



**Alameda County Employees' Retirement Association  
BOARD OF RETIREMENT**

**INVESTMENT COMMITTEE/BOARD MEETING**

**THIS MEETING WILL BE CONDUCTED VIA TELECONFERENCE  
SEE GOV'T CODE § 54953(e).**

**ACERA MISSION:**

**To provide ACERA members and employers with flexible, cost-effective, participant-oriented benefits through prudent investment management and superior member services.**

**Wednesday, December 8, 2021  
9:30 a.m.**

<b>ZOOM INSTRUCTIONS</b>	<b>COMMITTEE MEMBERS</b>	
The public can view the Teleconference and comment via audio during the meeting. To join this Teleconference, please click on the link below. <a href="https://zoom.us/join">https://zoom.us/join</a> <b>Webinar ID: 839 5303 8420</b> Passcode: <b>551816</b> For help joining a Zoom meeting, see: <a href="https://support.zoom.us/hc/en-us/articles/201362193">https://support.zoom.us/hc/en-us/articles/201362193</a> Call-in Number: <a href="tel:16699006833">1 669 900 6833</a>	<b>GEORGE WOOD, CHAIR</b>	<b>ELECTED GENERAL</b>
	<b>JAIME GODFREY, VICE-CHAIR</b>	<b>APPOINTED</b>
	<b>DALE AMARAL</b>	<b>ELECTED SAFETY</b>
	<b>OPHELIA BASGAL</b>	<b>APPOINTED</b>
	<b>KEITH CARSON</b>	<b>APPOINTED</b>
	<b>TARRELL GAMBLE</b>	<b>APPOINTED</b>
	<b>LIZ KOPPENHAVER</b>	<b>ELECTED RETIRED</b>
	<b>HENRY LEVY</b>	<b>TREASURER</b>
	<b>DARRYL L.WALKER</b>	<b>ELECTED GENERAL<sup>1</sup></b>
	<b>NANCY REILLY</b>	<b>ALTERNATE RETIRED<sup>2</sup></b>
<b>VACANT</b>	<b>ALTERNATE SAFETY</b>	

<sup>1</sup>Trustee Walker is filling the vacancy created by Trustee Rogers' retirement. See Gov't Code §§ 31524, 31520.1(b)

<sup>2</sup> The Alternate Retired Member votes in the absence of the Elected Retired Member, or, if the Elected Retired Member is present, then votes if both Elected General members, or the Safety Member and an Elected General member, are absent.

*Note regarding accommodations:* The Board of Retirement will provide reasonable accommodations for persons with special needs of accessibility who plan to attend Board meetings. Please contact ACERA at (510) 628-3000 to arrange for accommodation.

*Note regarding public comments:* Public comments are limited to four (4) minutes per person in total.

The order of agenda items is subject to change without notice. Board and Committee agendas and minutes, and all documents distributed to the Board or a Committee in connection with a public meeting (unless exempt from disclosure), are available online at [www.acera.org](http://www.acera.org).

# ***INVESTMENT COMMITTEE/BOARD MEETING***

**NOTICE and AGENDA, Page 2 of 2 – December 8, 2021**

**Call to Order:** 9:30 a.m.

**Roll Call:**

**Public Input (The Chair allows public input on each agenda item at the time the item is discussed)**

**Action Items: Matters for discussion and possible motion by the Committee**

1. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$30 million Investment in Tiger Infrastructure Partners Fund III as part of ACERA's Real Asset Portfolio – Infrastructure<sup>3</sup>, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations

9:30 – 10:15                      Emil Henry, Tiger Infrastructure Partners, L.P.  
John Nicolini, Verus Advisory Inc.  
Clint Kuboyama ACERA  
Betty Tse, ACERA

2. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$75 million Investment in Monroe Capital Private Credit Fund IV as part of ACERA's Private Credit Portfolio<sup>3</sup>, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations

10:15 – 11:00                      Zia Uddin, Monroe Capital Management Advisors, LLC  
Joe Reid, Monroe Capital Management Advisors, LLC  
Faraz Shooshani, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
Betty Tse, ACERA

**Information Items: These items are not presented for Committee action but consist of status updates and cyclical reports**

1. Semiannual Performance Review for the Period Ending June 30, 2021 – Real Assets

John Nicolini, Verus Advisory Inc.  
Faraz Shooshani, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
Betty Tse, ACERA

2. Discussion of ESG implementation for ACERA

Joe Abdou, Verus Advisory, Inc.  
Margaret Jadallah, Verus Advisory, Inc.  
Eileen Neill, Verus Advisory, Inc.  
John Ta, ACERA  
Betty Tse, ACERA

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<sup>3</sup> Written materials and investment recommendations from the consultants, fund managers and ACERA Investment Staff relating to this alternative investment are exempt from public disclosure pursuant to CA Gov. Codes § 6254.26 and § 6255.

# ***INVESTMENT COMMITTEE/BOARD MEETING***

**NOTICE and AGENDA, Page 2 of 2 – December 8, 2021**

3. Semiannual Performance Review for the Period Ending September 30, 2021 – Equities and Fixed Income

Margaret Jadallah, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
Thomas Taylor, ACERA  
Betty Tse, ACERA

4. Semiannual Performance Review for the Period Ending September 30, 2021 – Absolute Return

Margaret Jadallah, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
Betty Tse, ACERA

5. Semiannual Performance Review for the Period Ending June 30, 2021 – Private Equity

Faraz Shooshani, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
John Ta, ACERA  
Betty Tse, ACERA

6. Semiannual Performance Review for the Period Ending June 30, 2021 – Private Credit

Faraz Shooshani, Verus Advisory Inc.  
Clint Kuboyama, ACERA  
Betty Tse, ACERA

7. Semiannual Performance Review for the Period Ending September 30, 2021 – Real Estate

Avery Robinson, Callan LLC  
Thomas Taylor, ACERA  
Betty Tse, ACERA

8. CA Gov. Code § 7514.7 Alternative Investment Vehicles Information Report

John Ta, ACERA

## **Trustee Remarks**

## **Future Discussion Items**

## **Establishment of Next Meeting Date**

January 12, 2022 at 9:30 a.m.



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**PERIOD ENDING: SEPTEMBER 30, 2021**

Investment Performance Review for

**Alameda County Employees' Retirement Association - Public**



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Investment Landscape TAB I

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Investment Performance Q3 21 Review TAB II

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Absolute Return Q3 21 TAB III

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Private Equity & Private Credit Q2 21 TAB IV

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Real Assets Q2 21 TAB V

***Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward-looking information will be achieved. Investing entails risks, including possible loss of principal. Additional information about Verus Advisory, Inc. is available on the SEC's website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov). Verus – also known as Verus Advisory™*





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4<sup>TH</sup> 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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# 3<sup>rd</sup> 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 23<sup>rd</sup>, 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 25<sup>th</sup>, 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 27<sup>th</sup>, 2021

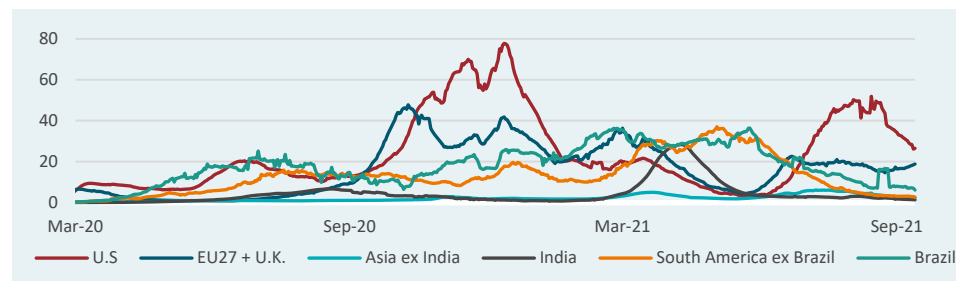
“Commodities surge again; spot price index hits decade high”

## 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 13<sup>th</sup>, 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

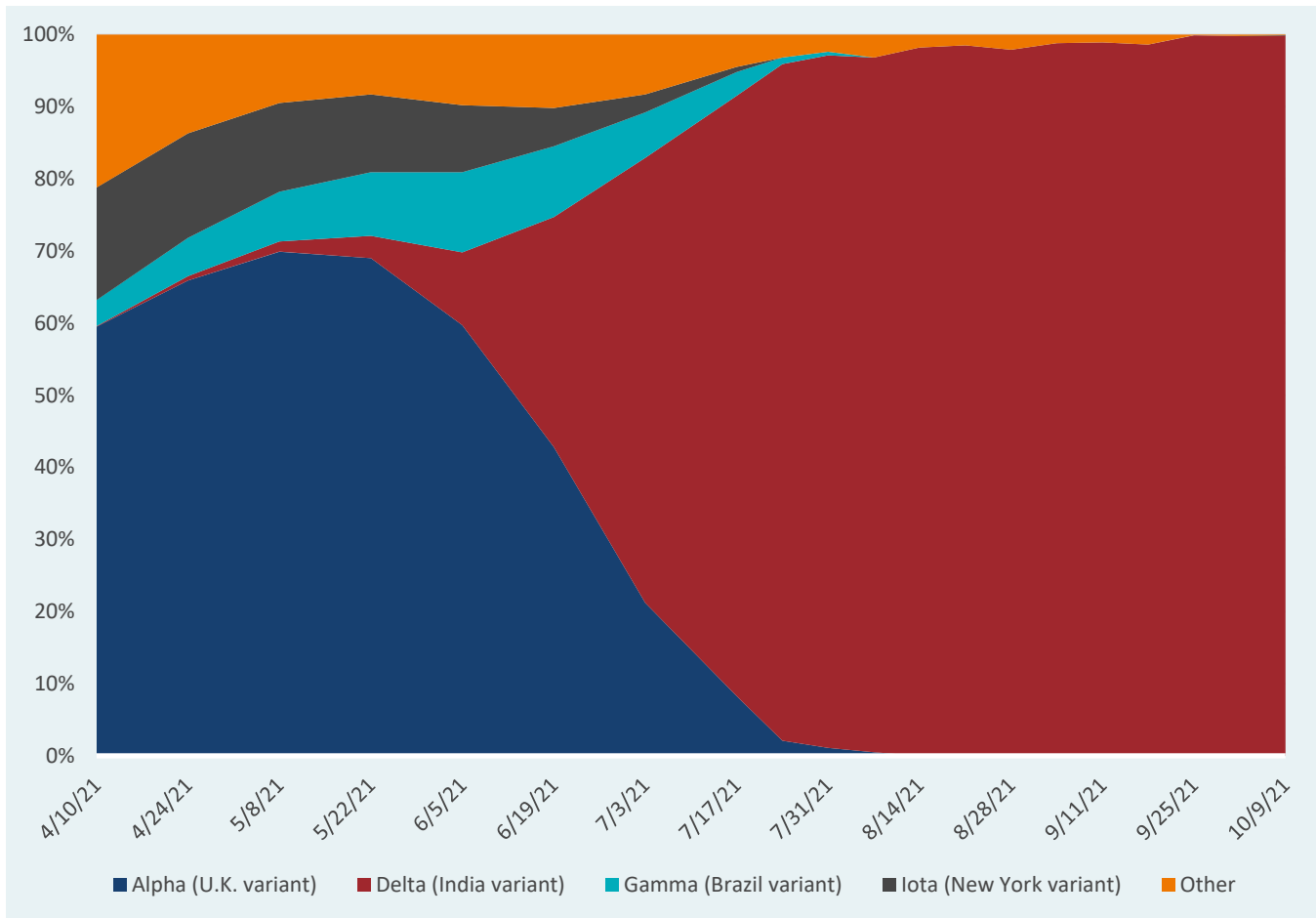
# U.S. economics summary

- 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% <i>6/30/21</i>	(9.1%) <i>6/30/20</i>
Inflation (CPI YoY, Core)	4.0% <i>9/30/21</i>	1.7% <i>9/30/20</i>
Expected Inflation (5yr-5yr forward)	2.2% <i>9/30/21</i>	1.7% <i>9/30/20</i>
Fed Funds Target Range	0% – 0.25% <i>9/30/21</i>	0% – 0.25% <i>9/30/20</i>
10-Year Rate	1.49% <i>9/30/21</i>	0.68% <i>9/30/20</i>
U-3 Unemployment	4.8% <i>9/30/21</i>	7.8% <i>9/30/20</i>
U-6 Unemployment	8.5% <i>9/30/21</i>	12.8% <i>9/30/20</i>

# Delta-plus variant?

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



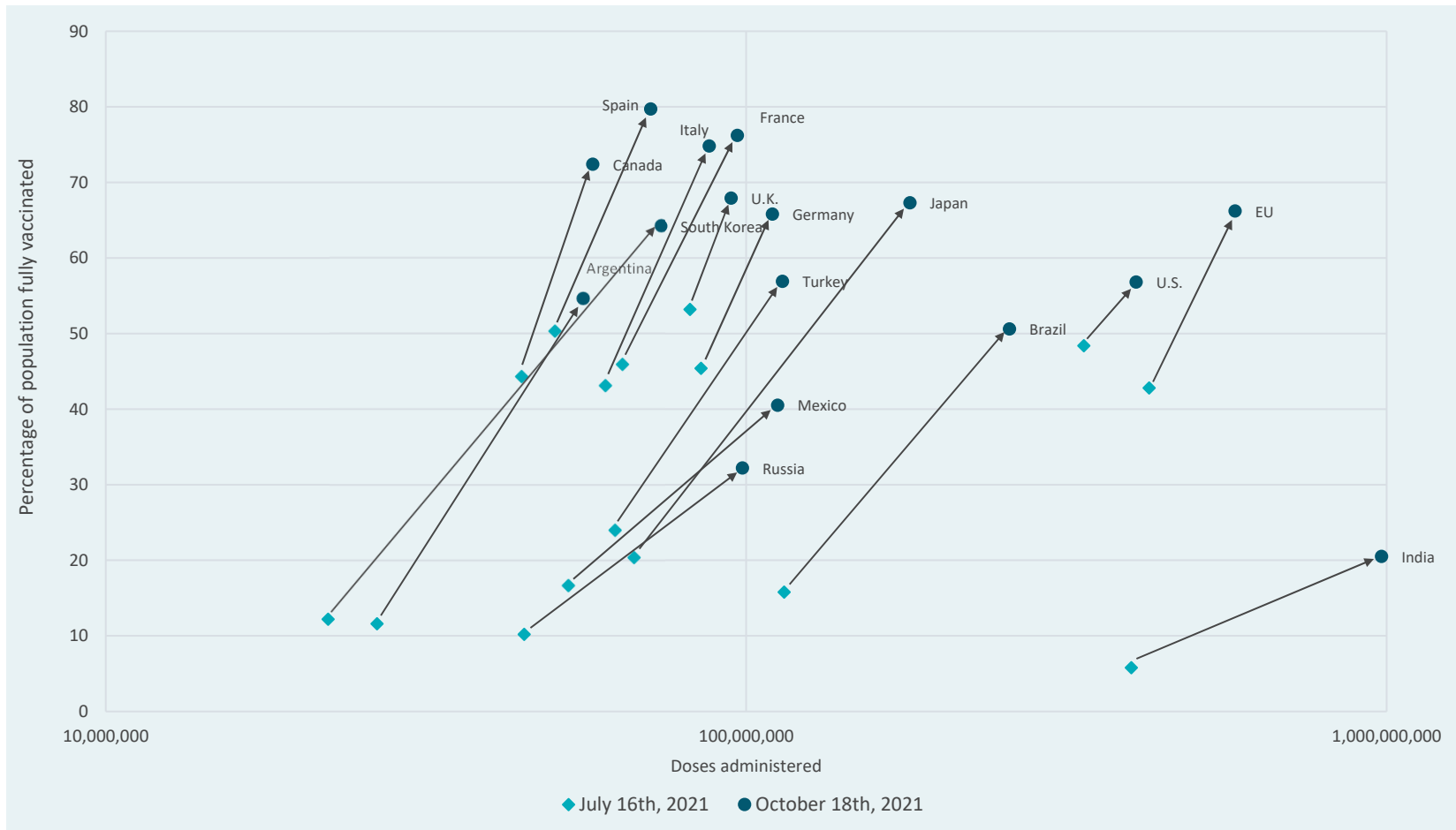
The delta variant of COVID-19 which surged through India in the second quarter took hold in the U.S., and by the end of the quarter, accounted for almost all new cases

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

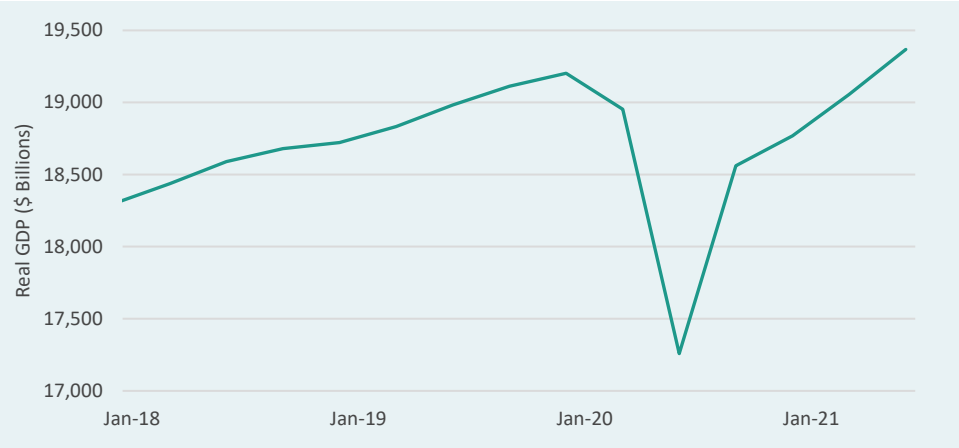
Real GDP grew at a 12.2% rate year-over-year in Q2 (+6.7% quarterly annualized rate) as the U.S. fully recovered from the pandemic-induced recession of 2020. However, it appears that recent strong economic activity may be slowing down. The Atlanta Fed GDPNow estimate, as of October 15<sup>th</sup>, suggests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

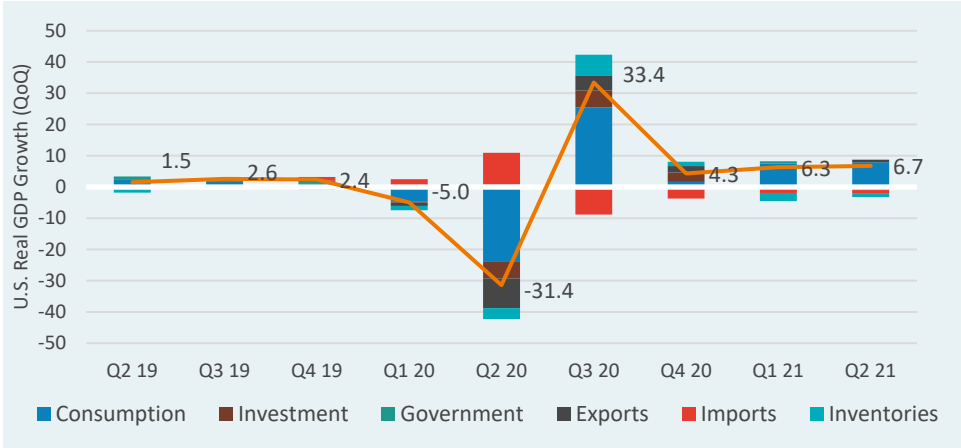
During Q2 2021 the U.S. economy fully recovered from the COVID-19 recession

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

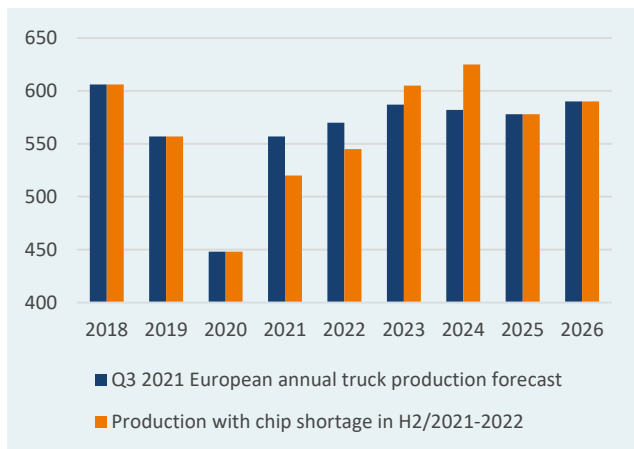
# Supply chain disruptions

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

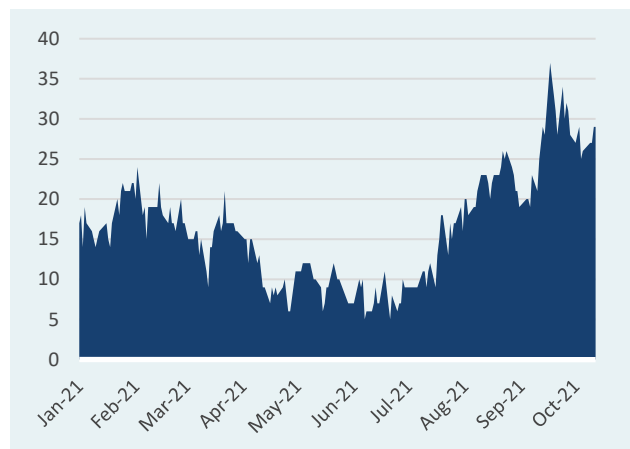
for several weeks in some cases. Part of the problem has been the massive size of these ships, which require many workers to unload, a lot of trucks to ship their cargo, and many warehouses to store that cargo. If there are not enough truckers to move the new cargo coming in, or there is not enough warehouse 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)**



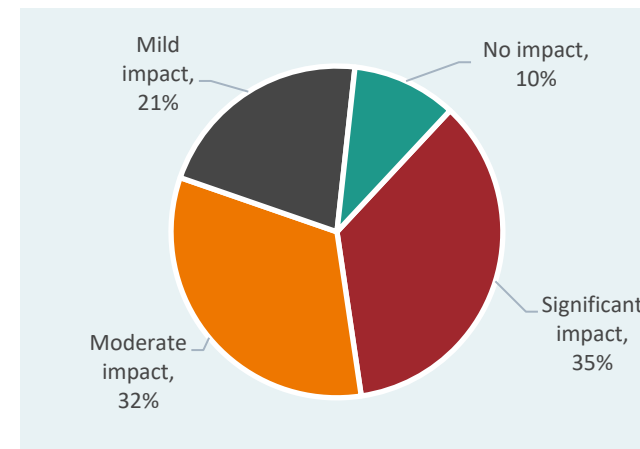
Source: IHS Markit, as of 9/28/21

**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.

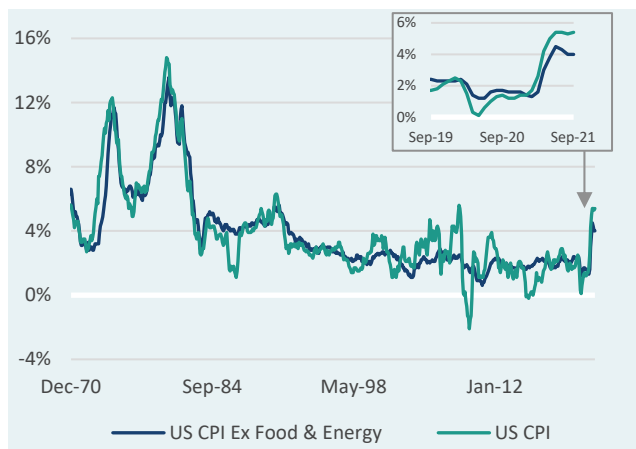
Energy and used automobile prices have had outsized impacts on inflation over the past year, increasing 24.8% and 24.4%, respectively. These two components have driven most of the rise in inflation experienced since 2019. If energy and used auto prices moderate, this will push inflation back down towards “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.

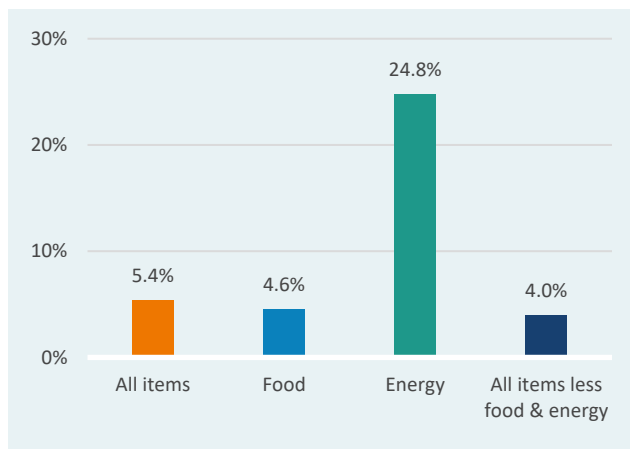
Recent moves suggest a moderation of prices, though we are watching closely for potential structural inflation

U.S. CPI (YOY)



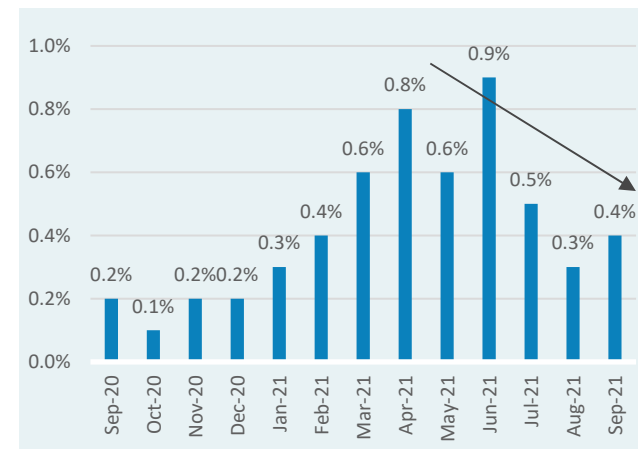
Source: BLS, as of 9/30/21

U.S. CPI (YOY)



Source: BLS, as of 9/30/21

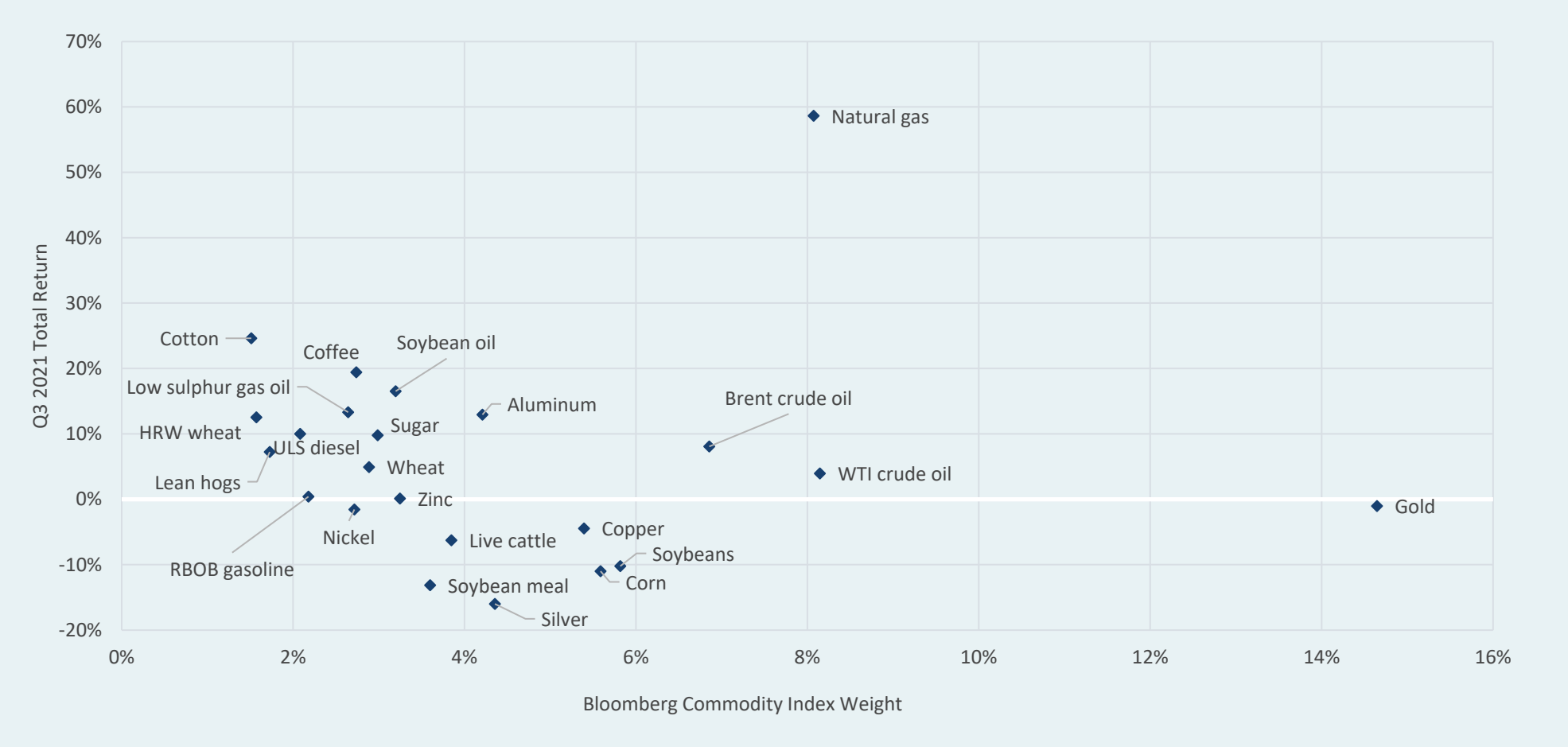
MONTHLY PRICE MOVEMENT



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

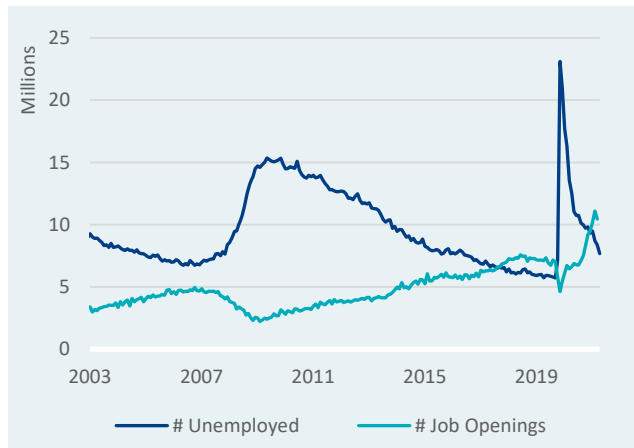
demonstrated below and on the next slide, the proportion of retired Americans per age group has increased markedly since 2019. It is difficult to know the main drivers behind the trend towards early retirement, but greater wealth (strong returns from markets and real estate), the need to take care of 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

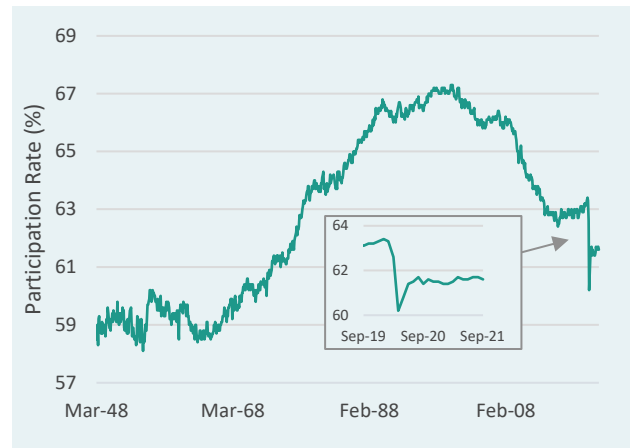
Much of this loss appears to be due to early retirements

