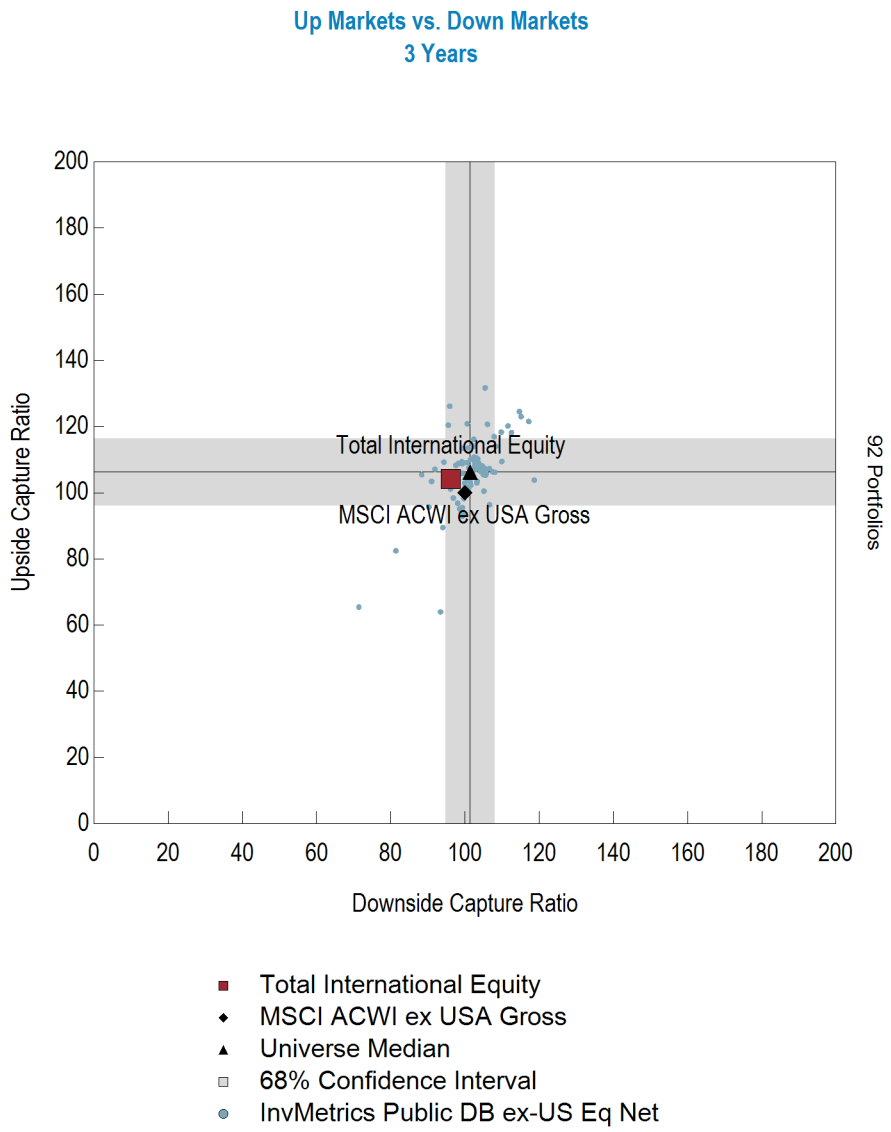

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Boston Partners Large Cap Value
Russell 1000 Value
212 Portfolios
0
50
100
150
200
250
0
20
40
60
80
100
120
140
160
180
200
Boston Partners Large Cap Value
Russell 1000 Value
Universe Median
68% Confidence Interval
eV US Large Cap Value Equity Net

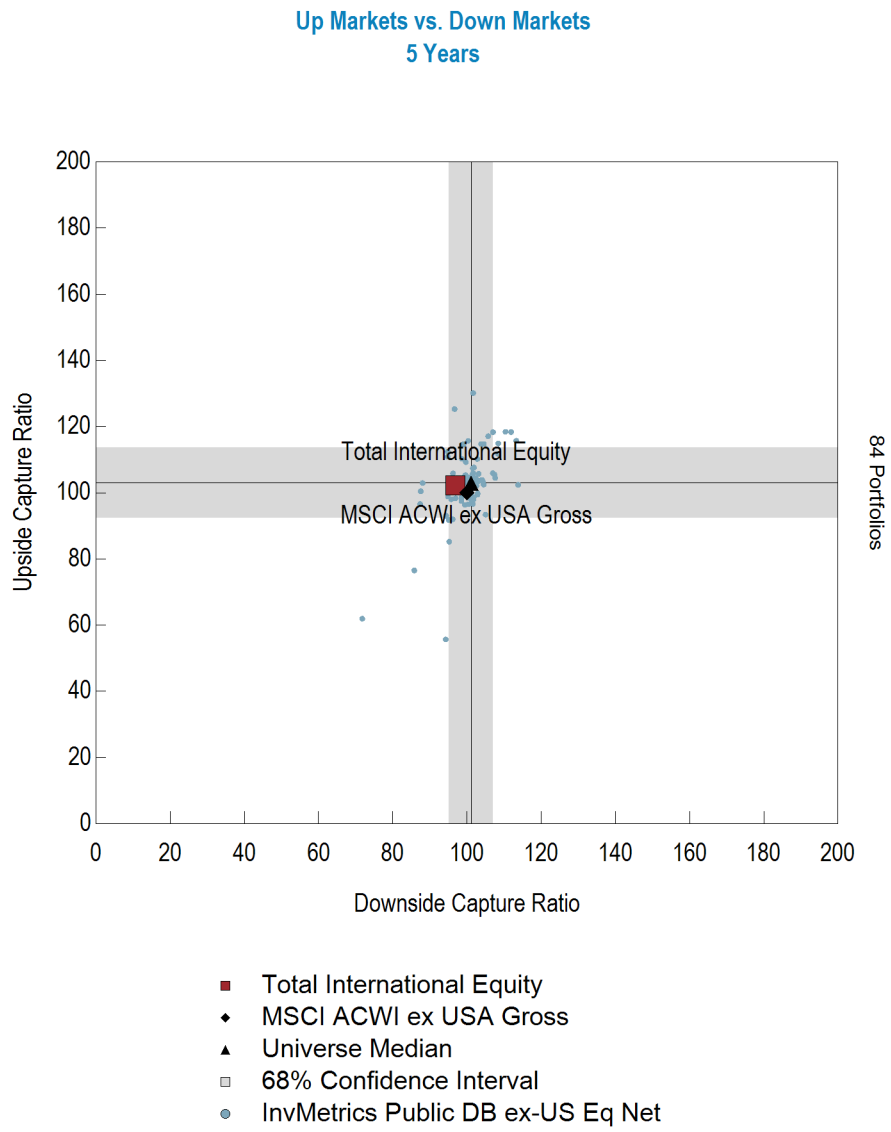

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 2500 Growth
William Blair SMID Cap Growth
60 Portfolios
0
50
100
150
200
250
0
20
40
60
80
100
120
140
160
180
200
William Blair SMID Cap Growth
Russell 2500 Growth
Universe Median
68% Confidence Interval
eV US Mid Cap Growth Equity Net

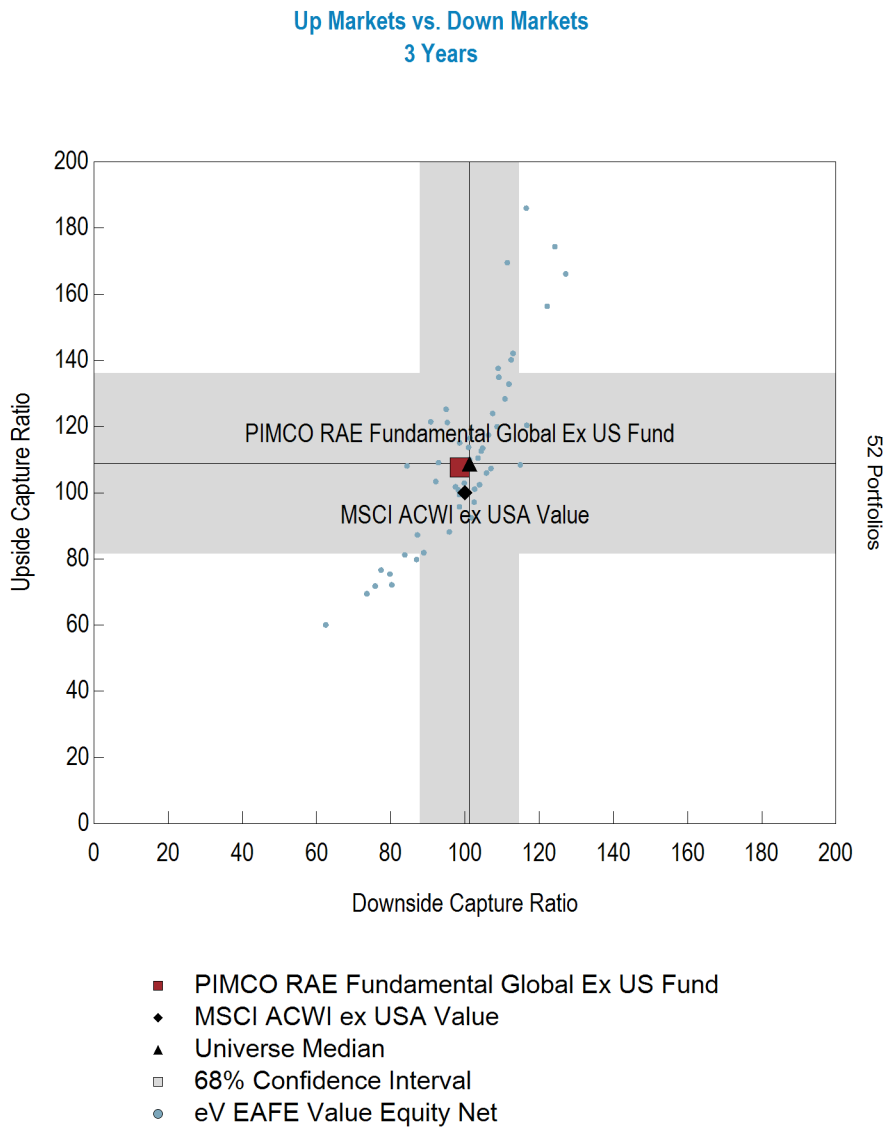

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 2500 Growth
William Blair SMID Cap Growth
56 Portfolios
0
50
100
150
200
250
0
20
40
60
80
100
120
140
160
180
200
William Blair SMID Cap Growth
Russell 2500 Growth
Universe Median
68% Confidence Interval
eV US Mid Cap Growth Equity Net

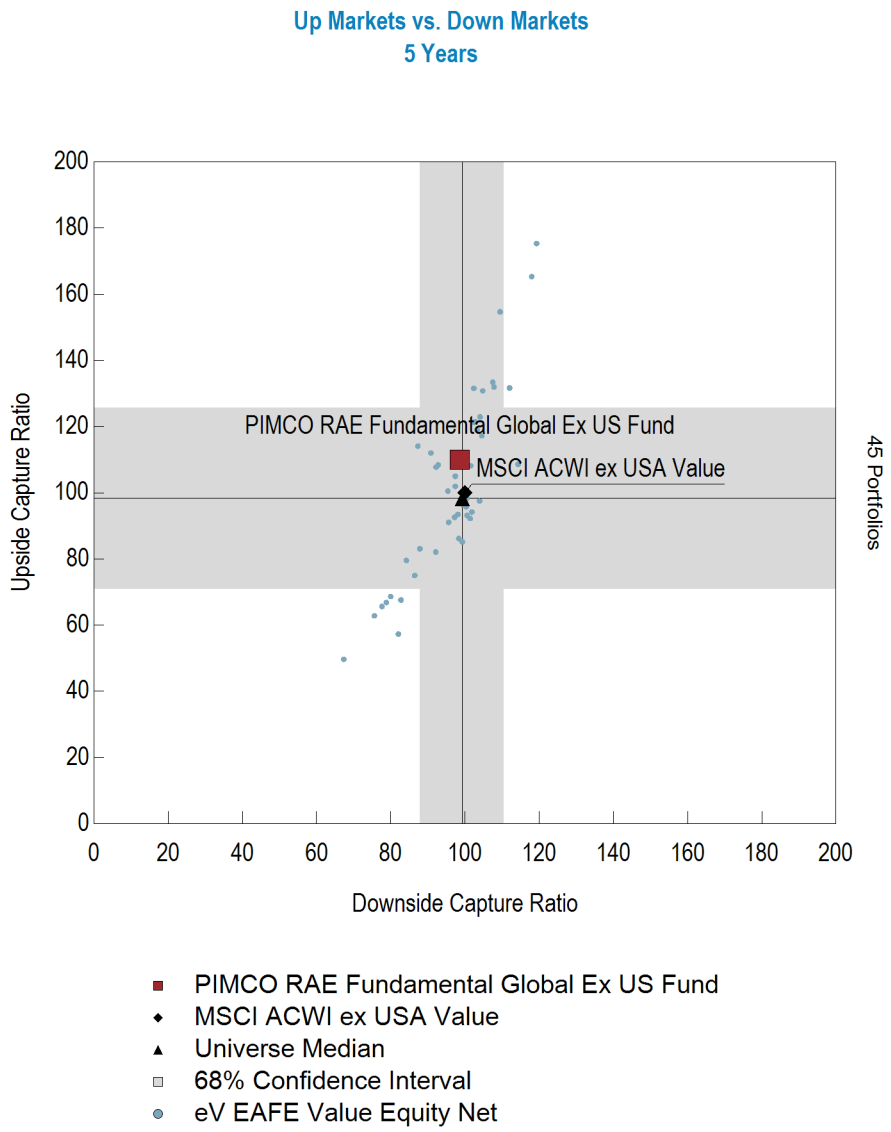

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 2000 Value
Lee Munder Small Value
157 Portfolios
0
20
40
60
80
100
120
140
160
180
200
Lee Munder Small Value
Russell 2000 Value
Universe Median
68% Confidence Interval
eV US Small Cap Value Equity Net

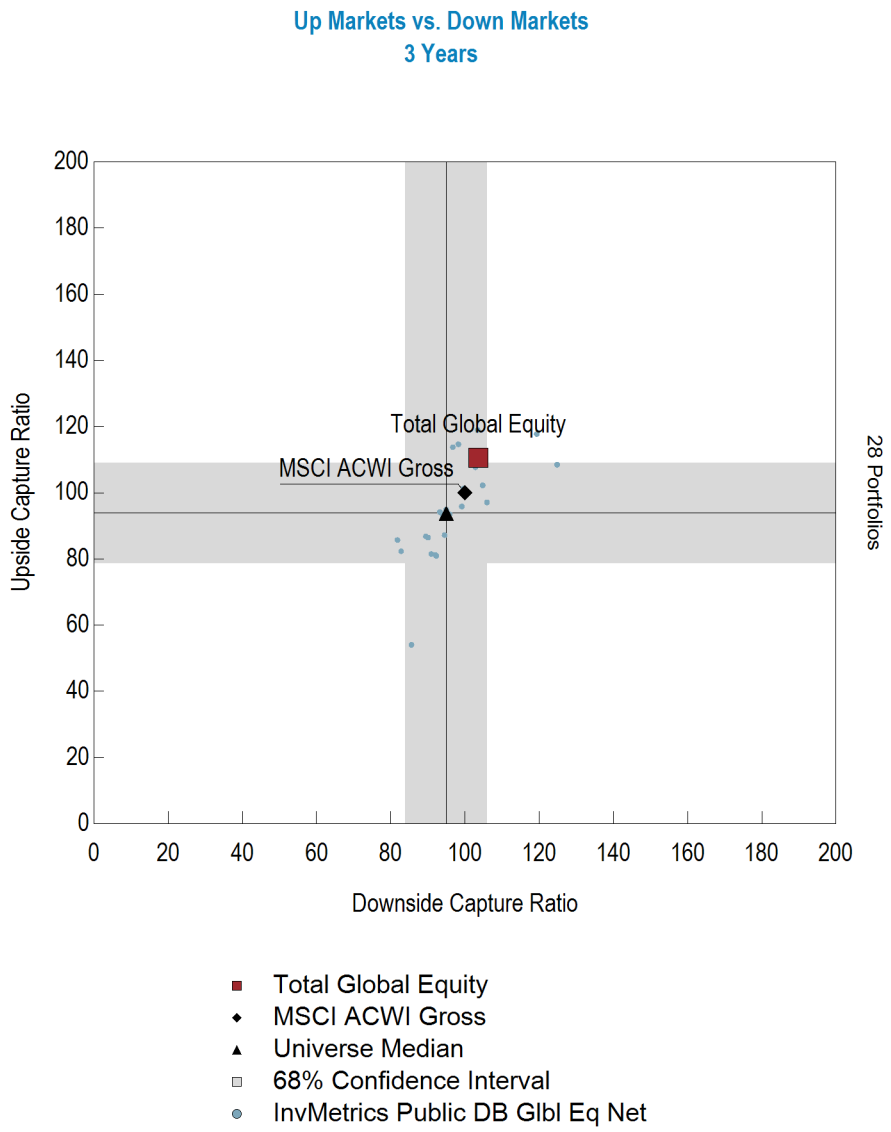
Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Russell 2000 Value
Lee Munder Small Value
153 Portfolios
0
20
40
60
80
100
120
140
160
180
200
Lee Munder Small Value
Russell 2000 Value
Universe Median
68% Confidence Interval
eV US Small Cap Value Equity Net


Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Total International Equity
MSCI ACWI ex USA Gross
92 Portfolios
0
20
40
60
80
100
120
140
160
180
200
Total International Equity
MSCI ACWI ex USA Gross
Universe Median
68% Confidence Interval
InvMetrics Public DB ex-US Eq Net

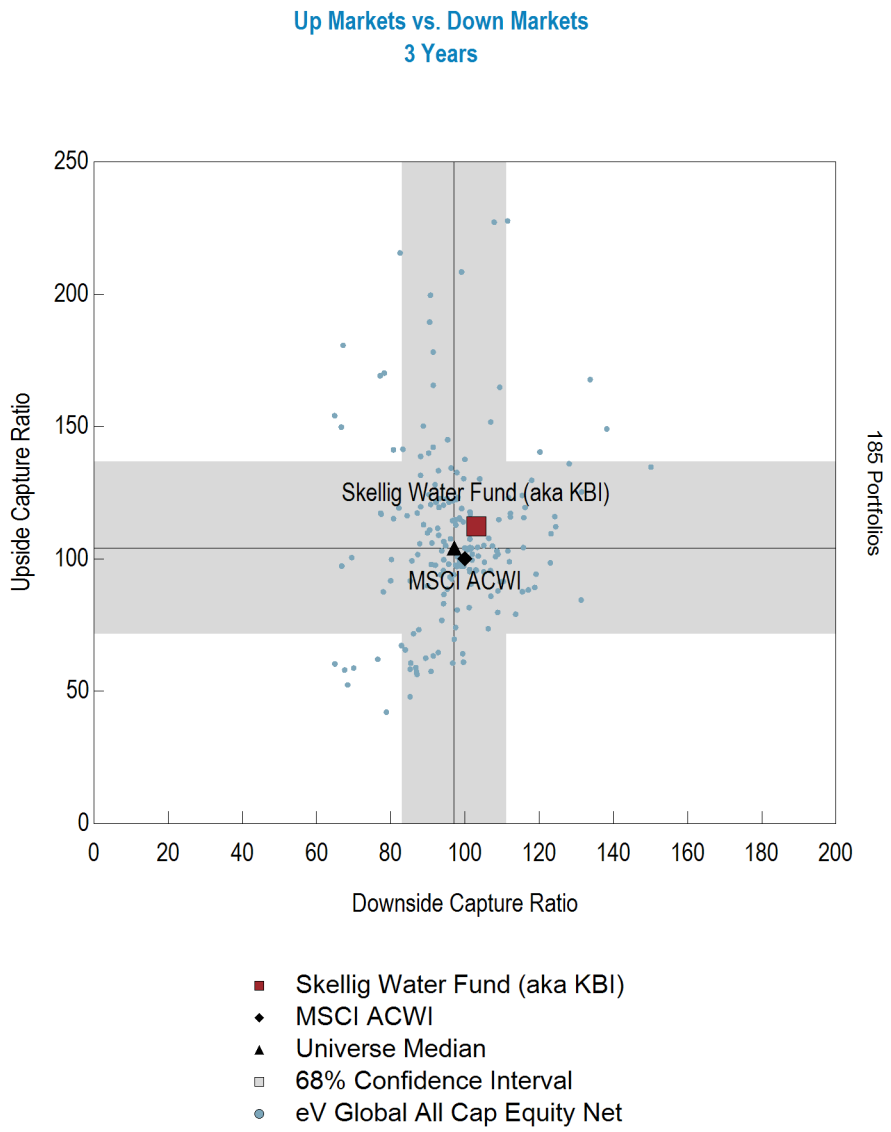

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Total International Equity
MSCI ACWI ex USA Gross
84 Portfolios
0
20
40
60
80
100
120
140
160
180
200
Total International Equity
MSCI ACWI ex USA Gross
Universe Median
68% Confidence Interval
InvMetrics Public DB ex-US Eq Net

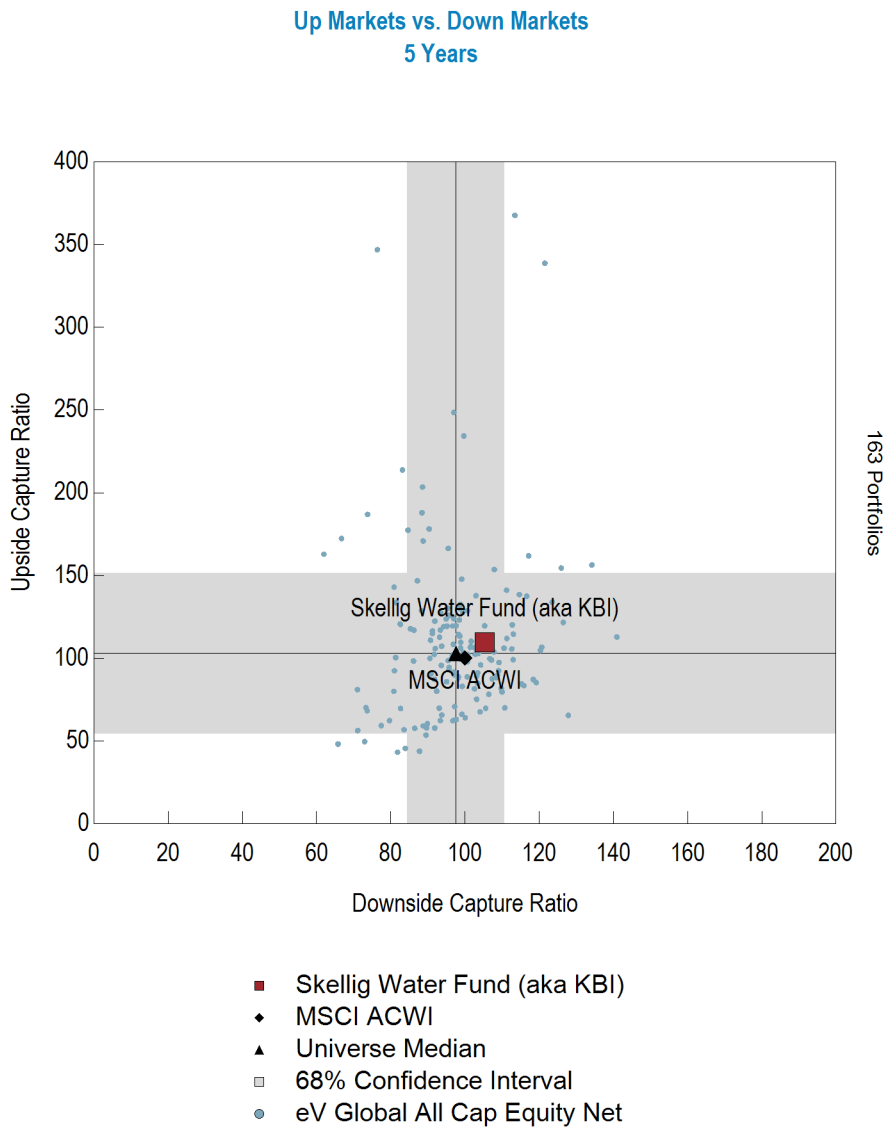

Up Markets vs. Down Markets
3 Years
PIMCO RAE Fundamental Global Ex US Fund
MSCI ACWI ex USA Value
Upside Capture Ratio
Downside Capture Ratio
52 Portfolios
0
20
40
60
80
100
120
140
160
180
200
PIMCO RAE Fundamental Global Ex US Fund
MSCI ACWI ex USA Value
Universe Median
68% Confidence Interval
eV EAFE Value Equity Net

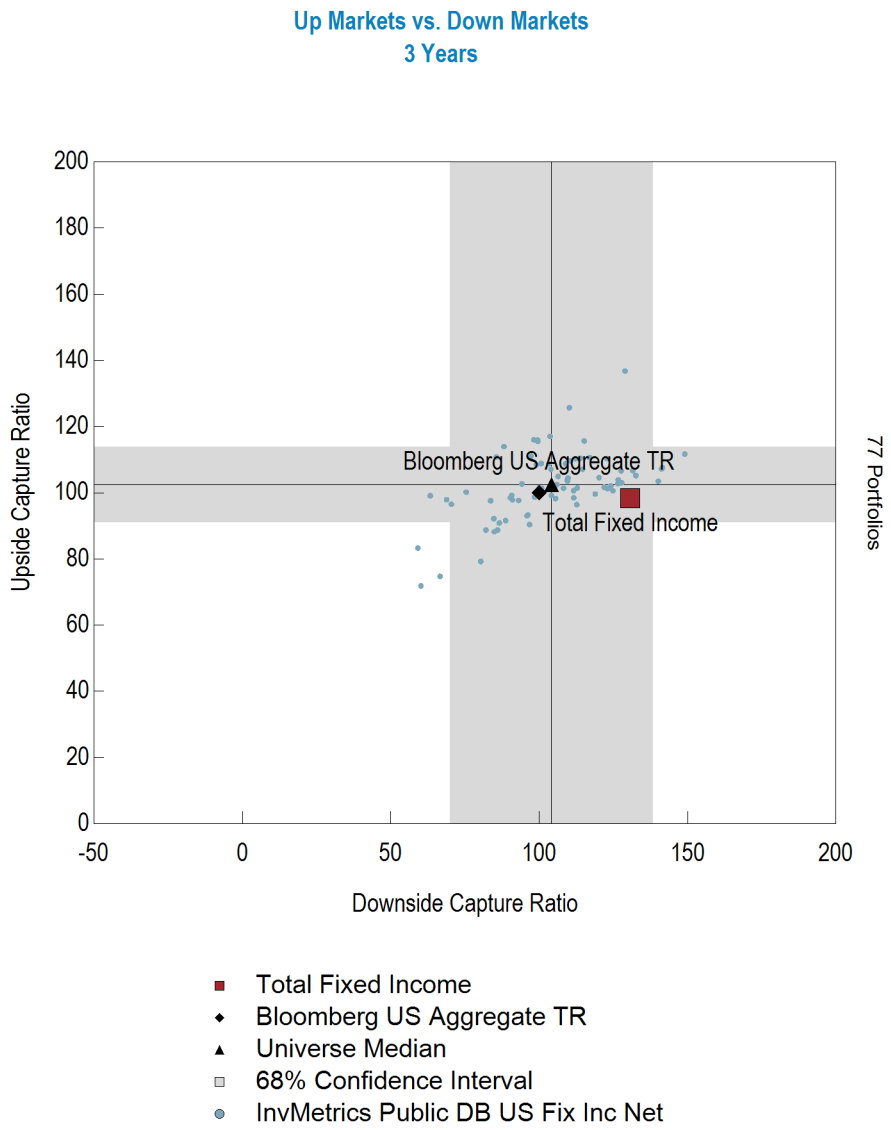

Up Markets vs. Down Markets
5 Years
PIMCO RAE Fundamental Global Ex US Fund
MSCI ACWI ex USA Value
Upside Capture Ratio
Downside Capture Ratio
45 Portfolios
0
20
40
60
80
100
120
140
160
180
200
PIMCO RAE Fundamental Global Ex US Fund
MSCI ACWI ex USA Value
Universe Median
68% Confidence Interval
eV EAFE Value Equity Net

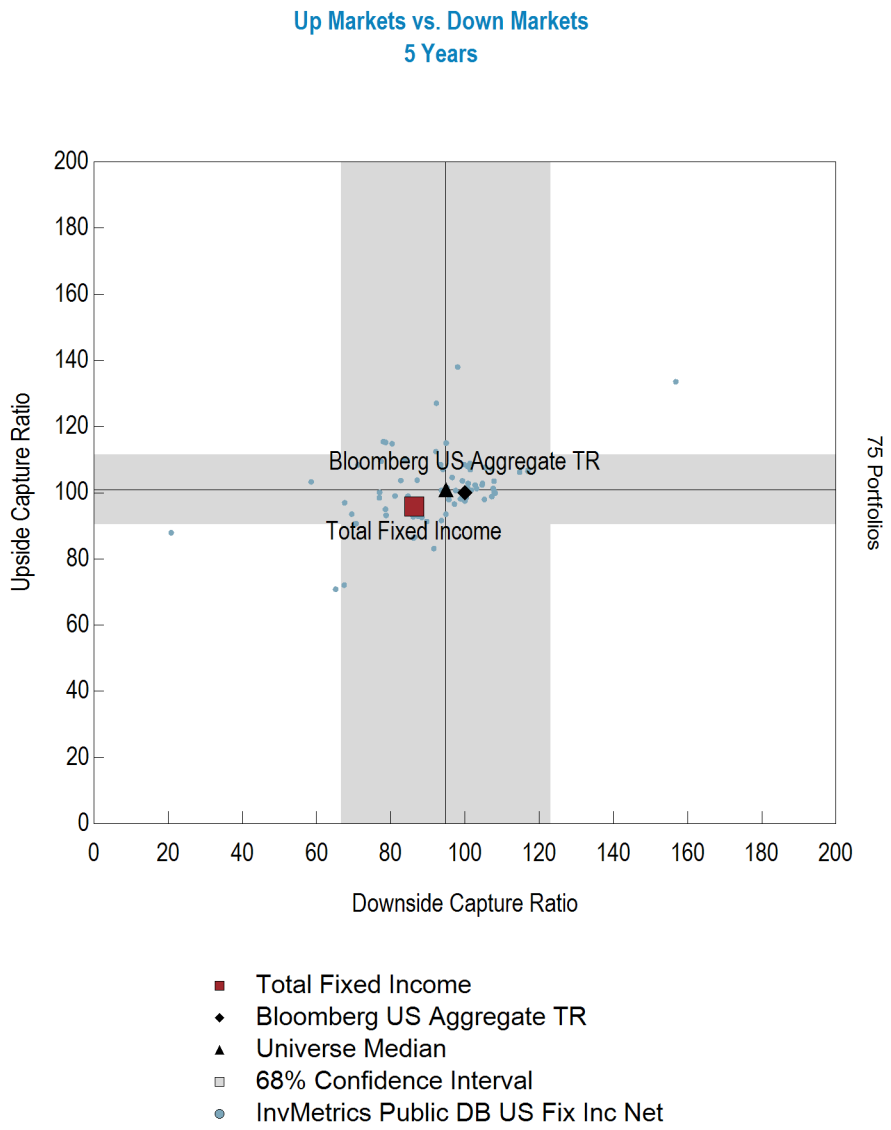

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Total Global Equity
MSCI ACWI Gross
28 Portfolios
Total Global Equity
MSCI ACWI Gross
Universe Median
68% Confidence Interval
InvMetrics Public DB Glbl Eq Net

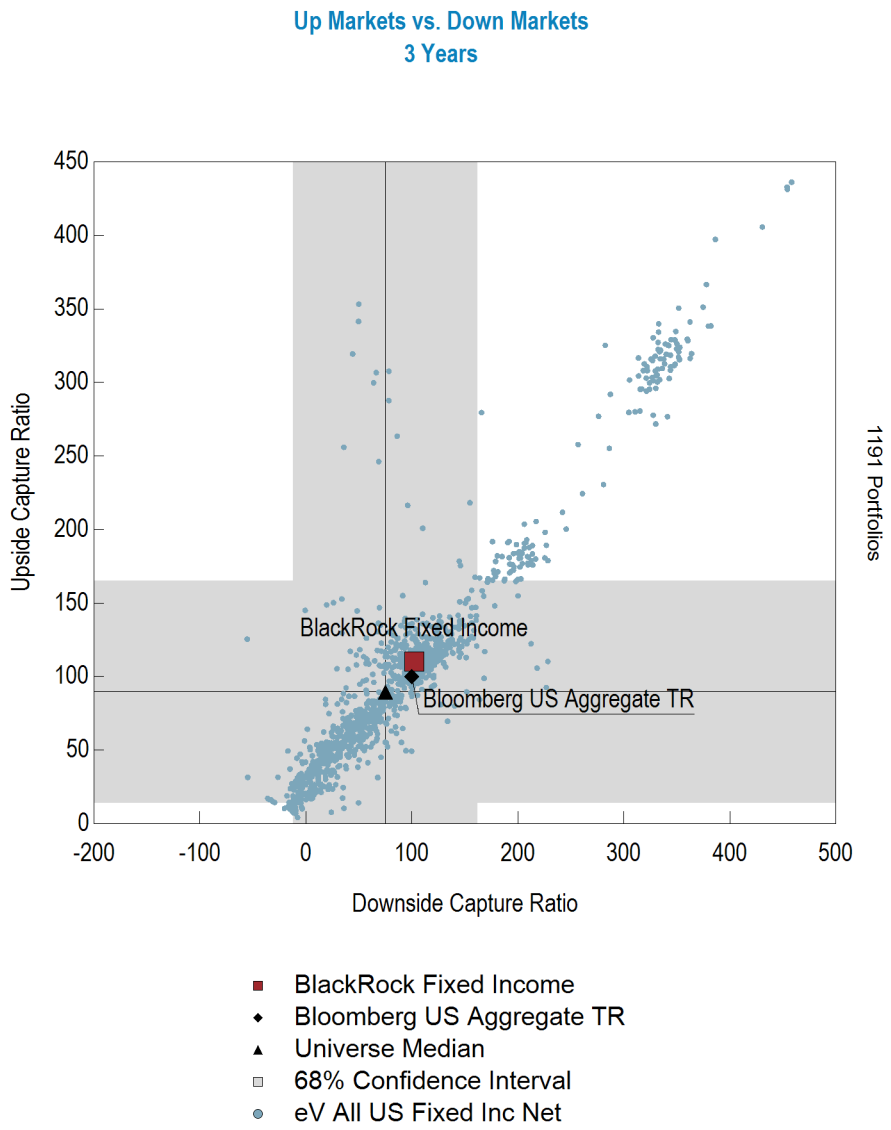
Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Total Global Equity
MSCI ACWI Gross
23 Portfolios
Total Global Equity
MSCI ACWI Gross
Universe Median
68% Confidence Interval
InvMetrics Public DB Glbl Eq Net

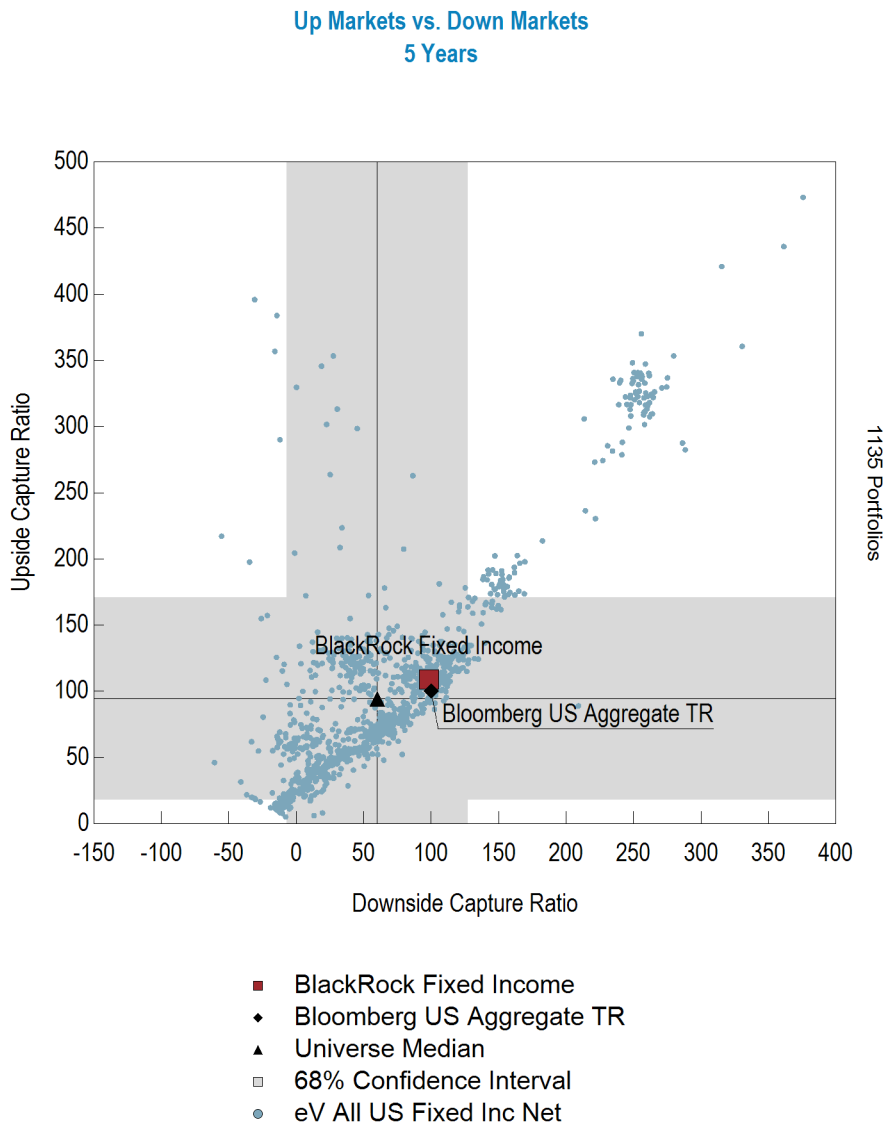

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Skellig Water Fund (aka KBI)
MSCI ACWI
185 Portfolios
Skellig Water Fund (aka KBI)
MSCI ACWI
Universe Median
68% Confidence Interval
eV Global All Cap Equity Net

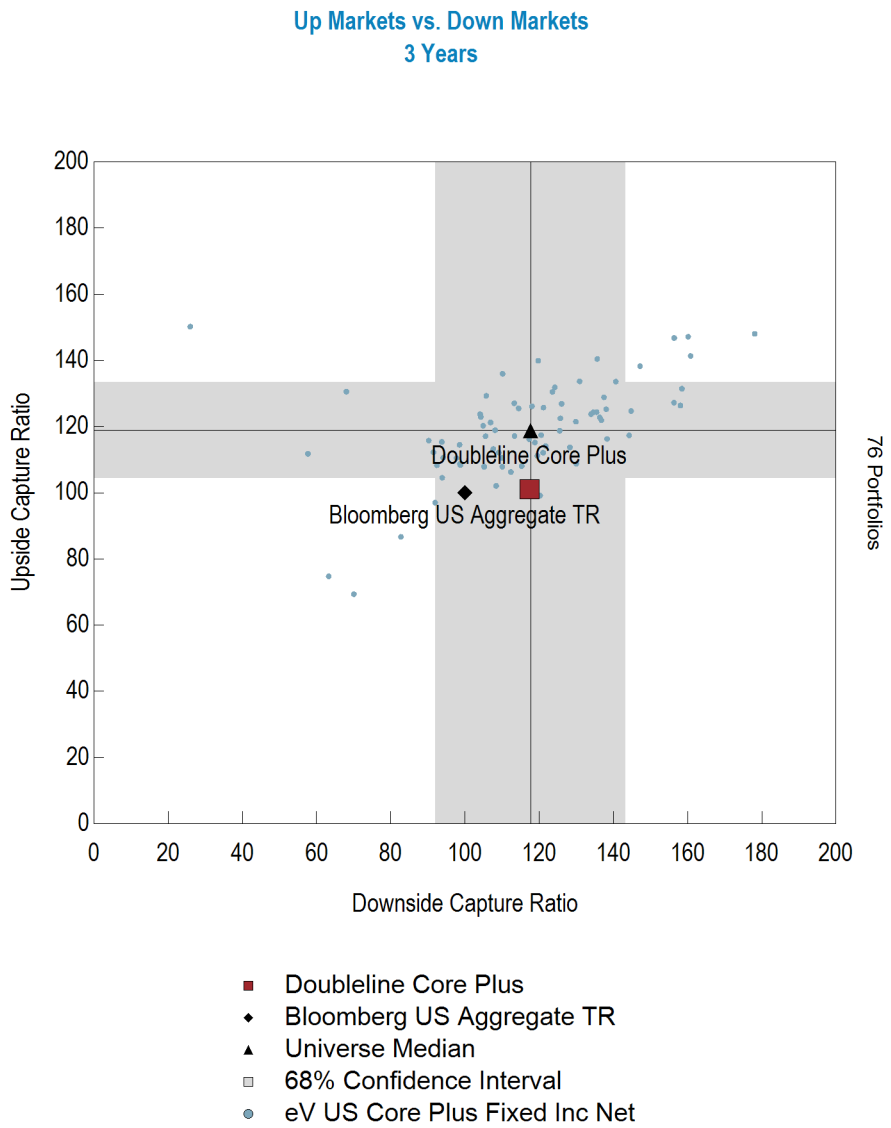

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Skellig Water Fund (aka KBI)
MSCI ACWI
163 Portfolios
Skellig Water Fund (aka KBI)
MSCI ACWI
Universe Median
68% Confidence Interval
eV Global All Cap Equity Net