## UNEMPLOYMENT VS. JOB OPENINGS



Source: FRED, as of 9/30/21

## LABOR PARTICIPATION RATE



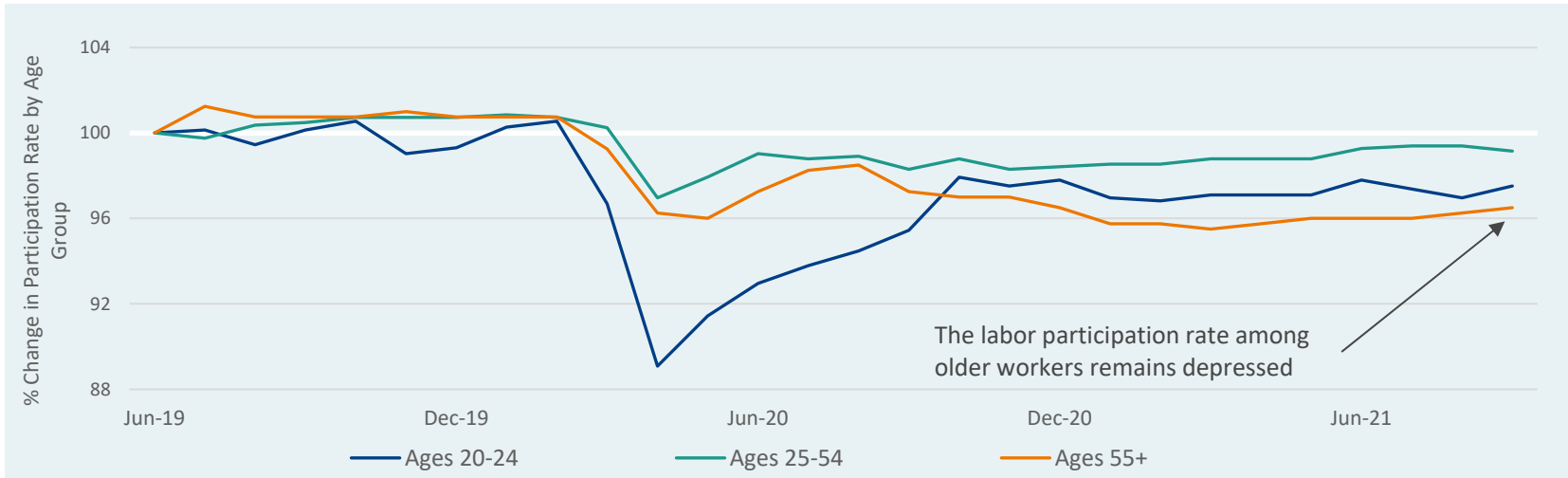
Source: FRED, as of 9/30/21

## % OF AMERICANS RETIRED

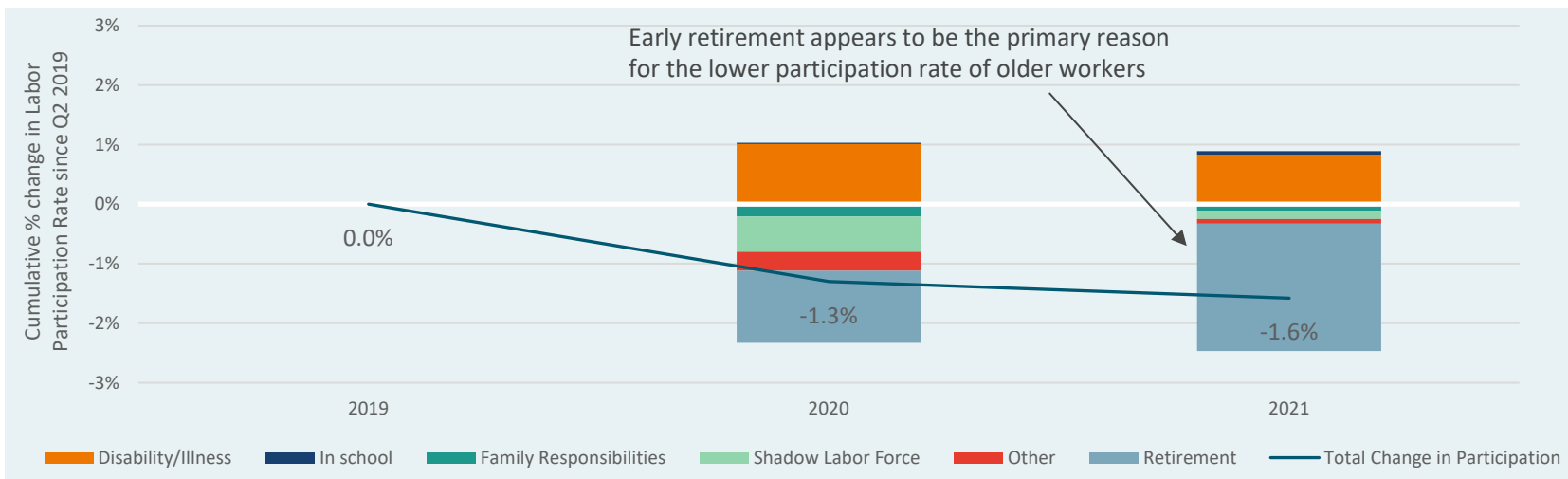
Age cohort	Women		Men	
	2019	2021	2019	2021
55+	52%	54%	44%	45%
55-59	11%	11%	7%	7%
60-64	28%	29%	21%	21%
65-69	59%	62%	52%	53%
70-74	78%	80%	71%	73%
75+	87%	88%	83%	85%

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

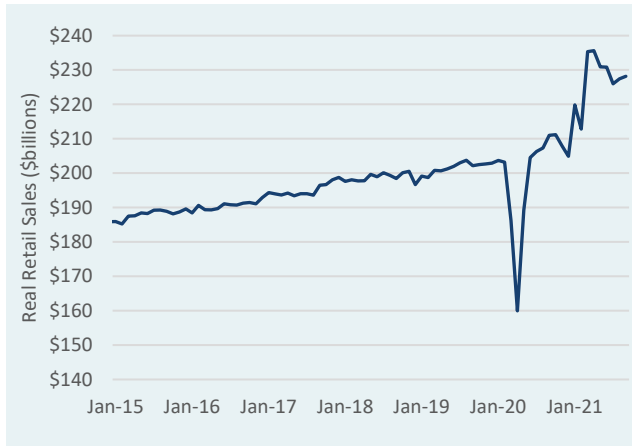
U.S. retail sales remain strong but have now slowed for two consecutive quarters, lower by -1.1% in Q3. The *reopening* spending surge appears to be slowing down, as retail sales, auto sales, and home sales have all declined in recent months. Fears around the COVID-19 Delta variant are also likely weighing 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.

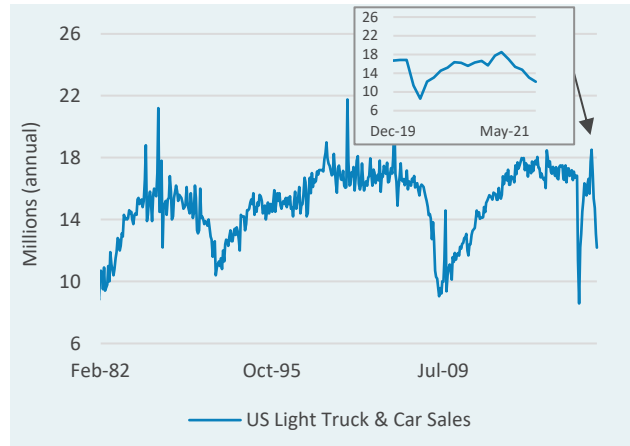
According to anonymized cellular phone data collected by Google for COVID-19 public health research, most economic activity seems to be back to normal for the most part. Public transportation and workplace travel remains the exception, though a recent uptick in workplace mobility might imply that some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

**REAL RETAIL SALES**



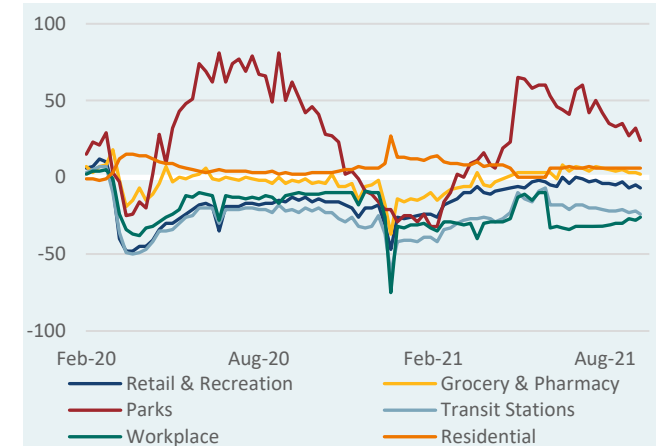
Source: FRED, as of 9/30/21

**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

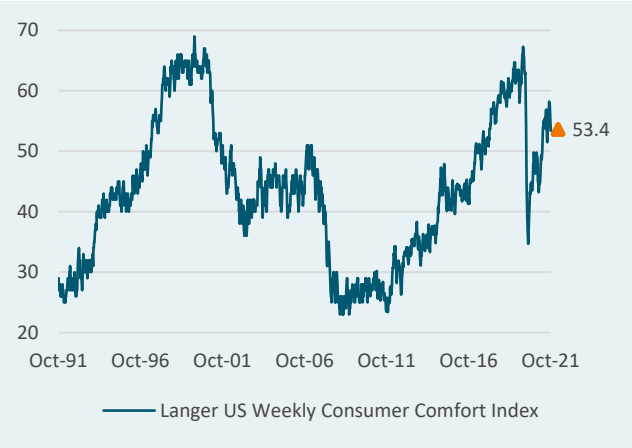
Consumer sentiment deteriorated during the third quarter, on reports of pessimism around COVID-19, inflation, and the economy. Small business optimism also fell as businesses face difficulty in hiring and are concerned about tax increases and more burdensome government regulations.

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.

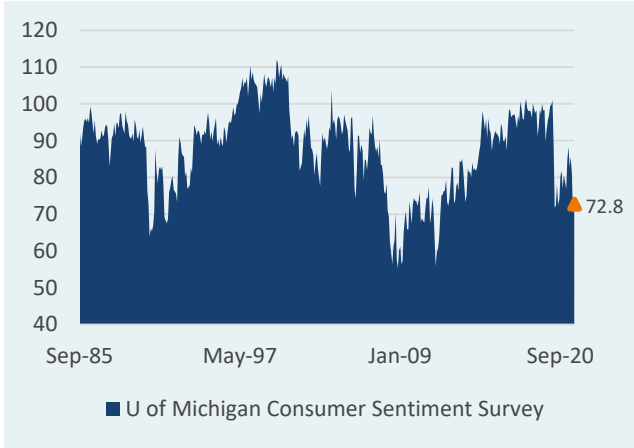
The NFIB Small Business Optimism index fell from 102.5 to 99.1 during the quarter. As reported, "Small business owners are doing their best to meet the needs of customers, but are unable to hire workers or receive the needed supplies and inventories," said NFIB Chief Economist Bill Dunkelberg. "The outlook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

**CONSUMER COMFORT**



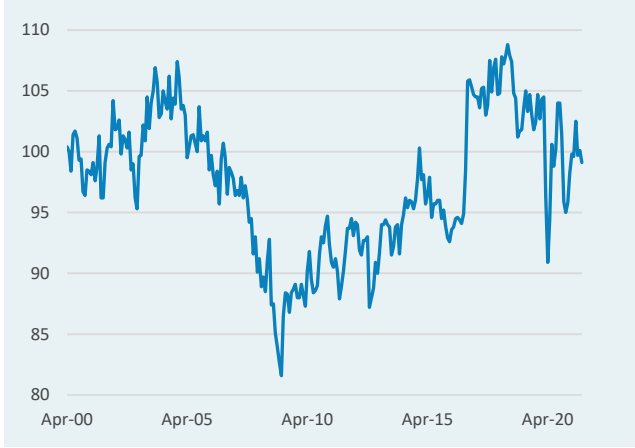
Source: Bloomberg, as of 9/30/21

**CONSUMER SENTIMENT**



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

**SMALL BUSINESS OPTIMISM**



Source: NFIB, as of 9/30/21



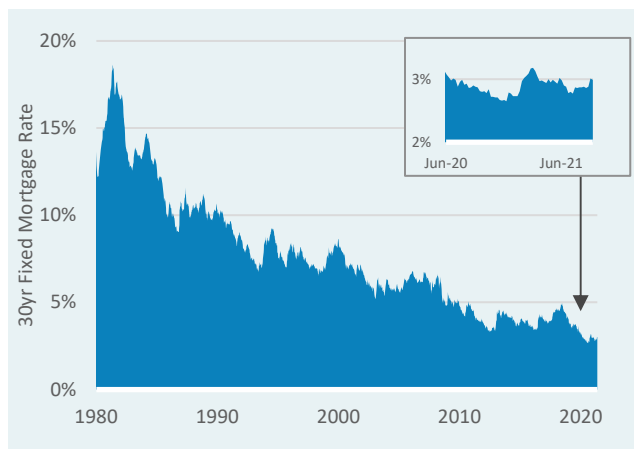
# Housing

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.

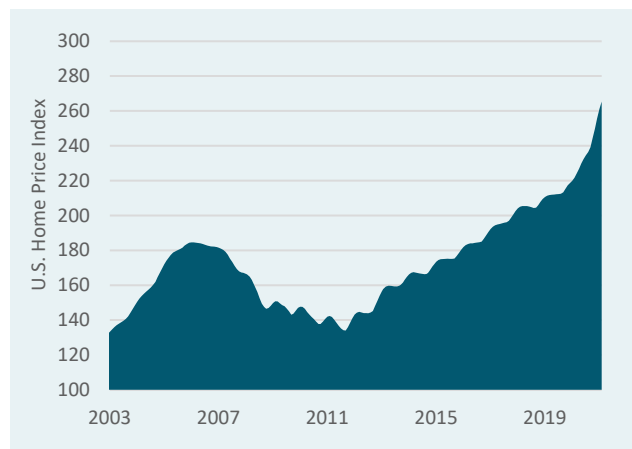
The cost of renting has seen a considerable rise throughout the pandemic, with rents up 9.2% year-over-year in September, according to Zillow. The rise in rent prices has differed quite a bit across the country, and it may be reasonable to assume that states with more outgoing net migration (ex: New 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)**



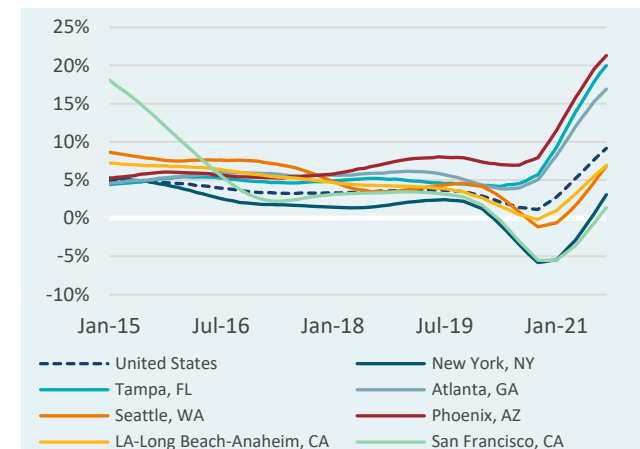
Source: U.S. Census Bureau, as of 9/30/21

**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 reimplementing 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.*

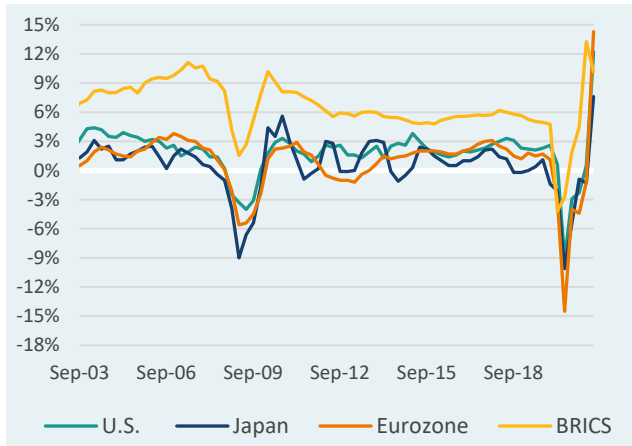
# International economics

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.

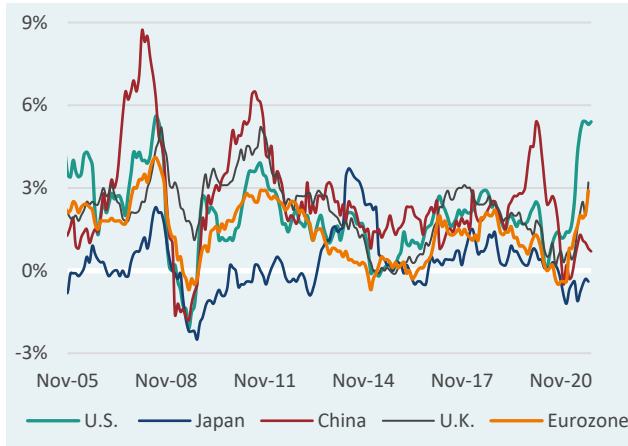
Unemployment around the world has improved as economies recover, government restrictions are loosened, and life moves back towards normalcy.

**REAL GDP GROWTH (YOY)**



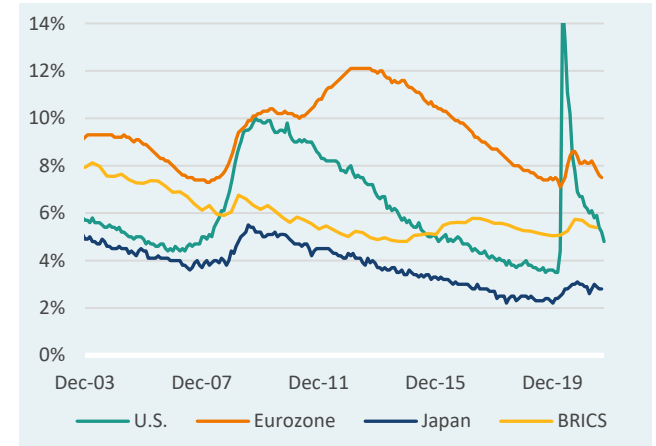
Source: Bloomberg, as of 6/30/21

**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.

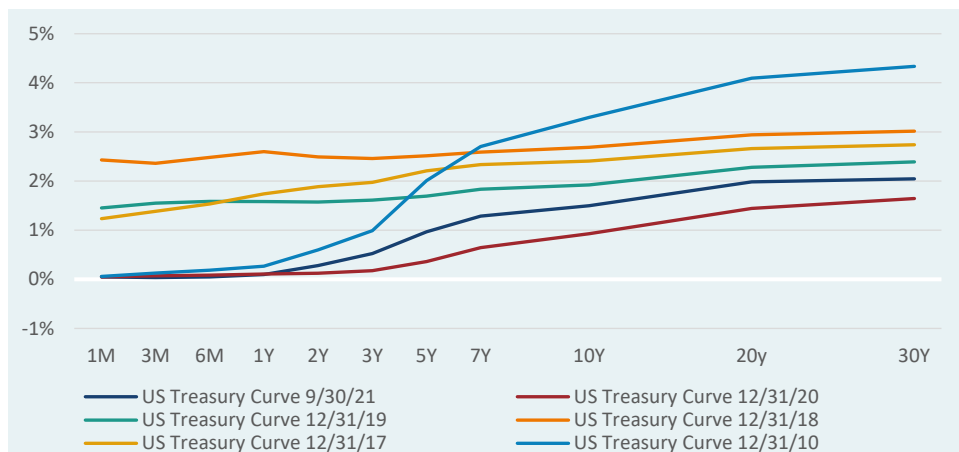
— The four-year discount margin, our preferred spread metric for bank loans, compressed slightly over the quarter from 4.32% to 4.28%.

	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%)

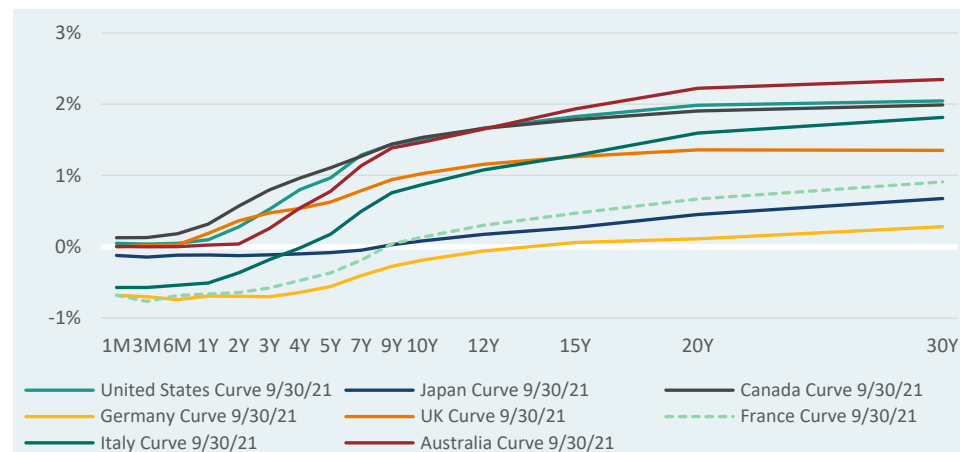
Source: Bloomberg, as of 9/30/21

# Yield environment

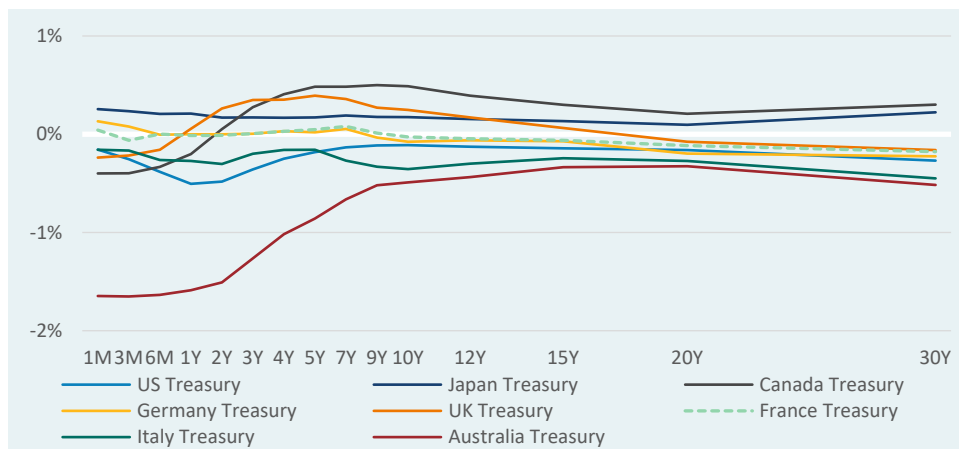
## U.S. YIELD CURVE



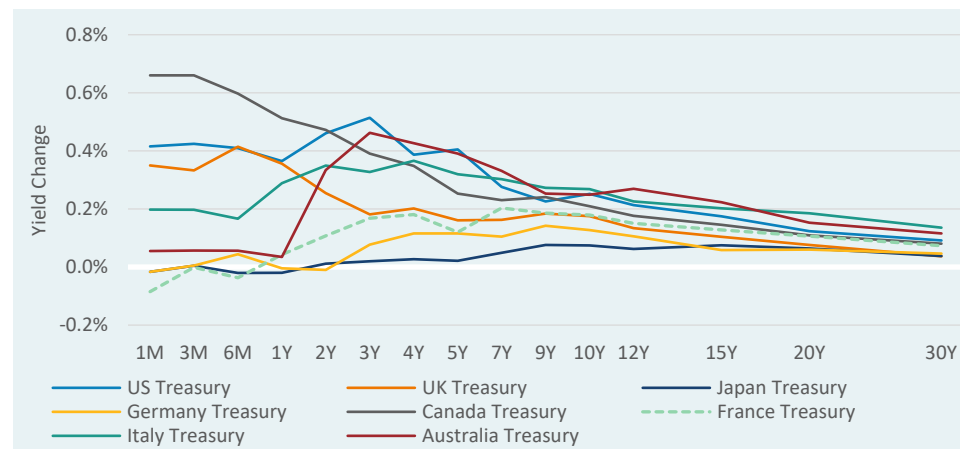
## GLOBAL GOVERNMENT YIELD CURVES



## YIELD CURVE CHANGES OVER LAST FIVE YEARS



## IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/21



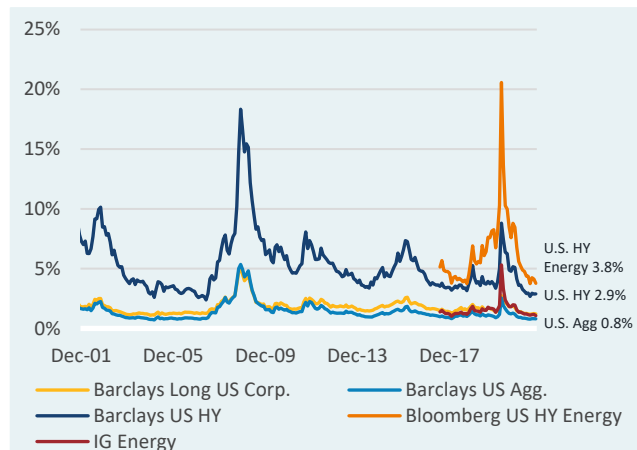
# Credit environment

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

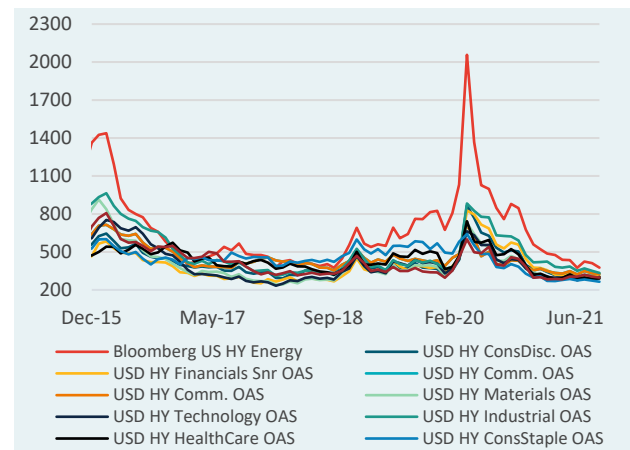
time, the sector has seen improvement in credit fundamentals as businesses repay some of last year's precautionary borrowing, reducing total debt levels. Strong demand and declining leverage, in conjunction with a potentially higher rate environment, are all supportive factors for credit (for example: 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

Market	Credit Spread (OAS)	
	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

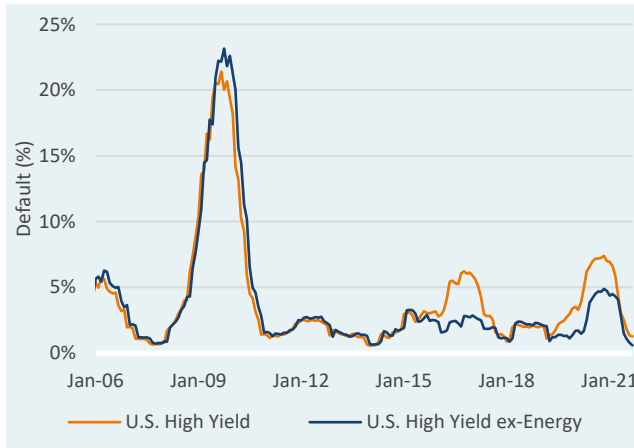
Default activity continued at a moderate pace in the third quarter with three defaults totaling \$1.3 billion across high yield bonds and bank loans. Over the first three quarters of the year, a total of nine companies defaulted on \$6.1 billion. As default activity continues to be light, the par-weighted 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).

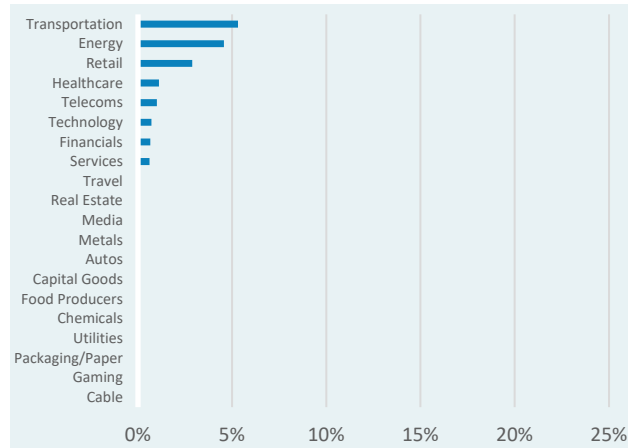
Investment grade issuance for the quarter totaled \$321 billion, below first quarter (\$423 billion) and second quarter (\$350 billion) issuance but in-line with the 4-year average of \$323 billion. Of note, year-to-date Financial sector issuance has seen an uptick, accounting for 42% of issuance versus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

HY DEFAULT RATE (ROLLING 1-YEAR)



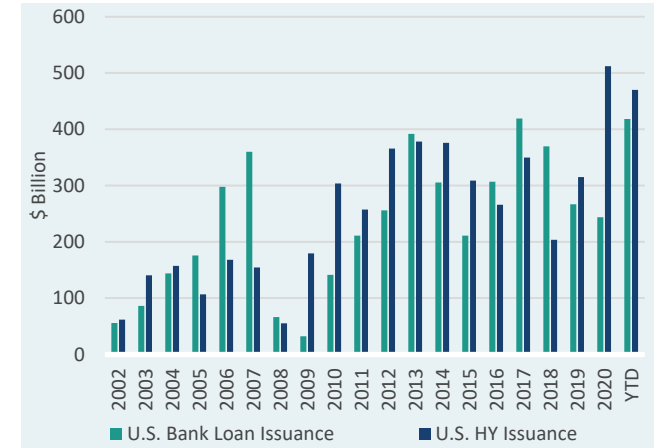
Source: BofA Merrill Lynch, as of 9/30/21

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 6<sup>th</sup>.