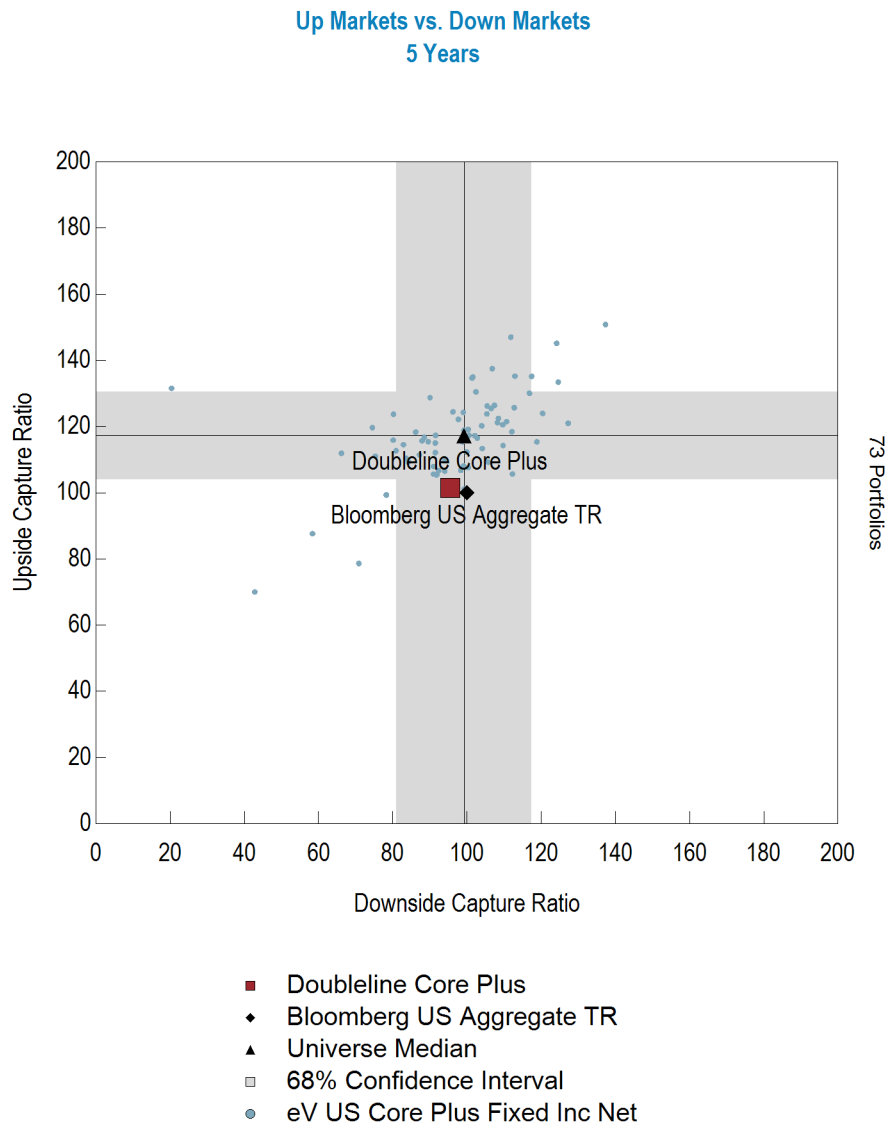

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Bloomberg US Aggregate TR
Total Fixed Income
77 Portfolios
Total Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
InvMetrics Public DB US Fix Inc Net

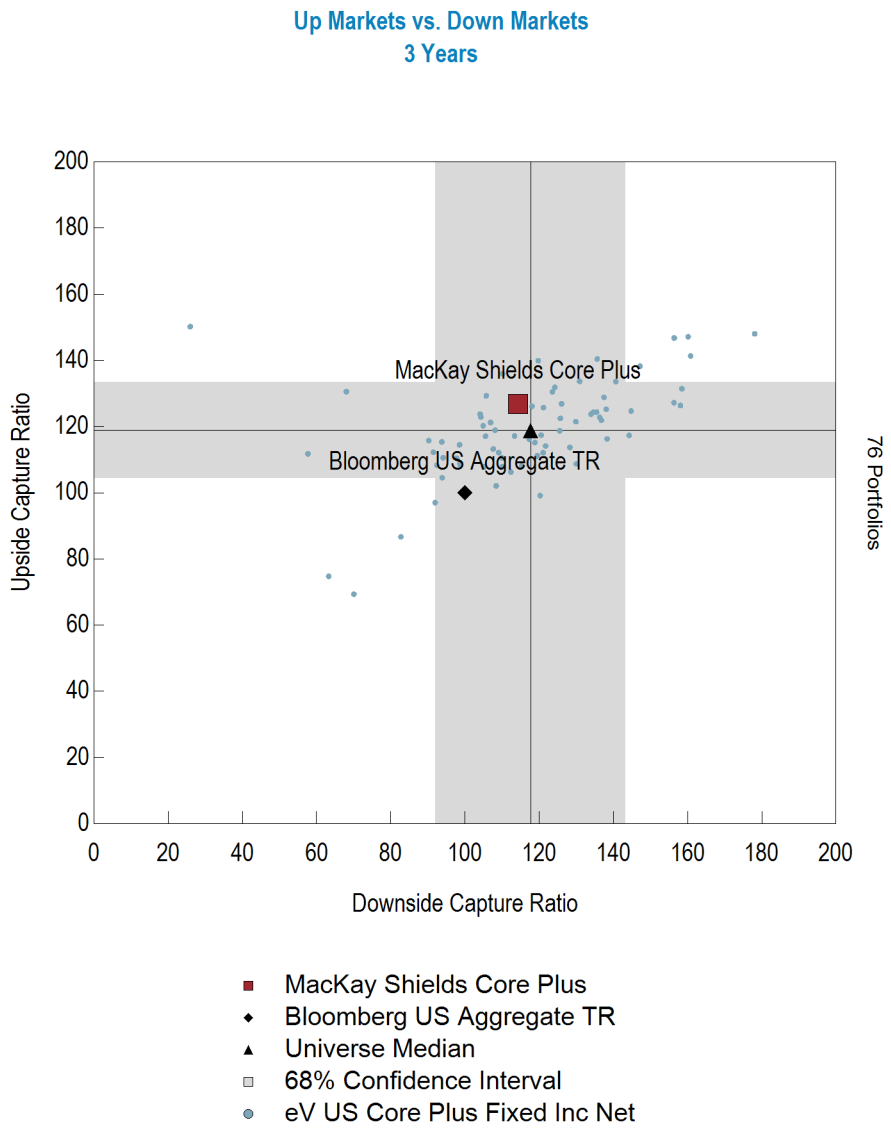

Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Bloomberg US Aggregate TR
Total Fixed Income
75 Portfolios
Total Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
InvMetrics Public DB US Fix Inc Net

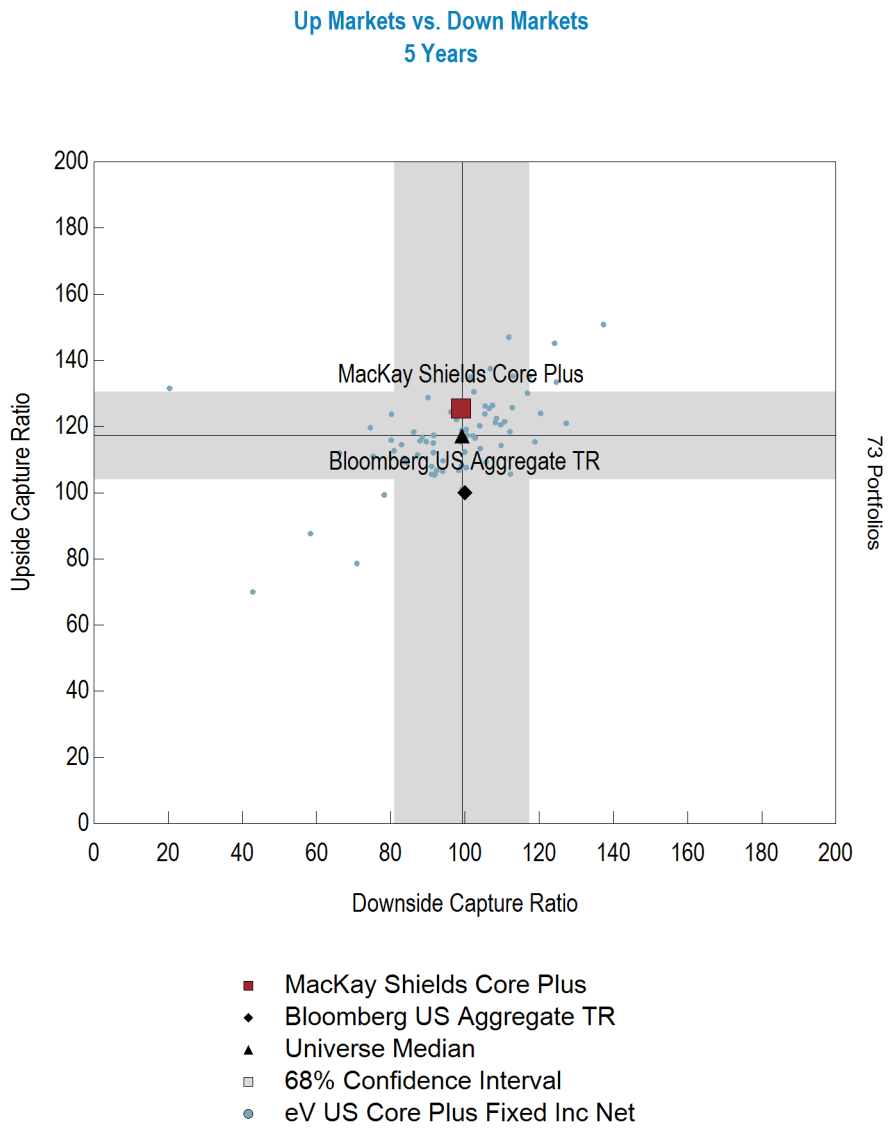

Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
1191 Portfolios
BlackRock Fixed Income
Bloomberg US Aggregate TR
BlackRock Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV All US Fixed Inc Net


Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
1135 Portfolios
BlackRock Fixed Income
Bloomberg US Aggregate TR
BlackRock Fixed Income
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV All US Fixed Inc Net


Up Markets vs. Down Markets
3 Years
Upside Capture Ratio
Downside Capture Ratio
Doubleline Core Plus
Bloomberg US Aggregate TR
76 Portfolios
Doubleline Core Plus
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV US Core Plus Fixed Inc Net


Up Markets vs. Down Markets
5 Years
Upside Capture Ratio
Downside Capture Ratio
Doubleline Core Plus
Bloomberg US Aggregate TR
73 Portfolios
Doubleline Core Plus
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV US Core Plus Fixed Inc Net


Up Markets vs. Down Markets
3 Years
MacKay Shields Core Plus
Bloomberg US Aggregate TR
Upside Capture Ratio
Downside Capture Ratio
76 Portfolios
0
20
40
60
80
100
120
140
160
180
200
MacKay Shields Core Plus
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV US Core Plus Fixed Inc Net


Up Markets vs. Down Markets
5 Years
MacKay Shields Core Plus
Bloomberg US Aggregate TR
Upside Capture Ratio
Downside Capture Ratio
73 Portfolios
0
20
40
60
80
100
120
140
160
180
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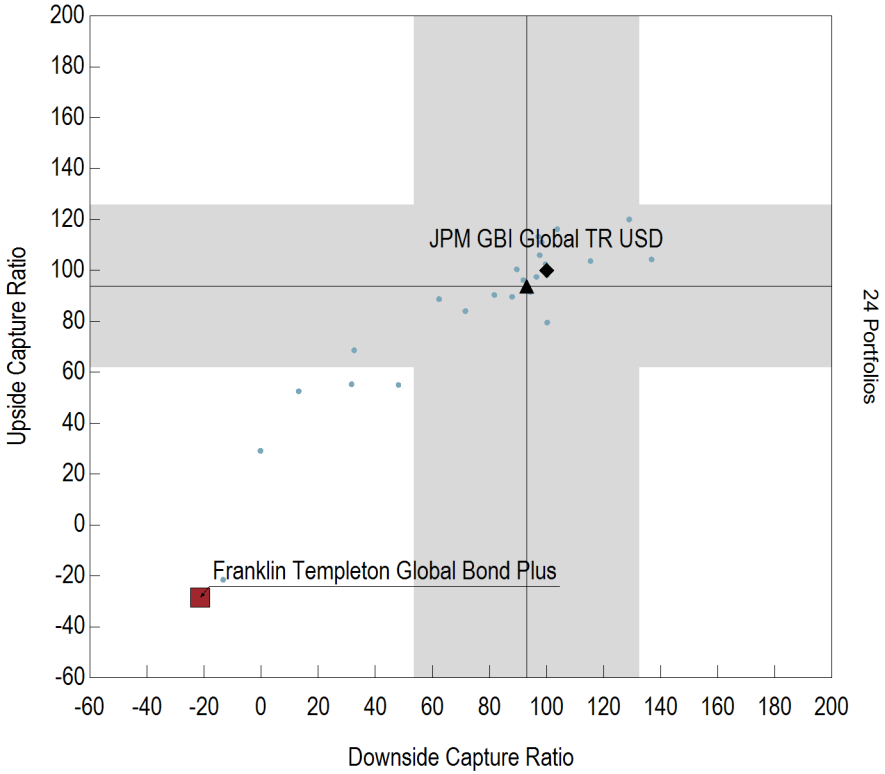
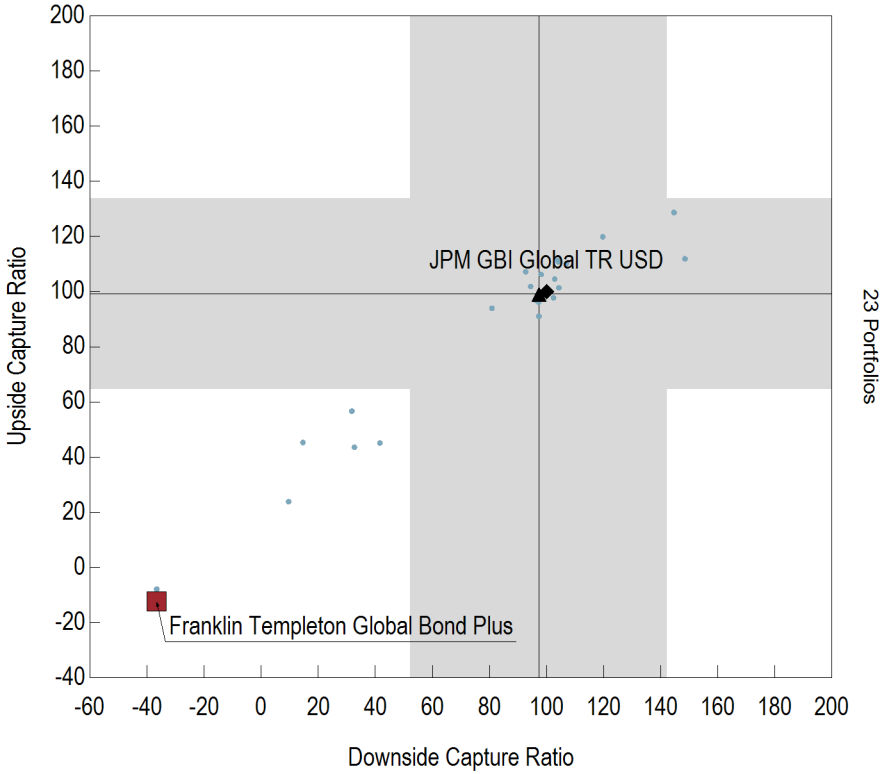
MacKay Shields Core Plus
Bloomberg US Aggregate TR
Universe Median
68% Confidence Interval
eV US Core Plus Fixed Inc Net

Up Markets vs. Down Markets
3 Years



- Franklin Templeton Global Bond Plus
- JPM GBI Global TR USD
- Universe Median
- 68% Confidence Interval
- eV Global Government Fixed Inc Net

Up Markets vs. Down Markets
5 Years



- Franklin Templeton Global Bond Plus
- JPM GBI Global TR USD
- Universe Median
- 68% Confidence Interval
- eV Global Government Fixed Inc Net

Performance Return Calculations

Performance is calculated using Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are linked geometrically and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up

Manager	Fund Incepted	Data Source	Manager	Fund Incepted	Data Source
SSGA S&P 500 Flagship Fund	7/27/2011	SSGA	RREEF America II	3/1/2003	Deutsche
QMA Large Cap Core	12/1/2008	BNY	TA Associates Realty	6/1/2007	TA Realty
Waddell & Reed	6/4/2010	BNY	BlackRock Private Capital II	7/13/2005	BlackRock
Robeco Boston Partners	2/1/1999	BNY	Pantheon USA Fund VI	7/26/2005	Pantheon
William Blair Mid Cap Grw	12/1/2006	BNY	PIMCO BRAVO	1/14/2011	PIMCO
Lee Munder Small Value	8/26/2009	BNY	KKR Mezzanine Partners	7/8/2011	KKR
SSGA US Extended Market Index	6/10/2021	SSGA	Stepstone Secondary Opps II	5/10/2013	Stepstone
PIMCO RAE	8/14/2012	PIMCO	Ocean Avenue Fund III	5/27/2016	Ocean Ave
SSGA MSCI ACWI ex US	1/1/2010	SSGA	Ocean Avenue Fund IV	9/16/2019	Ocean Ave
SGA Global Growth	6/4/2018	SGA	Pathway Fund 8	4/12/2016	Pathway
Skellig DST Water Fund	10/28/2014	KBI	Pathway Fund 9	5/31/2018	Pathway
BlackRock Fixed Income	12/1/1995	BNY	Pathway Fund 10	3/31/2020	Pathway
Doubleline Core Plus	12/1/2015	BNY	Sixth Street Partners Diversified Credit	11/21/2016	Sixth Street
MacKay Shields Core Plus	12/1/2015	MacKay	Sixth Stree TAO Contingent	4/16/2020	Sixth Street
Franklin Templeton Global	4/3/2012	BNY	American Realty	12/20/2019	American Realty
PGIM Emerging Markets Debt	8/26/2019	BNY			

Policy & Custom Index Composition

Policy Index: 25% Russell 3000, 15% MSCI ACWI ex US, 3% MSCI ACWI, 17% BBgBarc US Aggregate, 5% JPM GBI Global, 5% (50% JPM EMBI Global Div/50% JPM GBI EM Global Div), 20% NCREIF-ODCE, 5% Private Equity Returns, 5% Private Credit Returns.

Other Disclosures

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.

TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY EDUCATION REPORT

NAME OF ATTENDEE: Leanne Malison

CONFERENCE/SEMINAR ATTENDED: VERUS FOURTH QUARTER CONFERENCE CALL -- WEBINAR

DATES ATTENDED: OCTOBER 28, 2021

NUMBER OF CONTINUING EDUCATION HOURS OBTAINED: 1

TOPICS OF DISCUSSION: Jeff MacLean and Ian Toner covered a firm update, GDP changes, COVID impact, supply chain effects, and issues with China.

REASON MEETING WAS BENEFICIAL TO RETIREMENT SYSTEM: Webinars are providing important information during an ever-changing investment environment. It is important to stay up to date with the information available from TCERA's investment consultant.

RECOMMENDATION REGARDING FUTURE ATTENDANCE: *(I.E., SHOULD WE SEND A REPRESENTATIVE IN THE FUTURE? IF SO, WHO SHOULD ATTEND?)*

Trustees and Staff should participate as schedules permit whenever TCERA manager and consultant webinars are available.

Leanne Malison
Signature

10/28/21
Date

NOTE: Attachments to this report will be held on file in the Retirement Office for review by interested parties, but will not be photocopied for the Retirement Board.

RETBD\EDUC-SUM.RPT

TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY EDUCATION REPORT

NAME OF ATTENDEE: Mary Warner

CONFERENCE/SEMINAR ATTENDED: Verus 4th Quarter Investment Landscape

DATES ATTENDED: October 28, 2021

NUMBER OF CONTINUING EDUCATION HOURS OBTAINED: 1 hour

TOPICS OF DISCUSSION: The discussion covered 4th quarter summary of the current economic & investment climate, portfolio impacts and asset allocation issues.

REASON MEETING WAS BENEFICIAL TO RETIREMENT SYSTEM: The webinar provided insight into the current market environment.

RECOMMENDATION REGARDING FUTURE ATTENDANCE: ***(i.e., should we send a representative in the future? If so, who should attend?)*** Trustees and staff should participate whenever Verus Webinars are available.

Mary Warner
Signature

10/28/2021
Date

Members of a legislative body shall provide brief reports on meetings attended at the expense of the local agency ***at the next regular meeting*** *of the legislative body. (Gov. Code, § 53232.3, subd. (d).)*

NOTE: Attachments to this report will be held on file in the Retirement Office for review by interested parties, but will not be photocopied for the Retirement Board.

RETBD\EDUC-SUM.RPT

EDUCATIONAL EVENTS - Board of Retirement

2021

None

2022

1. **DWS**, America Real Assets Investor Conference, April 26-28, Balboa Bay Resort, Newport Beach, CA. Topics: Key trends impacting real estate investing through a series of panels from their research, transactions and portfolio mgmt. teams.

2. **CAL***A*PRS, Advanced Principles of Pension Governance for Trustees, March 30 to April 1, 2022, Los Angeles, 5:30 p.m.- 1:30 p.m.

County of Tulare
221 S Mooney Blvd Room 103E
Visalia, California 93291-4593

Cass Cook, CFIP
Auditor-Controller/Treasurer-Tax Collector

Paul Sampietro, Chief Deputy Treasurer-Tax Collector

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October 18, 2021

TREASURER'S QUARTERLY INVESTMENT REPORT
QUARTER ENDING SEPTEMBER 30, 2021

Honorable Board of Supervisors:

This report reflects the investment activity for the quarter ending September 30, 2021 of pooled funds on deposit with the Treasurer and is in compliance with California Government Code §27000, etc., §53600, etc., Tulare County Ordinance 1-03-2061 and the Treasurer's Statement of Investment Policy dated July 2021.

INVESTMENT GOALS – The first and primary goal is SAFETY and the preservation of capital. The second goal is the continual maintenance of LIQUIDITY. Tulare County has the ability to convert sufficient securities to cash to cover the cash flow of the County and all of its investment agencies to meet any contingency needs during the next six months. The third goal in order of importance is YIELD, or earning a reasonable rate of return representative of current market conditions and the present phase of the market cycle while remaining in compliance with all state laws and the Treasurer's written investment policy.

Attached is a statement containing summaries of the portfolio composition, credit ratings, maturity distribution, portfolio master summary and other information designed to give a better understanding of the investment activity that has occurred during the quarter ending September 30, 2021.

Respectfully submitted,

Cass Cook
Auditor-Controller/Treasurer-Tax Collector

CC/fv

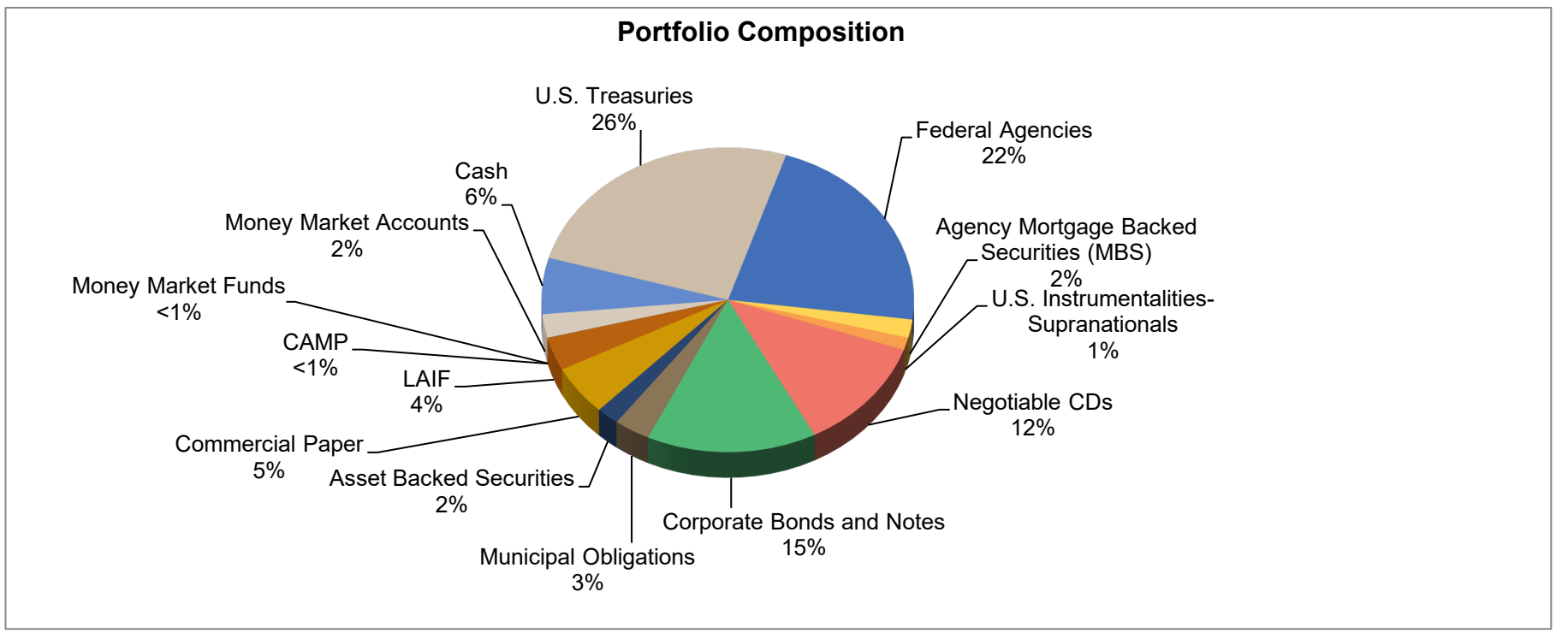
A listing of Tulare County investments is shown below.

Portfolio Composition

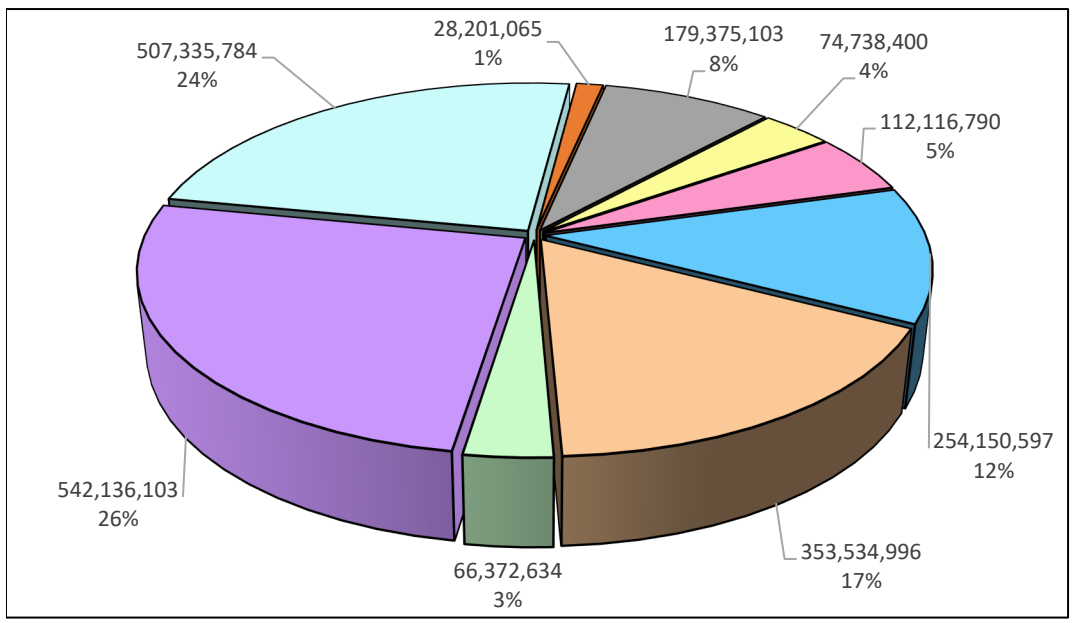
	Book Value	Market Value*	% of Portfolio**	Permitted by Policy
U.S. Treasuries	542,136,103	549,841,444	26%	100%
Federal Agencies	466,478,273	467,035,276	22%	75%
Agency Mortgage Backed Securities (MBS)	40,857,511	40,838,650	2%	
U.S. Instrumentalities-Supranationals	28,201,065	28,403,091	1%	30%
Negotiable CDs	254,150,597	254,575,876	12%	30%
Corporate Bonds and Notes	311,962,134	316,038,900	15%	30%
Municipal Obligations	66,372,634	66,837,045	3%	30%
Asset Backed Securities	41,572,861	41,781,987	2%	20%
Commercial Paper	112,116,790	112,130,753	5%	40%
Local Agency Investment Fund (LAIF)	74,561,067	74,561,067	4%	$75 million
California Asset Management Program (CAMP)	177,333	177,333	<1%	50%
Money Market Funds	457,442	457,442	<1%	15%
Money Market Accounts	52,870,287	52,870,287	2%	50%
Cash	126,047,375	126,047,375	6%	100%
Total	**$2,117,961,471**	**$2,131,596,525**	**100%**	

* Market Prices were provided by the Union Bank of California.

** Detail may not add to total due to rounding.

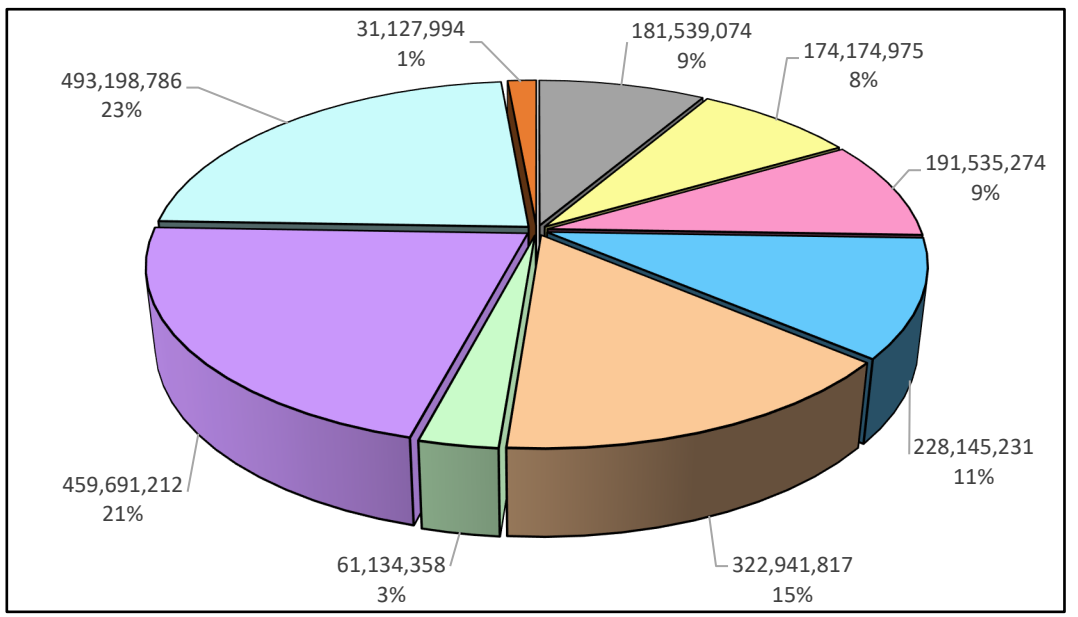


SEPTEMBER 30, 2021



Security Type	Book Value	% of Total
Cash	126,047,375	5.95%
Money Market Accounts	52,870,287	2.50%
Money Market Funds	457,442	0.02%
LAIF Managed Pool	74,561,067	3.52%
California Asset Management Program	177,333	0.01%
Commercial Paper - Discount	97,122,390	4.59%
Asset Backed Commercial Paper	14,994,400	0.71%
Negotiable Certificates of Deposit	254,150,597	12.00%
Corporate Notes	297,674,009	14.05%
Corporate Notes - Floaters	4,300,000	0.20%
Corporate Notes - Step Ups	9,988,125	0.47%
Corporate Asset Backed Securities	41,572,861	1.96%
Municipal Bonds	63,872,634	3.02%
Municpal Promissory Notes	2,500,000	0.12%
Treasury Securities	542,136,103	25.60%
Agency Issues	445,228,273	21.02%
Agency Issues - Step Ups	21,250,000	1.00%
Agency Mortgage Backed Securities	40,857,511	1.93%
Supranationals	28,201,065	1.33%
	2,117,961,471	100.00%

JUNE 30, 2021



Security Type	Book Value	% of Total
Cash	125,503,778	5.86%
Money Market Accounts	52,833,766	2.46%
Money Market Funds	3,201,530	0.15%
LAIF Managed Pool	74,500,669	3.48%
California Asset Management Program	99,674,306	4.65%
Commercial Paper - Discount	171,538,424	8.00%
Asset Backed Commercial Paper	19,996,850	0.93%
Negotiable Certificates of Deposit	228,145,231	10.64%
Corporate Notes / Bonds	273,870,037	12.78%
Corporate Notes / Bonds - Floaters	4,300,000	0.20%
	9,986,875	0.47%
Corporate Asset Backed Securities	34,784,905	1.62%
Municipal Bonds	58,634,358	2.74%
Municpal Promissory Notes	2,500,000	0.12%
Treasury Securities	459,691,212	21.45%
Agency Issues	448,976,994	20.95%
Agency Issues - Step Ups	-	0.00%
Agency Mortgage Backed Securities	44,221,792	2.06%
Supranationals	31,127,994	1.45%
	2,143,488,721	100.00%

The average weighted credit rating of Tulare County's portfolio is AA*.

	Credit Ratings	
	Book Value	% of Portfolio
AAA	$72,613,134	3%
A-1+/A-1 (Short-Term Rating)	$333,199,699	16%
A-2 (Short-Term Rating)	$14,977,688	1%
AA	$1,120,772,799	53%
A	$261,004,478	12%
BBB**	$13,552,115	1%
Not Rated***	$122,923,898	6%
Cash and Money Market Accounts****	$178,917,661	8%
Total	**$2,117,961,471**	**100%**

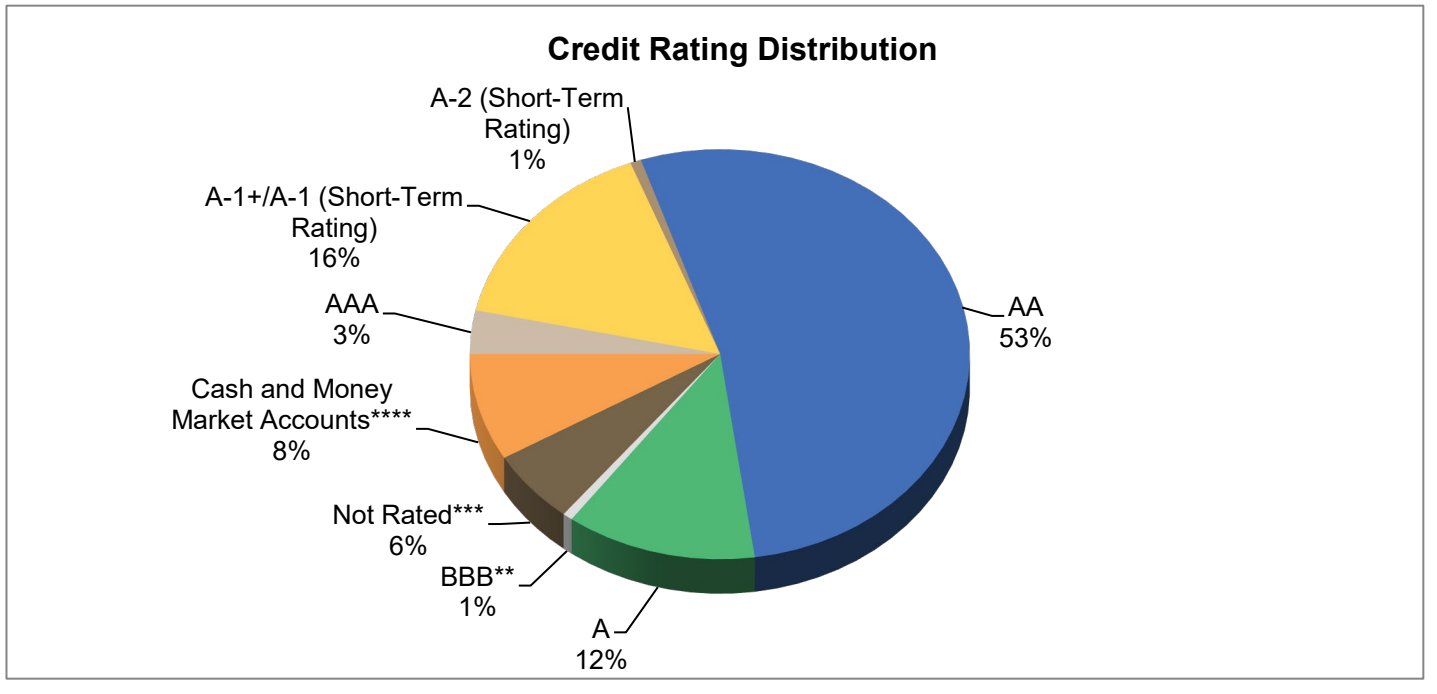
Ratings by Standard & Poor's (S&P). Includes all ratings in this category (e.g., A-, A, A+).

* Average weighted credit rating was calculated using S&P ratings. Cash/overnight securities were not included in the calculation.

** Securities rated in the BBB category by S&P are rated A- or the equivalent or better by at least one NRSRO or were rated A- or the equivalent or better by at least one NRSRO at time of purchase.

*** The portion of the portfolio that is invested in LAIF, the State of California pooled investment fund, is not rated. The remaining portion not rated comprises individual securities with ratings of A- or the equivalent or better by at least one NRSRO.

**** Fully collateralized in accordance with California government code.



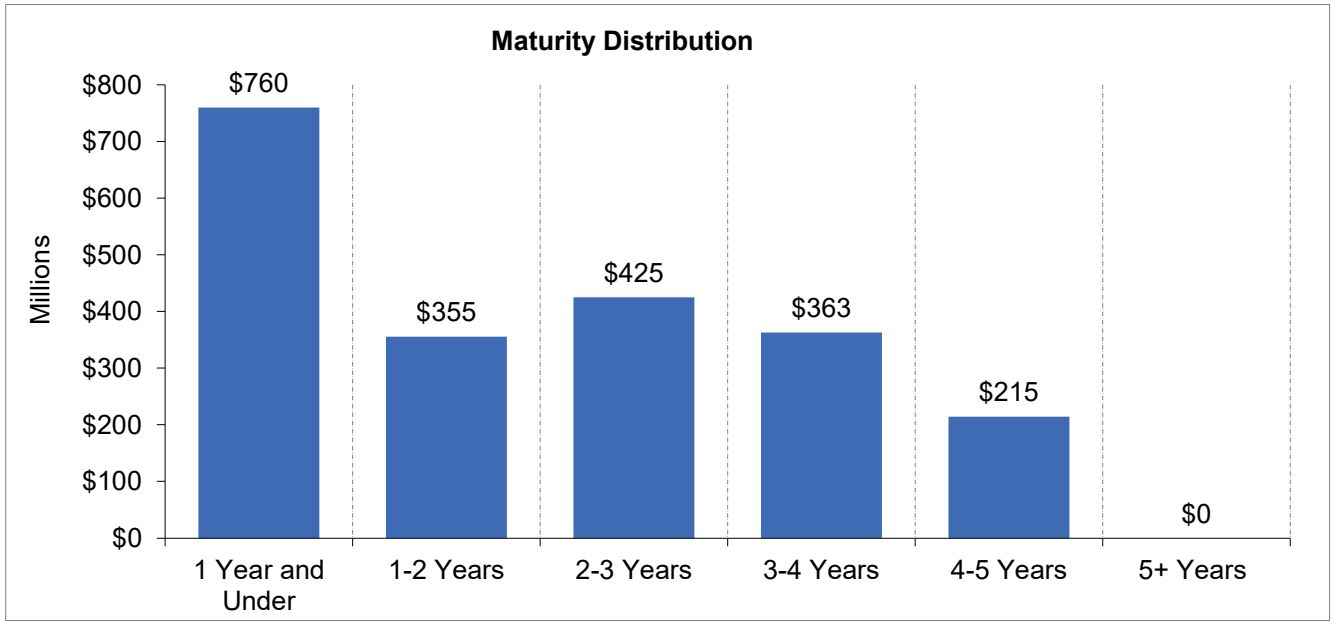
	Book Value	Market Value	% of Portfolio		S&P Rating	WAM (in days)
Amazon.com Inc	11,123,122	11,291,597	0.5%		AA	734
Apple Inc.	11,267,530	11,770,870	0.5%		AA+	831
Bank of America Corp.	23,225,653	23,079,695	1.1%		A-	853
Bank of Montreal Chicago	15,000,000	15,001,650	0.7%		A-1+	322
Bank of New York Mellon	11,868,796	12,207,795	0.6%		A	594
Bank of Nova Scotia Houston	10,000,056	10,002,900	0.5%		A-1	98
Bank of the Sierra - Checking[1]	1,215,825	1,215,825	0.1%		CASH	1
Blackrock Inc	5,526,844	5,615,830	0.3%		AA-	243
Burlingtn North Santa Fe	3,207,795	3,205,560	0.2%		AA-	1,278
CA Infrastructure & Econ Dev	5,000,000	5,000,000	0.2%		AAA	1
CA State Earthquake Authority	2,465,000	2,505,648	0.1%		NR [2]	638
CA State Health Financing	3,814,625	3,811,134	0.2%		AA-	608
California State University	3,050,000	3,048,292	0.1%		AA-	1,127
C.A.M.P.	177,333	177,333	0.0%		AAA	1
Canadian Imperial Bank	10,000,100	10,002,300	0.5%		A-1	133
Capital One Auto Receivables	1,538,223	1,552,473	0.1%		AAA	775
Cash in Vault	96,526	96,526	0.0%		CASH	1
CarMax Auto Owner Trust	8,743,205	8,791,210	0.4%		AAA	1,448
Charles Schwab Corp	5,956,505	6,174,540	0.3%		A	481
City of Oakland CA	2,813,950	2,813,223	0.1%		AA	106
Comcast Cable Communication	11,146,847	11,131,302	0.5%		A-	410
Cooperatieve Rabobank	15,000,000	14,999,550	0.7%		A-1	287
Costco Wholesale Corp.	7,076,290	7,385,910	0.3%		A+	960
Credit Suisse NY	9,320,000	9,316,924	0.4%		A+	532
Discover Card Execution Note	3,449,261	3,441,203	0.2%		AAA	1,810
Dnb Nor Bank Asa NY	8,770,000	8,937,244	0.4%		AA-	427
Federal Agricultural Mtg Corp	15,000,000	14,968,050	0.7%		NR[7]	1,089
Federal Farm Credit Bank	21,057,121	20,964,401	1.0%		AA+	882
Federal Home Loan Bank	132,975,490	133,631,180	6.3%		AA+	1,055
Federal Home Loan Mtg Corp	101,640,816	101,269,750	4.8%		AA+	764
Federal National Mtg Assoc	236,662,356	237,040,545	11.2%		AA+	1,083
Federated Govt Oblig Fund	457,442	457,442	0.0%		AAA	1
Five Star Bank[1]	50,451,381	50,451,381	2.4%		CASH	1
Florida St Brd of Admin Fin Co	9,114,109	9,198,098	0.4%		AA	1,369
Fresno County	6,004,352	6,002,280	0.3%		NR[6]	272
Goldman Sachs Group Inc	7,437,202	7,378,961	0.4%		BBB+ [4]	1,103
Grossmont-Cuyamaca CCC	1,240,000	1,239,839	0.1%		AA	304
Hershey Company	9,109,455	9,222,994	0.4%		A	1,141
Home Depot Inc.	5,667,438	5,873,451	0.3%		A	547
Honda/American Honda Finance	6,131,518	6,482,938	0.3%		A-	767
Honda Auto Receivables Trust	9,673,690	9,740,349	0.5%	0.8%	NR[3]	1,058
Honeywell International	23,476,813	23,475,325	1.1%		A-1	222
Honeywell International	5,881,573	5,844,128	0.3%	1.4%	A	1,339
HSBC USA Inc	14,977,688	14,991,150	0.7%		A-2 [5]	153
Hyundai Auto Receivables Trust	2,624,724	2,623,950	0.1%		AAA	1,445
IBM Corp.	5,000,843	5,035,700	0.2%		A-	118
Intel Corp	8,929,696	8,969,727	0.4%		A+	1,271
Inter-American Develop Bank	19,164,992	19,373,272	0.9%		AAA	724
Intl Bk of Reconstruction & Dev	9,036,073	9,029,819	0.4%		AAA	784
Intuit Inc	5,236,933	5,193,968	0.2%		A-	1,383
John Deere Owner Trust	219,789	220,225	0.0%		NR [3]	410
John Deere Capital Corp.	1,144,692	1,195,795	0.1%	0.1%	A	521
Johnson & Johnson	7,097,911	7,122,770	0.3%		AAA	1,202
J.P. Morgan Chase - Checking[1]	124,139,822	124,139,822	5.9%		CASH	1
J.P. Morgan Chase & Co	31,393,628	31,350,398	1.5%		A-	867
J.P. Morgan Securities	18,693,876	18,694,818	0.9%	8.3%	A-1	59
L.A.I.F	74,561,067	74,561,067	3.5%		NR	1
Lower Tule River Irrigation Dist	2,500,000	2,500,000	0.1%		A-	1,461