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**



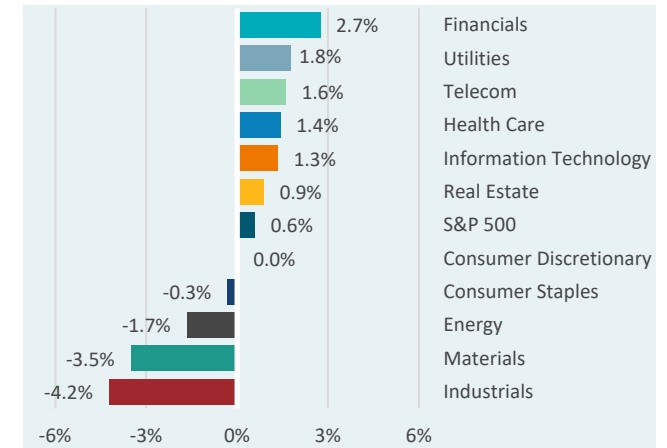
Source: Standard & Poor's, as of 9/30/21

**S&P 500 NET PROFIT MARGINS**



Source: FactSet, as of 10/18/21

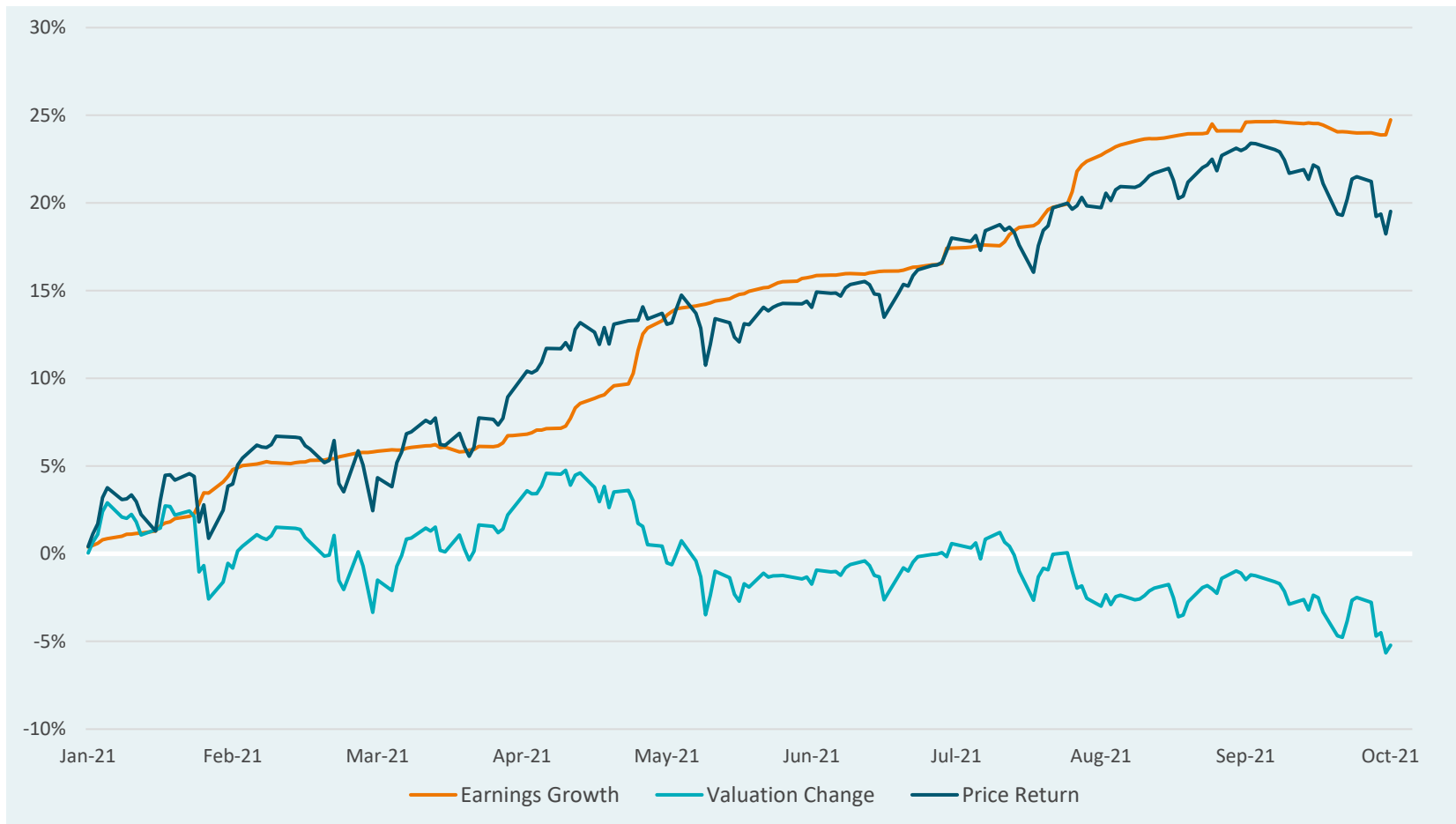
**Q3 SECTOR PERFORMANCE**



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

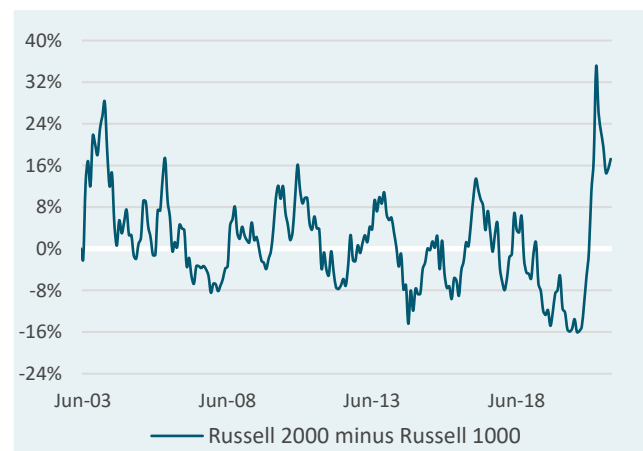
Large capitalization stocks outperformed small cap during the quarter by a wide margin (Russell 1000 +0.2%, Russell 2000 -4.4%) and growth stocks beat value (Russell 1000 Growth +1.2%, Russell 1000 Value -0.8%).

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.

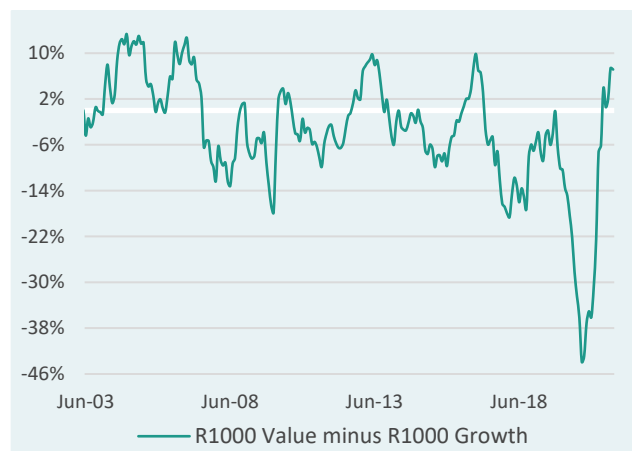
Large cap and growth stocks outperformed during Q3

SMALL CAP VS LARGE CAP (YOY)



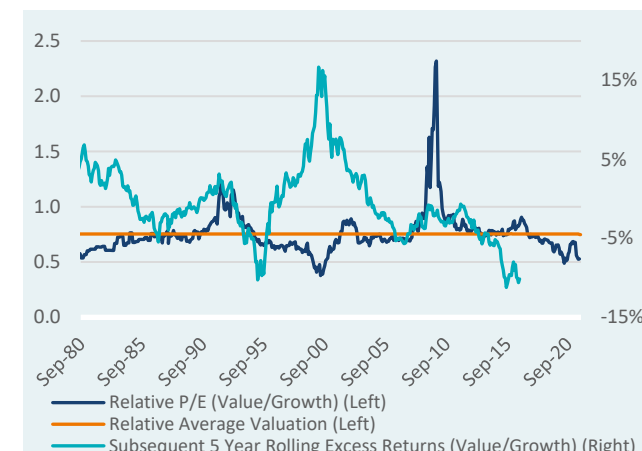
Source: FTSE, as of 9/30/21

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.

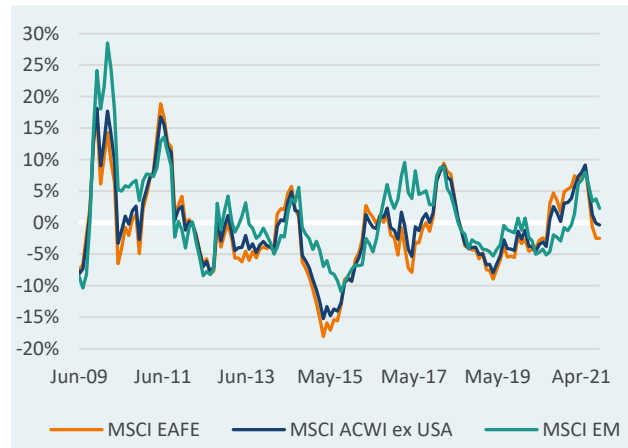
The strong performance of Japanese equities helped to offset for international developed equity investors the negative returns delivered by European equities (MSCI Europe -1.6%), which faced headwinds from a significant weakening in the pound sterling (-2.4%) and euro (-2.3%) relative to the U.S. dollar. 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



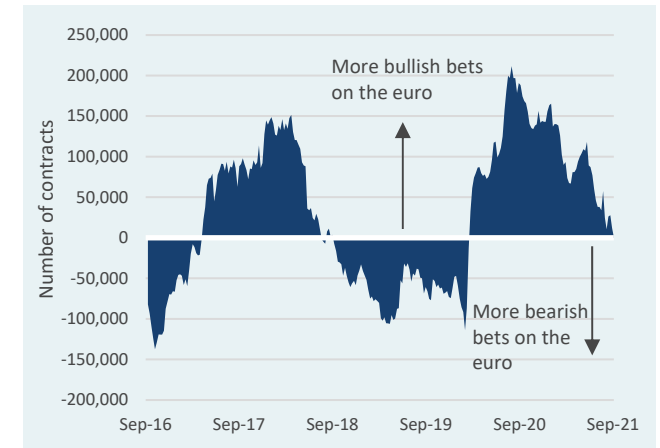
Source: MSCI, as of 9/30/21

## 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%)

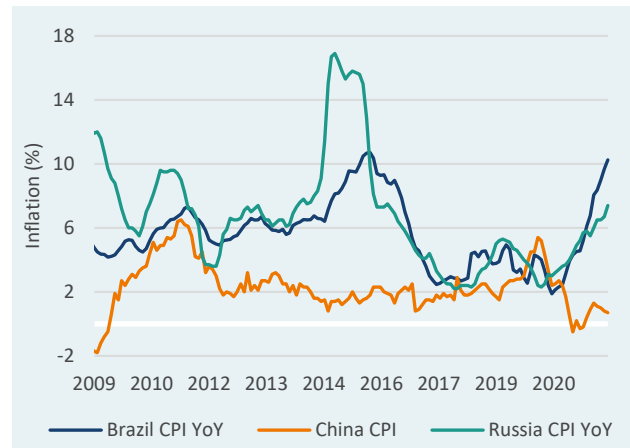
Inflation in Brazil has risen to 10.3%, and in Russia to 7.4%, which has generated responses from central banks. Brazil has hiked their central bank rate from 2.00% to 6.25% to battle rising prices, while Russia has hiked its rate from 4.25% to 6.75% year-to-date. While inflation rate in the U.S. is 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



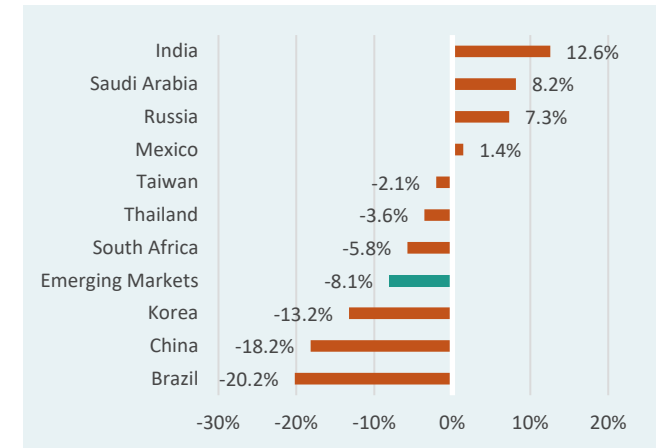
Source: MSCI, as of 9/30/21

## INFLATION (YOY)



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

## Q3 PERFORMANCE – TOP 10 EM CONSTITUENTS



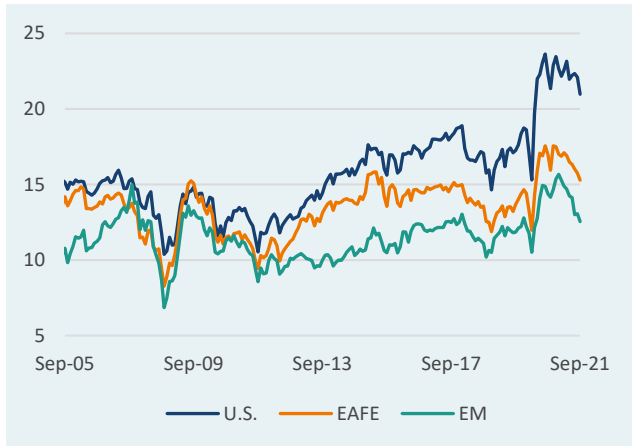
Source: Bloomberg, MSCI, as of 9/30/21, performance in USD terms

# 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.

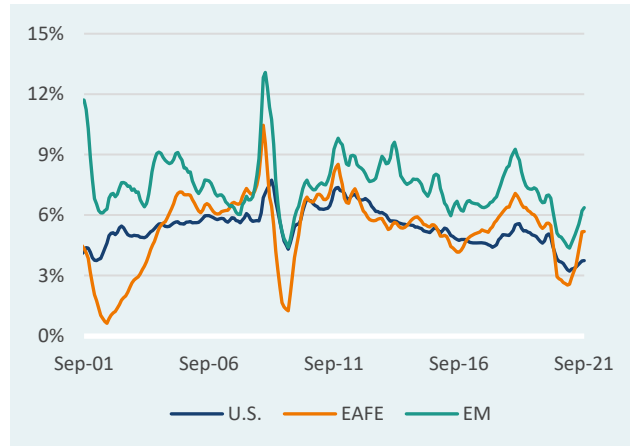
Global equity earnings yields improved considerably, as trailing 12-month earnings have rebounded from low levels. Price growth has moderated in the U.S. and has moved into negative territory across international developed and emerging market equities. The question moving ahead will be whether valuations (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



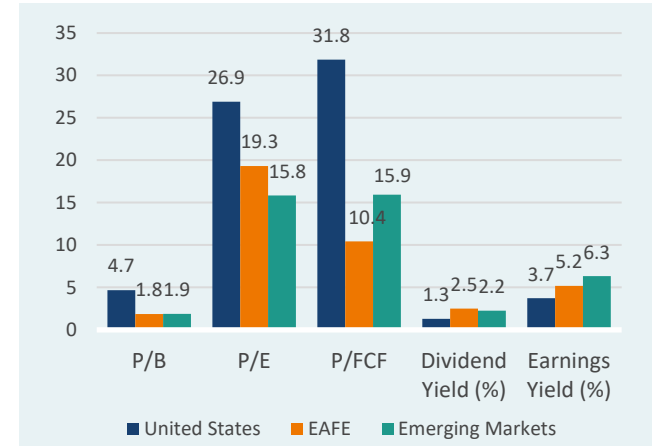
Source: MSCI, 12m forward P/E, as of 9/30/21

## CURRENT EARNINGS YIELD (3-MONTH AVERAGE)



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

## VALUATION METRICS (3-MONTH AVERAGE)



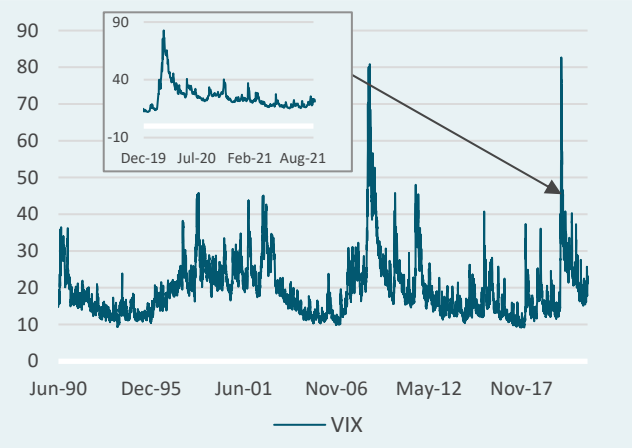
Source: Bloomberg, MSCI as of 9/30/21 - trailing P/E

# 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.

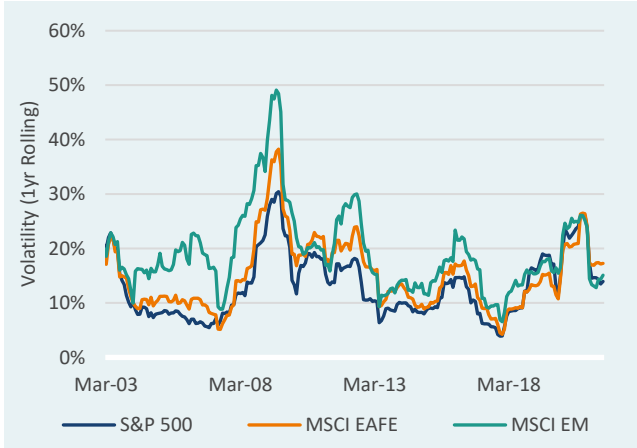
As we observed last quarter, it does seem that investors have put the 2020 pandemic-induced recession and its associated risks behind them. However, it is not clear that market risks have completely subsided, as the Delta-variant continues to spread, high inflation could indeed persist, and most governments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



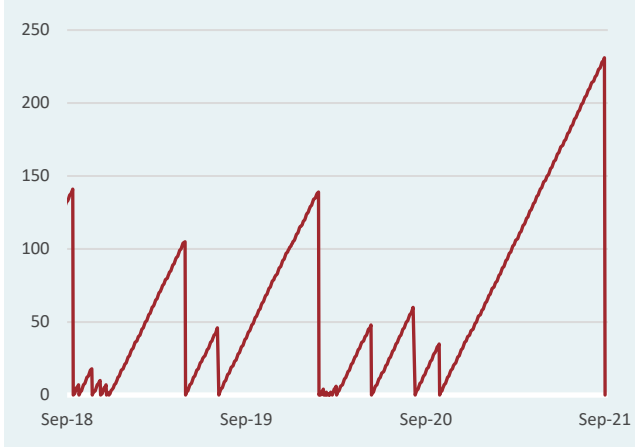
Source: Cboe, as of 9/30/21

**REALIZED VOLATILITY**



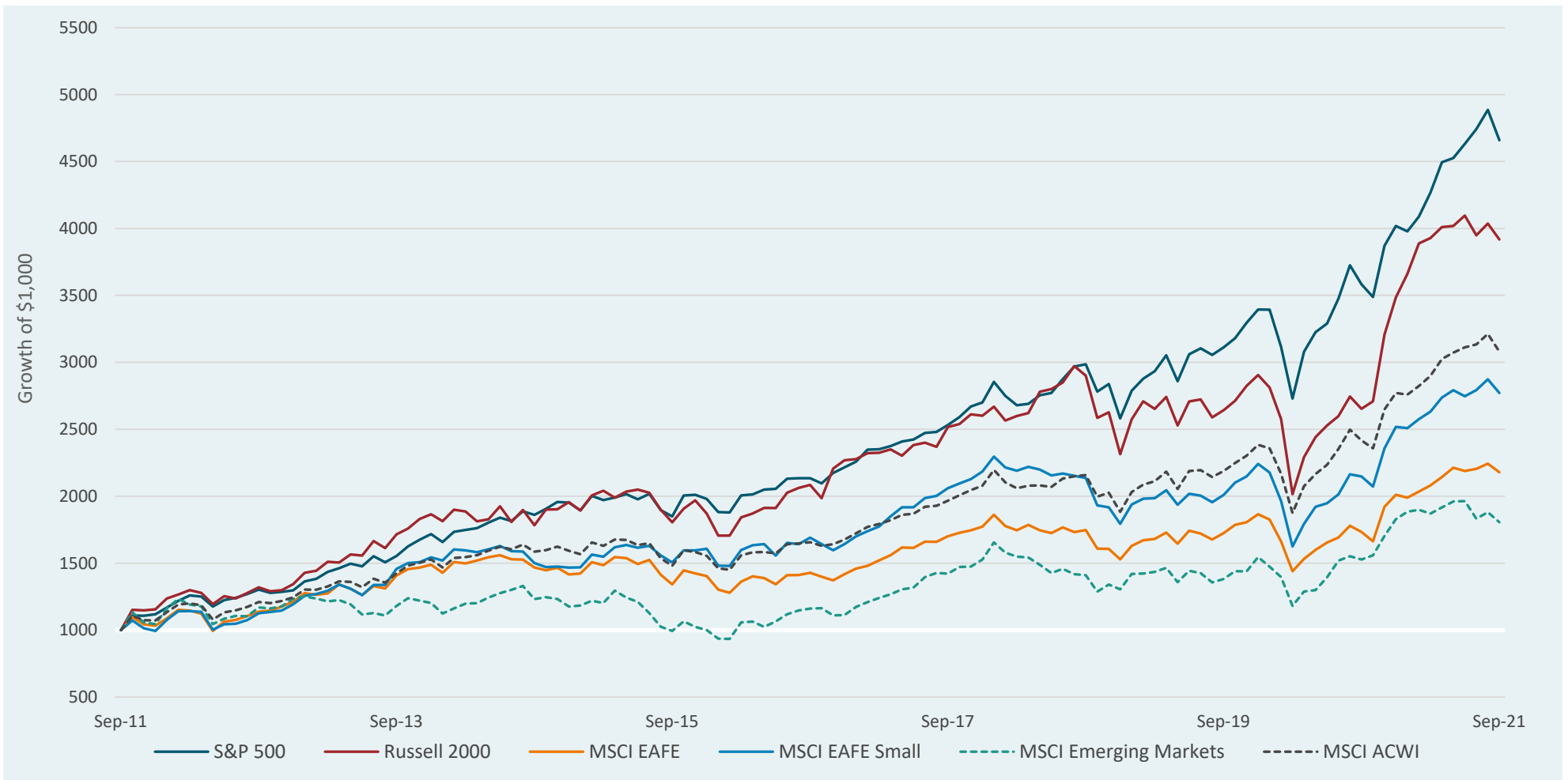
Source: Standard & Poor's, MSCI, as of 9/30/21

**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.

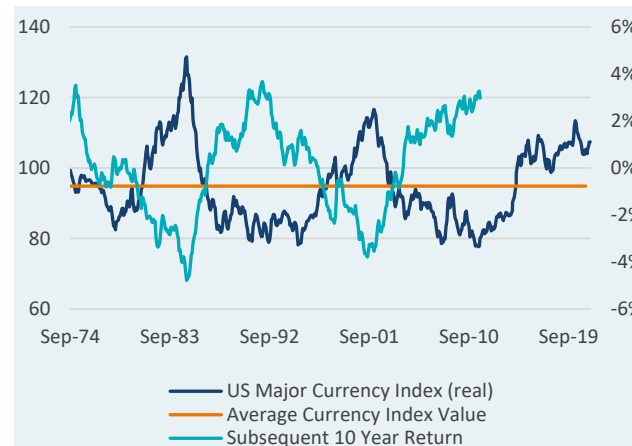
The MSCI Currency Factor Mix Index, Verus' preferred currency beta benchmark, outperformed the currency portfolio of the MSCI ACWI ex-US Index over the twelve months ending September 30<sup>th</sup>, while exhibiting 1.1% less volatility.

**BLOOMBERG DOLLAR SPOT INDEX**



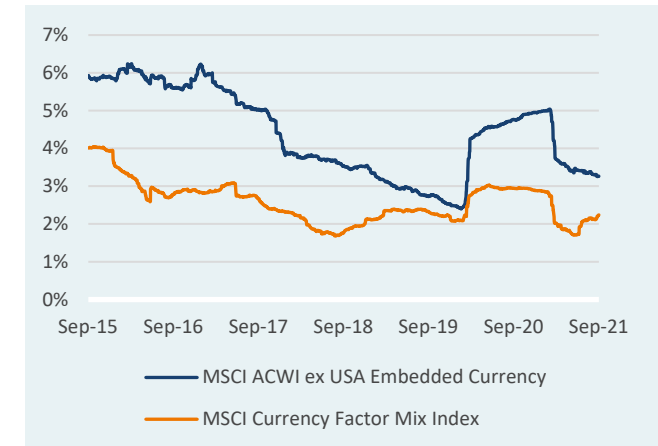
Source: Bloomberg, as of 9/30/21

**U.S. DOLLAR MAJOR CURRENCY INDEX**



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

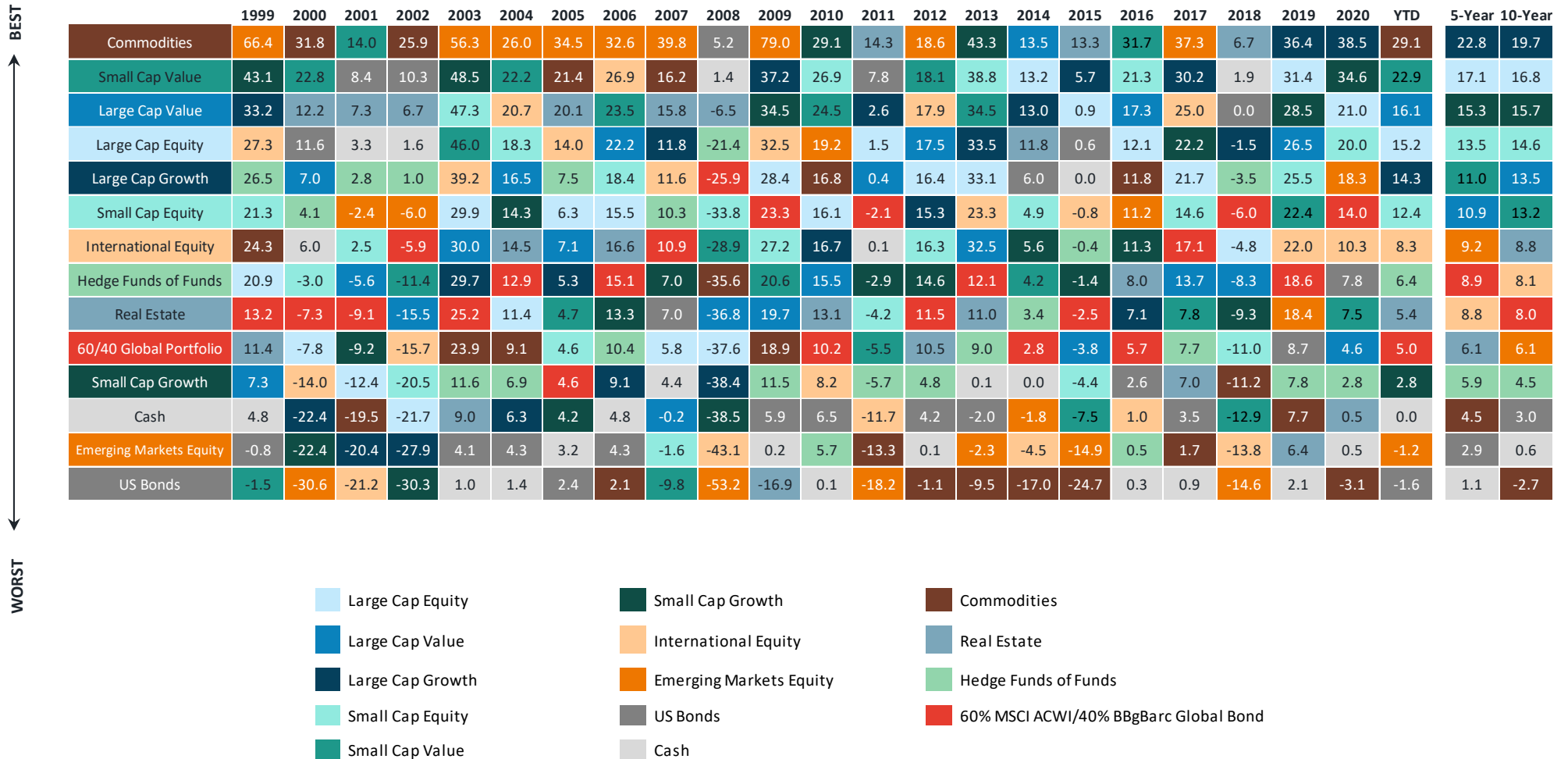
**TRAILING ONE-YEAR ANNUALIZED VOLATILITY**



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

# Appendix

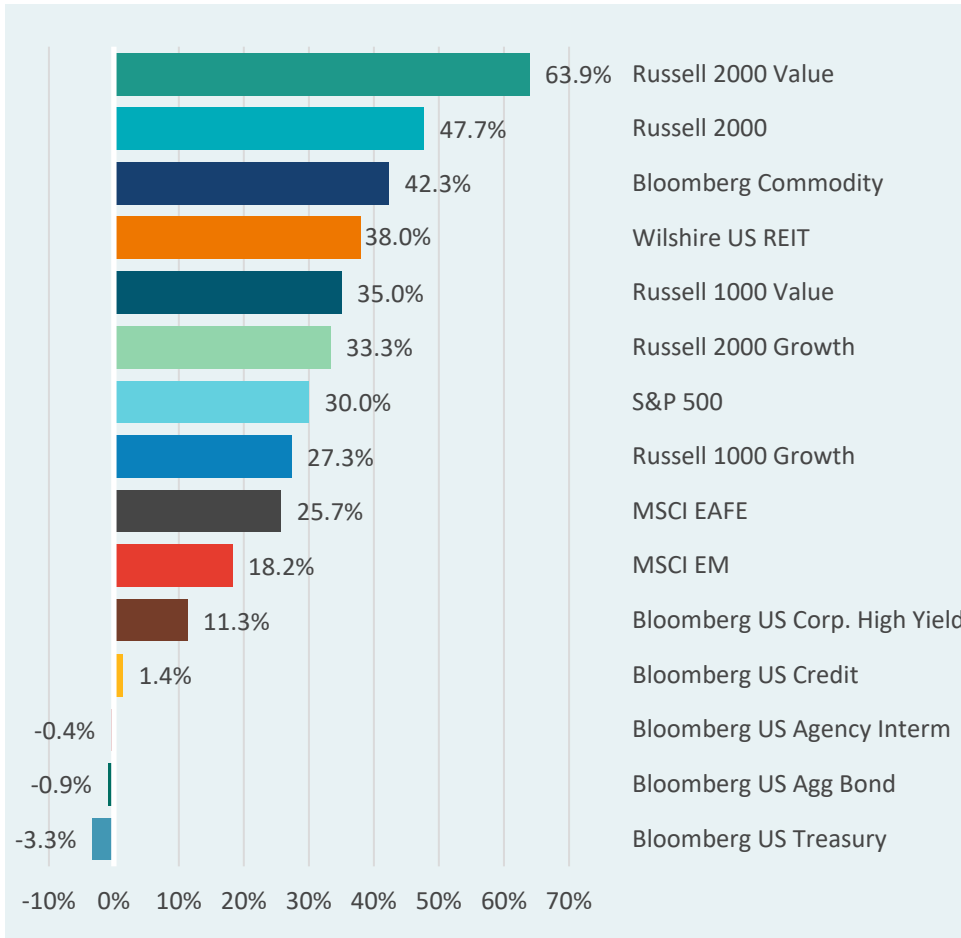
# Periodic table of returns



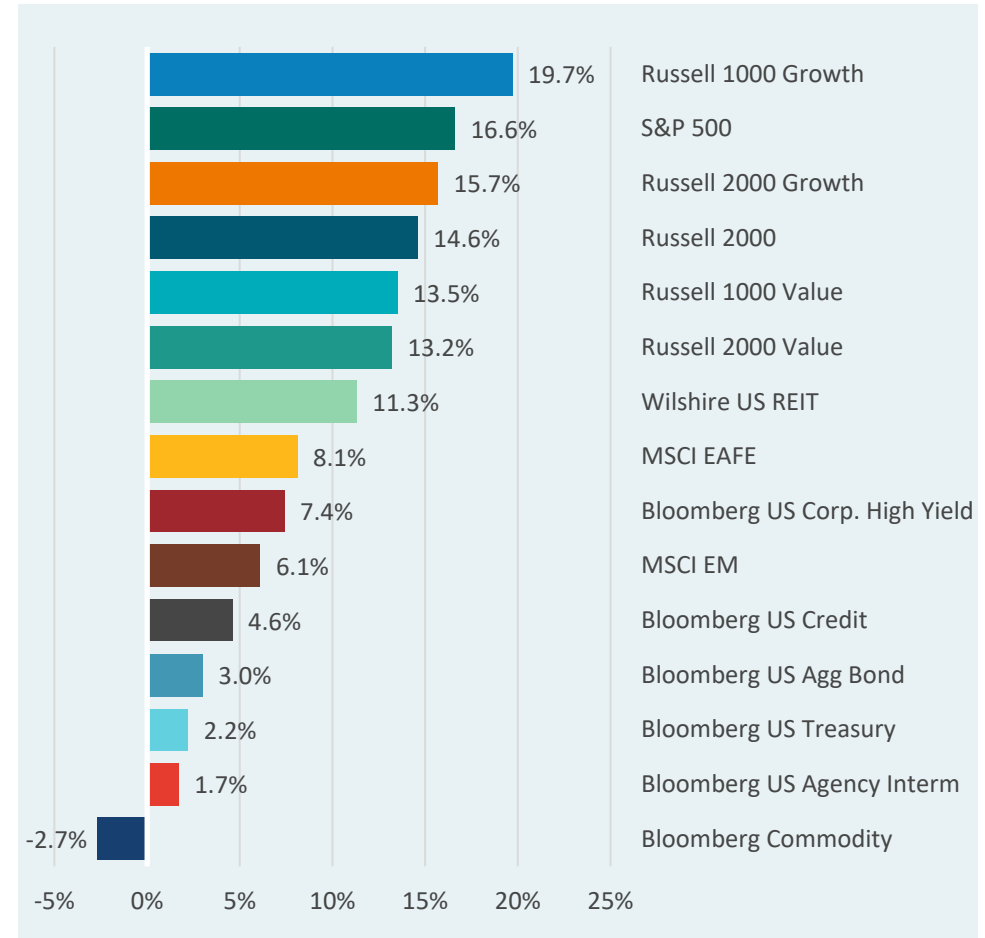
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 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