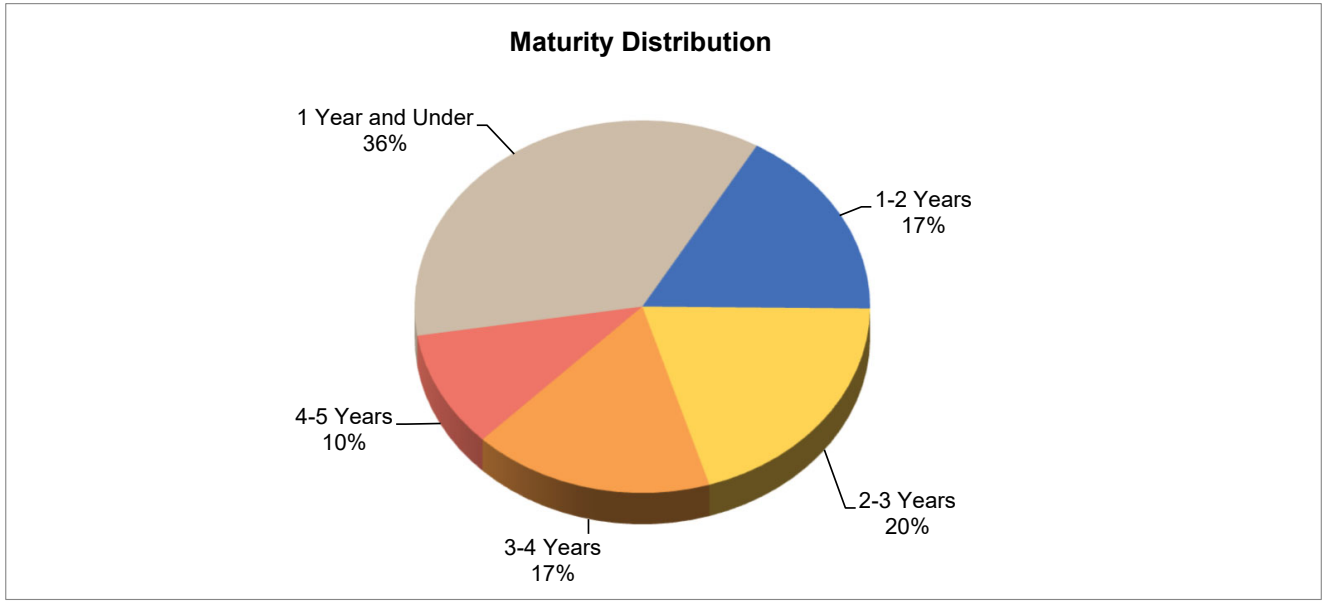
	Book Value	Market Value	% of Issuer		S&P Rating	WAM (in days)
Mastercard Inc.	9,682,806	9,997,412	0.5%		A+	1,069
Merck & Co Inc	8,981,281	8,967,358	0.4%		A+	1,228
Metlife Global Funding	11,002,338	11,000,092	0.5%		AA-	102
Mitsubishi UFJ TR&BK NY	28,070,333	28,070,641	1.3%		A-1	42
Mizuho Bank LTD/NY	25,000,000	25,001,500	1.2%		A-1	123
MUFG Union Bank - Checking[1]	595,202	595,202	0.0%		CASH	1
Morgan Stanley	6,114,913	6,130,285	0.3%		BBB+ [4]	917
Nissan Auto Receivables	2,414,934	2,420,096	0.1%		AAA	1,018
Nordea Bank ABP NY	15,000,000	15,000,000	0.7%		A-1	5
Nordea Bank ABP NY	11,000,000	11,176,880	0.5%	1.2%	A-1+	329
PACCAR Financial Corp.	604,508	604,728	0.0%		A+	679
Pfizer Inc	7,988,236	8,383,144	0.4%		A+	896
PNC Bank NA	15,070,088	15,160,041	0.7%		A	300
BBVA USA	10,521,684	10,487,200	0.5%	1.2%	A	1,061
Royal Bank of Canada	31,004,605	31,002,600	1.5%		A-1+	258
Santa Clara USD	15,000,000	15,001,350	0.7%		NR	273
Societe Generale NY	11,680,000	11,755,570	0.6%		A-1	136
State of California	10,687,571	11,002,671	0.5%		AA-	730
State of Louisiana	1,000,000	1,001,280	0.0%		AA-	1,339
Sumitomo Mitsui Bank NY	9,305,000	9,310,118	0.4%		A-1	280
Suncrest Bank[1]	2,418,905	2,418,905	0.1%		CASH	1
Svenska Handelsbanken NY	15,000,504	15,000,750	0.7%		A-1+	242
Swedbank NY	25,000,000	24,998,000	1.2%		A-1	271
Texas Instruments Inc	2,000,000	1,998,280	0.1%		A+	1,810
Toronto Dominion Bank NY	15,000,000	14,999,250	0.7%		A-1+	328
Toyotal Motor Credit Corp.	39,974,013	39,974,260	1.9%		A-1+	148
Toyotal Motor Credit Corp.	12,411,952	12,869,521	0.6%		A+	588
Toyota Auto Receivables Trust	12,909,035	12,992,481	0.6%	3.1%	AAA	1,162
Truist Financial Corp	15,605,440	15,582,754	0.7%		A-	170
Truist Financial Corp	10,176,315	10,167,900	0.5%	1.2%	A	304
University of California	3,683,027	3,713,230	0.2%		AA	1,322
US Bancorp	18,372,303	19,156,259	0.9%		A+	786
U.S. Treasury	542,136,103	549,841,444	25.6%		AA+	1,039
Versailles CP LLC	14,994,400	14,995,200	0.7%		A-1	96
	2,117,961,471	**2,131,596,525**	**100.0%**			**707**

Notes:

1. Deposits with the various financial institutions are FDIC insured and/or collateralized pursuant to California Government Code.
2. The securities are not rated by S&P nor Moody's, however are rated A by Fitch.
3. The securities are not rated by S&P, however are rated Aaa by Moody's.
4. The securities are rated BBB+ by S&P, however are rated A3 by Moody's and/or A- by Fitch, or better.
5. The securities are rated A-2 by S&P, however are rated P-1 by Moody's and F1+ by Fitch.
6. The securities are not rated by S&P, however are rated Aa3 by Moody's.
7. Farmer Mac is a government-sponsored enterprise created by Congress in 1988. The have not sought a credit rating.

The portfolio has a high degree of liquidity.



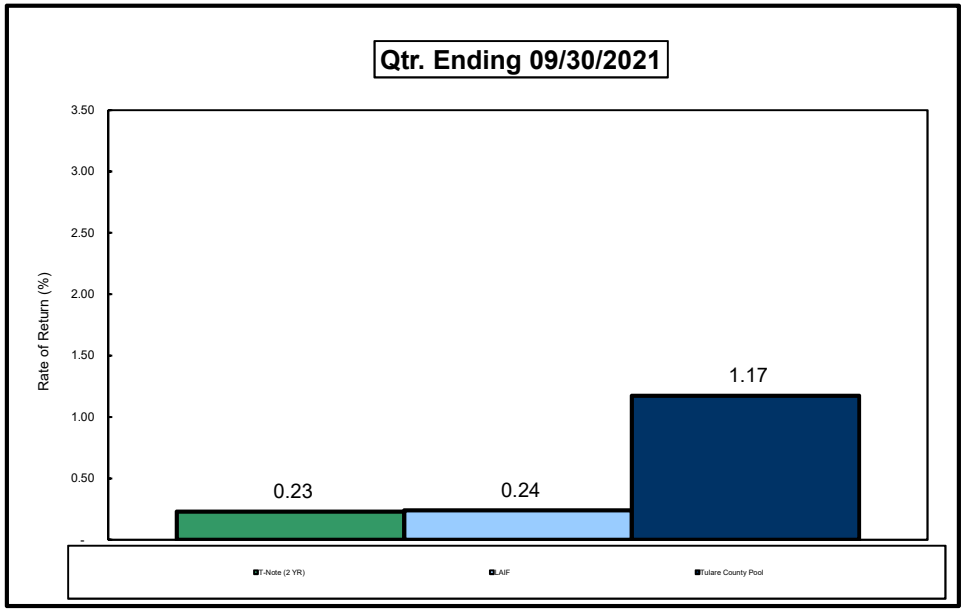


* Maturity Distribution values represent Book Valuation and are rounded to the nearest million.

OTHER PORTFOLIO CHARACTERISTICS

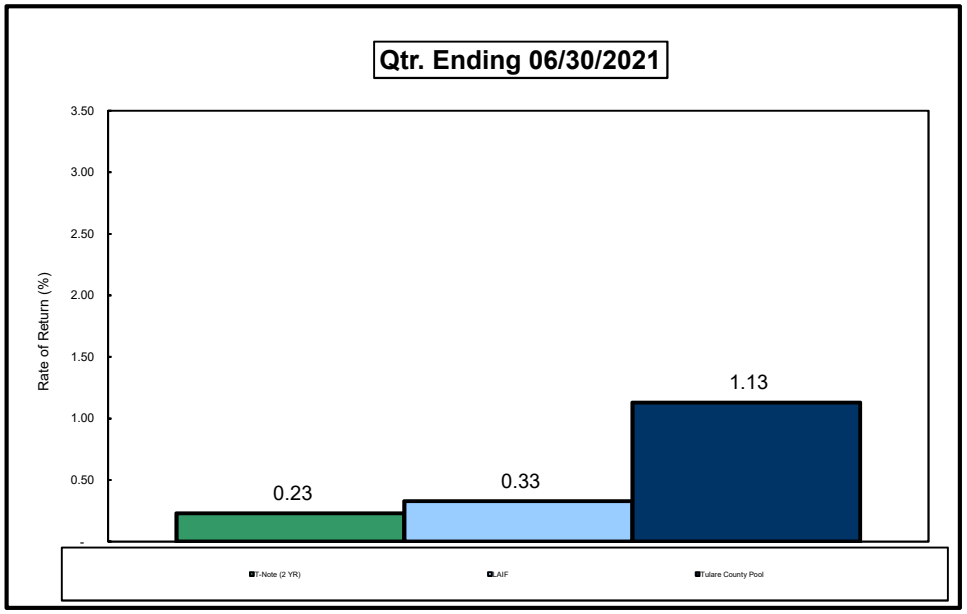
	LIQUID PORTFOLIO		PFM PORTFOLIO		TOTAL INVESTMENT POOL	
Average Daily Balance						
Month						
July 2021	$	808,803,988	$	1,221,323,346	$	2,030,127,334
August 2021	$	696,964,563	$	1,223,975,701	$	1,920,940,263
September 2021	$	790,128,581	$	1,225,896,164	$	2,016,024,745
Quarter						
Ended September 30, 2021	$	765,029,158	$	1,223,708,211	$	1,988,737,368
Fiscal Year to Date						
Ended September 30, 2021	$	765,029,158	$	1,223,708,211	$	1,988,737,368
Weighted Average Maturity as of September 30, 2021						
Average days to maturity:	328	days	983	days	707	days
Average years to maturity:			2.69	years	1.94	years
Effective Rate of Return and Earnings						
Month						
July 2021	0.19%	127,314	1.46%	1,511,173	0.95%	1,638,487
August 2021	0.18%	108,999	2.15%	2,232,730	1.44%	2,341,729
September 2021	0.24%	154,872	1.74%	1,752,095	1.15%	1,906,967
Quarter						
Ended September 30, 2021	0.20%	391,186	1.78%	5,495,998	1.17%	5,887,184
Treasury Fees - Quarterly					-0.10%	(494,454)
September 30, 2021 -- Net of Fees					1.07%	5,392,730

TULARE COUNTY TREASURER
INVESTMENT POOL EARNINGS COMPARISON
FOR THE QUARTER ENDING SEPTEMBER 30, 2021



TULARE COUNTY TREASURER
Quarter Ending 09/30/2021

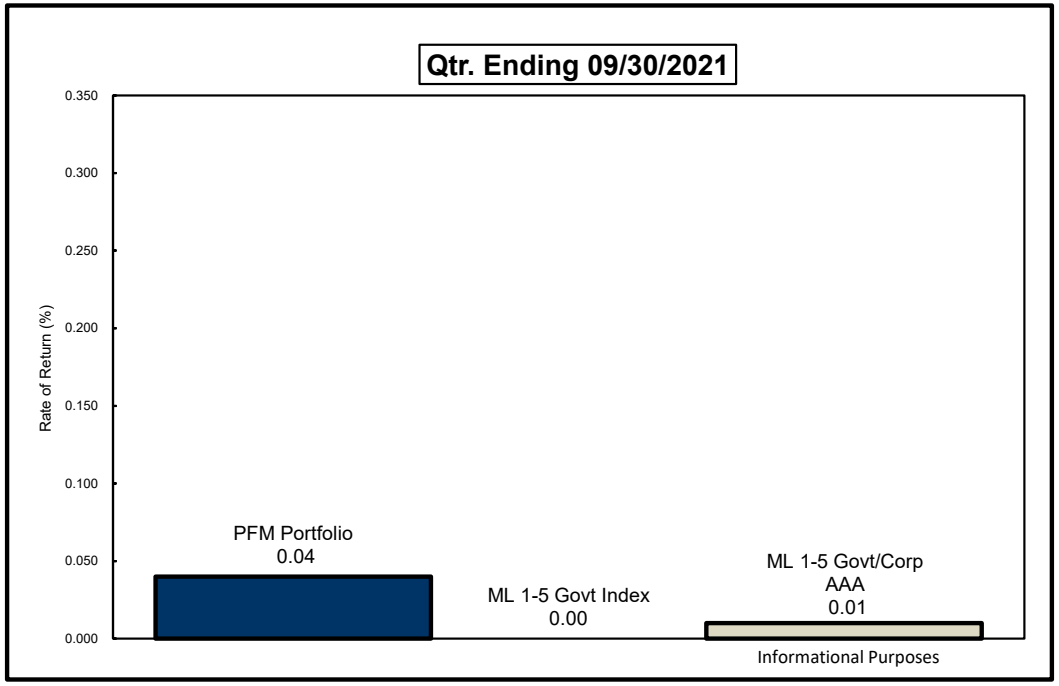
Average Daily Balance	$ 1,988,737,368
Earning for the Quarter	$ 5,887,184
Quarterly Rate of Return	1.17%
Weighted Avg. Yrs. to Maturity	1.94

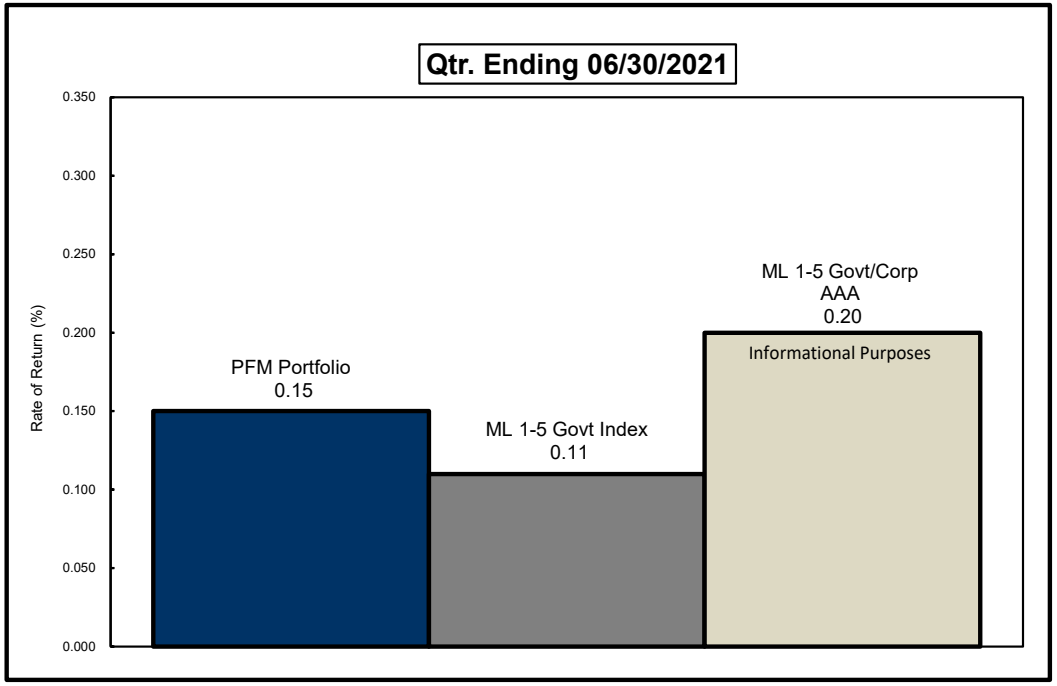


TULARE COUNTY TREASURER
Quarter Ending 06/30/2021

Average Daily Balance	$ 2,011,121,237
Earning for the Quarter	$ 5,687,437
Quarterly Rate of Return	1.13%
Weighted Avg. Yrs. to Maturity	1.72

TULARE COUNTY TREASURER
INVESTMENT ADVISORS' BENCHMARK COMPARISON
FOR THE QUARTER ENDING SEPTEMBER 30, 2021





TOTAL RETURN

Total return measures the portfolio's performance over time. It encompasses not only the income that the portfolio generated, but also any price appreciation or depreciation that the investments may have experienced. This equates the beginning value of the portfolio with the ending value, and includes interest earnings and both realized and unrealized gains and losses on the portfolio.

COMMENTS - CURRENT QUARTER

After dipping mid-quarter, U.S. Treasury yields ended the quarter little changed. The only material changes were 7 to 11 basis point (0.07%-0.11%) increases in yields on 3- to 10-year maturities. The late-quarter surge in rates was driven by inflation worries and the apparent accelerated pace of Fed tapering. On the other hand, short-term rates remain anchored near rock-bottom lows by the Fed's current near-zero rate policy. At quarter-end, the yield on a 3-month U.S. Treasury Bill stood at 0.03%, the 2-year note was 0.28%, the 5-year note was 0.96%, the 10-year note was 1.49%, and the 30-year ended the quarter at 2.04%. As a result of a modestly steeper curve over the quarter, U.S. Treasury index returns were mixed for the quarter. Shorter-duration U.S. Treasury indices (three years and under) were flat to slightly positive, while indices holding intermediate and longer-term portions of the yield curve posted negative returns. For example, the 1-year Treasury index returned 0.02% for the quarter, while the 5-year Treasury index returned -0.25% and the 10-year Treasury index returned -0.31%.

Diversification away from U.S. Treasuries was generally additive to the MMIP's performance in the quarter ended September 30, 2021, and the portfolio outperformed the benchmark by a small margin. Broad, global demand for yield has continued to pressure yield spreads, which remained in very low and tight trading ranges. Most investment grade sectors produced positive excess returns for the quarter– returns in excess of comparable maturity Treasuries – but at a lesser pace than in prior recent quarters. Federal agency spreads were again mostly unchanged, and the sector generated modest positive excess returns. Supranational opportunities were better in the quarter as several attractively priced new issues came to market. Investment grade corporates trudged along to slightly positive excess returns over the quarter, aided by continued economic recovery, improving credit fundamentals, and supportive global monetary policy. Although new issuance has been elevated, insatiable demand resulted in reasonable strong performance. The taxable municipal sector was one of the few investment grade fixed income sectors to post negative excess returns for the quarter. However, year-to-date returns remain near top of class, despite the recent underperformance. Going forward, low yields mean lesser income, while narrow spreads mean less opportunity for price gains from further spread compression. Portfolio returns very similar to index-level returns can be expected in upcoming quarters.

PERFORMANCE REVIEW

	CURRENT QUARTER	ANNUALIZED		
		1 YR	3YR	07/01/2006
ML 1-5 Govt	0.00%	-0.38%	3.22%	2.66%
PFM Portfolio	0.04%	0.00%	3.41%	2.96%

Tulare County Treasurer
Portfolio Management
Portfolio Summary
September 30, 2021

Tulare County
County Civic Center, Room 103E
Visalia, Visalia, Ca. 93291
(559)733-6575

Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Maturity	YTM 360 Equiv.	YTM 365 Equiv.
Cash	126,047,374.62	126,047,374.62	126,047,374.62	5.95	1	1	0.209	0.212
Money Market Accounts	52,870,286.59	52,870,286.59	52,870,286.59	2.50	1	1	0.220	0.223
Money Market Fund	457,442.23	457,442.23	457,442.23	0.02	1	1	0.020	0.020
Managed Investment Pools	74,738,399.67	74,738,399.67	74,738,399.67	3.53	1	1	0.218	0.221
Commercial Paper - Discount	97,200,000.00	97,135,553.00	97,122,389.71	4.59	290	150	0.200	0.202
Commercial Paper - Asset Backed	15,000,000.00	14,995,200.00	14,994,400.00	0.71	128	96	0.142	0.144
Negotiable CD's	254,145,000.00	254,575,876.35	254,150,596.84	12.00	391	219	0.414	0.420
Treasury Securities	539,176,000.00	549,841,444.07	542,136,103.01	25.60	1,606	1,040	1.347	1.366
Agency Issues	444,465,000.00	445,797,175.95	445,228,272.91	21.02	1,435	1,045	0.660	0.669
Agencies - Mortgage Backed	40,057,272.39	40,838,649.99	40,857,510.77	1.93	1,309	421	1.569	1.591
Supranationals	28,310,000.00	28,403,090.50	28,201,064.98	1.33	1,222	744	1.197	1.213
Municipal Bonds	63,710,000.00	64,337,045.45	63,872,634.01	3.02	956	630	0.739	0.749
Corporte Notes	290,171,000.00	301,821,549.91	297,674,009.48	14.05	1,243	749	1.453	1.474
Corporate - Step Ups	10,000,000.00	9,906,600.00	9,988,125.00	0.47	1,095	868	0.345	0.350
Corporate - Floating Rate	4,300,000.00	4,310,750.00	4,300,000.00	0.20	1,461	1,081	0.644	0.653
Asset Backed Securities	41,578,339.82	41,781,986.52	41,572,861.11	1.96	1,617	1,243	1.050	1.065
Promissory Notes	2,500,000.00	2,500,000.00	2,500,000.00	0.12	1,825	1,461	2.101	2.130
Agency - Step Ups	21,250,000.00	21,238,100.00	21,250,000.00	1.00	1,277	1,260	0.325	0.330
Investments	**2,105,976,115.32**	**2,131,596,524.85**	**2,117,961,470.93**	**100.00%**	**1,074**	**752**	**0.871**	**0.883**

Total Earnings	September 30 Month Ending	Fiscal Year To Date
Current Year	1,906,967.42	5,887,184.05
Average Daily Balance	**2,016,024,745.19**	**1,988,737,368.15**
Effective Rate of Return	**1.15%**	**1.17%**

Cass Cook, Auditor-Controller/Treasurer-Tax Collector

Reporting period 09/01/2021-09/30/2021

Run Date: 10/04/2021 - 10:14

Portfolio CNTY
AC
PM (PRF_PM1) 7.3.0
Report Ver. 7.3.6.1

LIP ACCOUNT
Portfolio Management
Portfolio Details - Investments
September 30, 2021

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Cash												
SYS0002	0002	UNION BANK - CHECKING			595,202.26	595,202.26	595,202.26	0.190		0.193	1	
SYS0002A	0002A	BANK OF THE SIERRA			1,215,824.85	1,215,824.85	1,215,824.85			0.000	1	
SYS0001	0001	CASH IN VAULT			96,525.78	96,525.78	96,525.78			0.000	1	
SYS0002C	0002C	JP MORGAN CHASE			113,889,821.73	113,889,821.73	113,889,821.73	0.230		0.233	1	
SYS0002D	0002D	JP MORGAN CHASE			10,250,000.00	10,250,000.00	10,250,000.00			0.000	1	
		Subtotal and Average	**55,687,538.00**		**126,047,374.62**	**126,047,374.62**	**126,047,374.62**			**0.212**	**1**	
Money Market Accounts												
SYS6096	6096	FIVE STAR BANK			50,451,381.35	50,451,381.35	50,451,381.35	0.221		0.221	1	
SYS5833	5833	SUNCREST BANK			2,418,905.24	2,418,905.24	2,418,905.24	0.270		0.270	1	
		Subtotal and Average	**52,870,286.59**		**52,870,286.59**	**52,870,286.59**	**52,870,286.59**			**0.223**	**1**	
Managed Investment Pools												
SYS4339-A	4339A	CALIFORNIA ASSET MANAGEMENT PR			177,333.03	177,333.03	177,333.03	0.050	AAA	0.050	1	
SYS9980	9980	LOCAL AGCY INVESTMENT FD			74,561,066.64	74,561,066.64	74,561,066.64	0.221		0.221	1	
		Subtotal and Average	**66,905,066.34**		**74,738,399.67**	**74,738,399.67**	**74,738,399.67**			**0.221**	**1**	
Commercial Paper - Discount												
43851UEB5	6283	HONEYWELL INTERNATIONAL		05/12/2021	23,500,000.00	23,475,325.00	23,476,813.33	0.160		0.165	222	05/11/2022
40434RC34	6240	HSBC USA		03/03/2021	15,000,000.00	14,991,150.00	14,977,687.50	0.350		0.361	153	03/03/2022
46640PX40	6264	JP MORGAN SECURITIES LLC		04/01/2021	15,000,000.00	14,999,850.00	14,999,775.00	0.180		0.186	3	10/04/2021
46590EGF9	6309	JP MORGAN SECURITIES LLC		07/19/2021	3,700,000.00	3,694,968.00	3,694,100.55	0.200		0.206	287	07/15/2022
89233GY26	6265	TOYOTA MOTOR CREDIT CORP		04/01/2021	7,000,000.00	6,999,370.00	6,998,880.00	0.180		0.186	32	11/02/2021
89233HB29	6284	TOYOTA MOTOR CREDIT CORP		05/13/2021	15,000,000.00	14,993,250.00	14,990,183.33	0.190		0.196	124	02/02/2022
89233HE42	6323	TOYOTA MOTOR CREDIT CORP		08/24/2021	18,000,000.00	17,981,640.00	17,984,950.00	0.140		0.145	215	05/04/2022
		Subtotal and Average	**97,948,038.05**		**97,200,000.00**	**97,135,553.00**	**97,122,389.71**			**0.202**	**150**	
Commercial Paper - Asset Backed												
92512MA58	6327	VERSAILLES CP LLC		08/30/2021	15,000,000.00	14,995,200.00	14,994,400.00	0.140		0.144	96	01/05/2022
		Subtotal and Average	**27,659,999.16**		**15,000,000.00**	**14,995,200.00**	**14,994,400.00**			**0.144**	**96**	
Negotiable CD's												
06367CK89	6318	BANK OF MONTREAL CHICAGO		08/19/2021	15,000,000.00	15,001,650.00	15,000,000.00	0.200		0.203	322	08/19/2022
06417MNR2	6270	BANK OF NOVA SCOTIA HOUSTON		04/15/2021	10,000,000.00	10,002,900.00	10,000,055.53	0.200		0.203	98	01/07/2022
13606CTA2	6286	CANADIAN IMPERIAL BANK		05/21/2021	10,000,000.00	10,002,300.00	10,000,099.95	0.180		0.182	133	02/11/2022
60683BU43	6263	MITSUBISHI UFJ TR&BK NY		04/01/2021	18,000,000.00	18,000,540.00	18,000,000.00	0.200		0.203	7	10/08/2021
60683BX65	6298	MITSUBISHI UFJ TR&BK NY		06/30/2021	10,070,000.00	10,070,100.70	10,070,332.84	0.140		0.152	105	01/14/2022
60710RUA1	6304	MIZUHO BANK LTD/NY		07/01/2021	25,000,000.00	25,001,500.00	25,000,000.00	0.140		0.142	123	02/01/2022

LIP ACCOUNT
Portfolio Management
Portfolio Details - Investments
September 30, 2021

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Negotiable CD's												
65558UDP4	6307	NORDEA BANK ABP NY		07/07/2021	15,000,000.00	15,000,000.00	15,000,000.00	0.090		0.091	5	10/06/2021
21684XTL0	6344	COOPERATIEVE RABOBANK		09/28/2021	15,000,000.00	14,999,550.00	15,000,000.00	0.170		0.172	287	07/15/2022
78012UN68	6293	ROYAL BANK OF CANADA		06/15/2021	10,000,000.00	10,000,200.00	10,000,000.00	0.120		0.122	165	03/15/2022
78012UL78	6322	ROYAL BANK OF CANADA		08/24/2021	6,000,000.00	6,002,100.00	6,004,604.97	0.200		0.172	222	05/11/2022
78012UT39	6329	ROYAL BANK OF CANADA		09/03/2021	15,000,000.00	15,000,300.00	15,000,000.00	0.190		0.193	336	09/02/2022
86959RST8	6328	SVENSKA HANDELSBANKEN NY		08/31/2021	15,000,000.00	15,000,750.00	15,000,503.55	0.175		0.172	242	05/31/2022
87019V2D8	6299	SWED BANK		06/30/2021	25,000,000.00	24,998,000.00	25,000,000.00	0.180		0.183	271	06/29/2022
89114WF34	6324	TORONTO DOMINION BANK NY		08/25/2021	15,000,000.00	14,999,250.00	15,000,000.00	0.190		0.193	328	08/25/2022
		Subtotal and Average	**218,742,325.27**		**204,070,000.00**	**204,079,140.70**	**204,075,596.84**			**0.170**	**192**	
Treasury Securities												
91282CBX8	6279	U.S. TREASURY NOTE		05/10/2021	15,000,000.00	14,980,050.00	14,996,759.51	0.125		0.141	576	04/30/2023
91282CCD1	6295	U.S. TREASURY NOTE		06/18/2021	10,000,000.00	9,984,000.00	9,987,960.04	0.125		0.201	607	05/31/2023
		Subtotal and Average	**24,984,322.85**		**25,000,000.00**	**24,964,050.00**	**24,984,719.55**			**0.165**	**588**	
Agency Issues												
31422XMJ8	6340	FARMER MAC		09/24/2021	15,000,000.00	14,968,050.00	15,000,000.00	0.500		0.500	1,089	09/24/2024
3133EMRQ7	6278	FEDERAL FARM CREDIT BANK		05/10/2021	11,000,000.00	10,986,690.00	10,996,821.10	0.100		0.121	511	02/24/2023
313381BR5	6257	FEDERAL HOME LOAN BANKS		03/26/2021	10,000,000.00	10,205,100.00	10,207,157.59	1.875		0.130	434	12/09/2022
313382AX1	6258	FEDERAL HOME LOAN BANKS		03/26/2021	10,000,000.00	10,272,200.00	10,283,238.35	2.125		0.157	525	03/10/2023
3130AMRY0	6290	FEDERAL HOME LOAN BANKS		06/11/2021	10,000,000.00	9,975,600.00	9,995,340.39	0.125		0.154	609	06/02/2023
3130ANBD1	6311	FEDERAL HOME LOAN BANKS		07/26/2021	5,615,000.00	5,612,024.05	5,615,000.00	0.500		0.500	1,029	07/26/2024
3130ANBC3	6312	FEDERAL HOME LOAN BANKS		07/29/2021	4,375,000.00	4,371,981.25	4,375,000.00	0.510		0.510	1,032	07/29/2024
3130ANKC3	6321	FEDERAL HOME LOAN BANKS		08/24/2021	3,000,000.00	2,992,860.00	3,000,000.00	0.600		0.600	1,242	02/24/2025
3130ANHN3	6325	FEDERAL HOME LOAN BANKS		08/26/2021	6,050,000.00	6,041,893.00	6,050,000.00	0.670		0.670	1,364	06/26/2025
3130ANXV7	6336	FEDERAL HOME LOAN BANKS		09/10/2021	15,000,000.00	14,962,500.00	15,000,000.00	0.550		0.550	1,256	03/10/2025
3130ANU65	6337	FEDERAL HOME LOAN BANKS		09/13/2021	10,000,000.00	9,995,400.00	9,997,050.00	0.480		0.490	1,078	09/13/2024
3130APCH6	6346	FEDERAL HOME LOAN BANKS		09/29/2021	10,000,000.00	9,993,700.00	10,000,000.00	1.125		1.125	1,824	09/29/2026
3135G05P4	6319	FED. NAT'L. MTG. ASSN.		08/20/2021	14,100,000.00	14,103,525.00	14,116,868.49	0.300		0.242	671	08/03/2023
		Subtotal and Average	**99,321,922.57**		**124,140,000.00**	**124,481,523.30**	**124,636,475.92**			**0.417**	**943**	
Supranationals												
		Subtotal and Average	**828,757.51**									
Municipal Bonds												
13034AL24	6206	CA INFRASTRUCTURE & ECON DEV		12/17/2020	5,000,000.00	5,000,000.00	5,000,000.00	0.178	AAA	0.178	0	10/01/2021
13032UXK9	6305	CALIFORNIA ST HEALTH FINANCING		07/06/2021	3,800,000.00	3,811,134.00	3,814,624.64	0.553		0.353	608	06/01/2023
358244BK6	6310	FRESNO COUNTY		07/20/2021	6,000,000.00	6,002,280.00	6,004,351.96	0.250		0.170	272	06/30/2022

LIP ACCOUNT
Portfolio Management
Portfolio Details - Investments
September 30, 2021

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Municipal Bonds												
399267HC0	6287	GROSSMONT-CUYAMACA CCC		06/03/2021	1,240,000.00	1,239,838.80	1,240,000.00	0.177	AA	0.177	304	08/01/2022
672240US5	6244	CITY OF OAKLAND		03/05/2021	2,795,000.00	2,813,223.40	2,813,950.46	2.500	AA	0.151	106	01/15/2022
8014952N1	6252	SANTA CLARA CA USD		03/16/2021	15,000,000.00	15,001,350.00	15,000,000.00	0.160		0.191	273	07/01/2022
		Subtotal and Average	**33,876,065.16**		**33,835,000.00**	**33,867,826.20**	**33,872,927.06**			**0.200**	**258**	
Corporte Notes												
06051GEU9	6308	BANK OF AMERICA CORP		07/08/2021	1,000,000.00	1,037,780.00	1,038,036.83	3.300		0.314	467	01/11/2023
06051GFB0	6320	BANK OF AMERICA CORP		08/23/2021	2,793,000.00	3,019,177.14	3,029,330.32			0.583	843	01/22/2024
05552JAA7	6326	BBVA USA		08/30/2021	10,000,000.00	10,487,200.00	10,521,684.07	2.500	A	0.690	1,061	08/27/2024
06406RAM9	6259	BANK OF NEW YORK MELLON CORP		03/29/2021	5,000,000.00	5,095,300.00	5,103,374.47	1.850	A	0.281	483	01/27/2023
00209TAB1	6285	COMCAST CABLE COMMUNICATION		05/14/2021	10,101,000.00	11,131,302.00	11,146,847.46	9.455		0.209	410	11/15/2022
46124HAB2	6332	INTUIT INC		09/08/2021	5,200,000.00	5,193,968.00	5,236,932.65	0.950		0.797	1,383	07/15/2025
46625HJT8	6331	JP MORGAN CHASE & CO		09/08/2021	15,000,000.00	16,129,350.00	16,240,314.32	3.875		0.478	853	02/01/2024
59217GCS6	6218	MET LIFE GLOB FUNDING		02/03/2021	10,905,000.00	11,000,091.60	11,002,338.42	3.375		0.158	102	01/11/2022
69353RFE3	6347	PNC BANK		09/30/2021	7,430,000.00	7,554,601.10	7,590,198.64	2.450	A	0.343	300	07/28/2022
867914BM4	6222	TRUIST FINANCIAL CORP		02/05/2021	9,901,000.00	9,958,524.81	9,974,446.29	2.700		0.391	118	01/27/2022
86787EAT4	6291	TRUIST FINANCIAL CORP		06/14/2021	10,000,000.00	10,167,900.00	10,176,314.50	2.450	A	0.328	304	08/01/2022
05531FBG7	6292	TRUIST FINANCIAL CORP		06/14/2021	5,525,000.00	5,624,229.00	5,630,993.80	3.050		0.376	262	06/20/2022
89236TGZ2	6348	TOYOTA MOTOR CREDIT		09/30/2021	5,000,000.00	5,031,150.00	5,052,367.00	1.150		0.151	237	05/26/2022
882508BK9	6339	TEXAS INSTRUMENTS INC		09/15/2021	2,000,000.00	1,998,280.00	2,000,000.00	1.125		1.125	1,810	09/15/2026
		Subtotal and Average	**86,774,669.35**		**99,855,000.00**	**103,428,853.65**	**103,743,178.77**			**0.403**	**543**	
Corporate - Step Ups												
06048WL24	6229	BANK OF AMERICA CORP		02/16/2021	10,000,000.00	9,906,600.00	9,988,125.00	0.300		0.350	868	02/16/2024
		Subtotal and Average	**9,987,923.61**		**10,000,000.00**	**9,906,600.00**	**9,988,125.00**			**0.350**	**868**	
Promissory Notes												
SYS6164	6164	LOWER TULE RIVER IRRIGATION			2,500,000.00	2,500,000.00	2,500,000.00	2.130		2.130	1,461	10/01/2021
		Subtotal and Average	**2,500,000.00**		**2,500,000.00**	**2,500,000.00**	**2,500,000.00**			**2.130**	**1,461**	
Agency - Step Ups												
3130ANVZ0	6338	FEDERAL HOME LOAN BANKS		09/14/2021	21,250,000.00	21,238,100.00	21,250,000.00	0.330		0.330	1,260	03/14/2025
		Subtotal and Average	**12,041,666.67**		**21,250,000.00**	**21,238,100.00**	**21,250,000.00**			**0.330**	**1,260**	

LIP ACCOUNT
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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity
		Total and Average	790,128,581.12		886,506,060.88	890,252,907.73	890,823,873.73			0.261	328

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Money Market Fund												
60934N10S	3521B	FEDERATED GOVT OBLIG			457,442.23	457,442.23	457,442.23	0.020	AAA	0.020	1	
		Subtotal and Average	**1,527,365.50**		**457,442.23**	**457,442.23**	**457,442.23**			**0.020**	**1**	
Negotiable CD's												
22552G3C2	6253	CREDIT SUISSE AG NY		03/23/2021	9,320,000.00	9,316,924.40	9,320,000.00	0.590		0.598	532	03/17/2023
23341VZT1	6039	DNB NOR BANK ASA NY		12/06/2019	8,770,000.00	8,937,243.90	8,770,000.00	2.040		2.068	427	12/02/2022
65558TLL7	5990	NORDEA BANK FINLAND NY		08/29/2019	11,000,000.00	11,176,880.00	11,000,000.00	1.850		1.871	329	08/26/2022
83369XDL9	6081	SOCIETE GENERALE NY		02/19/2020	11,680,000.00	11,755,569.60	11,680,000.00	1.800		1.800	136	02/14/2022
86565CKU2	6131	SUMITOMO MITSUI BANK NY		07/14/2020	9,305,000.00	9,310,117.75	9,305,000.00	0.700		0.710	280	07/08/2022
		Subtotal and Average	**50,075,000.00**		**50,075,000.00**	**50,496,735.65**	**50,075,000.00**			**1.436**	**330**	
Treasury Securities												
912828XG0	5746A	U.S. TREASURY NOTE		09/01/2018	11,000,000.00	11,167,530.00	11,023,867.07	2.125		1.822	272	06/30/2022
912828XQ8	5748	U.S. TREASURY NOTE		08/31/2017	5,000,000.00	5,079,700.00	5,010,682.02	2.000		1.730	303	07/31/2022
912828L24	5755	U.S. TREASURY NOTE		09/29/2017	3,000,000.00	3,049,230.00	2,999,041.63	1.875		1.912	334	08/31/2022
912828L57	5757	U.S. TREASURY NOTE		10/06/2017	185,000.00	188,078.40	184,684.92	1.750		1.930	364	09/30/2022
912828L57	5761A	U.S. TREASURY NOTE		09/01/2018	11,000,000.00	11,183,040.00	10,975,431.76	1.750		1.984	364	09/30/2022
912828L57	5765	U.S. TREASURY NOTE		11/03/2017	7,390,000.00	7,512,969.60	7,370,591.33	1.750		2.028	364	09/30/2022
912828N30	5784A	U.S. TREASURY NOTE		09/01/2018	2,445,000.00	2,505,171.45	2,435,370.27	2.125		2.459	456	12/31/2022
9128283C2	5819	U.S. TREASURY NOTE		05/04/2018	14,075,000.00	14,362,552.25	13,961,980.13	2.000		2.796	395	10/31/2022
912828L57	5825	U.S. TREASURY NOTE		06/06/2018	10,740,000.00	10,918,713.60	10,638,807.04	1.750		2.759	364	09/30/2022
912828P38	5855	U.S. TREASURY NOTE		10/05/2018	18,150,000.00	18,532,783.50	17,881,695.44	1.750		2.939	487	01/31/2023
912828Q29	5865	U.S. TREASURY NOTE		11/07/2018	7,960,000.00	8,116,414.00	7,797,738.28	1.500		2.964	546	03/31/2023
912828P38	5880	U.S. TREASURY NOTE		12/06/2018	12,000,000.00	12,253,080.00	11,836,726.99	1.750		2.839	487	01/31/2023
912828T91	5898	U.S. TREASURY NOTE		12/24/2018	3,750,000.00	3,851,962.50	3,674,231.53	1.625		2.667	760	10/31/2023
9128282D1	5899	U.S. TREASURY NOTE		12/24/2018	6,600,000.00	6,738,732.00	6,447,278.87	1.375		2.670	699	08/31/2023
912828V23	5907	U.S. TREASURY NOTE		01/09/2019	4,995,000.00	5,207,287.50	4,962,908.86	2.250		2.556	821	12/31/2023
912828S92	5920	U.S. TREASURY NOTE		02/12/2019	2,650,000.00	2,698,442.00	2,595,656.96	1.250		2.439	668	07/31/2023
912828WE6	5931	U.S. TREASURY NOTE		03/08/2019	7,150,000.00	7,518,082.00	7,182,727.30	2.750		2.519	775	11/15/2023
9128285D8	5969	U.S. TREASURY NOTE		05/03/2019	10,300,000.00	10,828,287.00	10,422,530.53	2.875		2.245	729	09/30/2023
912828X70	5972	U.S. TREASURY NOTE		06/05/2019	24,490,000.00	25,482,089.90	24,548,366.29	2.000		1.903	942	04/30/2024
912828V80	5975	U.S. TREASURY NOTE		06/25/2019	13,200,000.00	13,779,612.00	13,342,952.97	2.250		1.764	852	01/31/2024
912828XX3	5976	U.S. TREASURY NOTE		07/03/2019	22,560,000.00	23,503,910.40	22,687,931.99	2.000		1.783	1,003	06/30/2024
9128285K2	5981	U.S. TREASURY NOTE		07/30/2019	7,910,000.00	8,330,812.00	8,074,107.69	2.875		1.833	760	10/31/2023
9128282N9	5985	U.S. TREASURY NOTE		08/05/2019	8,950,000.00	9,363,937.50	9,028,568.85	2.125		1.799	1,034	07/31/2024
9128282U3	5996	U.S. TREASURY NOTE		09/05/2019	17,775,000.00	18,482,622.75	18,045,705.27	1.875		1.333	1,065	08/31/2024
9128282Y5	6005	U.S. TREASURY NOTE		10/03/2019	13,745,000.00	14,398,987.10	13,991,578.67	2.125		1.501	1,095	09/30/2024
9128283D0	6023	U.S. TREASURY NOTE		11/05/2019	11,925,000.00	12,547,842.75	12,165,953.86	2.250		1.566	1,126	10/31/2024