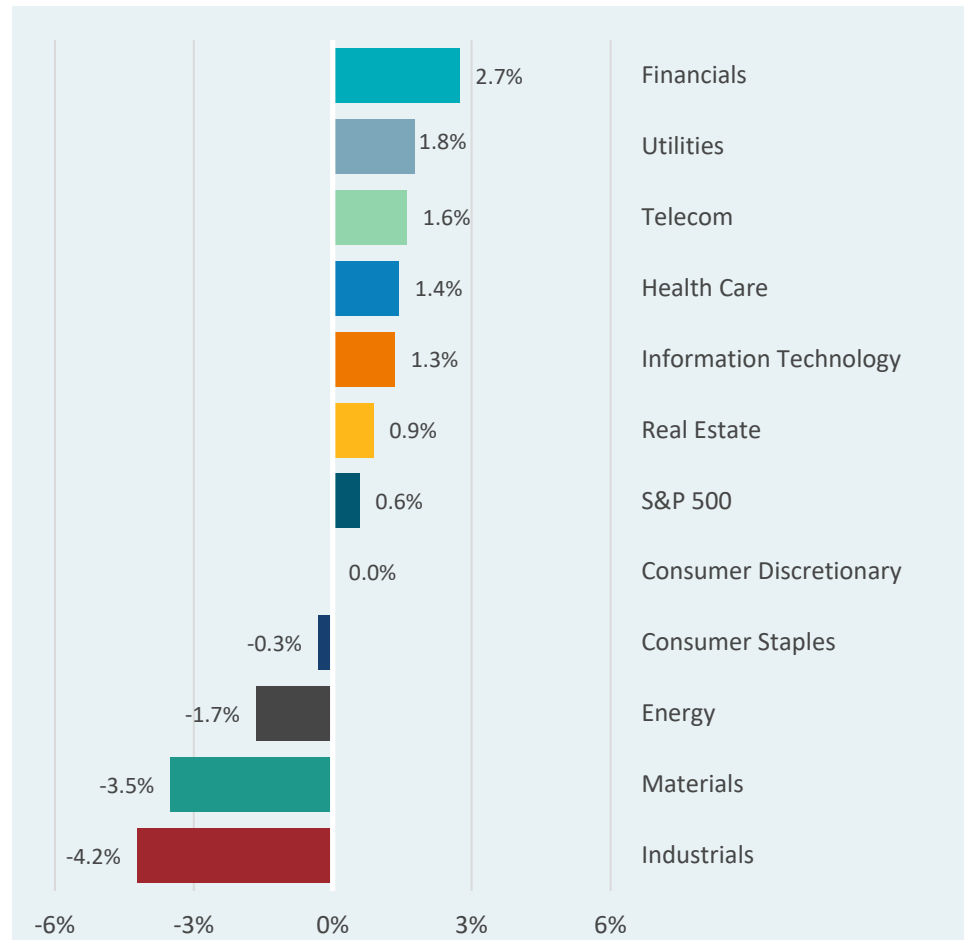
\*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 9/30/21

Source: Morningstar, as of 9/30/21

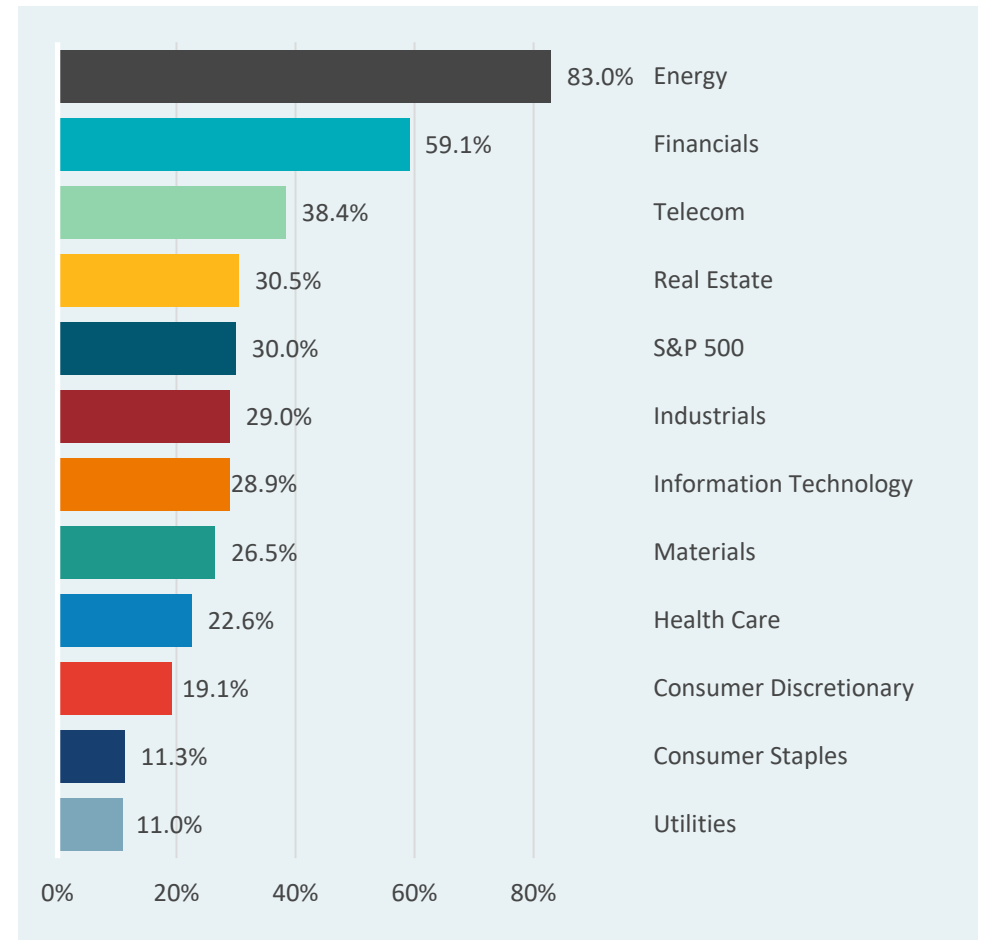
# S&P 500 sector returns

Q3 2021



Source: Morningstar, as of 9/30/21

ONE YEAR ENDING SEPTEMBER

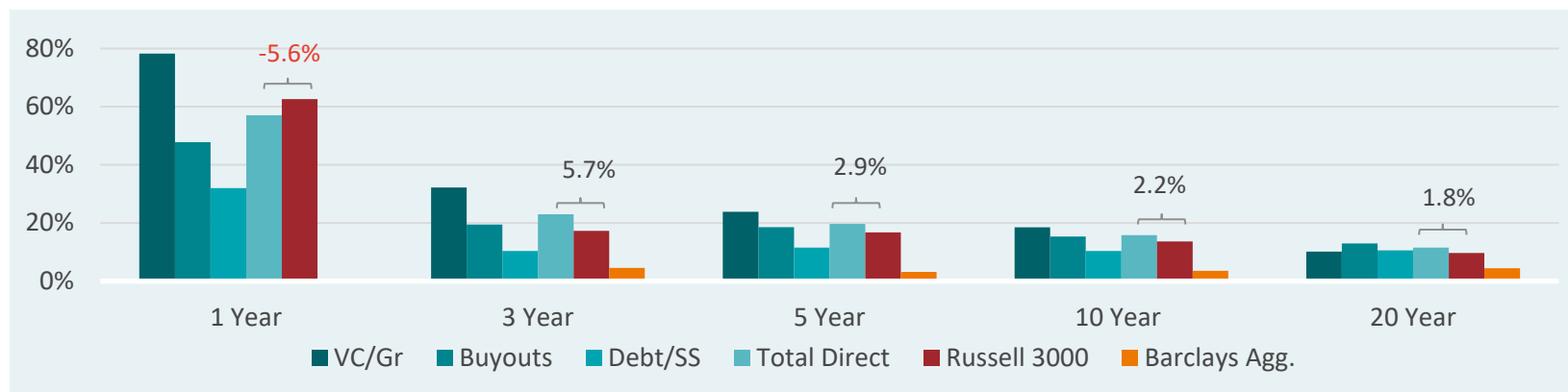


Source: Morningstar, as of 9/30/21



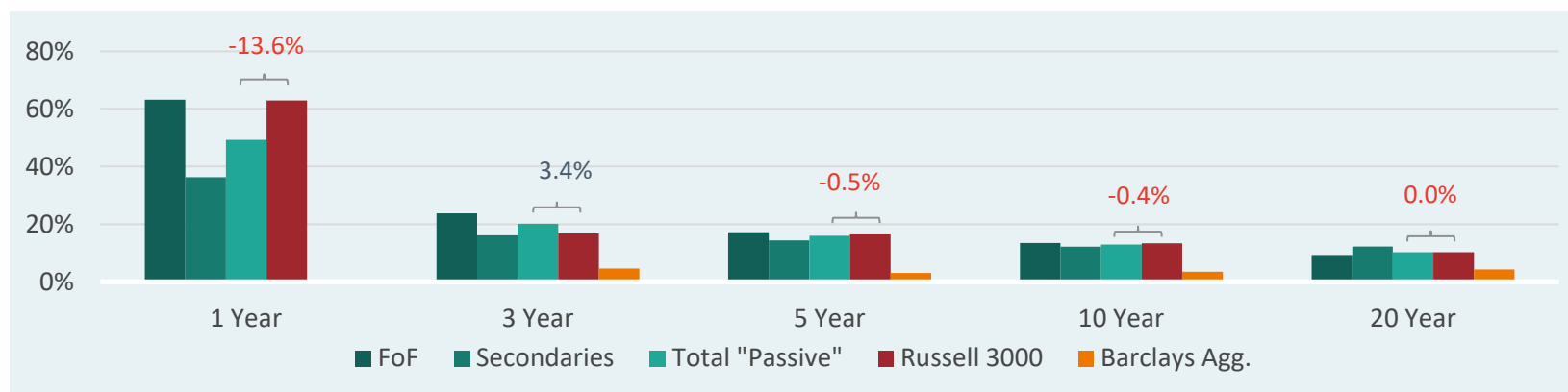
# Private equity vs. traditional assets performance

## DIRECT PRIVATE EQUITY FUND INVESTMENTS



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

## "PASSIVE" STRATEGIES

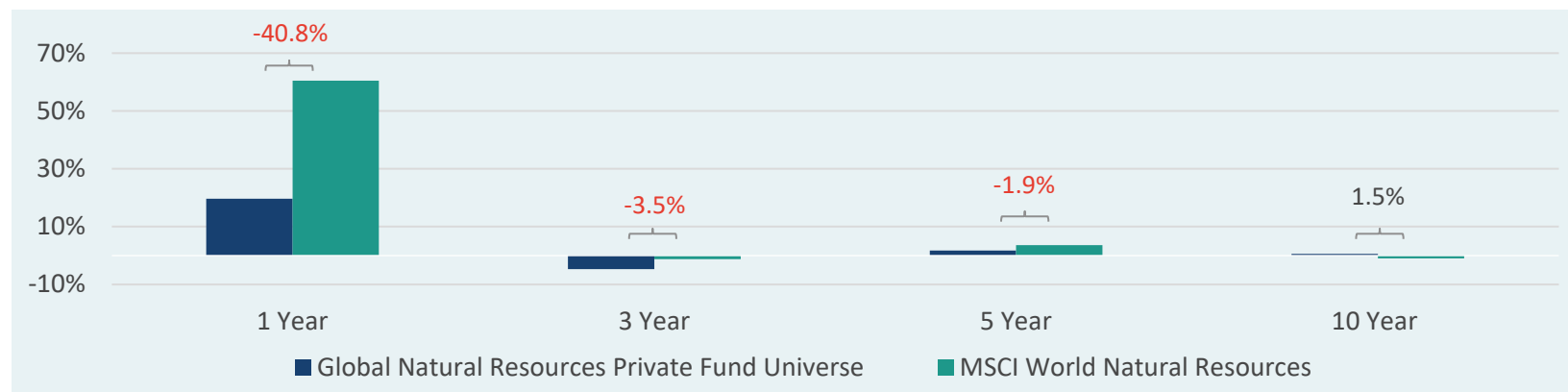


"Passive" strategies underperformed comparable public equities across all time periods, aside from the 3-year basis.

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.

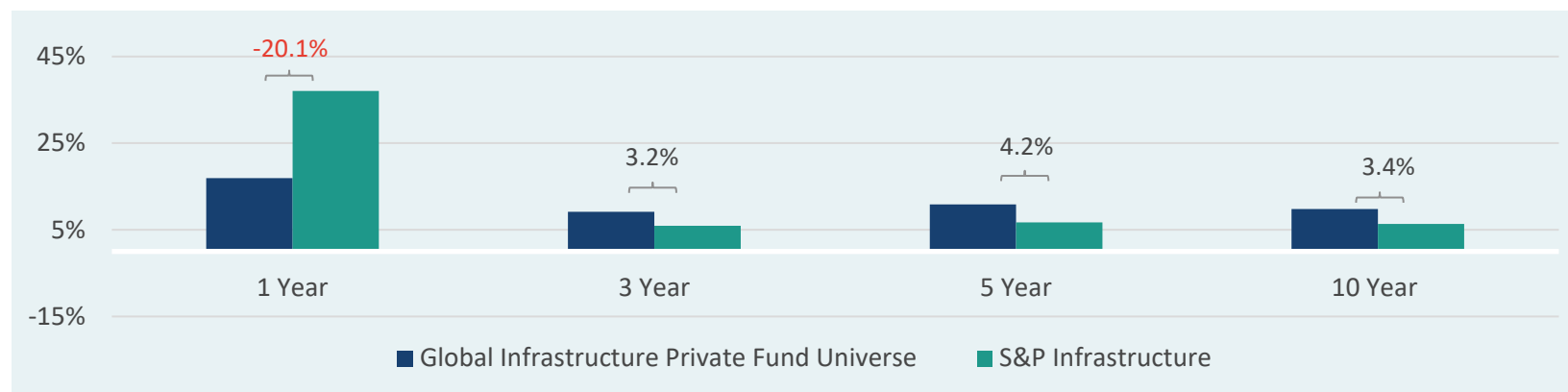
# Private vs. liquid real assets performance

## GLOBAL NATURAL RESOURCES FUNDS



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

## GLOBAL INFRASTRUCTURE FUNDS

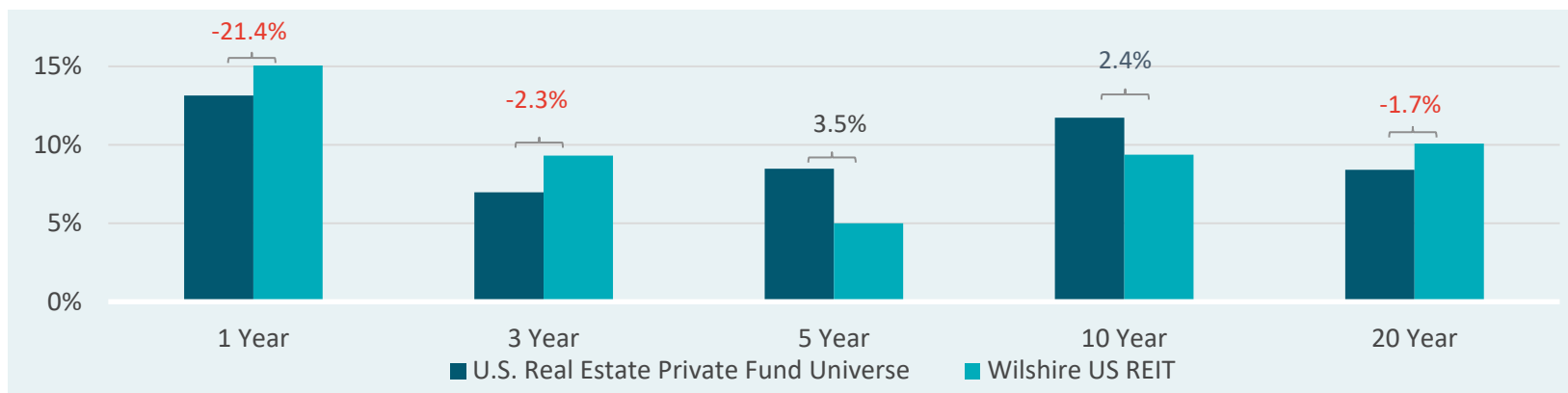


Infra. funds outperformed the S&P Infra. across all periods, aside from the 1-year.

Sources: Refinitiv CJA 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.

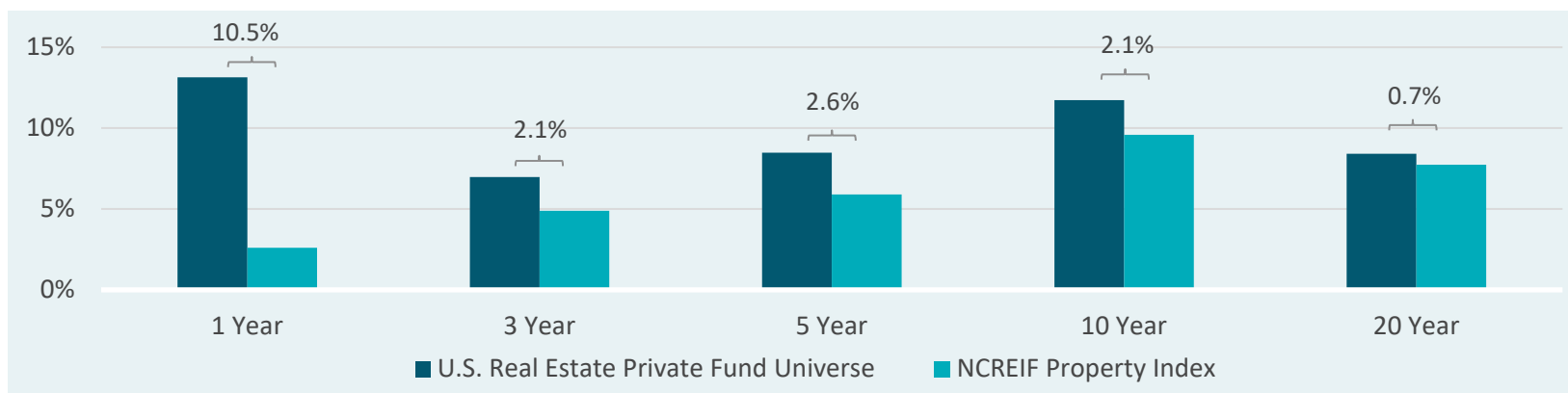
# Private vs. liquid and core real estate performance

## 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 CJA 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
<b>Core Index</b>							
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
<b>Style Index</b>							
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

<b>Broad Index</b>							
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
<b>Style Index</b>							
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
<b>Regional Index</b>							
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
<b>Broad Index</b>							
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
<b>Duration</b>							
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
<b>Issuer</b>							
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

<b>Index</b>							
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
<b>Regional Index</b>							
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
<b>Hedge Funds</b>							
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
<b>Currency (Spot)</b>							
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.lanqerresearch.com](http://www.lanqerresearch.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](http://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 indices 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  $(\text{Good-Poor} + 100)/2$  to the present and future sales series and  $(\text{High/Very High-Low/Very Low} + 100)/2$  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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**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**PERIOD ENDING: SEPTEMBER 30, 2021**

Investment Performance Review for

**Alameda County Employees' Retirement Association**



# 3<sup>rd</sup> 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.
- 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.
- 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.

## 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%).
- 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.

## 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.
- 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.

## 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.
- 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%).

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

# 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% <i>6/30/21</i>	(9.1%) <i>6/30/20</i>
Inflation (CPI YoY, Core)	4.0% <i>9/30/21</i>	1.7% <i>9/30/20</i>
Expected Inflation (5yr-5yr forward)	2.2% <i>9/30/21</i>	1.7% <i>9/30/20</i>
Fed Funds Target Range	0% – 0.25% <i>9/30/21</i>	0% – 0.25% <i>9/30/20</i>
10-Year Rate	1.49% <i>9/30/21</i>	0.68% <i>9/30/20</i>
U-3 Unemployment	4.8% <i>9/30/21</i>	7.8% <i>9/30/20</i>
U-6 Unemployment	8.5% <i>9/30/21</i>	12.8% <i>9/30/20</i>

# International economics summary

- The emergence of the delta variant of COVID-19 in Europe and the United States over the summer led to the reimplementing 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.

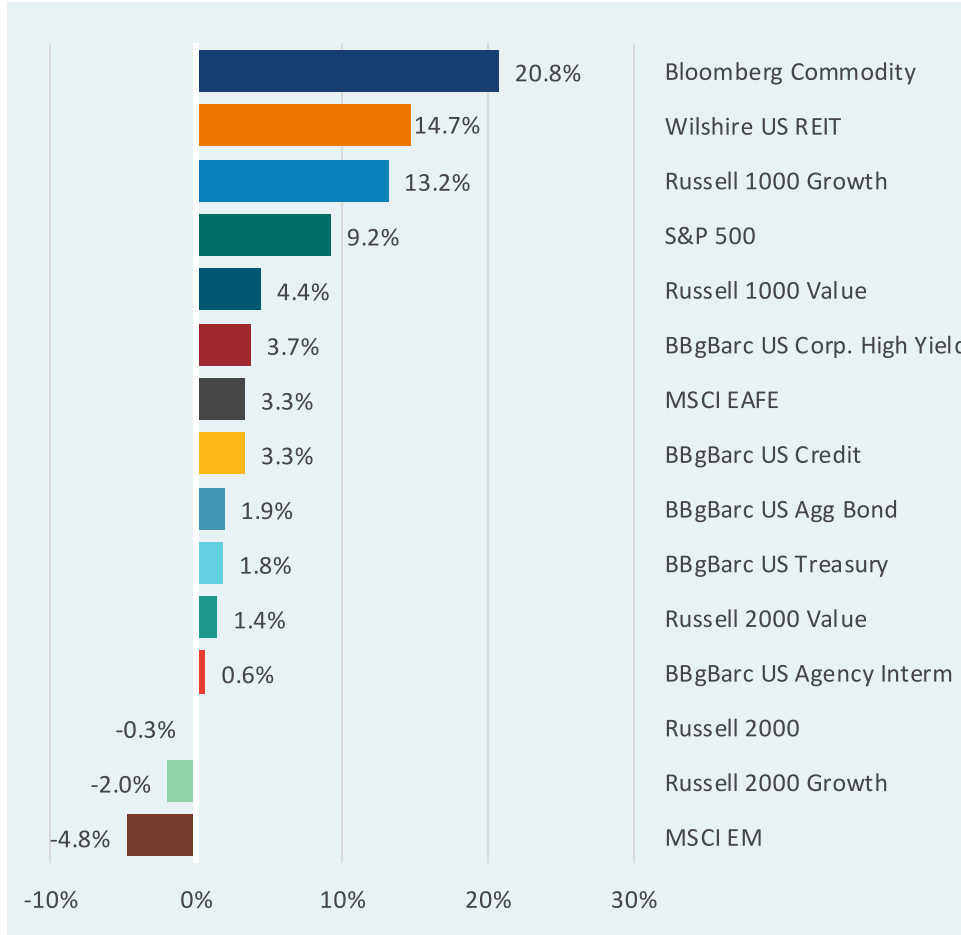
- Many factories in China were forced to shut down late in the quarter as a result of surging coal and electricity prices. Those shutdowns, alongside weaker than expected investment activity, tighter financing conditions, and stricter social distancing controls, all contributed to a larger-than expected 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.

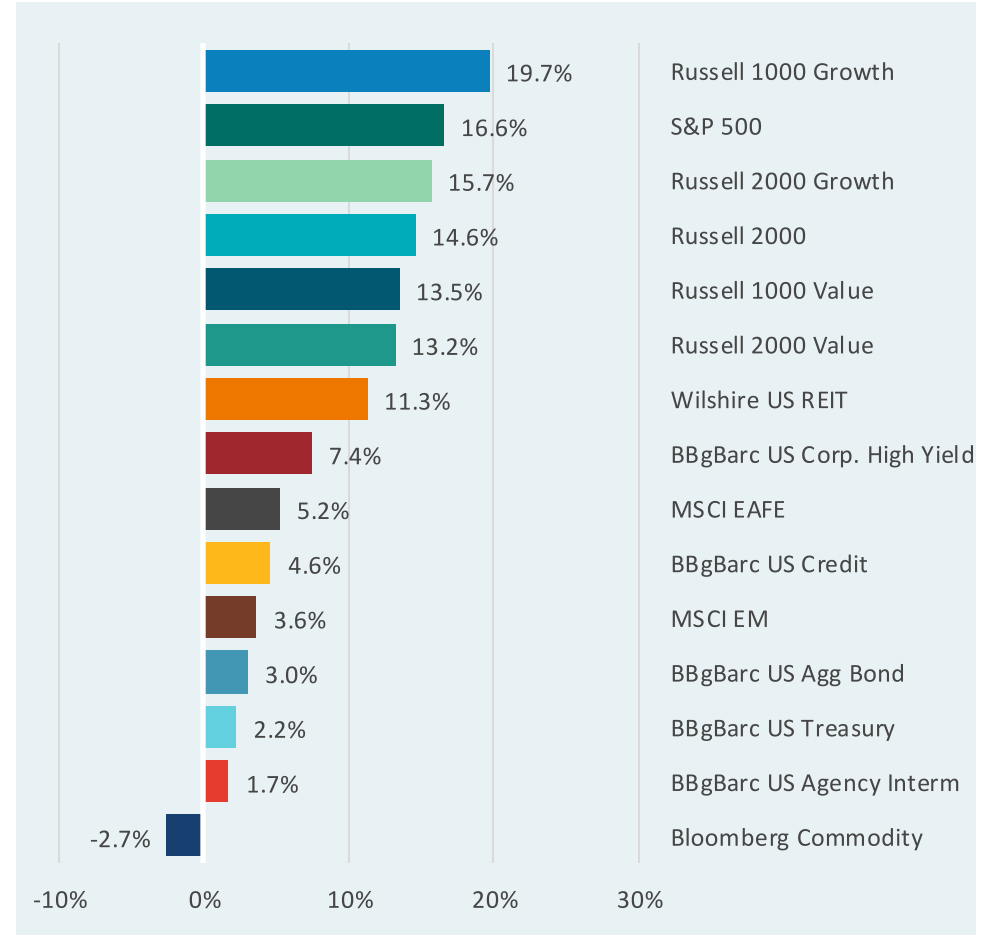
# Major asset class returns

SIX MONTHS ENDING SEPTEMBER



Source: Bloomberg, as of 9/30/21

TEN YEARS ENDING SEPTEMBER



Source: Bloomberg, as of 9/30/21

- The composite fund returned 0.8% for the third quarter of 2021 and ranked in the 38<sup>th</sup> percentile among public funds greater than \$1 billion (median of 0.4%). The fund matched its policy index return of 0.8% during this time period. Longer term, the five (11.4%), and ten-year (10.7%) returns ranked in the 20<sup>th</sup> and 25<sup>th</sup> percentile of large public plans respectively.
- Third quarter results were enhanced by the following factors:
  1. William Blair Small Cap Growth beat the Russell 2000 Growth (0.3% vs -5.7%). Third quarter relative performance was a result of strong stock selection in several sectors, but most notably within information technology.
  2. Kennedy lost -1.1% beating the Russell 2000 Value which returned -3.0%. The strategy outperformed due to stock selection within the financials, communication services, and industrial sectors.
  3. Newton lost 2% beating the MSCI Emerging Market Index (-8.0%). Increasing regulatory intervention within China affected a number of holdings in the strategy, but this was outweighed by superior stock selection in India.
- Third quarter results were hindered by the following factors:
  1. Templeton trailed the MSCI ACWI ex US Small Cap -2.2% versus 0.1% for the index. Stock selection in IT hurt relative returns this quarter due to raw materials shortages and shipping congestion.

Total Fund  
 Manager Allocation Analysis (One Quarter)

Period Ending: September 30, 2021

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Absolute Return <sup>1</sup>	\$733,939,675	-\$1,605,917	\$12,578,873	\$744,912,630
Alta	\$5,249	\$0	\$0	\$5,249
Applied Research Investments	\$28,405,052	\$0	-\$550,374	\$27,854,678
AQR	\$1,603,051	-\$4	-\$30,082	\$1,572,965
Arga Investment Management	\$30,762,466	\$0	-\$877,418	\$29,885,048
Aristotle	\$160,122,732	-\$305,242	-\$197,397	\$159,620,093
Baird Advisors	\$872,487,802	\$479,842,728	\$2,021,873	\$1,354,352,403
Bivium Cash	\$0	\$0	\$0	\$0
BlackRock MSCI World ex-US Index Fd A	\$737,297,934	\$38,000,000	-\$4,573,841	\$770,724,093
BlackRock Russell 1000 Index Fund	\$2,409,566,427	\$35,000,000	\$6,910,945	\$2,451,477,372
Brandywine	\$394,409,463	-\$165,270,193	-\$9,028,516	\$220,110,754
Capital Group	\$726,094,505	\$49,733,177	-\$18,630,344	\$757,197,337
Cash Account	\$837,761,043	-\$753,895,353	-\$8,174	\$83,857,516
Denali Advisors	\$29,884,570	\$0	-\$1,086,214	\$28,798,357
Dundas Partners	\$29,814,822	\$2,000,000	\$254,991	\$32,069,813
Global Alpha Capital Management	\$11,811,477	\$0	\$54,698	\$11,866,175
Huber	\$1,651	\$0	\$0	\$1,651
Kennedy	\$163,736,003	-\$5,323,529	-\$1,493,807	\$156,918,667
Loomis Sayles	\$425,029,011	\$10,668,965	\$1,064,117	\$436,762,093
Mondrian	\$744,613,507	\$26,363,063	-\$28,318,365	\$742,658,205
Newton Emerging Mkt	\$266,275,485	\$50,000,000	-\$5,507,670	\$310,767,815
Next Century-SCG	\$0	\$259	\$0	\$259
Overlay	\$0	\$10,000,000	-\$2,005,321	\$7,994,679
Private Credit	\$123,326,560	\$18,725,449	\$3,449,630	\$145,501,638
Private Equity	\$895,422,433	-\$27,992,722	\$89,973,825	\$957,403,536
Pzena	\$21,933	-\$7,023	\$0	\$14,911
Radin Capital Partners	\$12,500,104	\$0	-\$1,075,439	\$11,424,665
Redwood	\$0	\$7,747,033	-\$461,171	\$7,285,862
RVX Asset Management	\$7,720,230	\$252,967	-\$1,435,048	\$6,538,149
Real Assets	\$531,447,957	\$166,924,619	\$7,170,007	\$705,542,582
Real Estate	\$658,532,300	-\$6,802,060	\$44,921,079	\$696,651,317
Sec. Lending	\$0	-\$284,711	\$284,711	\$0
TCW	\$151,211,171	\$8,347,859	\$2,954,832	\$162,513,862
Templeton	\$302,213,800	\$15,000,000	-\$6,531,217	\$310,682,583
Transition Account	\$100,462	\$0	-\$68,447	\$32,015
William Blair Small Cap Growth	\$171,569,253	-\$15,322,748	\$870,733	\$157,117,239
<b>Total</b>	<b>\$11,457,688,127</b>	<b>-\$58,203,385</b>	<b>\$90,631,468</b>	<b>\$11,490,116,211</b>

<sup>1</sup> Preliminary ending market value

Bivium

Manager Allocation Analysis (One Quarter)

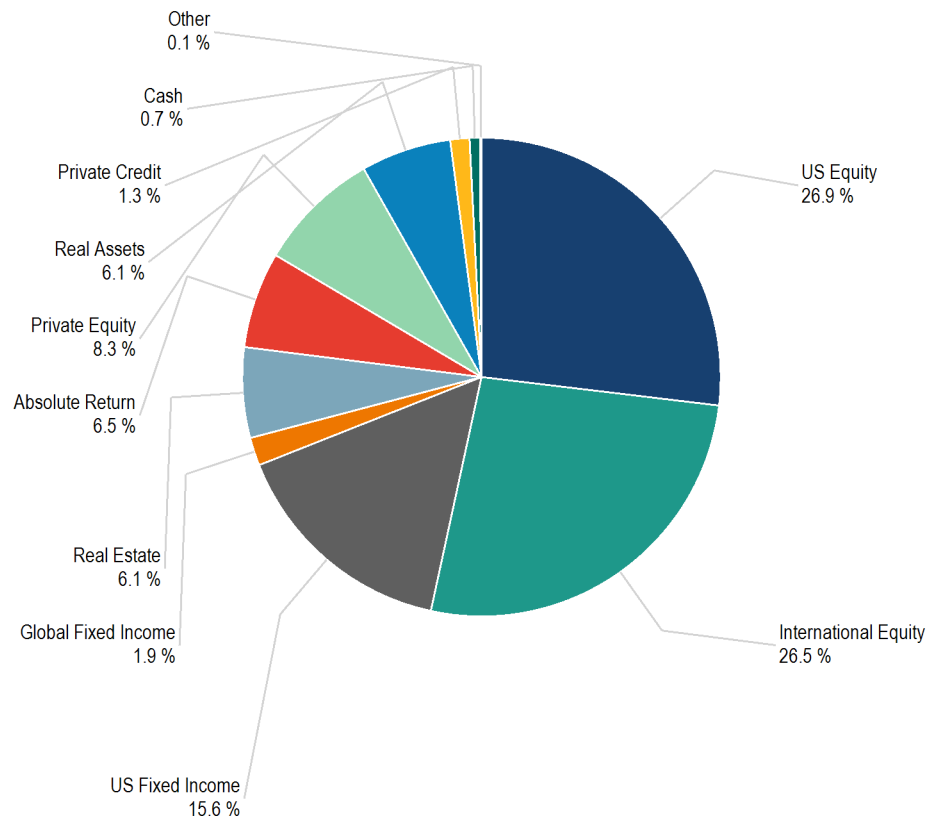
Period Ending: September 30, 2021

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Alta	\$5,249	\$0	\$0	\$5,249
Bivium Cash	\$0	\$0	\$0	\$0
Huber	\$1,651	\$0	\$0	\$1,651
<b>Total</b>	<b>\$6,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,900</b>

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Applied Research Investments	\$28,405,052	\$0	-\$550,374	\$27,854,678
Arga Investment Management	\$30,762,466	\$0	-\$877,418	\$29,885,048
Denali Advisors	\$29,884,570	\$0	-\$1,086,214	\$28,798,357
Dundas Partners	\$29,814,822	\$2,000,000	\$254,991	\$32,069,813
Global Alpha Capital Management	\$11,811,477	\$0	\$54,698	\$11,866,175
Radin Capital Partners	\$12,500,104	\$0	-\$1,075,439	\$11,424,665
Redwood	\$0	\$7,747,033	-\$461,171	\$7,285,862
RVX Asset Management	\$7,720,230	\$252,967	-\$1,435,048	\$6,538,149
<b>Total</b>	<b>\$150,898,722</b>	<b>\$10,000,000</b>	<b>-\$5,175,975</b>	<b>\$155,722,747</b>

Total Fund  
Asset Allocation Analysis

Period Ending: September 30, 2021



	Actual	Actual
US Equity	\$3,087,669,302	26.9%
International Equity	\$3,049,357,759	26.5%
US Fixed Income	\$1,791,114,496	15.6%
Global Fixed Income	\$220,110,754	1.9%
Real Estate	\$696,651,317	6.1%
Absolute Return	\$744,912,630	6.5%
Private Equity	\$957,403,536	8.3%
Real Assets	\$705,542,582	6.1%
Private Credit	\$145,501,638	1.3%
Cash	\$83,857,516	0.7%
Other	\$7,994,679	0.1%
<b>Total</b>	<b>\$11,490,116,211</b>	<b>100.0%</b>

	Actual	Target
US Equity	26.9%	25.0%
International Equity	26.5%	25.0%
US Fixed Income	15.6%	13.0%
Global Fixed Income	1.9%	3.0%
Real Estate	6.1%	8.0%
Absolute Return	6.5%	9.0%
Private Equity	8.3%	8.0%
Real Assets	6.1%	5.0%
Private Credit	1.3%	4.0%
Cash	0.7%	0.0%
Other	0.1%	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

Bivium Portfolio Liquidated U.S. Equities and invested in International Equities



# Total Fund Performance Summary

Period Ending: September 30, 2021

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Fund (Gross)</b>	<b>0.81</b>	<b>38</b>	<b>7.13</b>	<b>32</b>	<b>25.29</b>	<b>18</b>	<b>11.34</b>	<b>29</b>	<b>11.57</b>	<b>16</b>	<b>9.41</b>	<b>19</b>	<b>11.03</b>	<b>16</b>	<b>9.86</b>	<b>Sep-85</b>
<b>Total Fund (Net)</b>	<b>0.77</b>	<b>38</b>	<b>7.05</b>	<b>33</b>	<b>25.11</b>	<b>19</b>	<b>11.16</b>	<b>32</b>	<b>11.36</b>	<b>20</b>	<b>9.16</b>	<b>34</b>	<b>10.74</b>	<b>25</b>	<b>9.67</b>	
<i>Policy Index 1</i>	0.83	37	5.87	49	21.90	50	10.21	59	10.67	41	8.98	38	10.84	20	10.03	Sep-85
<i>Allocation Index</i>	0.46	45	5.74	54	22.45	44	10.38	53	10.73	40	8.93	39	10.67	27	--	Sep-85
<i>InvMetrics Public DB &gt; \$1B Gross Median</i>	0.39		5.86		21.90		10.63		10.38		8.73		10.09		8.93	Sep-85
<b>US Equity (Gross)</b>	<b>0.24</b>	<b>22</b>	<b>8.65</b>	<b>11</b>	<b>33.50</b>	<b>49</b>	<b>16.10</b>	<b>15</b>	<b>17.59</b>	<b>11</b>	<b>14.27</b>	<b>14</b>	<b>16.75</b>	<b>18</b>	<b>12.23</b>	<b>Sep-85</b>
<b>US Equity (Net)</b>	<b>0.20</b>	<b>24</b>	<b>8.58</b>	<b>13</b>	<b>33.33</b>	<b>53</b>	<b>15.95</b>	<b>24</b>	<b>17.37</b>	<b>13</b>	<b>14.01</b>	<b>23</b>	<b>16.45</b>	<b>31</b>	<b>--</b>	
<i>Russell 3000</i>	-0.10	52	8.13	28	31.87	79	16.00	21	16.85	29	13.93	27	16.60	24	11.75	Sep-85
<i>InvMetrics All DB US Eq Gross Median</i>	-0.10		7.55		33.44		15.00		16.17		13.38		16.06		11.36	Sep-85
BlackRock Russell 1000 Index Fund (Gross)	0.22	52	8.77	44	30.99	41	16.47	32	--	--	--	--	--	--	17.84	Apr-18
BlackRock Russell 1000 Index Fund (Net)	0.21	53	8.76	44	30.98	41	16.46	33	--	--	--	--	--	--	17.83	
<i>Russell 1000</i>	0.21	53	8.76	44	30.96	41	16.43	33	17.11	34	14.09	33	16.76	34	17.79	Apr-18
<b>Large Cap Active Equity (Gross)</b>	<b>0.86</b>	<b>--</b>	<b>11.81</b>	<b>--</b>	<b>32.35</b>	<b>--</b>	<b>13.36</b>	<b>--</b>	<b>15.92</b>	<b>--</b>	<b>12.95</b>	<b>--</b>	<b>15.68</b>	<b>--</b>	<b>8.89</b>	<b>Mar-00</b>
<b>Large Cap Active Equity (Net)</b>	<b>0.72</b>	<b>--</b>	<b>11.56</b>	<b>--</b>	<b>31.78</b>	<b>--</b>	<b>12.82</b>	<b>--</b>	<b>15.41</b>	<b>--</b>	<b>12.47</b>	<b>--</b>	<b>15.20</b>	<b>--</b>	<b>8.44</b>	
<i>Russell 1000</i>	0.21	--	8.76	--	30.96	--	16.43	--	17.11	--	14.09	--	16.76	--	7.28	Mar-00
Aristotle (Gross)	-0.13	38	6.18	30	--	--	--	--	--	--	--	--	--	--	35.57	Oct-20
Aristotle (Net)	-0.31	43	5.90	36	--	--	--	--	--	--	--	--	--	--	35.12	
<i>Russell 1000 Value</i>	-0.78	61	4.39	64	35.01	54	10.07	65	10.94	77	9.32	74	13.51	70	36.81	Oct-20
TCW (Gross)	1.86	15	18.26	2	29.29	30	23.88	19	23.86	24	19.09	22	19.14	49	9.74	Jun-99
TCW (Net)	1.77	18	18.04	2	28.77	33	23.32	23	23.35	27	18.64	31	18.71	59	--	
<i>Russell 1000 Growth</i>	1.16	37	13.23	28	27.32	50	22.00	39	22.84	36	18.51	35	19.68	36	7.73	Jun-99

Total Fund and asset class composites are ranked against InvestorForce universes. Managers are ranked against eVestment Alliance style universes.  
 Ranking of 1 is a top ranking and a ranking of 100 is a bottom ranking. The InvestorForce Public DB > \$1B Gross universe consists of 85 members with a total market value of \$1,149.5 Trillion.  
 Effective 1/1/2017, only traditional asset class (public equity, public fixed income, public real estate) investment management fees will be included in the gross of fee return calculation.  
 1 See Policy Index and Benchmark History.

# Total Fund Performance Summary

Period Ending: September 30, 2021

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Small Cap Equity (Gross)</b>	-0.21	--	5.03	--	56.04	--	15.75	--	17.92	--	14.73	--	17.11	--	14.04	Jul-85
<b>Small Cap Equity (Net)</b>	-0.41	--	4.64	--	54.94	--	14.85	--	16.95	--	13.78	--	16.14	--	--	--
<i>Russell 2000</i>	-4.36	--	-0.26	--	47.68	--	10.54	--	13.45	--	11.90	--	14.63	--	9.96	Jul-85
Kennedy (Gross)	-0.89	30	4.53	26	65.12	33	10.22	40	11.90	47	10.51	49	15.37	26	13.02	Sep-10
Kennedy (Net)	-1.10	37	4.14	32	63.99	35	9.36	53	10.98	63	9.61	71	14.44	44	12.13	--
<i>Russell 2000 Value</i>	-2.98	75	1.44	65	63.92	35	8.58	64	11.03	62	10.19	57	13.22	76	11.32	Sep-10
William Blair Small Cap Growth (Gross)	0.48	23	5.56	32	48.54	21	--	--	--	--	--	--	--	--	32.07	Oct-19
William Blair Small Cap Growth (Net)	0.28	24	5.15	35	47.46	25	--	--	--	--	--	--	--	--	31.18	--
<i>Russell 2000 Growth</i>	-5.65	91	-1.96	94	33.26	79	11.70	89	15.34	91	13.19	89	15.74	88	23.53	Oct-19
<b>International Equity (Gross)</b>	-2.22	38	3.32	44	26.03	42	11.18	21	11.44	19	8.04	22	9.69	22	8.60	Dec-90
<b>International Equity (Net)</b>	-2.27	41	3.20	47	25.67	46	10.82	26	11.10	23	7.67	29	9.28	33	--	--
<i>MSCI ACWI ex USA IMI Gross <sup>1</sup></i>	-2.45	46	3.16	47	25.68	46	8.83	58	9.62	50	6.49	57	8.22	68	6.65	Dec-90
<i>InvMetrics All DB ex-US Eq Gross Median</i>	-2.53		3.02		25.31		9.30		9.60		6.67		8.79		7.26	Dec-90
Bivium Intl Equity (Gross)	-3.23	80	3.22	69	28.16	46	--	--	--	--	--	--	--	--	14.40	Oct-18
Bivium Intl Equity (Net)	-3.53	86	2.60	77	26.64	54	--	--	--	--	--	--	--	--	13.08	--
<i>MSCI ACWI ex USA Gross</i>	-2.88	76	2.60	77	24.44	73	8.52	70	9.44	76	6.17	91	7.97	97	11.98	Oct-18
BlackRock MSCI World ex-US Index Fd A (Gross)	-0.57	51	5.18	47	27.09	48	--	--	--	--	--	--	--	--	13.43	May-19
BlackRock MSCI World ex-US Index Fd A (Net)	-0.58	51	5.16	48	27.08	49	--	--	--	--	--	--	--	--	13.43	--
<i>MSCI World ex US Gross</i>	-0.56	51	5.26	46	27.10	48	8.41	52	9.42	54	6.22	70	8.41	79	13.51	May-19
Capital Group (Gross)	-2.41	62	4.28	65	22.51	47	15.59	27	15.17	30	10.62	53	11.49	50	9.25	Dec-90
Capital Group (Net)	-2.45	62	4.21	66	22.35	47	15.27	31	14.92	32	10.34	62	11.15	59	--	--
<i>MSCI ACWI ex USA Gross</i>	-2.88	68	2.60	73	24.44	24	8.52	99	9.44	97	6.17	99	7.97	99	6.60	Dec-90
<i>MSCI ACWI ex USA Growth Gross</i>	-3.58	76	2.91	73	17.27	78	12.30	75	11.59	87	8.64	88	9.69	92	--	Dec-90

<sup>1</sup> See Policy Index and Benchmark History.

# Total Fund Performance Summary

Period Ending: September 30, 2021

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Mondrian (Gross)	-3.67	95	0.79	79	28.20	73	5.62	73	6.89	72	4.45	73	6.66	82	7.04	Nov-03
Mondrian (Net)	-3.76	99	0.63	81	27.68	79	5.15	84	6.48	88	4.05	86	6.28	99	6.71	
MSCI ACWI ex USA Gross	-2.88	86	2.60	38	24.44	99	8.52	24	9.44	21	6.17	24	7.97	35	7.38	Nov-03
MSCI ACWI ex USA Value Gross	-2.14	65	2.30	51	32.15	54	4.43	91	7.06	69	3.54	90	6.11	99	6.56	Nov-03
Newton Emerging Mkt (Gross)	-1.91	11	1.23	32	28.27	30	--	--	--	--	--	--	--	--	31.07	May-19
Newton Emerging Mkt (Net)	-2.02	13	0.99	33	27.62	33	--	--	--	--	--	--	--	--	30.69	
MSCI Emerging Markets Gross	-7.97	69	-3.26	65	18.58	70	8.96	65	9.62	59	6.00	69	6.46	78	13.40	May-19
Templeton (Gross)	-2.04	87	4.67	94	26.61	85	9.25	68	10.16	76	7.95	80	10.32	86	7.61	Apr-11
Templeton (Net)	-2.17	87	4.39	94	25.92	88	8.60	79	9.50	82	7.26	85	9.57	94	6.90	
MSCI ACWI ex US Small Cap Gross	0.09	58	6.59	73	33.54	40	10.76	57	10.69	71	8.55	72	9.84	92	6.60	Apr-11
MSCI ACWI ex US Small Cap Value GD	-0.24	64	5.83	81	38.25	23	8.11	81	9.06	86	7.01	86	8.99	99	5.75	Apr-11
<b>Total Fixed Income (Gross)</b>	<b>-0.23</b>	<b>95</b>	<b>2.15</b>	<b>59</b>	<b>3.45</b>	<b>31</b>	<b>6.96</b>	<b>18</b>	<b>4.76</b>	<b>26</b>	<b>4.60</b>	<b>23</b>	<b>5.30</b>	<b>19</b>	<b>7.25</b>	<b>Sep-86</b>
<b>Total Fixed Income (Net)</b>	<b>-0.26</b>	<b>96</b>	<b>2.06</b>	<b>68</b>	<b>3.27</b>	<b>35</b>	<b>6.75</b>	<b>21</b>	<b>4.57</b>	<b>33</b>	<b>4.40</b>	<b>27</b>	<b>5.08</b>	<b>22</b>	<b>--</b>	
Fixed Income Blend <sup>1</sup>	-0.24	95	1.42	86	-0.19	82	5.13	67	2.97	85	3.23	77	3.08	89	6.26	Sep-86
InvMetrics All DB Total Fix Inc Gross Median	0.17		2.30		2.21		5.75		4.02		3.92		4.15		6.71	Sep-86
<b>US Fixed Income (Gross)</b>	<b>0.21</b>	<b>41</b>	<b>2.57</b>	<b>32</b>	<b>1.82</b>	<b>37</b>	<b>7.08</b>	<b>22</b>	<b>4.78</b>	<b>25</b>	<b>4.81</b>	<b>24</b>	<b>5.58</b>	<b>17</b>	<b>7.16</b>	<b>Sep-86</b>
<b>US Fixed Income (Net)</b>	<b>0.18</b>	<b>47</b>	<b>2.49</b>	<b>36</b>	<b>1.69</b>	<b>39</b>	<b>6.92</b>	<b>23</b>	<b>4.61</b>	<b>31</b>	<b>4.64</b>	<b>27</b>	<b>5.40</b>	<b>18</b>	<b>--</b>	
Bloomberg US Aggregate TR	0.05	72	1.88	66	-0.90	86	5.36	62	2.94	80	3.26	72	3.01	79	6.03	Sep-86
InvMetrics All DB US Fix Inc Gross Median	0.15		2.18		0.62		5.66		3.90		3.91		4.06		6.42	Sep-86
Baird Advisors (Gross)	0.20	18	2.29	39	0.01	48	6.28	25	3.87	23	4.22	10	4.39	10	5.12	Oct-01
Baird Advisors (Net)	0.19	22	2.24	41	-0.05	51	6.20	33	3.79	27	4.14	14	4.31	12	5.03	
Bloomberg US Aggregate TR	0.05	62	1.88	84	-0.90	84	5.36	88	2.94	92	3.26	92	3.01	95	4.24	Oct-01
Loomis Sayles (Gross)	0.24	46	3.17	9	5.71	5	8.77	3	6.61	2	5.99	2	7.86	1	8.29	Dec-00
Loomis Sayles (Net)	0.17	68	3.01	16	5.40	5	8.44	4	6.28	2	5.65	3	7.51	1	7.95	
Bloomberg US Credit BAA TR	0.03	85	3.75	1	3.27	16	7.83	7	5.11	11	4.95	10	5.32	10	6.38	Dec-00

<sup>1</sup> See Policy Index and Benchmark History.

# Total Fund Performance Summary

Period Ending: September 30, 2021

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Global Fixed Income (Gross)</b>	-3.25	90	-0.85	99	6.35	38	5.66	60	4.07	66	3.50	74	4.15	76	7.10	Nov-01
<b>Global Fixed Income (Net)</b>	-3.36	95	-1.04	99	6.01	41	5.32	66	3.77	77	3.21	80	3.81	82	6.79	
<i>FTSE WGBI TR</i>	-1.24	69	-0.27	85	-3.33	98	3.73	88	1.35	99	1.74	87	1.06	99	4.27	Nov-01
<i>InvMetrics All DB Gbl Fix Inc Gross Median</i>	-0.02		2.61		5.46		5.84		4.47		4.16		5.69		6.32	Nov-01
<b>Brandywine (Gross)</b>	-3.25	97	-0.85	91	6.35	32	5.66	48	4.07	52	3.50	53	4.15	46	7.10	Nov-01
<b>Brandywine (Net)</b>	-3.36	97	-1.04	93	6.01	33	5.32	56	3.77	56	3.21	58	3.81	52	6.79	
<i>Bloomberg Global Aggregate TR</i>	-0.88	70	0.42	73	-0.91	87	4.24	78	1.99	88	2.17	79	1.86	85	4.39	Nov-01
<i>FTSE WGBI TR</i>	-1.24	78	-0.27	84	-3.33	97	3.73	85	1.35	96	1.74	88	1.06	95	4.27	Nov-01
<b>Absolute Return (Gross)</b>	1.72	29	6.11	25	18.47	42	3.29	80	3.37	81	2.73	76	3.52	83	3.52	Sep-11
<b>Absolute Return (Net)</b>	1.72	29	6.11	25	18.47	42	3.29	80	3.37	81	2.73	76	3.52	83	3.52	
<i>HFRI Fund of Funds Composite Index</i>	0.78	59	3.67	60	14.35	72	6.51	57	5.81	58	4.16	58	4.47	73	4.47	Sep-11
<i>InvMetrics All DB Hedge Funds Gross Median</i>	0.99		4.97		17.55		7.09		6.40		4.76		5.73		5.73	Sep-11
<b>Private Equity (Gross)</b>	10.05	--	24.57	--	62.50	--	23.08	--	20.14	--	18.49	--	16.91	--	7.59	Nov-08
<b>Private Equity (Net)</b>	10.05	--	24.57	--	62.50	--	23.08	--	20.14	--	18.49	--	16.91	--	7.59	
<i>Thomson Reuters C A Global All PE 1 Qtr Lag</i>	9.48	--	14.55	--	41.47	--	14.66	--	14.40	--	10.97	--	10.87	--	9.58	Nov-08
<b>Real Assets (Gross)</b>	1.04	--	6.51	--	29.06	--	1.45	--	2.21	--	-1.86	--	-2.45	--	-2.45	Sep-11
<b>Real Assets (Net)</b>	1.02	--	6.45	--	28.88	--	1.38	--	2.17	--	-1.89	--	-2.48	--	-2.48	
<i>Real Asset Blend <sup>1</sup></i>	0.87	--	4.81	--	30.77	--	5.67	--	6.82	--	6.34	--	5.88	--	5.88	Sep-11
<b>Private Credit (Gross)</b>	2.60	--	5.29	--	11.66	--	--	--	--	--	--	--	--	--	6.27	Oct-19
<b>Private Credit (Net)</b>	2.60	--	5.29	--	11.66	--	--	--	--	--	--	--	--	--	6.27	
<i>S&amp;P/LSTA Leveraged Loan Index +1.75%</i>	1.54	--	3.49	--	10.29	--	5.96	--	6.41	--	5.99	--	6.74	--	6.95	Oct-19

<sup>1</sup> See Policy Index and Benchmark History.

Total Fund  
Performance Summary

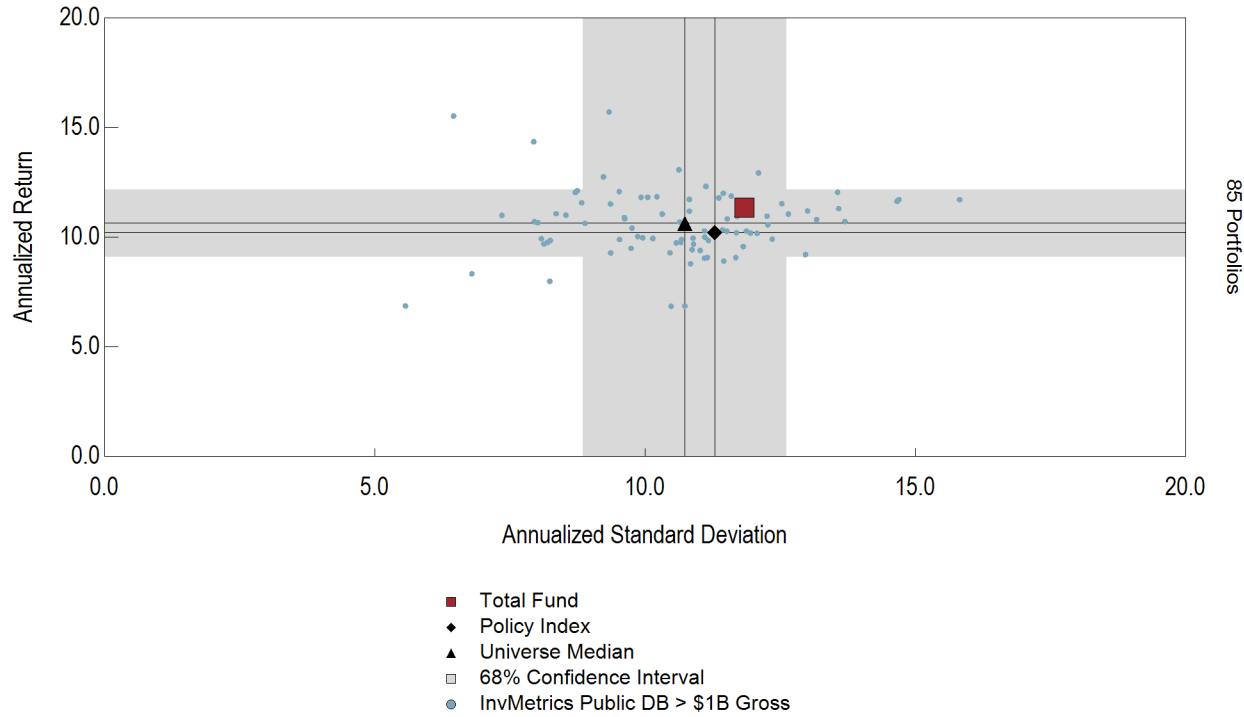
Period Ending: September 30, 2021

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Cash (Gross)	-0.01	--	0.39	--	0.55	--	1.12	--	1.15	--	0.87	--	0.64	--	3.01	Sep-85
Cash (Net)	-0.01	--	0.39	--	0.55	--	1.12	--	1.15	--	0.87	--	0.64	--	3.01	
91 Day T-Bills	0.01	--	0.01	--	0.04	--	1.04	--	1.10	--	0.82	--	0.59	--	3.09	Sep-85
Overlay (Gross)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-25.91	Jul-21
Overlay (Net)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-25.91	
Real Estate (Gross)	6.84	6	11.41	16	15.86	25	7.92	20	8.14	25	9.83	17	10.82	24	7.18	Mar-86
Real Estate (Net)	6.84	6	11.41	16	15.86	25	7.92	20	8.09	26	9.50	27	10.27	43	6.19	
NCREIF-ODCE	6.59	10	10.78	21	14.59	29	7.05	42	7.50	38	8.90	43	9.92	50	7.31	Mar-86
InvMetrics All DB Real Estate Pub+Priv Gross Median	5.03		9.25		13.24		6.71		7.16		8.61		9.90		7.52	Mar-86

1 See Policy Index and Benchmark History.

Total Fund  
Risk vs. Return (3 Years)

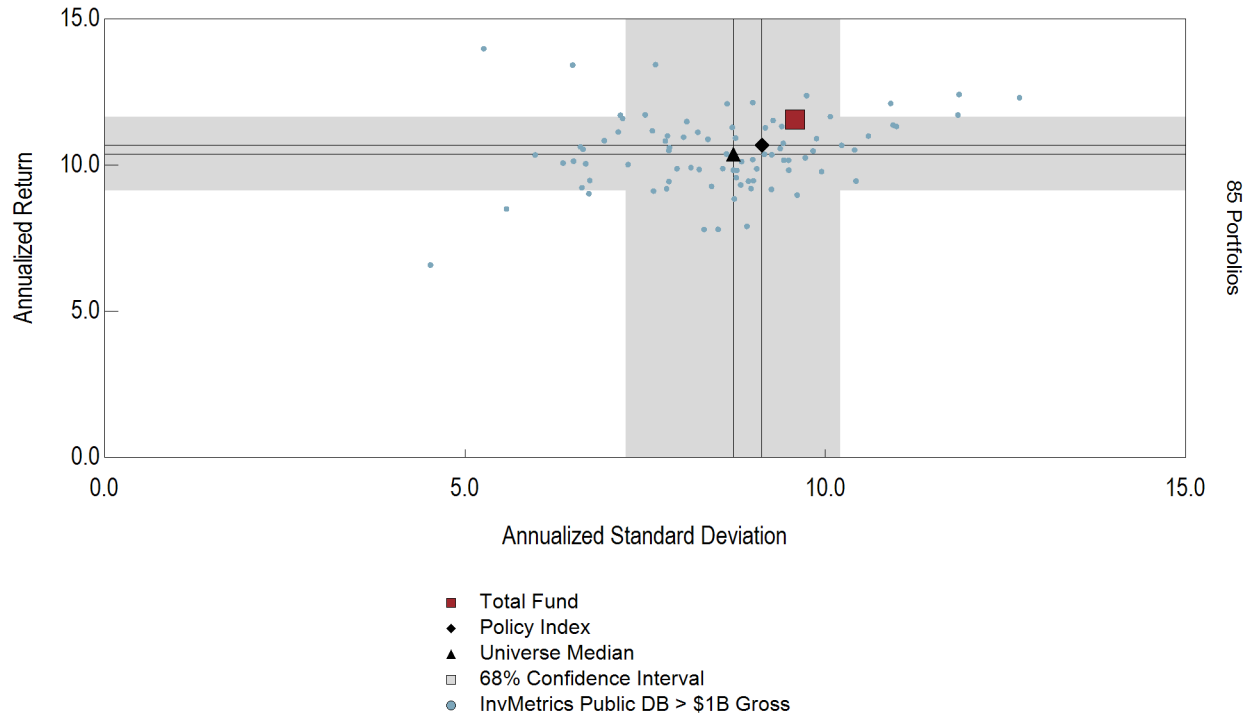
Period Ending: September 30, 2021



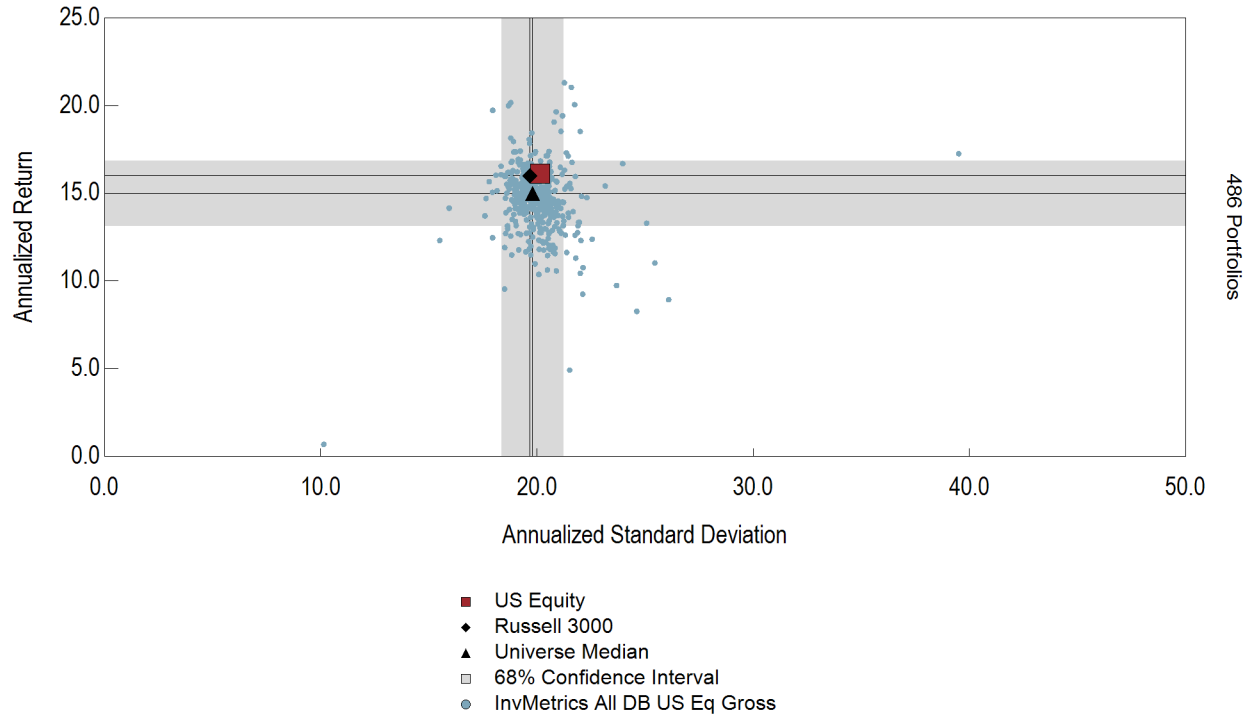
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	11.34%	29	11.84%	80	0.87	50	0.48	24	2.35%	67
Policy Index	10.21%	59	11.29%	67	0.81	62	--	--	0.00%	1
Allocation Index	10.38%	53	11.77%	79	0.79	68	0.25	40	0.66%	3
InvMetrics Public DB > \$1B Gross Median	10.63%	--	10.74%	--	0.87	--	0.14	--	1.76%	--