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Treasury Securities												
912828YM6	6035	U.S. TREASURY NOTE		12/04/2019	9,450,000.00	9,727,641.00	9,396,449.70	1.500		1.692	1,126	10/31/2024
9128283J7	6061	U.S. TREASURY NOTE		01/07/2020	4,135,000.00	4,337,242.85	4,200,858.59	2.125		1.599	1,156	11/30/2024
9128285P1	6084	U.S. TREASURY NOTE		03/04/2020	27,750,000.00	29,272,920.00	28,961,173.99	2.875		0.822	790	11/30/2023
91282CBC4	6209	U.S. TREASURY NOTE		01/13/2021	14,275,000.00	13,987,216.00	14,202,921.28	0.375		0.495	1,552	12/31/2025
912828Y87	6210	U.S. TREASURY NOTE		01/14/2021	5,055,000.00	5,236,474.50	5,263,908.18	1.750		0.283	1,034	07/31/2024
9128286A3	6223	U.S. TREASURY NOTE		02/08/2021	19,485,000.00	20,941,893.45	21,296,949.09	2.625		0.453	1,583	01/31/2026
91282CBH3	6235	U.S. TREASURY NOTE		02/26/2021	5,736,000.00	5,612,790.72	5,631,563.23	0.375		0.804	1,583	01/31/2026
91282CBQ3	6243	U.S. TREASURY NOTE		03/05/2021	17,725,000.00	17,425,979.25	17,555,327.43	0.500		0.721	1,611	02/28/2026
91282CBQ3	6256	U.S. TREASURY NOTE		03/26/2021	2,900,000.00	2,851,077.00	2,861,067.50	0.500		0.811	1,611	02/28/2026
91282CBC4	6269	U.S. TREASURY NOTE		04/07/2021	12,375,000.00	12,125,520.00	12,111,615.23	0.375		0.888	1,552	12/31/2025
91282CBC4	6274	U.S. TREASURY NOTE		04/26/2021	5,085,000.00	4,982,486.40	5,001,710.82	0.375		0.768	1,552	12/31/2025
91282CBC4	6280	U.S. TREASURY NOTE		05/10/2021	12,600,000.00	12,345,984.00	12,411,283.24	0.375		0.734	1,552	12/31/2025
91282CBQ3	6281	U.S. TREASURY NOTE		05/11/2021	3,700,000.00	3,637,581.00	3,663,627.07	0.500		0.727	1,611	02/28/2026
91282CCF6	6289	U.S. TREASURY NOTE		06/04/2021	28,000,000.00	27,764,800.00	27,945,045.49	0.750		0.795	1,703	05/31/2026
91282CBH3	6306	U.S. TREASURY NOTE		07/07/2021	15,500,000.00	15,167,060.00	15,217,459.05	0.375		0.804	1,583	01/31/2026
91282CAJ0	6314	U.S. TREASURY NOTE		08/06/2021	13,780,000.00	13,498,474.60	13,633,925.11	0.250		0.524	1,430	08/31/2025
9128286G0	6316	U.S. TREASURY NOTE		08/12/2021	11,385,000.00	11,928,064.50	11,940,090.88	2.375		0.345	881	02/29/2024
9128286G0	6317	U.S. TREASURY NOTE		08/12/2021	11,385,000.00	11,928,064.50	11,939,249.19	2.375		0.348	881	02/29/2024
91282CAM3	6334	U.S. TREASURY NOTE		09/09/2021	11,060,000.00	10,822,873.60	10,876,984.33	0.250		0.670	1,460	09/30/2025
91282CBT7	6335	U.S. TREASURY NOTE		09/09/2021	10,850,000.00	10,773,290.50	10,845,817.75	0.750		0.759	1,642	03/31/2026
91282CBT7	6345	U.S. TREASURY NOTE		09/28/2021	13,000,000.00	12,908,090.00	12,907,239.79	0.750		0.912	1,642	03/31/2026
		Subtotal and Average	**503,071,225.00**		**514,176,000.00**	**524,877,394.07**	**517,151,383.46**			**1.424**	**1,061**	
Agency Issues												
3133ELVX9	6094	FEDERAL FARM CREDIT BANK		04/08/2020	3,170,000.00	3,179,002.80	3,170,000.00	0.875		0.875	920	04/08/2024
3133EMBH4	6166	FEDERAL FARM CREDIT BANK		10/09/2020	6,900,000.00	6,798,708.00	6,890,299.53	0.530		0.566	1,459	09/29/2025
3130A0F70	5913	FEDERAL HOME LOAN BANKS		01/31/2019	8,990,000.00	9,588,554.20	9,111,091.23	3.375		2.713	798	12/08/2023
3130A0F70	5917	FEDERAL HOME LOAN BANKS		02/06/2019	6,110,000.00	6,516,803.80	6,198,525.17	3.375		2.664	798	12/08/2023
3130AJHU6	6100	FEDERAL HOME LOAN BANKS		04/16/2020	11,935,000.00	11,864,464.15	11,893,087.57	0.500		0.601	1,291	04/14/2025
3137EAER6	6123	FED. HOME LOAN MTG. CORP.		06/18/2020	5,520,000.00	5,530,984.80	5,525,469.22	0.375		0.313	581	05/05/2023
3137EAES4	6126	FED. HOME LOAN MTG. CORP.		06/26/2020	16,700,000.00	16,700,000.00	16,671,780.09	0.250		0.348	633	06/26/2023
3137EAEU9	6134	FED. HOME LOAN MTG. CORP.		07/23/2020	11,195,000.00	11,047,897.70	11,152,520.02	0.375		0.476	1,389	07/21/2025
3137EAEV7	6148	FED. HOME LOAN MTG. CORP.		08/21/2020	11,080,000.00	11,075,568.00	11,072,872.58	0.250		0.284	692	08/24/2023
3137EAEX3	6159	FED. HOME LOAN MTG. CORP.		09/25/2020	17,170,000.00	16,890,644.10	17,128,838.60	0.375		0.436	1,453	09/23/2025
3137EAFA2	6199	FED. HOME LOAN MTG. CORP.		12/04/2020	5,815,000.00	5,802,439.60	5,810,826.28	0.250		0.283	794	12/04/2023
3135G0T78	5794	FED. NAT'L. MTG. ASSN.		03/05/2018	3,500,000.00	3,567,550.00	3,478,496.42	2.000		2.649	369	10/05/2022
3135G0T78	5795	FED. NAT'L. MTG. ASSN.		03/06/2018	2,410,000.00	2,456,513.00	2,394,604.41	2.000		2.675	369	10/05/2022
3135G0U43	5854	FED. NAT'L. MTG. ASSN.		10/04/2018	6,240,000.00	6,556,430.40	6,222,188.13	2.875		3.034	711	09/12/2023

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Agency Issues												
3135G0U43	5875	FED. NAT'L. MTG. ASSN.		11/30/2018	7,000,000.00	7,354,970.00	6,987,803.74	2.875		2.971	711	09/12/2023
3135G0U43	5904	FED. NAT'L. MTG. ASSN.		12/31/2018	6,350,000.00	6,672,008.50	6,373,033.30	2.875		2.675	711	09/12/2023
3135G0X24	6085	FED. NAT'L. MTG. ASSN.		03/05/2020	14,250,000.00	14,737,350.00	14,607,766.95	1.625		0.839	1,194	01/07/2025
3135G03U5	6103	FED. NAT'L. MTG. ASSN.		04/24/2020	15,500,000.00	15,469,310.00	15,477,251.21	0.625		0.667	1,299	04/22/2025
3135G03U5	6106	FED. NAT'L. MTG. ASSN.		04/30/2020	5,345,000.00	5,334,416.90	5,352,985.56	0.625		0.582	1,299	04/22/2025
3135G04Q3	6117	FED. NAT'L. MTG. ASSN.		05/22/2020	17,335,000.00	17,341,760.65	17,306,446.85	0.250		0.351	598	05/22/2023
3135G03U5	6118	FED. NAT'L. MTG. ASSN.		05/26/2020	3,225,000.00	3,218,614.50	3,235,316.37	0.625		0.534	1,299	04/22/2025
3135G03U5	6121	FED. NAT'L. MTG. ASSN.		06/05/2020	12,500,000.00	12,475,250.00	12,546,661.35	0.625		0.519	1,299	04/22/2025
3135G04Z3	6124	FED. NAT'L. MTG. ASSN.		06/19/2020	18,485,000.00	18,373,165.75	18,456,568.05	0.500		0.542	1,355	06/17/2025
3135G04Z3	6129	FED. NAT'L. MTG. ASSN.		07/07/2020	7,200,000.00	7,156,440.00	7,206,214.65	0.500		0.476	1,355	06/17/2025
3135G05G4	6130	FED. NAT'L. MTG. ASSN.		07/10/2020	16,970,000.00	16,966,096.90	16,948,412.75	0.250		0.322	647	07/10/2023
3135G04Z3	6143	FED. NAT'L. MTG. ASSN.		08/04/2020	10,000,000.00	9,939,500.00	10,039,706.56	0.500		0.392	1,355	06/17/2025
3135G05X7	6150	FED. NAT'L. MTG. ASSN.		08/27/2020	11,900,000.00	11,717,692.00	11,856,511.92	0.375		0.470	1,424	08/25/2025
3135G04Z3	6158	FED. NAT'L. MTG. ASSN.		09/18/2020	2,145,000.00	2,132,022.75	2,150,969.55	0.500		0.424	1,355	06/17/2025
3135G04Z3	6165	FED. NAT'L. MTG. ASSN.		10/05/2020	12,000,000.00	11,927,400.00	12,040,459.01	0.500		0.408	1,355	06/17/2025
3135G05X7	6174	FED. NAT'L. MTG. ASSN.		10/23/2020	4,360,000.00	4,293,204.80	4,340,321.43	0.375		0.492	1,424	08/25/2025
3135G05X7	6180	FED. NAT'L. MTG. ASSN.		10/29/2020	13,730,000.00	13,519,656.40	13,684,028.54	0.375		0.462	1,424	08/25/2025
3135G05G4	6183	FED. NAT'L. MTG. ASSN.		11/10/2020	8,675,000.00	8,673,004.75	8,671,246.71	0.250		0.274	647	07/10/2023
3135G06G3	6185	FED. NAT'L. MTG. ASSN.		11/12/2020	11,205,000.00	11,059,895.25	11,172,014.98	0.500		0.573	1,498	11/07/2025
3135G06G3	6189	FED. NAT'L. MTG. ASSN.		11/24/2020	2,570,000.00	2,536,718.50	2,569,191.55	0.500		0.508	1,498	11/07/2025
3135G06H1	6213	FED. NAT'L. MTG. ASSN.		01/26/2021	2,845,000.00	2,841,614.45	2,848,286.71	0.250		0.196	787	11/27/2023
		Subtotal and Average	**340,604,565.60**		**320,325,000.00**	**321,315,652.65**	**320,591,796.99**			**0.767**	**1,085**	
Agencies - Mortgage Backed												
3137BM6P6	5753A	FREDDIE MAC MULTIFAMILY PASS		08/30/2018	8,042,064.15	8,166,474.88	8,347,984.27	3.090		0.962	328	08/25/2022
3137BM6P6	5810	FREDDIE MAC MULTIFAMILY PASS		04/09/2018	2,699,733.76	2,741,498.64	2,722,723.68	3.090		2.565	328	08/25/2022
3137BLUR7	5954	FREDDIE MAC MULTIFAMILY PASS		04/05/2019	4,421,497.91	4,466,110.82	4,432,551.65	2.716		2.441	267	06/25/2022
3137BHXY8	5970	FREDDIE MAC MULTIFAMILY PASS		05/21/2019	7,796,156.74	7,824,066.98	7,844,882.72	2.791		2.108	116	01/25/2022
3137B1BS0	5973	FREDDIE MAC MULTIFAMILY PASS		06/17/2019	3,000,000.00	3,063,330.00	3,026,250.00	2.510		1.848	420	11/25/2022
3137AWQH1	6001	FREDDIE MAC MULTIFAMILY PASS		09/09/2019	5,450,000.00	5,529,352.00	5,530,472.66	2.307		1.201	328	08/25/2022
3137FQ3V3	6033	FREDDIE MAC MULTIFAMILY PASS		11/26/2019	2,373,701.65	2,431,382.60	2,373,644.68	2.092		1.980	1,028	07/25/2024
3136AJB54	6055	FANNIE MAE		12/18/2019	6,274,118.18	6,616,434.07	6,579,001.11	3.346		0.867	906	03/25/2024
		Subtotal and Average	**41,871,110.25**		**40,057,272.39**	**40,838,649.99**	**40,857,510.77**			**1.591**	**421**	
Supranationals												
4581X0CZ9	5802A	INTER-AMERICAN DEVEL BK		09/01/2018	9,500,000.00	9,640,600.00	9,412,160.41	1.750	AAA	2.783	348	09/14/2022
4581X0DZ8	6341	INTER-AMERICAN DEVEL BK		09/23/2021	9,760,000.00	9,732,672.00	9,752,831.10	0.500	AAA	0.525	1,088	09/23/2024
459058JM6	6191	INTL BK RECON & DEVELOP		11/24/2020	9,050,000.00	9,029,818.50	9,036,073.47	0.250	AAA	0.322	784	11/24/2023

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
		Subtotal and Average	**23,631,440.50**		**28,310,000.00**	**28,403,090.50**	**28,201,064.98**			**1.213**	**744**	
Municipal Bonds												
13063DRJ9	6011	STATE OF CALIFORNIA		10/24/2019	10,580,000.00	11,002,671.00	10,687,571.05	2.400		1.870	730	10/01/2023
13017HAK2	6190	CALIFORNIA ST EARTHQUAKE AUTH		11/24/2020	2,465,000.00	2,505,647.85	2,465,000.00	1.477		1.477	638	07/01/2023
13077DMK5	6157	CALIFORNIA ST UNIV REVENUE		09/17/2020	3,050,000.00	3,048,292.00	3,050,000.00	0.685		0.685	1,127	11/01/2024
341271AD6	6155	FLORIDA ST BRD OF ADMIN FIN CO		09/16/2020	2,550,000.00	2,577,489.00	2,564,109.26	1.258	AA	1.158	1,369	07/01/2025
341271AD6	6156	FLORIDA ST BRD OF ADMIN FIN CO		09/16/2020	6,550,000.00	6,620,609.00	6,550,000.00	1.258	AA	1.258	1,369	07/01/2025
546417DQ6	6168	STATE OF LOUISIANA		10/14/2020	1,000,000.00	1,001,280.00	1,000,000.00	0.840		0.914	1,339	06/01/2025
91412HGE7	6132	UNIVERSITY OF CALIFORNIA BG		07/16/2020	2,565,000.00	2,588,161.95	2,565,000.00	0.883	AA	0.916	1,322	05/15/2025
91412HGE7	6133	UNIVERSITY OF CALIFORNIA BG		07/16/2020	1,115,000.00	1,125,068.45	1,118,026.64	0.883	AA	0.806	1,322	05/15/2025
		Subtotal and Average	**30,002,058.51**		**29,875,000.00**	**30,469,219.25**	**29,999,706.95**			**1.370**	**1,050**	
Corporte Notes												
037833CG3	5958	APPLE INC		04/11/2019	10,000,000.00	10,547,000.00	10,054,305.18	3.000		2.752	861	02/09/2024
037833DV9	6114	APPLE INC		05/11/2020	1,215,000.00	1,223,869.50	1,213,225.20	0.750		0.842	587	05/11/2023
023135AW6	5959	AMAZON.COM INC		04/11/2019	5,500,000.00	5,653,010.00	5,480,309.37	2.400	AA	2.672	509	02/22/2023
023135BW5	6282	AMAZON.COM INC		05/12/2021	5,650,000.00	5,638,587.00	5,642,812.68	0.450	AA	0.499	954	05/12/2024
06051GHF9	6167	BANK OF AMERICA CORP		10/14/2020	8,745,000.00	9,116,137.80	9,170,160.84	3.550		1.489	886	03/05/2024
06406RAJ6	5929	BANK OF NEW YORK MELLON CORP		03/07/2019	6,725,000.00	7,112,494.50	6,765,421.72	3.450	A	3.101	679	08/11/2023
09247XAJ0	5960	BLACKROCK INC.		04/11/2019	5,500,000.00	5,615,830.00	5,526,843.89	3.375		2.607	243	06/01/2022
12189LAV3	6262	BURLINGTN NORTH SANTA FE		03/29/2021	3,000,000.00	3,205,560.00	3,207,795.15	3.000		0.977	1,278	04/01/2025
22160KAL9	5974	COSTCO WHOLESALE CORP		06/18/2019	7,000,000.00	7,385,910.00	7,076,289.68	2.750		2.309	960	05/18/2024
24422ETG4	5822A	JOHN DEERE CAPITAL CORPORATION		09/01/2018	1,155,000.00	1,195,794.60	1,144,691.54	2.800	A	3.479	521	03/06/2023
38148LAE6	6230	GOLDMAN SACHS GROUP INC		02/17/2021	3,330,000.00	3,608,621.10	3,663,266.79	3.750		0.940	1,329	05/22/2025
38141GVM3	6275	GOLDMAN SACHS GROUP INC		04/28/2021	3,500,000.00	3,770,340.00	3,773,935.61	4.000		0.729	884	03/03/2024
437076AZ5	5807	HOME DEPOT INC		04/05/2018	5,700,000.00	5,873,451.00	5,667,437.64	2.700	A	3.114	547	04/01/2023
02665WCJ8	5840A	AMERICAN HONDA FINANCE CORP		09/01/2018	2,215,000.00	2,331,309.65	2,213,629.62	3.450		3.487	651	07/14/2023
02665WCT6	5911	AMERICAN HONDA FINANCE CORP		01/31/2019	3,900,000.00	4,151,628.00	3,917,888.21	3.550		3.330	833	01/12/2024
438516CB0	6333	HONEYWELL INT		09/08/2021	5,750,000.00	5,844,127.50	5,881,572.52	1.350	A	0.816	1,339	06/01/2025
427866BC1	6111	HERSHEY COMPANY		05/05/2020	8,860,000.00	9,222,994.20	9,109,454.77	2.050	A	1.123	1,141	11/15/2024
459200JQ5	5677	IBM CORP.		01/31/2017	5,000,000.00	5,035,700.00	5,000,842.87	2.500		2.444	118	01/27/2022
458140BP4	6112	INTEL CORP		05/05/2020	8,300,000.00	8,969,727.00	8,929,696.10	3.400		1.154	1,271	03/25/2025
478160CJ1	6245	JOHNSON & JOHNSON		03/08/2021	5,000,000.00	5,315,500.00	5,298,006.06	2.625	AAA	0.782	1,202	01/15/2025
478160CJ1	6255	JOHNSON & JOHNSON		03/25/2021	1,700,000.00	1,807,270.00	1,799,905.40	2.625	AAA	0.807	1,202	01/15/2025
48128BAB7	5789A	JP MORGAN CHASE & CO		09/01/2018	6,000,000.00	6,043,740.00	5,984,838.83	2.972		3.183	471	01/15/2023
48128BAB7	5803A	JP MORGAN CHASE & CO		09/01/2018	1,000,000.00	1,007,290.00	993,475.00	2.972		3.522	471	01/15/2023
46647PCM6	6315	JP MORGAN CHASE & CO		08/10/2021	3,875,000.00	3,859,267.50	3,875,000.00	0.768		0.768	1,408	08/09/2025
57636QAB0	5961	MASTERCARD INC		04/11/2019	5,091,000.00	5,444,620.86	5,173,397.41	3.375		2.679	913	04/01/2024
57636QAN4	6110	MASTERCARD INC		05/05/2020	4,380,000.00	4,552,791.00	4,509,408.49	2.000		1.111	1,249	03/03/2025