Total Fund  
Risk vs. Return (5 Years)

Period Ending: September 30, 2021

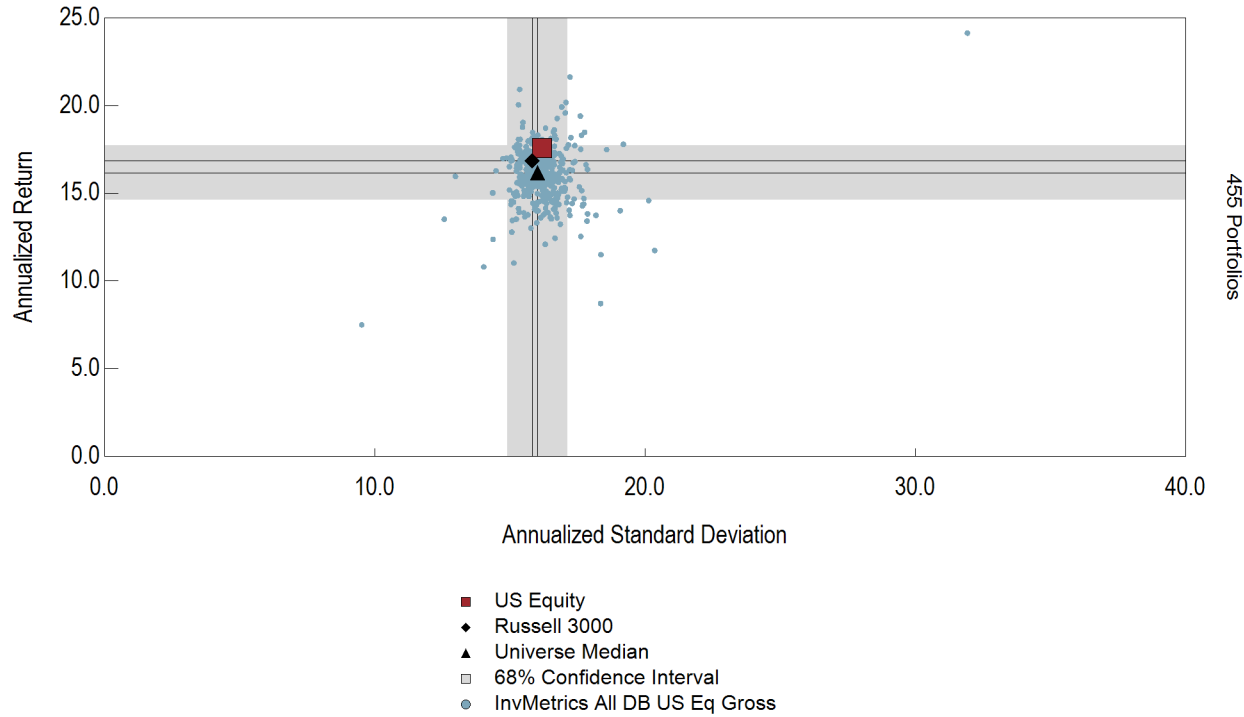


	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	11.57%	16	9.58%	81	1.09	44	0.45	32	1.97%	65
Policy Index	10.67%	41	9.12%	67	1.05	52	--	--	0.00%	1
Allocation Index	10.73%	40	9.53%	80	1.01	60	0.09	70	0.61%	2
InvMetrics Public DB > \$1B Gross Median	10.38%	--	8.73%	--	1.06	--	0.23	--	1.63%	--

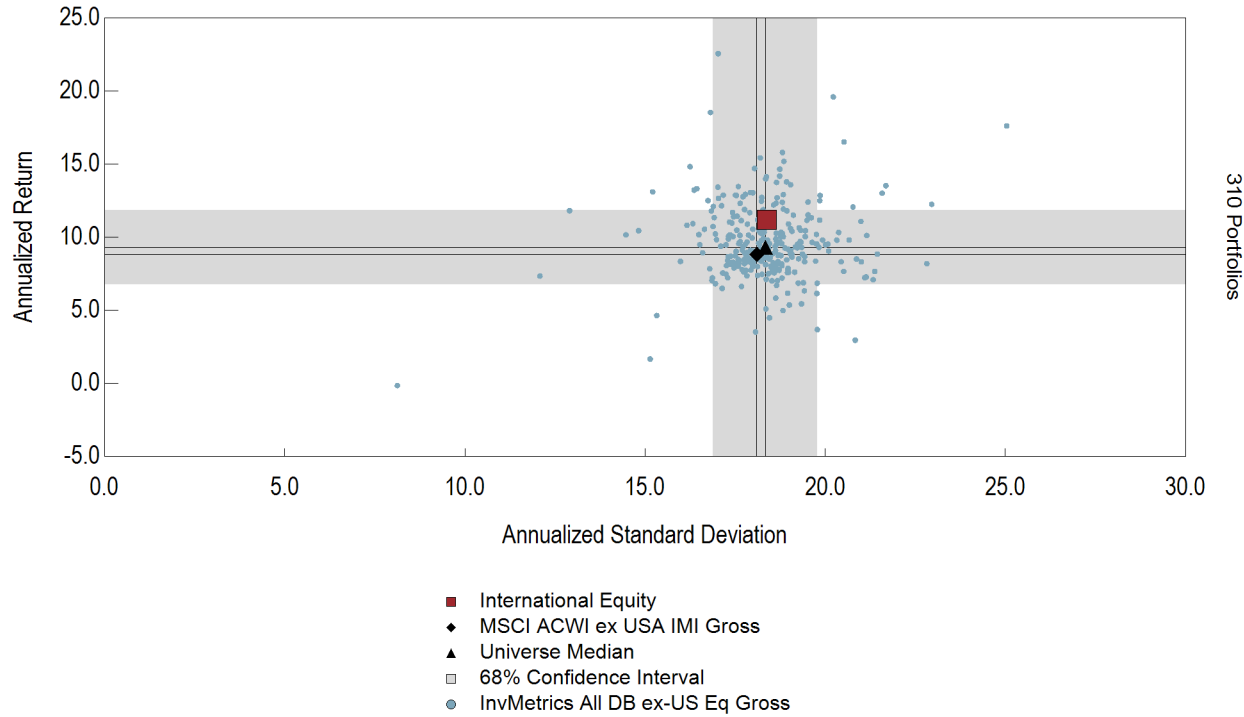


	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
US Equity	16.10%	15	20.14%	65	0.75	30	0.11	21	0.98%	13
Russell 3000	16.00%	21	19.68%	44	0.76	23	--	--	0.00%	1
InvMetrics All DB US Eq Gross Median	15.00%	--	19.80%	--	0.71	--	-0.45	--	2.33%	--

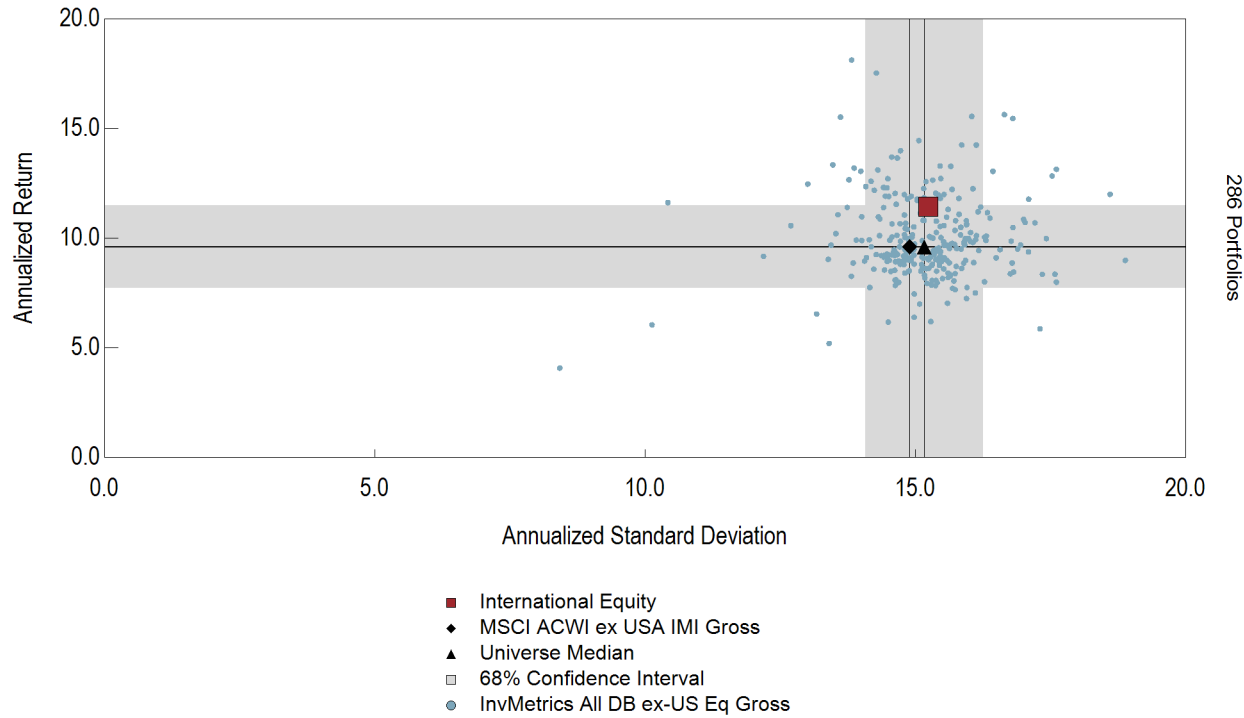




	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
US Equity	17.59%	11	16.19%	60	1.02	16	0.61	8	1.21%	19
Russell 3000	16.85%	29	15.83%	38	1.00	26	--	--	0.00%	1
InvMetrics All DB US Eq Gross Median	16.17%	--	16.02%	--	0.94	--	-0.33	--	2.12%	--



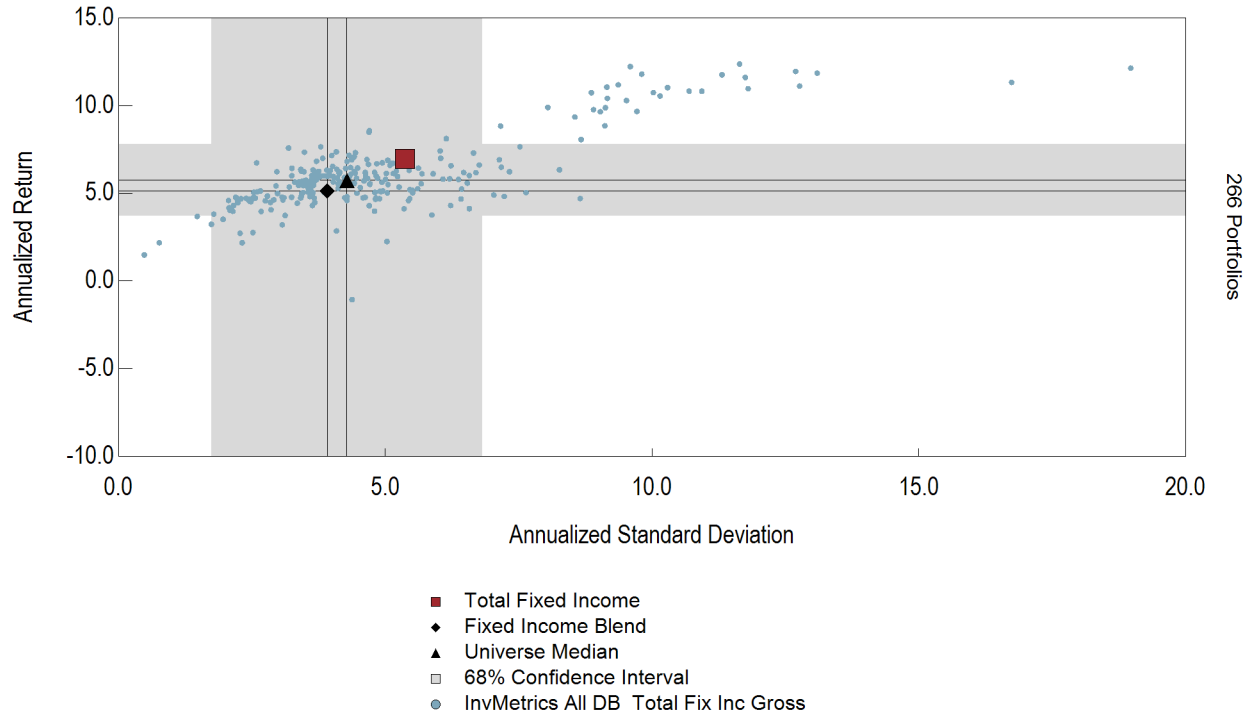
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
International Equity	11.18%	21	18.38%	53	0.55	23	1.70	3	1.38%	8
MSCI ACWI ex USA IMI Gross	8.83%	58	18.10%	41	0.43	54	--	--	0.00%	1
InvMetrics All DB ex-US Eq Gross Median	9.30%	--	18.34%	--	0.44	--	0.35	--	3.14%	--



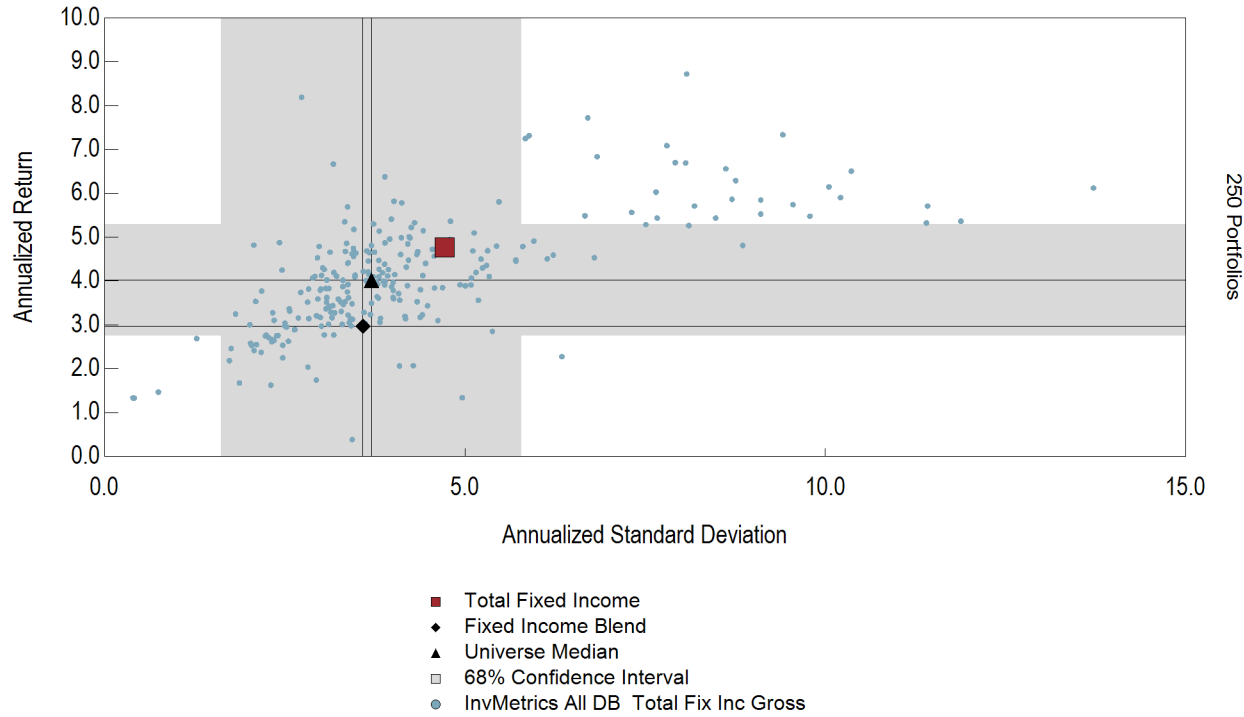
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
International Equity	11.44%	19	15.23%	53	0.68	21	1.32	3	1.38%	8
MSCI ACWI ex USA IMI Gross	9.62%	50	14.90%	39	0.57	42	--	--	0.00%	1
InvMetrics All DB ex-US Eq Gross Median	9.60%	--	15.17%	--	0.56	--	0.20	--	2.95%	--

Total Fixed Income  
Risk vs. Return (3 Years)

Period Ending: September 30, 2021



	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fixed Income	6.96%	18	5.36%	75	1.10	50	0.70	10	2.60%	50
Fixed Income Blend	5.13%	67	3.91%	41	1.05	59	--	--	0.00%	1
InvMetrics All DB Total Fix Inc Gross Median	5.75%	--	4.28%	--	1.10	--	0.20	--	2.60%	--



	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fixed Income	4.76%	26	4.72%	77	0.78	40	0.80	15	2.25%	51
Fixed Income Blend	2.97%	85	3.59%	45	0.52	87	--	--	0.00%	1
InvMetrics All DB Total Fix Inc Gross Median	4.02%	--	3.70%	--	0.73	--	0.44	--	2.21%	--

# 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 6<sup>th</sup>.

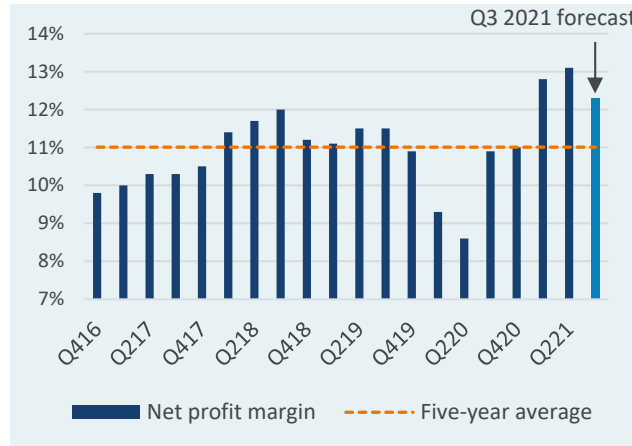
Recent price increases have raised questions around the defensibility of net profit margins, which are expected to moderate in Q3 but remain elevated well above recent averages. Some investors have begun to discuss positioning within sectors that have exhibited more pricing power.

**S&P 500 INDEX**



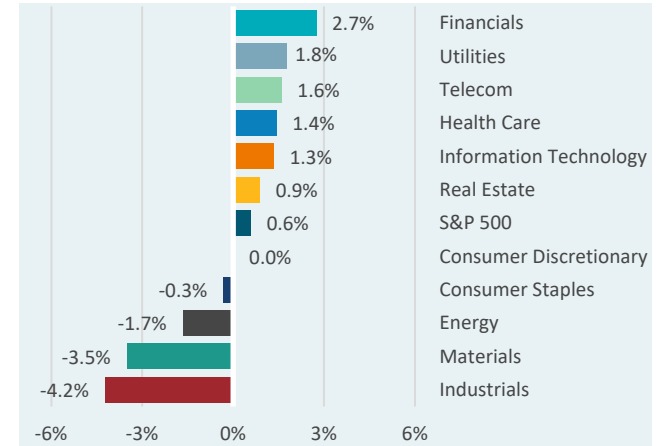
Source: Standard & Poor's, as of 9/30/21

**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

# Domestic equity size & style

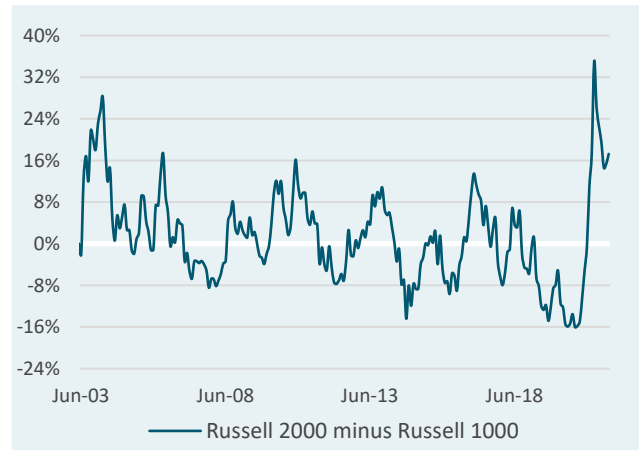
Large capitalization stocks outperformed small cap during the quarter by a wide margin (Russell 1000 +0.2%, Russell 2000 -4.4%) and growth stocks beat value (Russell 1000 Growth +1.2%, Russell 1000 Value -0.8%).

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.

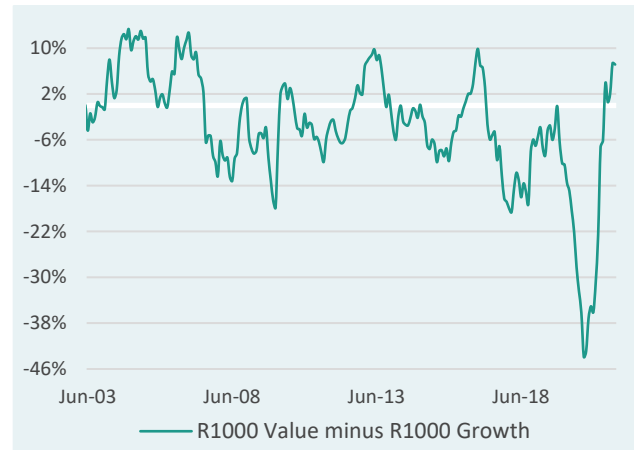
Large cap and growth stocks outperformed during Q3

SMALL CAP VS LARGE CAP (YOY)



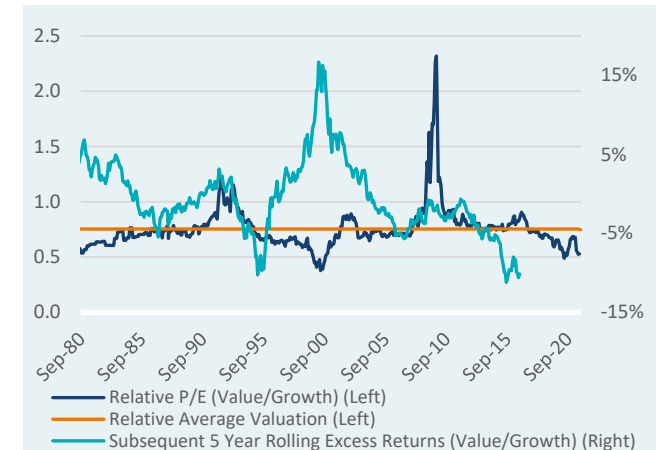
Source: FTSE, as of 9/30/21

VALUE VS GROWTH (YOY)



Source: FTSE, as of 9/30/21

VALUE VS. GROWTH RELATIVE VALUATIONS



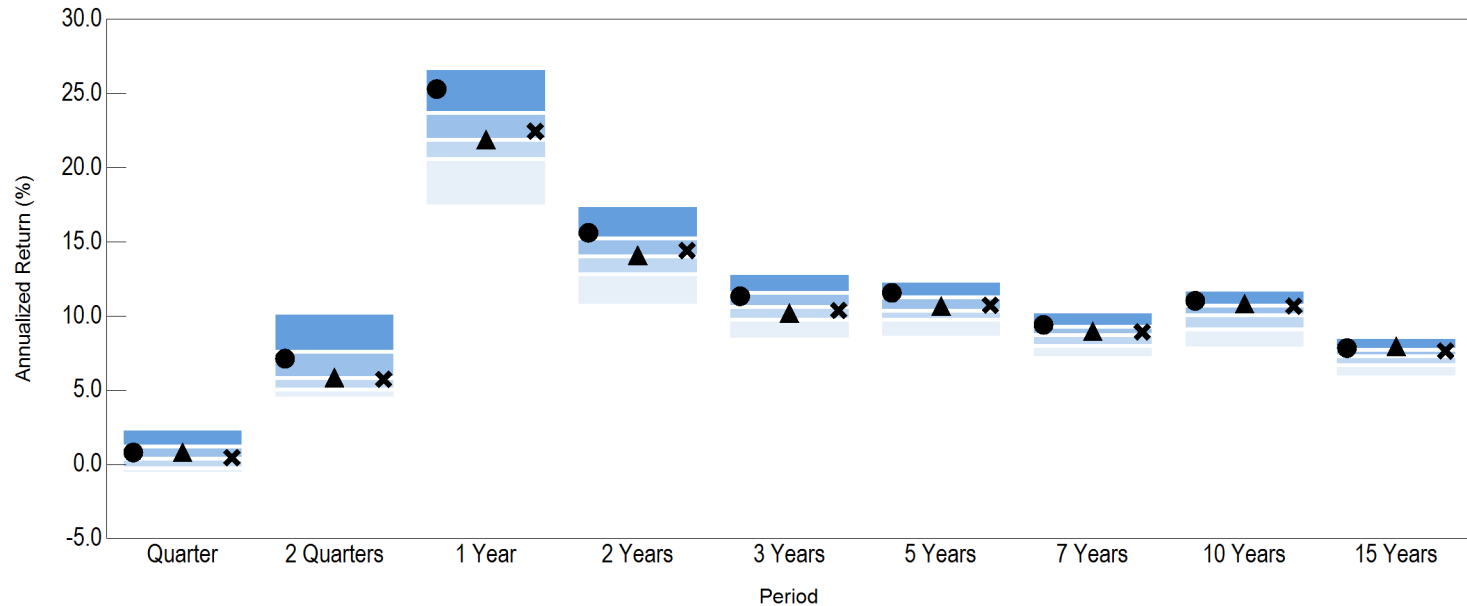
Source: Standard & Poor's, as of 9/30/21



Total Fund  
Peer Universe Comparison

Period Ending: September 30, 2021

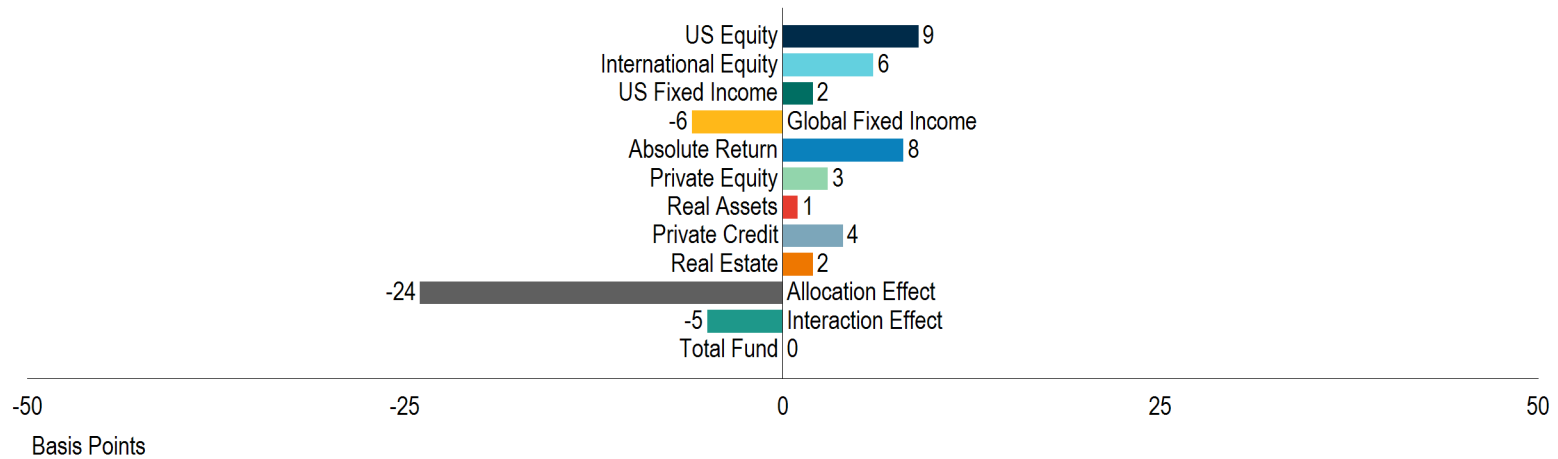
InvMetrics Public DB > \$1B Gross Return Comparison



	Return (Rank)								
	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years	15 Years
5th Percentile	2.41	10.21	26.71	17.43	12.89	12.36	10.28	11.76	8.59
25th Percentile	1.24	7.64	23.73	15.24	11.57	11.27	9.31	10.74	7.74
Median	0.39	5.86	21.90	14.05	10.63	10.38	8.73	10.09	7.30
75th Percentile	-0.23	5.06	20.61	12.83	9.77	9.77	8.02	9.15	6.71
95th Percentile	-0.64	4.45	17.43	10.72	8.42	8.57	7.18	7.85	5.89
# of Portfolios	85	85	85	85	85	85	84	80	75
● Total Fund	0.81 (38)	7.13 (32)	25.29 (18)	15.62 (21)	11.34 (29)	11.57 (16)	9.41 (19)	11.03 (16)	7.84 (18)
▲ Policy Index	0.83 (37)	5.87 (49)	21.90 (50)	14.11 (48)	10.21 (59)	10.67 (41)	8.98 (38)	10.84 (20)	7.98 (16)
✕ Allocation Index	0.46 (45)	5.74 (54)	22.45 (44)	14.41 (44)	10.38 (53)	10.73 (40)	8.93 (39)	10.67 (27)	7.64 (30)

Total Fund  
Performance Attribution (One Quarter)

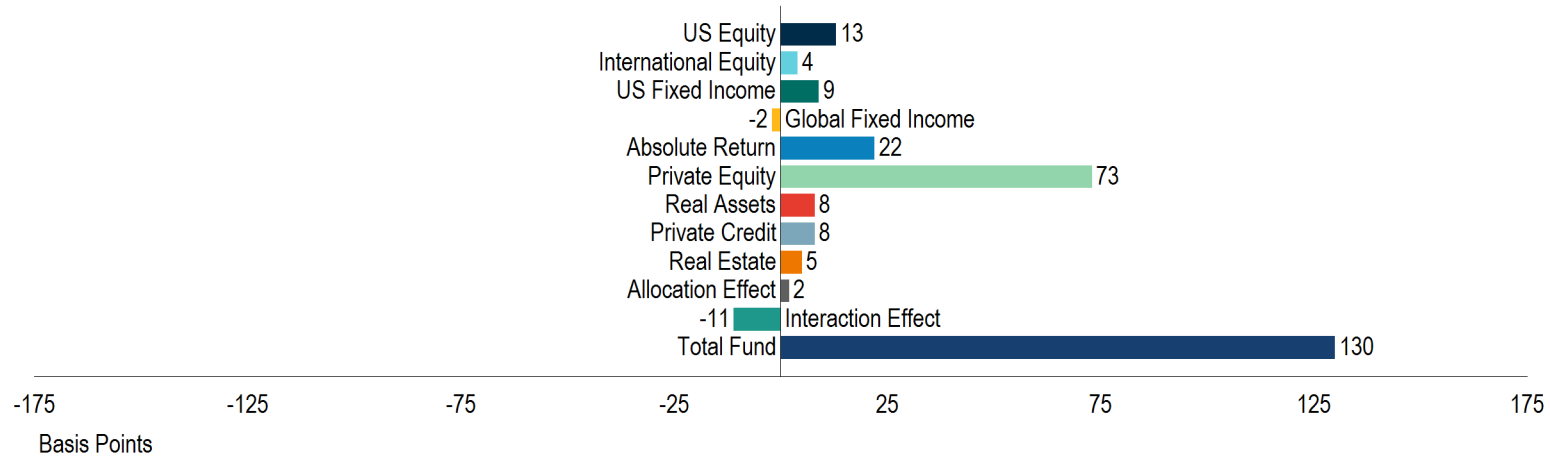
Period Ending: September 30, 2021



	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	0.24%	-0.10%	0.34%	0.09%	-0.02%	0.01%	0.07%
International Equity	-2.22%	-2.45%	0.24%	0.06%	-0.08%	0.01%	-0.01%
US Fixed Income	0.21%	0.05%	0.16%	0.02%	-0.05%	0.01%	-0.02%
Global Fixed Income	-3.25%	-1.24%	-2.01%	-0.06%	0.05%	-0.02%	-0.04%
Absolute Return	1.72%	0.78%	0.94%	0.08%	0.00%	-0.02%	0.06%
Private Equity	10.05%	9.48%	0.57%	0.03%	0.03%	0.01%	0.06%
Real Assets	1.04%	0.87%	0.17%	0.01%	0.00%	0.00%	0.01%
Private Credit	2.60%	1.54%	1.05%	0.04%	-0.02%	-0.03%	-0.01%
Real Estate	6.84%	6.59%	0.25%	0.02%	-0.14%	0.00%	-0.12%
<b>Total</b>	<b>0.84%</b>	<b>0.84%</b>	<b>0.00%</b>	<b>0.29%</b>	<b>-0.24%</b>	<b>-0.05%</b>	<b>0.00%</b>

Total Fund  
Performance Attribution (6 Months)

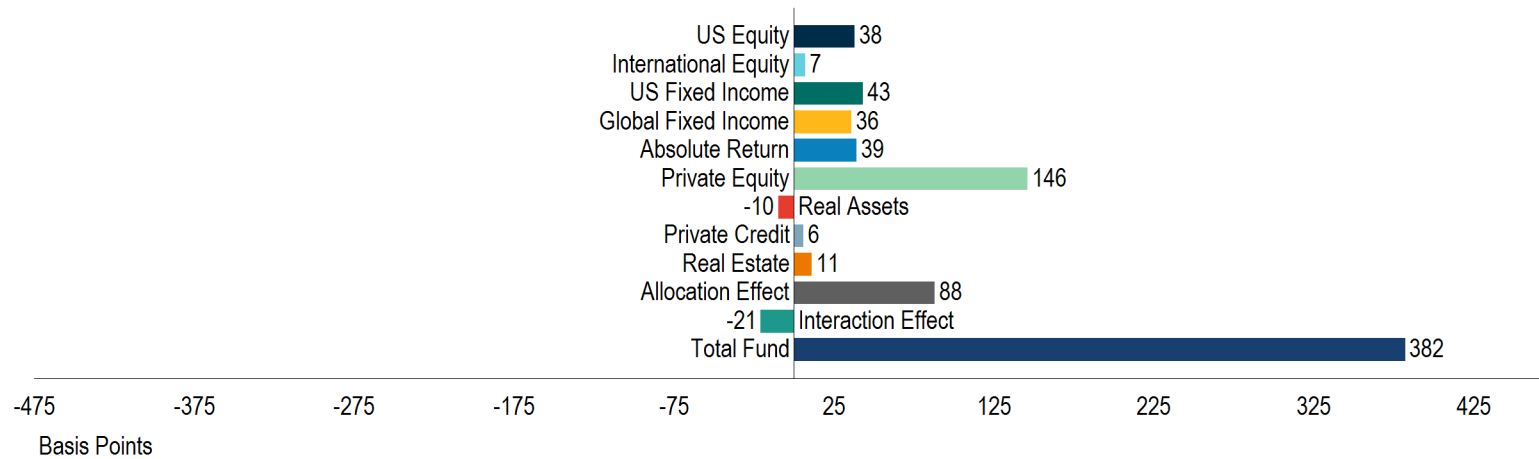
Period Ending: September 30, 2021



	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	8.65%	8.13%	0.52%	0.13%	0.08%	0.02%	0.23%
International Equity	3.32%	3.16%	0.16%	0.04%	-0.07%	0.00%	-0.03%
US Fixed Income	2.57%	1.88%	0.69%	0.09%	-0.04%	0.00%	0.06%
Global Fixed Income	-0.85%	-0.27%	-0.58%	-0.02%	0.01%	-0.01%	-0.01%
Absolute Return	6.11%	3.67%	2.44%	0.22%	0.04%	-0.06%	0.21%
Private Equity	24.57%	14.55%	10.02%	0.73%	0.04%	-0.01%	0.76%
Real Assets	6.51%	4.81%	1.69%	0.08%	0.00%	0.00%	0.08%
Private Credit	5.29%	3.49%	1.81%	0.08%	0.07%	-0.05%	0.10%
Real Estate	11.41%	10.78%	0.63%	0.05%	-0.13%	-0.01%	-0.10%
<b>Total</b>	<b>7.18%</b>	<b>5.88%</b>	<b>1.30%</b>	<b>1.40%</b>	<b>0.02%</b>	<b>-0.11%</b>	<b>1.30%</b>

Total Fund  
Performance Attribution (One Year)

Period Ending: September 30, 2021

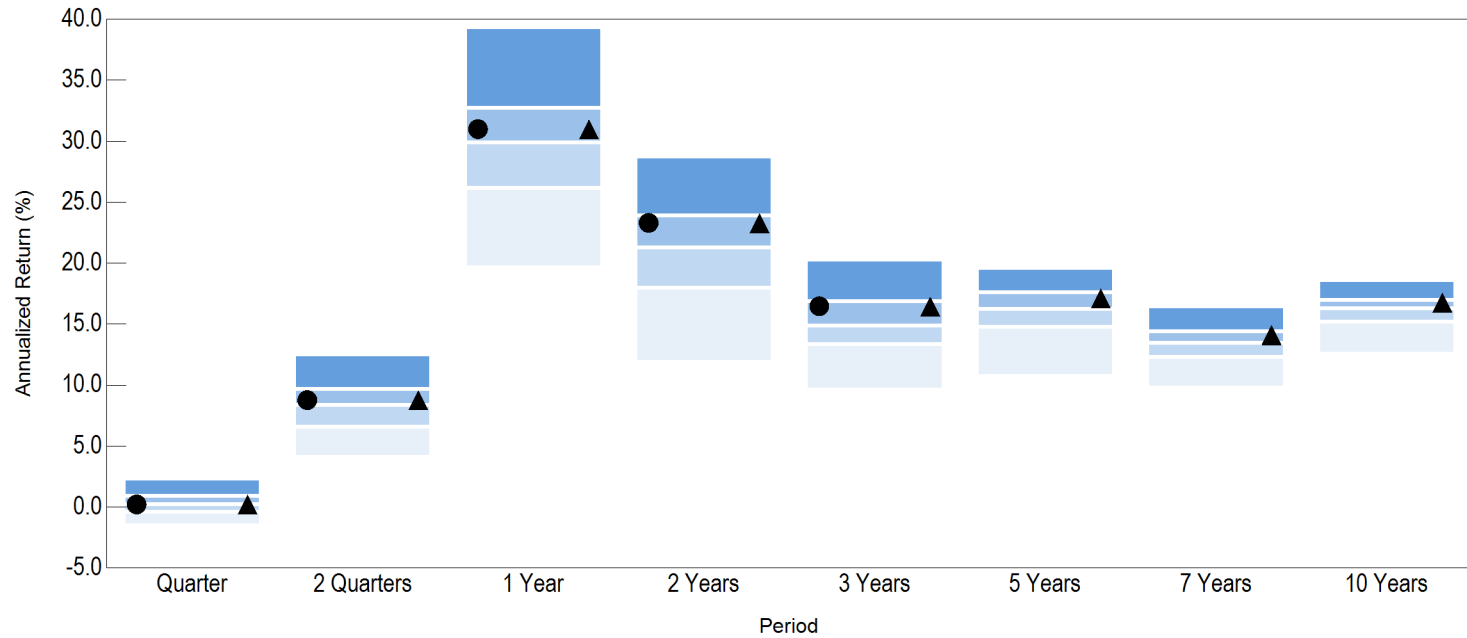


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	33.50%	31.87%	1.62%	0.38%	0.33%	0.04%	0.75%
International Equity	26.03%	25.68%	0.34%	0.07%	0.12%	0.02%	0.21%
US Fixed Income	1.82%	-0.90%	2.72%	0.43%	0.06%	-0.01%	0.47%
Global Fixed Income	6.35%	-3.33%	9.68%	0.36%	-0.21%	0.13%	0.28%
Absolute Return	18.47%	14.35%	4.12%	0.39%	0.14%	-0.10%	0.42%
Private Equity	62.50%	41.47%	21.03%	1.46%	0.06%	-0.24%	1.28%
Real Assets	29.06%	30.77%	-1.71%	-0.10%	-0.03%	0.01%	-0.12%
Private Credit	11.66%	10.29%	1.37%	0.06%	0.41%	-0.03%	0.44%
Real Estate	15.86%	14.59%	1.27%	0.11%	0.01%	-0.02%	0.10%
<b>Total</b>	<b>25.50%</b>	<b>21.68%</b>	<b>3.82%</b>	<b>3.15%</b>	<b>0.88%</b>	<b>-0.21%</b>	<b>3.82%</b>

US Effective Style Map



eV US Large Cap Core Equity Gross Return Comparison



	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>5th Percentile</b>	2.34	12.51	39.31	28.73	20.28	19.59	16.42	18.58								
<b>25th Percentile</b>	0.95	9.70	32.78	23.95	16.93	17.65	14.42	17.01								
<b>Median</b>	0.26	8.39	29.92	21.30	14.94	16.30	13.52	16.32								
<b>75th Percentile</b>	-0.34	6.64	26.19	18.00	13.38	14.83	12.35	15.24								
<b>95th Percentile</b>	-1.49	4.16	19.72	11.91	9.66	10.78	9.81	12.59								
<b># of Portfolios</b>	324	324	324	320	314	291	273	234								
<b>● BlackRock Russell 1000 Index Fund</b>	0.22	(52)	8.77	(44)	30.99	(41)	23.30	(33)	16.47	(32)	--	(--)	--	(--)	--	(--)
<b>▲ Russell 1000</b>	0.21	(53)	8.76	(44)	30.96	(41)	23.26	(33)	16.43	(33)	17.11	(34)	14.09	(33)	16.76	(34)

Characteristics

	Portfolio	Russell 1000
Number of Holdings	1,025	1,025
Weighted Avg. Market Cap. (\$B)	497.1	497.9
Median Market Cap. (\$B)	15.5	15.5
Price To Earnings	24.6	24.7
Price To Book	4.5	4.5
Price To Sales	3.5	3.5
Return on Equity (%)	24.8	24.8
Yield (%)	1.4	1.4

Top Holdings

APPLE INC	5.4%
MICROSOFT CORP	5.2%
AMAZON.COM INC	3.5%
META PLATFORMS INC	2.0%
ALPHABET INC	2.0%
ALPHABET INC	1.8%
TESLA INC	1.5%
BERKSHIRE HATHAWAY INC	1.2%
NVIDIA CORPORATION	1.2%
JPMORGAN CHASE & CO	1.2%

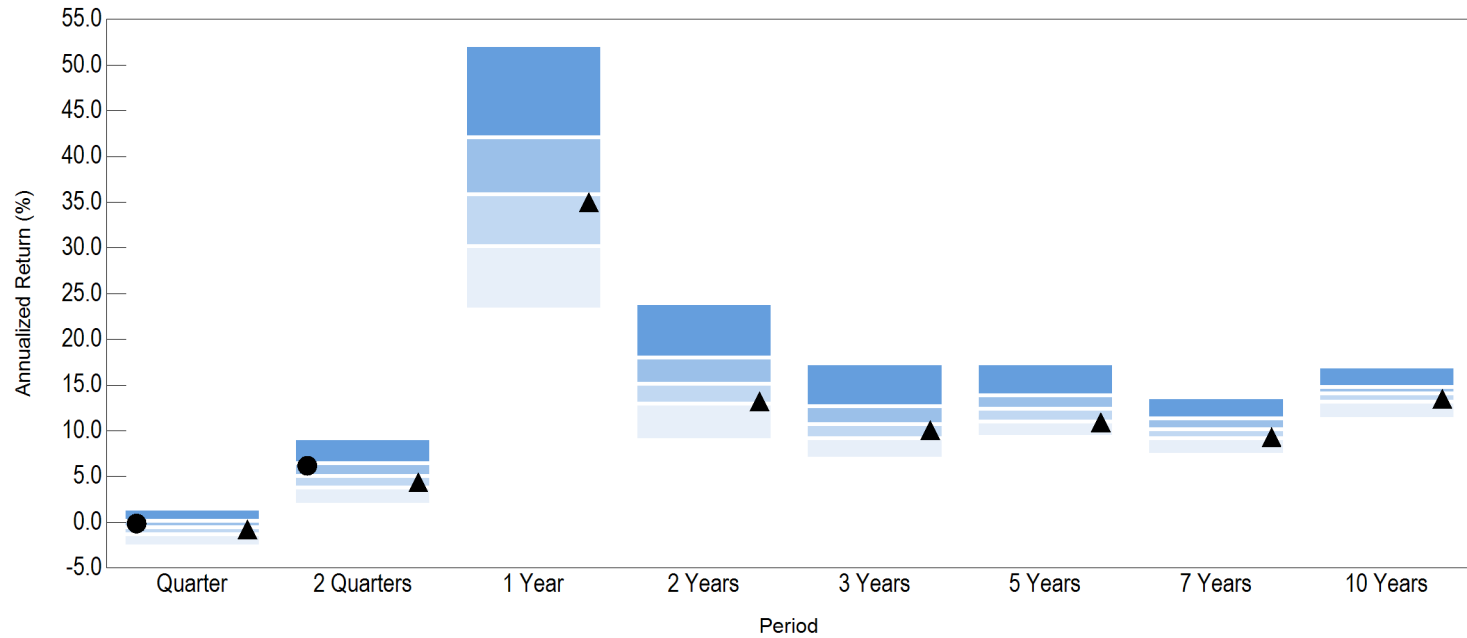
Best Performers

	Return %
STATE AUTO FINANCIAL CORP (STFC)	198.2%
FULCRUM THERAPEUTICS INC (FULC)	169.2%
IVERIC BIO INC (ISEE)	157.4%
UPSTART HOLDINGS INC (UPST)	153.4%
KADMON HOLDINGS INC (KDMN)	125.1%
GREENSKY INC (GSKY)	101.4%
DYNAVAX TECHNOLOGIES CORP (DVAX)	95.0%
GRID DYNAMICS HOLDINGS INC (GDYN)	94.4%
Peabody Energy Corp (BTU)	86.5%
TRILLIUM THERAPEUTICS INC (TRIL)	81.0%

Worst Performers

	Return %
FORTE BIOSCIENCES INC (FBRX)	-91.2%
EARGO INC COMMON STOCK (EAR)	-83.1%
SESEN BIO INC (SESN)	-82.8%
ARDELYX INC (ARDX)	-82.6%
MedAvail Holdings Inc (MDVL)	-76.2%
SERES THERAPEUTICS INC (MCRB)	-70.8%
ONTRAK INC (OTRK)	-69.1%
INNOVAGE HOLDING CORP. COM UDS0.00	-69.0%
ASHFORD HOSPITALITY TRUST INC (AHT)	-67.7%
SILVERBACK THERAPEUTICS INC	-67.7%

eV US Large Cap Value Equity Gross Return Comparison



	Return (Rank)															
5th Percentile	1.48	9.20	52.15	23.92	17.38	17.37	13.66	17.03								
25th Percentile	0.21	6.49	42.12	18.05	12.76	13.91	11.41	14.85								
Median	-0.53	5.09	35.92	15.22	10.75	12.43	10.25	14.11								
75th Percentile	-1.27	3.87	30.27	13.02	9.23	11.05	9.24	13.21								
95th Percentile	-2.58	1.94	23.33	8.99	7.02	9.35	7.45	11.36								
# of Portfolios	341	341	340	336	332	315	302	273								
● Aristotle	-0.13	(38)	6.18	(30)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ Russell 1000 Value	-0.78	(61)	4.39	(64)	35.01	(54)	13.24	(74)	10.07	(65)	10.94	(77)	9.32	(74)	13.51	(70)



Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	44	848
Weighted Avg. Market Cap. (\$B)	177.8	156.3
Median Market Cap. (\$B)	42.1	13.8
Price To Earnings	21.0	18.7
Price To Book	3.2	2.6
Price To Sales	3.2	2.4
Return on Equity (%)	18.2	14.9
Yield (%)	1.5	2.0

Top Holdings

DANAHER CORP	4.7%
MICROSOFT CORP	4.2%
ADOBE INC	4.2%
SONY GROUP CORPORATION	3.6%
CAPITAL ONE FINANCIAL CORP.	3.6%
ANSYS INC	3.2%
MICROCHIP TECHNOLOGY INC	2.9%
JOHNSON CONTROLS INTERNATIONAL PLC	2.8%
THE PNC FINANCIAL SERVICES GROUP INC	2.8%
LENNAR CORP	2.8%

Best Performers

	Return %
COTERRA ENERGY INC (CTRA)	25.5%
ALCON INC (ALC)	14.5%
SONY GROUP CORPORATION (SONY)	13.7%
DANAHER CORP (DHR)	13.5%
CHUBB LTD (CB)	9.6%
MITSUBISHI UFJ FINANCIAL GROUP (MUFG)	9.4%
EAST WEST BANCORP INC (EWBC)	8.7%
SUN COMMUNITIES INC. (SUI)	8.5%
TYSON FOODS INC. (TSN)	7.6%
CULLEN/FROST BANKERS INC (CFR)	6.6%

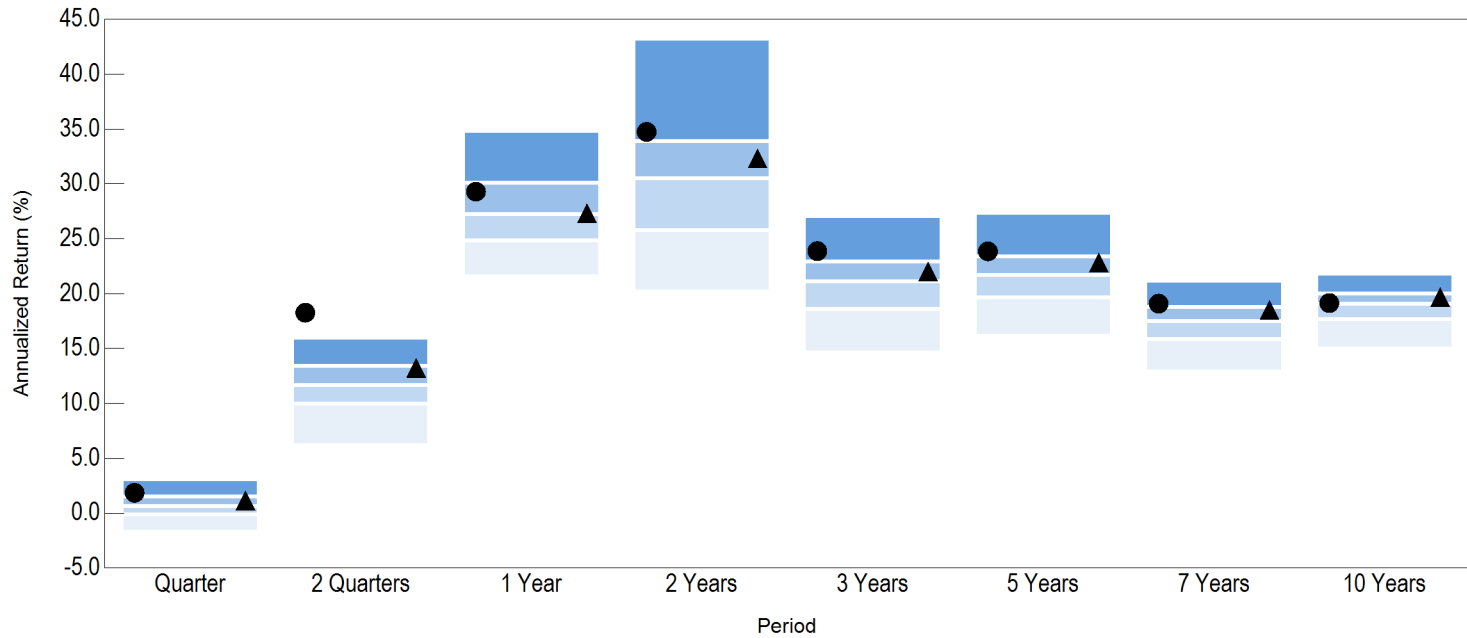
Worst Performers

	Return %
PHILLIPS 66 (PSX)	-17.3%
TWITTER INC (TWTR)	-12.2%
AMGEN INC (AMGN)	-12.1%
RPM INTERNATIONAL INC (RPM)	-12.1%
PAYPAL HOLDINGS INC (PYPL)	-10.7%
CROWN CASTLE INTERNATIONAL CORP (CCI)	-10.5%
NOVARTIS AG (NVS)	-10.4%
WALGREENS BOOTS ALLIANCE INC (WBA)	-9.7%
QUALCOMM INC. (QCOM)	-9.3%
PARKER-HANNIFIN CORP (PH)	-8.6%

**Aristotle Performance Attribution vs. Russell 1000 Value**

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.16%	0.25%	0.00%	-0.08%	2.16%	-2.53%	3.44%	4.58%			
Materials	-0.28%	-0.04%	-0.20%	-0.03%	-6.10%	-4.99%	6.71%	3.84%			
Industrials	0.30%	0.30%	0.00%	0.01%	-1.42%	-3.77%	12.35%	12.13%			
Consumer Discretionary	0.33%	0.25%	-0.06%	0.14%	2.16%	-2.49%	8.26%	5.36%			
Consumer Staples	0.14%	0.15%	0.00%	-0.02%	0.82%	-1.25%	6.61%	7.20%			
Health Care	0.14%	0.22%	-0.04%	-0.04%	1.52%	0.29%	14.36%	17.50%			
Financials	0.15%	0.35%	-0.14%	-0.05%	4.19%	2.46%	18.44%	21.08%			
Information Technology	-0.07%	0.06%	-0.14%	0.02%	-2.08%	-2.40%	19.01%	10.34%			
Communication Services	-0.06%	-0.80%	0.16%	0.58%	-12.24%	-3.23%	2.39%	8.57%			
Utilities	-0.10%	--	-0.10%	--	--	1.34%	0.00%	4.84%			
Real Estate	-0.23%	-0.23%	0.01%	-0.01%	-2.72%	2.20%	4.96%	4.56%			
Cash	0.00%	0.00%	0.00%	0.00%	0.01%	--	3.46%	0.00%			
<b>Portfolio</b>	<b>0.50%</b>	<b>=</b>	<b>0.50%</b>	<b>+</b>	<b>-0.50%</b>	<b>+</b>	<b>0.50%</b>	<b>-0.26%</b>	<b>-0.77%</b>	<b>100.00%</b>	<b>100.00%</b>

eV US Large Cap Growth Equity Gross Return Comparison



	Return (Rank)							
	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	3.05	15.95	34.82	43.22	27.02	27.32	21.18	21.80
25th Percentile	1.55	13.44	30.17	33.92	22.97	23.44	18.83	20.07
Median	0.68	11.70	27.30	30.54	21.17	21.75	17.55	19.10
75th Percentile	-0.11	9.98	24.89	25.84	18.65	19.70	15.93	17.73
95th Percentile	-1.65	6.22	21.64	20.22	14.69	16.17	12.90	15.03
# of Portfolios	260	260	260	257	254	236	227	210
● TCW	1.86 (15)	18.26 (2)	29.29 (30)	34.74 (19)	23.88 (19)	23.86 (24)	19.09 (22)	19.14 (49)
▲ Russell 1000 Growth	1.16 (37)	13.23 (28)	27.32 (50)	32.33 (36)	22.00 (39)	22.84 (36)	18.51 (35)	19.68 (36)

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	34	500
Weighted Avg. Market Cap. (\$B)	422.2	815.3
Median Market Cap. (\$B)	122.0	19.5
Price To Earnings	51.3	34.6
Price To Book	11.1	12.8
Price To Sales	9.7	6.2
Return on Equity (%)	32.2	43.1
Yield (%)	0.3	0.7
Beta	1.0	1.0

Top Holdings

ALPHABET INC	6.9%
AMAZON.COM INC	6.4%
ADOBE INC	6.1%
SERVICENOW INC	6.0%
PAYPAL HOLDINGS INC	5.1%
META PLATFORMS INC	5.0%
NVIDIA CORPORATION	4.9%
SALESFORCE.COM INC	4.4%
VISA INC	4.2%
AMERICAN TOWER CORP	3.9%

Best Performers

	Return %
DEXCOM INC (DXCM)	28.1%
SNOWFLAKE INC (SNOW)	25.1%
NETFLIX INC (NFLX)	15.6%
COSTCO WHOLESALE CORP (COST)	13.8%
SERVICENOW INC (NOW)	13.2%
SALESFORCE.COM INC (CRM)	11.0%
ALIGN TECHNOLOGY INC (ALGN)	8.9%
ASML HOLDING NV (ASML)	7.9%
ALPHABET INC (GOOG)	6.3%
WASTE CONNECTIONS INC. (WCN)	5.6%

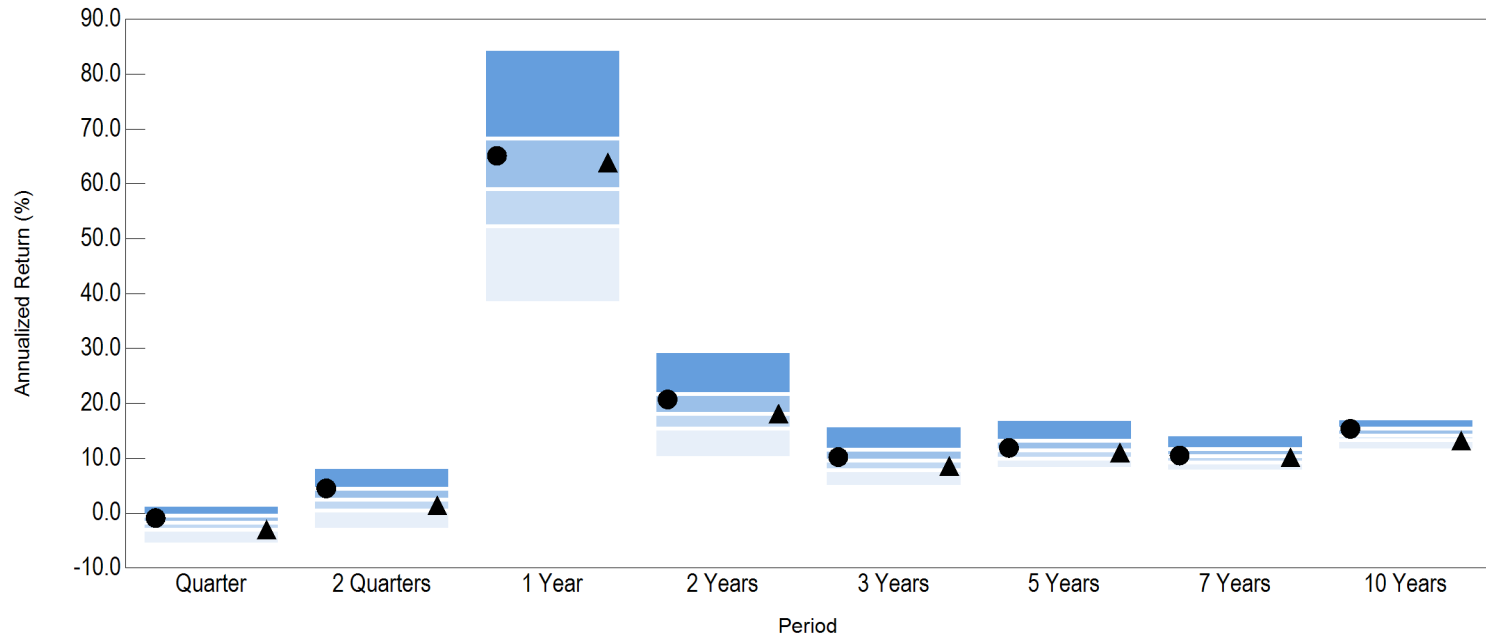
Worst Performers

	Return %
TWILIO INC (TWLO)	-19.1%
ILLUMINA INC (ILMN)	-14.3%
PAYPAL HOLDINGS INC (PYPL)	-10.7%
TRADE DESK INC (THE) (TTD)	-9.1%
NIKE INC (NKE)	-5.8%
MASTERCARD INC (MA)	-4.7%
VISA INC (V)	-4.6%
AMAZON.COM INC (AMZN)	-4.5%
META PLATFORMS INC (FB)	-2.4%
ADOBE INC (ADBE)	-1.7%

TCW Performance Attribution vs. Russell 1000 Growth

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.01%	--	-0.01%	--	--	0.98%	0.00%	0.24%			
Materials	0.04%	--	0.04%	--	--	-2.90%	0.00%	1.03%			
Industrials	0.61%	0.62%	-0.01%	0.00%	3.66%	-5.99%	6.31%	6.37%			
Consumer Discretionary	-0.07%	-0.28%	0.09%	0.12%	-1.48%	0.08%	10.55%	18.52%			
Consumer Staples	0.29%	0.49%	0.01%	-0.22%	13.78%	0.39%	2.11%	3.88%			
Health Care	0.42%	0.23%	0.10%	0.09%	6.15%	3.60%	12.91%	9.07%			
Financials	-0.13%	-0.12%	0.06%	-0.06%	1.69%	7.17%	3.40%	2.33%			
Information Technology	-0.59%	-0.60%	0.00%	0.01%	0.43%	1.80%	43.11%	44.14%			
Communication Services	0.34%	0.30%	0.01%	0.03%	4.53%	2.11%	13.76%	12.64%			
Utilities	0.00%	--	0.00%	--	--	0.03%	0.00%	0.03%			
Real Estate	-0.07%	0.02%	-0.13%	0.04%	-1.31%	-2.26%	5.84%	1.74%			
Cash	-0.01%	0.00%	-0.01%	0.00%	0.01%	--	2.01%	0.00%			
<b>Portfolio</b>	<b>0.82%</b>	<b>=</b>	<b>0.66%</b>	<b>+</b>	<b>0.14%</b>	<b>+</b>	<b>0.01%</b>	<b>1.97%</b>	<b>1.15%</b>	<b>100.00%</b>	<b>100.00%</b>

eV US Small Cap Value Equity Gross Return Comparison



Return (Rank)