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	S&P	YTM 365	Days to Maturity	Maturity Date
Corporte Notes												
61772BAA1	6272	MORGAN STANLEY		04/22/2021	4,585,000.00	4,600,222.20	4,589,912.98	0.731		0.688	917	04/05/2024
61772BAA1	6273	MORGAN STANLEY		04/22/2021	1,525,000.00	1,530,063.00	1,525,000.00	0.731		0.731	917	04/05/2024
58933YAR6	6246	MERCK & CO INC		03/08/2021	5,000,000.00	5,293,600.00	5,297,840.40	2.750		0.939	1,228	02/10/2025
58933YAR6	6261	MERCK & CO INC		03/29/2021	3,470,000.00	3,673,758.40	3,683,441.00	2.750		0.883	1,228	02/10/2025
69371RQ90	6147	PACCAR FINANCIAL CORP		08/11/2020	605,000.00	604,727.75	604,508.33	0.350		0.394	679	08/11/2023
717081ES8	5941	PFIZER INC		03/28/2019	7,925,000.00	8,383,144.25	7,988,235.56	2.950		2.601	896	03/15/2024
69353RFE3	5738A	PNC BANK		09/01/2018	7,480,000.00	7,605,439.60	7,479,888.92	2.450	A	2.452	300	07/28/2022
808513AT2	5804A	CHARLES SCHWAB CORP		09/01/2018	6,000,000.00	6,174,540.00	5,956,505.45	2.650	A	3.245	481	01/25/2023
89236TFS9	5908	TOYOTA MOTOR CREDIT		01/10/2019	7,375,000.00	7,838,371.25	7,359,584.69	3.350		3.451	829	01/08/2024
91159HHP8	5666A	US BANCORP		09/01/2018	3,000,000.00	3,016,230.00	2,999,676.07	2.625		2.661	115	01/24/2022
91159HHV5	5957	US BANCORP		04/11/2019	10,000,000.00	10,629,600.00	10,110,148.33	3.375		2.868	857	02/05/2024
91159HHX1	5984	US BANCORP		08/05/2019	5,260,000.00	5,510,428.60	5,262,478.41	2.400		2.382	1,033	07/30/2024
		Subtotal and Average	**195,850,519.73**		**190,316,000.00**	**198,392,696.26**	**193,930,830.71**			**2.047**	**860**	
Corporate - Floating Rate												
46647PBS4	6154	JP MORGAN CHASE & CO		09/16/2020	4,300,000.00	4,310,750.00	4,300,000.00	0.653		0.653	1,081	09/16/2024
		Subtotal and Average	**4,300,000.00**		**4,300,000.00**	**4,310,750.00**	**4,300,000.00**			**0.653**	**1,081**	
Asset Backed Securities												
14315XAC2	6063	CarMax Auto Owner Trust		01/22/2020	2,790,000.00	2,829,366.90	2,789,452.60	1.890	AAA	1.906	1,172	12/16/2024
14316NAC3	6214	CarMax Auto Owner Trust		01/27/2021	2,005,000.00	2,004,298.25	2,004,603.81	0.340	AAA	0.349	1,536	12/15/2025
14314QAC8	6271	CarMax Auto Owner Trust		04/21/2021	3,950,000.00	3,957,544.50	3,949,148.78	0.520	AAA	0.530	1,600	02/17/2026
14042WAC4	5971	CAPITAL ONE PRIME AUTO RECEIVA		05/30/2019	1,538,534.21	1,552,473.33	1,538,222.51	2.510	AAA	2.533	775	11/15/2023
254683CP8	6342	DISCOVER CARD EXECUTION NOTE		09/27/2021	3,450,000.00	3,441,202.50	3,449,261.36	0.580	AAA	0.590	1,810	09/15/2026
43813RAC1	6082	HONDA AUTO RECEIVABLES TRUST		02/26/2020	6,375,000.00	6,442,065.00	6,373,750.50	1.610		1.625	934	04/22/2024
43813GAC5	6234	HONDA AUTO RECEIVABLES TRUST		02/24/2021	3,300,000.00	3,298,284.00	3,299,939.61	0.270		0.271	1,298	04/21/2025
44933LAC7	6276	HYUNDAI AUTO RECEIVABLES TRUST		04/28/2021	2,625,000.00	2,623,950.00	2,624,723.85	0.380	AAA	0.385	1,445	09/15/2025
47788EAC2	5842A	JOHN DEERE OWNER TRUST		08/30/2018	219,805.61	220,225.44	219,788.95	3.080		2.012	410	11/15/2022
65479CAD0	6127	NISSAN AUTO RECEIVABLES OWNERS		06/30/2020	2,415,000.00	2,420,095.65	2,414,933.83	0.550	AAA	0.552	1,018	07/15/2024
89232HAC9	6072	TOYOTA AUTO RECEIVABLES TRUST		02/12/2020	8,565,000.00	8,647,480.95	8,564,381.61	1.660	AAA	1.669	957	05/15/2024
89239BAC5	6343	TOYOTA AUTO RECEIVABLES TRUST		09/27/2021	4,345,000.00	4,345,000.00	4,344,653.70	0.430		0.434	1,567	01/15/2026
		Subtotal and Average	**34,962,878.98**		**41,578,339.82**	**41,781,986.52**	**41,572,861.11**			**1.065**	**1,243**	
		Total and Average	**1,225,896,164.07**		**1,219,470,054.44**	**1,241,343,617.12**	**1,227,137,597.20**			**1.335**	**983**	

SUMMARY

- In Q3, U.S. economic conditions were impacted by: (1) a summer surge of COVID-19 infections driven by the highly contagious delta variant negatively affected consumer and business sentiment; (2) moderating but still above-trend economic growth; (3) higher inflation caused by material increases in the price of energy, other raw materials and various consumer goods and services; (4) continuing supply chain disruptions and shortages; (5) a Federal Reserve (Fed) planning to begin an accelerated pace of asset purchase tapering; (6) political wrangling over both government funding and the expired suspension of the debt ceiling; and (7) a material slowdown in job growth.
- The recovery is continuing, but the economy faces familiar headwinds. The COVID-19 surge in the U.S. that began in July peaked in September before trailing off sharply late in the quarter. The overall toll remains staggering: 44 million cases and over 700,000 deaths in the U.S. The surge impaired economic activity and caused consumer sentiment to fall to its lowest level in over a year. The labor market slowed even with job openings at record levels. Prices remained elevated for both the consumer and the producer, although the Fed views this trend as transitory. The growth outlook has become more uncertain.
- At the Federal Open Market Committee's (FOMC) September meeting, officials hinted that a tapering of bond purchases could begin as soon as November. More importantly, the Fed indicated that a likely path of tapering could conclude around the middle of next year – a faster pace than was expected by analysts. Half of the FOMC participants indicated that they expect to increase short-term rates at least once in 2022, with multiple hikes in place by the end of 2023. In its updated September projections, the Fed also lowered its forecast for GDP growth for 2021 from 7% to 5.9% and increased its forecast for inflation (Core PCE) from 3% to 3.7%. Longer-term projections were relatively unchanged.

ECONOMIC SNAPSHOT

- Real GDP in the U.S. increased by 6.7% in Q2, following a 6.3% expansion in Q1. Spending was again the primary driver, with consumer spending rising by 12% as public health restrictions eased and businesses reopened earlier in the year. The delta variant triggered a summer slowdown in spending, but consumers remain in a strong position to help power the economic recovery. Nevertheless, the impact of waning monetary and fiscal stimulus creates a larger degree of uncertainty for the economy.
- Job gains disappointed for a second straight month as the U.S. economy added only 366,000 jobs in August and 194,000 jobs in September, far short of expectations and well below the average of 641,000 for the first seven months of the year. Despite the recent weakness, the unemployment rate fell 1.1% to 4.8% in the quarter. The labor force participation rate held steady, but wages continued to rise, up 4.6% over the past year. The number of job openings stood at 10.4 million in August, following a record 11.1 million in July. The "quits rate" – voluntary separations initiated by the employee, serving as a measure of workers' willingness to leave jobs – increased to a series high of 2.9%.
- On the inflation front, the consumer price index (CPI) rose 5.4% for the twelve months through September, up slightly from the prior quarter. Surging prices for energy and new and used cars accounted for more than half the overall gain. The producer price index (PPI) rose for the eighth straight month, reaching a whopping 8.3% increase over the past year ended August as commodity prices remain elevated.
- The frantic and heated housing market showed signs of cooling as existing homes sales declined. The lack of available supply remains a significant constraint. With prices up 20% over the past year and mortgage rates rising, affordability is also impeding further gains.

INTEREST RATES

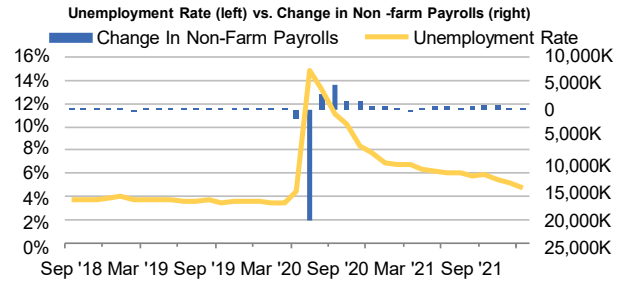
- After dipping mid-quarter, U.S. Treasury yields barely changed. The only material changes were 7 to 11 basis point increases in yields on 3- to 10-year maturities. Late surges in rates were driven by inflation worries and the accelerated pace of Fed tapering. Short-term rates remain anchored near rock-bottom lows by the current near-zero rate policy. At quarter-end, the yield on a 3-month U.S. Treasury Bill stood at 0.04%, the 2-year note was 0.28%, the 5-year note was 0.97%, the 10-year note was 1.49% and the 30-year was 2.05%.
- As a result of a modestly steeper curve over the quarter, U.S. Treasury index returns were mixed for the quarter. Shorter-duration U.S. Treasury indices (three years and under) were flat to slightly positive, while indices holding intermediate- and longer-term portions of the yield curve posted negative returns. For example, the 1-year Treasury index returned 0.02% for the quarter, while the 5-year Treasury index returned -0.25% and the 10-year Treasury index returned -0.31%.

SECTOR PERFORMANCE

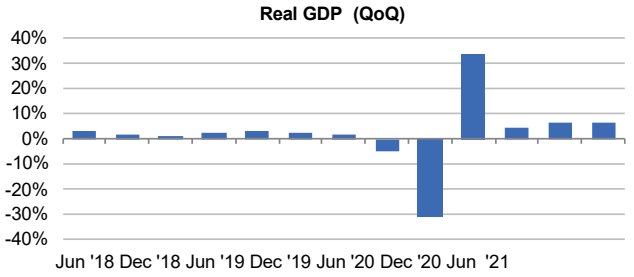
- Diversification away from U.S. Treasuries was generally additive to performance in Q3. Broad, global demand for yield has continued to pressure yield spreads, which remained in very low and tight trading ranges. Most investment-grade (IG) sectors produced positive excess returns for Q3 – returns in excess of comparable maturity Treasuries – but at a lesser pace than in recent prior quarters. Low yields mean less income, while narrow spreads mean less opportunity for price gains from further spread compression. Something close to index-level returns is about all that can be expected in upcoming quarters.
- Federal agency spreads were mostly unchanged again, and the sector generated modest positive excess returns. Supranational opportunities were better in Q3 as several attractively priced new issues came to market.
- IG corporates trudged along to slightly positive excess returns, aided by continued economic recovery, improving credit fundamentals, and supportive global monetary policy. Although new issuance has been elevated, insatiable demand resulted in a reasonably strong performance. Valuations are now very rich, with spreads ending the quarter nearer the June 2021 all-time tights. Lower quality corporates led the way, as the incremental income component of total returns remains a driver of overall performance in the current, low spread environment.
- The taxable municipal sector was one of the few IG fixed income sectors to post negative excess returns for Q3. YTD returns remain near the top, despite recent underperformance.
- AAA-rated asset-backed securities (ABS) spreads were stable, and collateral performance has remained strong. Issuance picked up in Q3.
- Agency mortgage-backed securities (MBS) spreads widened but remain susceptible to further duration extension and price deterioration as rates rise. Expectations for Fed tapering is a lingering concern, as the Fed has been the largest buyer in the sector. Excess returns were largely flat to modestly negative, depending on the specific term and collateral type. Lower coupons suffered, while higher coupons performed best. After a strong performance, agency CMBS stumbled notably in Q3. Similar to taxable municipals, the recent

Economic Snapshot

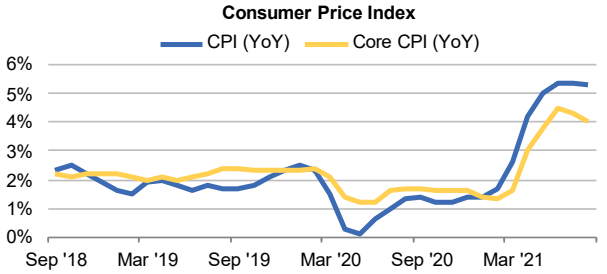
Labor Market	Latest		Jun '21	Sep '20
Unemployment Rate	Sep '21	4.8%	5.9%	7.8%
Change In Non-Farm Payrolls	Sep '21	194,000	962,000	716,000
Average Hourly Earnings (YoY)	Sep '21	4.6%	3.7%	4.8%
Personal Income (YoY)	Aug '21	6.1%	2.5%	6.2%
Initial Jobless Claims (week)	10/2/21	326,000	368,000	803,000



Growth				
Real GDP (QoQ SAAR)	2021Q2	6.7%	6.3%[1]	-31.2%[2]
GDP Personal Consumption (QoQ SAAR)	2021Q2	12.0%	11.4%[1]	-33.4%[2]
Retail Sales (YoY)	Aug '21	15.1%	18.9%	6.0%
ISM Manufacturing Survey (month)	Sep '21	61.1	60.6	55.7
Existing Home Sales SAAR (month)	Aug '21	5.88 mil.	5.87 mil.	6.44 mil.



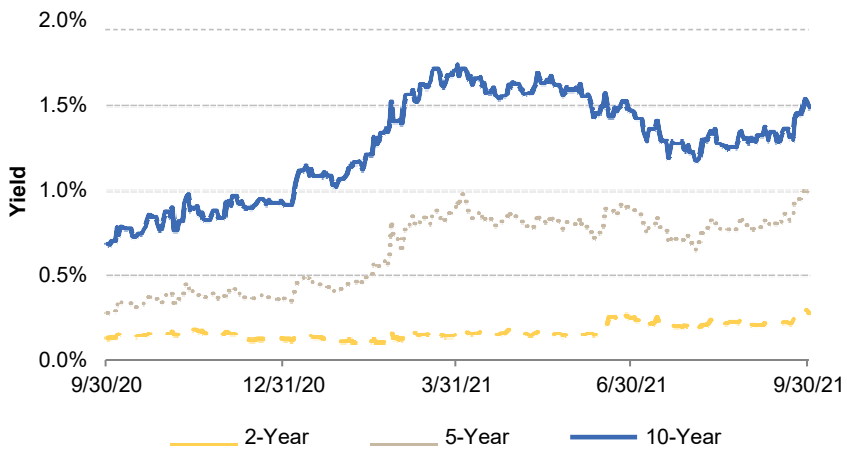
Inflation / Prices				
Personal Consumption Expenditures (YoY)	Aug '21	4.3%	4.0%	1.4%
Consumer Price Index (YoY)	Aug '21	5.3%	5.4%	1.4%
Consumer Price Index Core (YoY)	Aug '21	4.0%	4.5%	1.7%
Crude Oil Futures (WTI, per barrel)	Sep 30	$75.03	$73.47	$40.22
Gold Futures (oz.)	Sep 30	$1,755	$1,772	$1,888



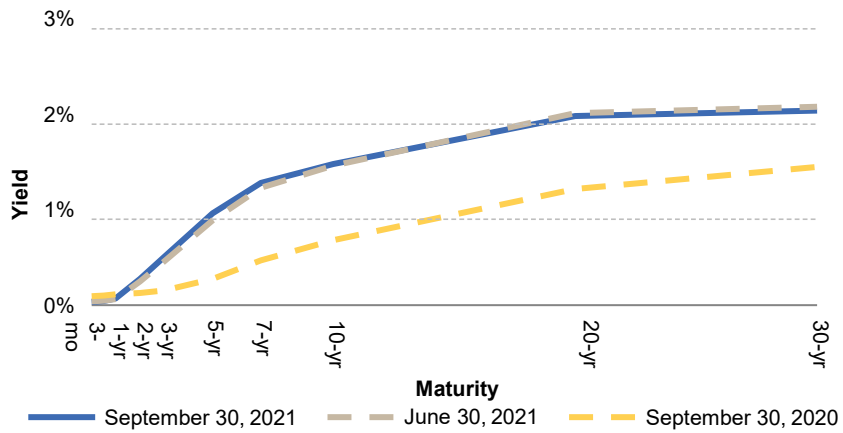
1. Data as of First Quarter 2021.
2. Data as of Second Quarter 2020.
Note: YoY = year-over-year, QoQ = quarter-over-quarter, SAAR = seasonally adjusted annual rate, WTI = West Texas Intermediate crude oil.
Source: Bloomberg.

Interest Rate Overview

U.S. Treasury Note Yields



U.S. Treasury Yield Curve

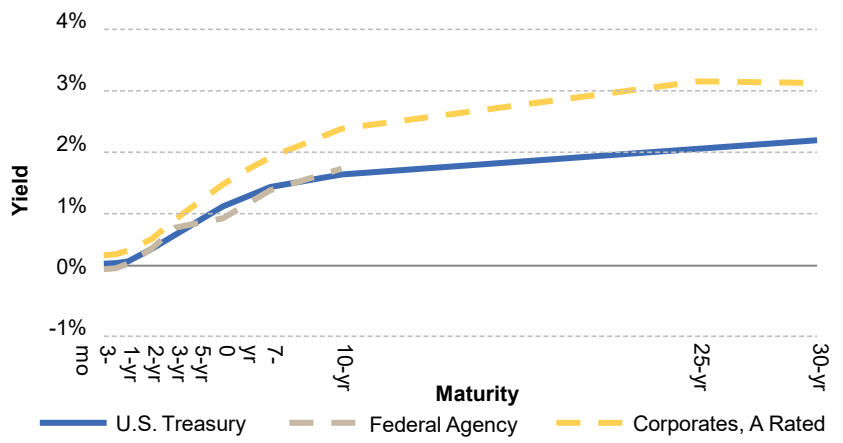


U.S. Treasury Yields

Maturity	Sep '21	Jun '21	Change over Quarter	Sep '20	Change over Year
3-Month	0.04%	0.04%	0.00%	0.10%	(0.06%)
1-Year	0.07%	0.07%	0.00%	0.12%	(0.05%)
2-Year	0.28%	0.25%	0.03%	0.13%	0.15%
5-Year	0.97%	0.89%	0.08%	0.28%	0.69%
10-Year	1.49%	1.47%	0.02%	0.69%	0.80%
30-Year	2.05%	2.09%	(0.04%)	1.46%	0.59%

Source: Bloomberg.

Yield Curves as of 09/30/2021



ICE BofAML Index Returns

	As of 09/30/2021		Returns for Periods ended 09/30/2021		
September 30, 2021	**Duration**	**Yield**	**3 Month**	**1 Year**	**3 Years**
1-3 Year Indices					
U.S. Treasury	1.90	0.28%	0.06%	0.03%	2.63%
Federal Agency	1.74	0.29%	0.09%	0.20%	2.48%
U.S. Corporates, A-AAA rated	1.89	0.56%	0.14%	0.79%	3.39%
Agency MBS (0 to 3 years)	1.52	0.72%	(0.01%)	(1.64%)	3.44%
Taxable Municipals	1.57	0.47%	0.03%	3.32%	4.11%
1-5 Year Indices					
U.S. Treasury	2.66	0.48%	(0.00%)	(0.40%)	3.24%
Federal Agency	2.33	0.47%	0.10%	0.01%	2.79%
U.S. Corporates, A-AAA rated	2.82	0.88%	0.05%	0.76%	4.23%
Agency MBS (0 to 5 years)	2.56	1.37%	0.25%	(0.52%)	3.37%
Taxable Municipals	2.65	0.79%	0.22%	1.82%	3.97%
Master Indices (Maturities 1 Year or Greater)					
U.S. Treasury	7.27	1.04%	(0.03%)	(3.60%)	4.94%
Federal Agency	3.99	0.81%	0.01%	(0.75%)	4.23%
U.S. Corporates, A-AAA rated	8.50	1.90%	(0.18%)	0.04%	6.87%
Agency MBS (0 to 30 years)	3.89	1.66%	0.05%	(0.46%)	3.92%
Taxable Municipals	11.26	2.52%	0.33%	2.36%	9.18%

Returns for periods greater than one year are annualized.
Source: ICE BofAML Indices.