5th Percentile	1.50	8.39	84.59	29.43	15.98	17.13	14.26	17.22
25th Percentile	-0.42	4.53	68.32	21.80	11.61	13.25	11.71	15.43
Median	-1.72	2.56	59.13	18.13	9.59	11.50	10.46	14.22
75th Percentile	-2.99	0.55	52.34	15.50	7.86	9.96	9.31	13.34
95th Percentile	-5.64	-2.97	38.35	10.08	4.81	8.12	7.63	11.47
# of Portfolios	212	212	212	210	206	198	188	176
● Kennedy	-0.89 (30)	4.53 (26)	65.12 (33)	20.72 (33)	10.22 (40)	11.90 (47)	10.51 (49)	15.37 (26)
▲ Russell 2000 Value	-2.98 (75)	1.44 (65)	63.92 (35)	18.12 (51)	8.58 (64)	11.03 (62)	10.19 (57)	13.22 (76)

Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	253	1,426
Weighted Avg. Market Cap. (\$B)	3.2	2.9
Median Market Cap. (\$B)	2.1	1.1
Price To Earnings	15.9	13.8
Price To Book	2.0	1.8
Price To Sales	1.5	1.4
Return on Equity (%)	7.1	3.8
Yield (%)	1.3	1.7
Beta	1.0	1.0

Top Holdings

GOODYEAR TIRE & RUBBER CO	1.1%
PDC ENERGY INC	1.1%
TRONOX HOLDINGS PLC	1.1%
METROPOLITAN BANK HOLDING CORP	1.0%
PACWEST BANCORP	1.0%
BANCORP INC (THE)	0.9%
SCRIPPS (E.W.) CO (THE)	0.9%
TEXAS CAPITAL BANCSHARES INC	0.9%
BUILDERS FIRSTSOURCE INC	0.8%
WILLSCOT MOBILE MINI HOLDINGS CORP	0.8%

Best Performers

	Return %
KADMON HOLDINGS INC (KDMN)	125.1%
KEZAR LIFE SCIENCES INC (KZR)	59.1%
ASPEN AEROGELS INC (ASPN)	53.8%
VERITIV CORP (VRTV)	45.8%
CITY OFFICE REIT INC (CIO)	45.5%
PERFICIENT INC (PRFT)	43.9%
METROPOLITAN BANK HOLDING CORP (MCB)	40.0%
ARC DOCUMENT SOLUTIONS INC (ARC)	38.5%
RANGE RESOURCES CORP. (RRC)	35.0%
TRIUMPH BANCORP INC (TBK)	34.9%

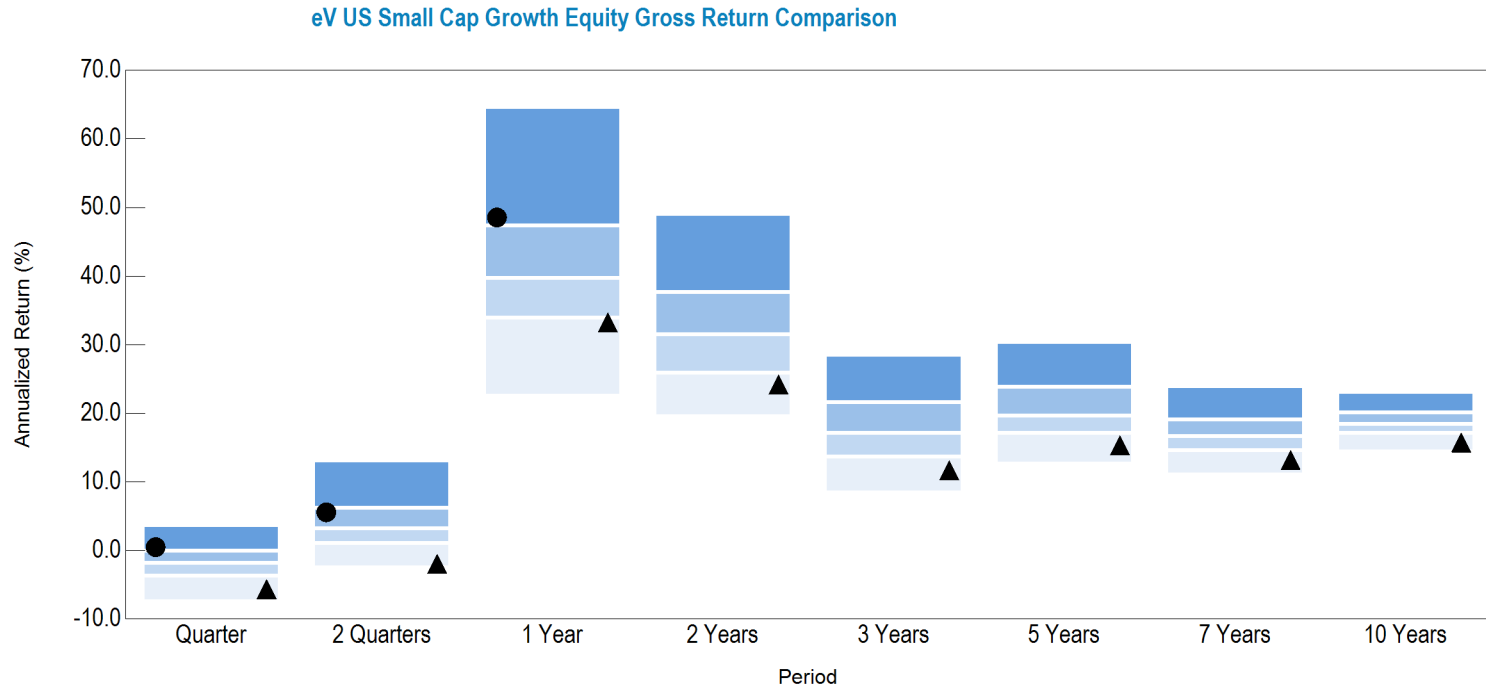
Worst Performers

	Return %
ARDELYX INC (ARDX)	-82.6%
REGIS CORP (RGS)	-62.8%
CALAVO GROWERS INC (CVGW)	-39.7%
AIRGAIN INC (AIRG)	-38.8%
HYDROFARM HOLDINGS GROUP INC COMMON STOCK USD (HYFM)	-36.0%
HIMAX TECHNOLOGIES INC (HIMX)	-36.0%
DMC GLOBAL INC (BOOM)	-34.3%
FARMER BROTHERS CO (FARM)	-33.7%
SI-BONE INC (SIBN)	-31.9%
FATE THERAPEUTICS INC (FATE)	-31.7%

**Kennedy Performance Attribution vs. Russell 2000 Value**

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.33%	-0.31%	-0.09%	0.07%	-1.68%	2.97%	5.13%	6.65%			
Materials	0.05%	0.06%	-0.05%	0.04%	-3.40%	-4.78%	7.33%	4.65%			
Industrials	0.39%	0.34%	-0.01%	0.06%	-1.06%	-3.32%	17.94%	15.18%			
Consumer Discretionary	0.12%	0.20%	-0.15%	0.07%	-5.61%	-7.95%	11.28%	8.41%			
Consumer Staples	0.05%	0.05%	0.00%	0.00%	-2.70%	-4.40%	2.92%	2.81%			
Health Care	0.13%	-0.13%	0.20%	0.06%	-7.76%	-6.59%	6.17%	11.43%			
Financials	0.69%	0.81%	-0.07%	-0.05%	5.18%	2.01%	23.95%	25.40%			
Information Technology	-0.16%	-0.06%	-0.05%	-0.04%	-5.62%	-4.44%	8.62%	5.39%			
Communication Services	0.47%	0.26%	0.40%	-0.18%	-9.68%	-15.63%	1.31%	4.40%			
Utilities	-0.03%	-0.11%	0.03%	0.05%	-6.57%	-4.29%	2.66%	4.65%			
Real Estate	0.36%	0.49%	-0.04%	-0.09%	3.50%	-0.92%	9.03%	11.03%			
Cash	0.10%	0.00%	0.10%	0.00%	0.01%	--	3.65%	0.00%			
<b>Portfolio</b>	<b>1.84%</b>	<b>=</b>	<b>1.59%</b>	<b>+</b>	<b>0.26%</b>	<b>+</b>	<b>-0.01%</b>	<b>-0.95%</b>	<b>-2.79%</b>	<b>100.00%</b>	<b>100.00%</b>





	Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)	
<b>5th Percentile</b>	3.67	13.12	64.60	49.03	28.45	30.32	23.89	23.08						
<b>25th Percentile</b>	0.03	6.29	47.41	37.76	21.69	23.90	19.18	20.16						
<b>Median</b>	-1.74	3.27	39.78	31.61	17.23	19.74	16.76	18.52						
<b>75th Percentile</b>	-3.58	1.16	34.00	26.01	13.76	17.18	14.64	17.16						
<b>95th Percentile</b>	-7.32	-2.37	22.63	19.58	8.49	12.67	11.15	14.46						
<b># of Portfolios</b>	160	160	160	157	156	150	143	134						
<b>● William Blair Small Cap Growth</b>	0.48	(23)	5.56	(32)	48.54	(21)	--	(--)	--	(--)	--	(--)	--	(--)
<b>▲ Russell 2000 Growth</b>	-5.65	(91)	-1.96	(94)	33.26	(79)	24.18	(84)	11.70	(89)	15.34	(91)	13.19	(89)

Characteristics

	Portfolio	Russell 2000 Growth
Number of Holdings	3,351	1,224
Weighted Avg. Market Cap. (\$B)	274.9	3.8
Median Market Cap. (\$B)	12.6	1.4
Price To Earnings	21.4	26.1
Price To Book	3.5	5.1
Price To Sales	2.3	2.8
Return on Equity (%)	17.5	-2.2
Yield (%)	1.8	0.4

Top Holdings

CAMECO CORP	2.1%
BUILDERS FIRSTSOURCE INC	2.0%
THE BEAUTY HEALTH CO COMMON STOCK	2.0%
BROOKS AUTOMATION INC	2.0%
CASELLA WASTE SYSTEMS INC	2.0%
MONTROSE ENVIRONMENTAL GROUP INC	1.9%
DUCOMMUN INC	1.9%
BRINK'S CO (THE)	1.9%
SKYLINE CHAMPION CORP	1.9%
BWX TECHNOLOGIES INC	1.8%

Best Performers

	Return %
GRID DYNAMICS HOLDINGS INC (GDYN)	94.4%
SITIME CORP (SITM)	61.3%
RUSH STREET INTERACTIVE INC	56.7%
THE BEAUTY HEALTH CO COMMON STOCK	54.6%
GOGO INC (GOGO)	52.0%
PURE STORAGE INC (PSTG)	28.8%
PDF SOLUTIONS INC (PDFS)	26.7%
BUILDERS FIRSTSOURCE INC (BLDR)	21.3%
INSPIRE MEDICAL SYSTEMS INC (INSP)	20.5%
CASELLA WASTE SYSTEMS INC (CWST)	19.7%

Worst Performers

	Return %
INNOVAGE HOLDING CORP. COM UDS0.00	-69.0%
STEM INC	-33.7%
PAE INCORPORATED (PAE)	-32.8%
CAREDX INC (CDNA)	-30.8%
AERIE PHARMACEUTICALS INC (AERI)	-28.8%
MERCURY SYSTEMS INC (MRCY)	-28.5%
BUTTERFLY NETWORK INC	-27.9%
PACIFIC BIOSCIENCES OF CALIFORNIA INC (PACB)	-26.9%
AXOGEN INC (AXGN)	-26.9%
PROS HOLDINGS INC (PRO)	-22.1%

William Blair Small Cap Growth Performance Attribution vs. Russell 2000 Growth

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.37%	0.12%	0.31%	-0.06%	6.29%	-1.09%	2.86%	2.05%			
Materials	0.04%	0.07%	0.01%	-0.05%	-4.00%	-6.23%	1.36%	2.93%			
Industrials	-0.58%	-0.65%	0.53%	-0.46%	-4.74%	-0.04%	24.03%	13.27%			
Consumer Discretionary	1.24%	2.02%	0.04%	-0.82%	7.48%	-6.12%	9.37%	15.24%			
Consumer Staples	1.06%	1.15%	-0.01%	-0.08%	26.86%	-5.80%	2.81%	3.59%			
Health Care	0.90%	0.74%	0.27%	-0.11%	-9.39%	-11.62%	26.04%	30.46%			
Financials	0.08%	0.15%	-0.02%	-0.04%	1.23%	-1.28%	4.45%	4.92%			
Information Technology	2.04%	1.82%	0.07%	0.15%	7.46%	-1.08%	23.39%	21.37%			
Communication Services	0.83%	0.83%	0.03%	-0.03%	18.14%	-11.52%	2.30%	2.97%			
Utilities	-0.03%	--	-0.03%	--	--	6.91%	0.00%	0.27%			
Real Estate	0.20%	0.28%	-0.03%	-0.06%	9.59%	-0.18%	2.27%	2.80%			
Cash	0.13%	0.00%	0.13%	0.00%	0.01%	--	1.13%	0.00%			
Unclassified	0.00%	--	0.00%	--	--	-5.52%	0.00%	0.13%			
<b>Portfolio</b>	<b>6.27%</b>	<b>=</b>	<b>6.52%</b>	<b>+</b>	<b>1.31%</b>	<b>+</b>	<b>-1.56%</b>	<b>0.75%</b>	<b>-5.52%</b>	<b>100.00%</b>	<b>100.00%</b>

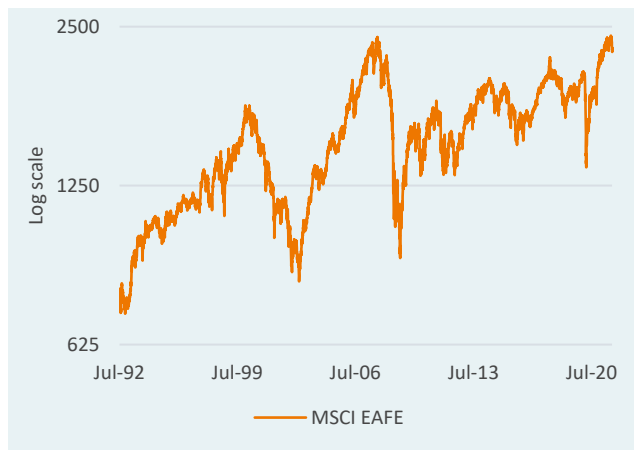
# International developed equity

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.

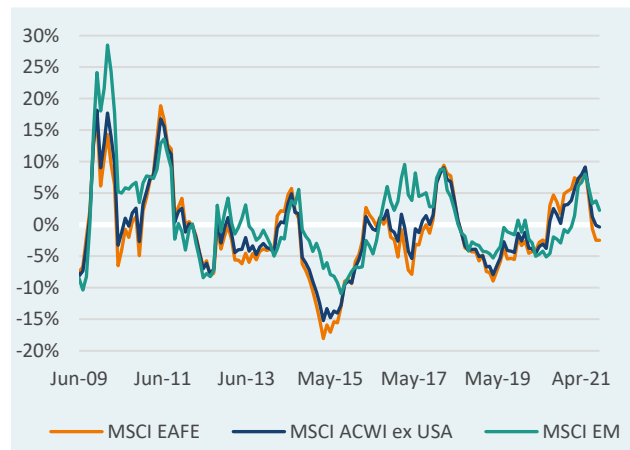
The strong performance of Japanese equities helped to offset for international developed equity investors the negative returns delivered by European equities (MSCI Europe -1.6%), which faced headwinds from a significant weakening in the pound sterling (-2.4%) and euro (-2.3%) relative to the U.S. dollar. 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**



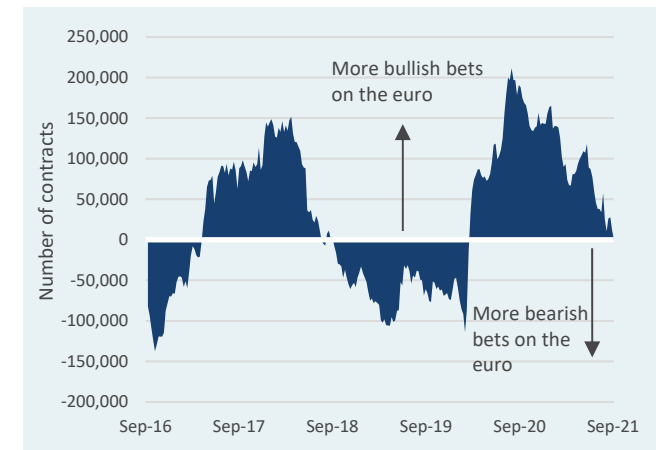
Source: MSCI, as of 9/30/21

**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

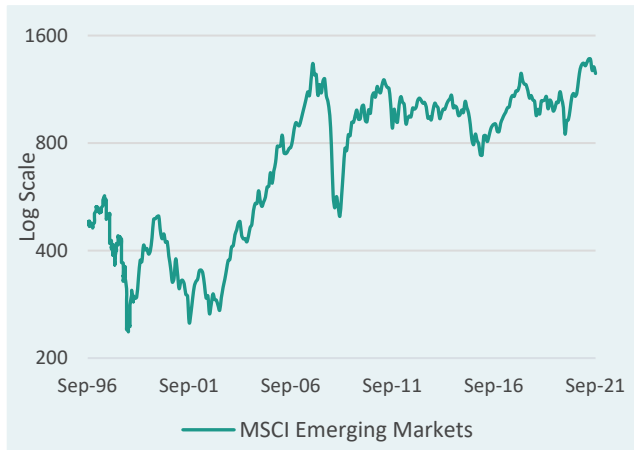
Emerging market equities saw large losses (MSCI EM -8.1%) on an unhedged currency basis, underperforming other markets during the third quarter. China has dragged down emerging markets performance considerably, producing losses of -18.2% in Q3 relative to ex-China emerging market performance of -2.0%, 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%)

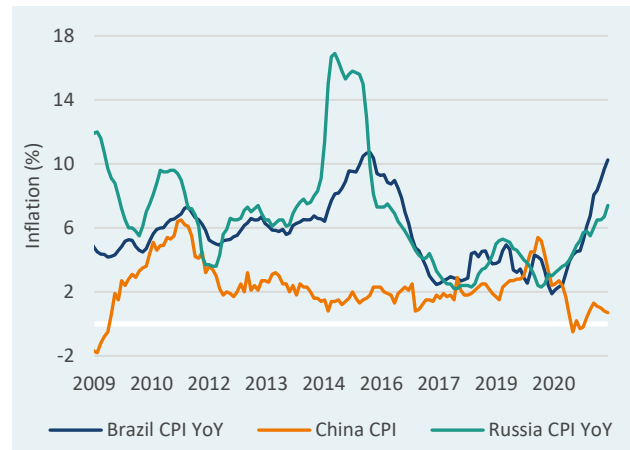
Inflation in Brazil has risen to 10.3%, and in Russia to 7.4%, which has generated responses from central banks. Brazil has hiked their central bank rate from 2.00% to 6.25% to battle rising prices, while Russia has hiked its rate from 4.25% to 6.75% year-to-date. While inflation rate in the U.S. is 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



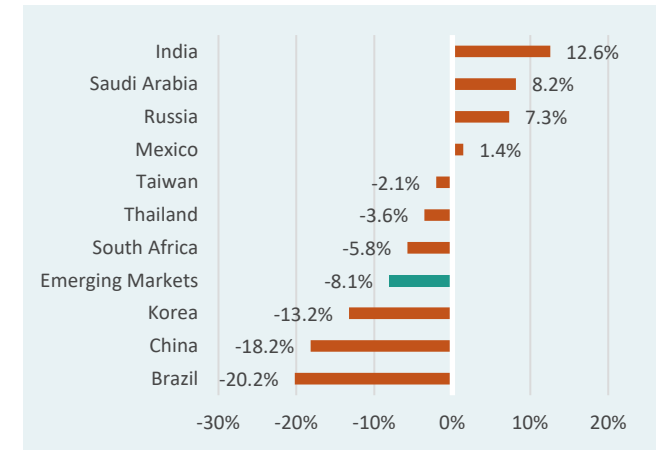
Source: MSCI, as of 9/30/21

## INFLATION (YOY)



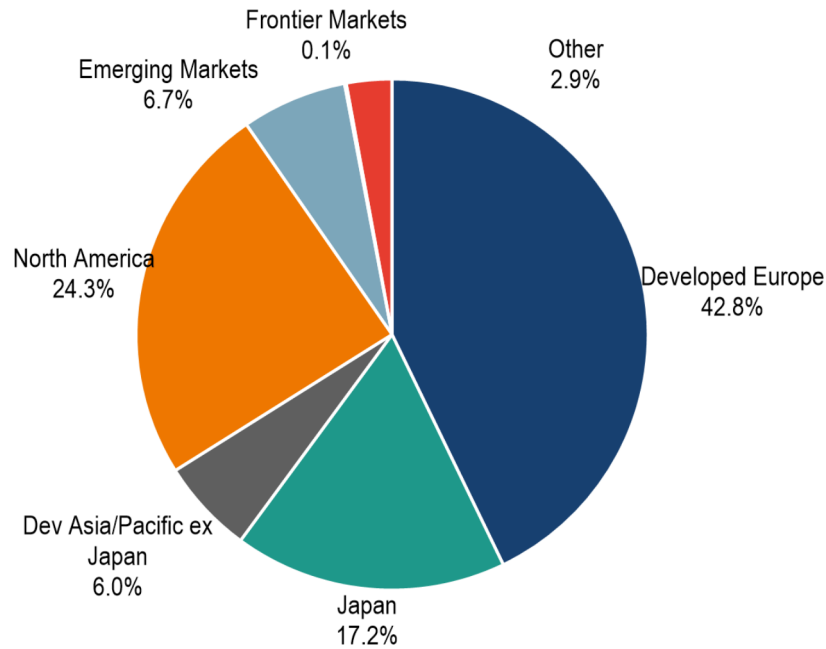
Source: Bloomberg, as of 9/30/21 or most recent data

## Q3 PERFORMANCE – TOP 10 EM CONSTITUENTS

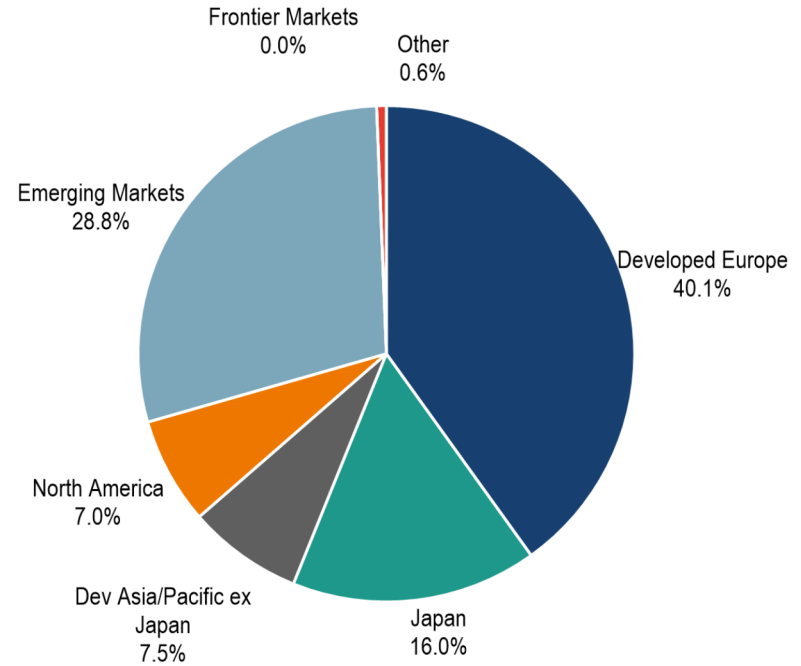


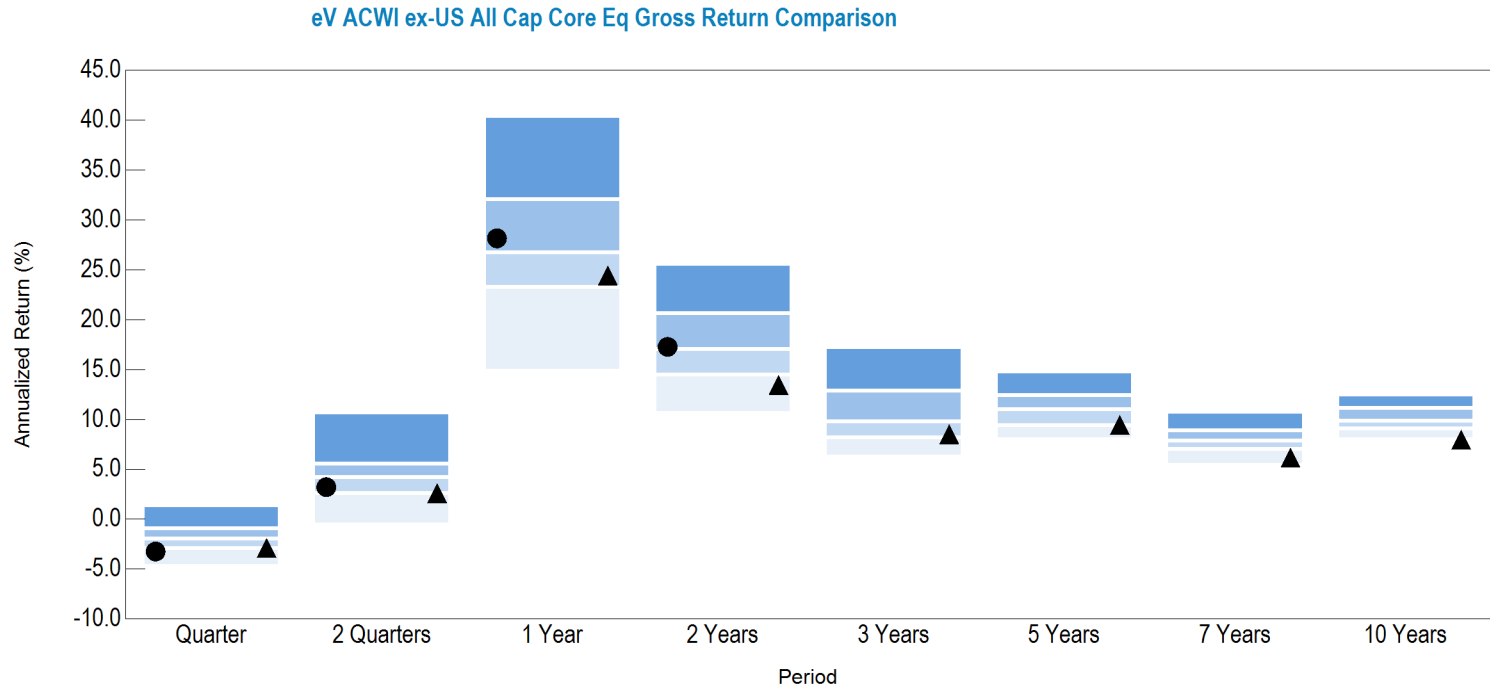
Source: Bloomberg, MSCI, as of 9/30/21, performance in USD terms

International Equity



MSCI ACWI ex US IMI





	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>Return (Rank)</b>																
5th Percentile	1.37		10.69		40.40		25.57		17.25		14.80		10.76		12.50	
25th Percentile	-0.89		5.61		32.12		20.72		12.91		12.51		8.95		11.21	
Median	-1.88		4.26		26.77		17.12		9.86		11.06		7.92		9.91	
75th Percentile	-2.87		2.65		23.31		14.52		8.27		9.46		7.08		9.16	
95th Percentile	-4.68		-0.47		14.91		10.66		6.31		8.07		5.49		8.04	
# of Portfolios	56		56		56		54		52		51		47		40	
● Bivium Intl Equity	-3.23	(80)	3.22	(69)	28.16	(46)	17.28	(48)	--	(--)	--	(--)	--	(--)	--	(--)
▲ MSCI ACWI ex USA Gross	-2.88	(76)	2.60	(77)	24.44	(73)	13.46	(81)	8.52	(70)	9.44	(76)	6.17	(91)	7.97	(97)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	348	2,348
Weighted Avg. Market Cap. (\$B)	73.6	94.6
Median Market Cap. (\$B)	12.1	10.3
Price To Earnings	17.5	15.8
Price To Book	3.2	2.7
Price To Sales	1.5	1.5
Return on Equity (%)	13.8	13.6
Yield (%)	2.0	2.6

Top Holdings

ISHARES CORE MSCI EMERGING MARKETS ETF	6.6%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	1.8%
ASML HOLDING NV	1.6%
AIRBUS SE	1.6%
LVMH MOET HENNESSY LOUIS VUITTON SE	1.4%
DIAGEO PLC	1.4%
NOVO NORDISK 'B'	1.3%
DASSAULT SYST SHS	1.2%
LONZA GROUP AG, ZUERICH	1.2%
L'OREAL S.A., PARIS	1.1%

Best Performers

	Return %
ILIAD SA	44.2%
GAZPROM PJSC	37.0%
SAMHALLSBYGGNADSBOLAGET I NORDEN AB	32.9%
VANGUARD INTERNATIONAL SEMICONDUCTOR CORP	32.2%
AEGON NV	27.2%
ALUMINA LTD	26.8%
MISUMI GROUP INC	26.3%
RECRUIT HOLDINGS CO LTD	24.5%
RAFFLES MEDICAL GROUP LTD	22.6%
JBS SA	21.8%

Worst Performers

	Return %
C&A MODAS S A	-53.6%
SANDS CHINA LTD	-51.2%
STONECO LTD (STNE)	-48.2%
SSY GROUP LTD	-38.8%
MELCO RESORTS & ENTERTAINMENT LTD (MLCO)	-38.2%
FLATEXDEGIRO AG	-36.7%
QUALICORP CONSULTORIA E CORRETORA DE SEGUROS SA	-35.9%
GALAXY ENTERTAINMENT GROUP LTD	-35.8%
ALIBABA GROUP HOLDING LTD	-35.5%
CHINA LESSO GROUP HOLDINGS LTD	-34.4%



**Bivium Intl Equity Performance Attribution vs. MSCI ACWI ex USA Gross**

	Total Effects	Attribution Effects				Returns		Sector Weights			
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.21%	0.07%	-0.30%	0.01%	8.79%	7.15%	1.62%	4.55%			
Materials	0.15%	0.06%	0.03%	0.05%	-4.05%	-5.25%	7.62%	8.31%			
Industrials	0.22%	0.09%	0.13%	0.00%	1.42%	0.33%	15.84%	11.81%			
Consumer Discretionary	0.14%	-0.26%	0.28%	0.12%	-13.27%	-11.19%	11.06%	13.83%			
Consumer Staples	0.11%	0.14%	0.00%	-0.03%	-1.86%	-3.27%	8.85%	8.49%			
Health Care	0.13%	0.14%	0.02%	-0.03%	-0.21%	-1.81%	10.26%	9.30%			
Financials	-0.22%	-0.11%	-0.28%	0.17%	0.80%	1.34%	12.30%	18.61%			
Information Technology	-0.09%	-0.14%	0.01%	0.03%	-1.62%	-0.77%	14.23%	12.97%			
Communication Services	0.44%	0.33%	0.26%	-0.15%	-4.51%	-9.35%	2.73%	6.63%			
Utilities	0.00%	-0.04%	-0.03%	0.07%	-2.44%	-1.60%	1.29%	2.98%			
Real Estate	0.20%	0.21%	0.00%	-0.01%	2.68%	-5.65%	2.34%	2.52%			
Cash	0.03%	0.00%	0.03%	0.00%	0.01%	--	2.23%	0.00%			
Unclassified	-0.46%	0.00%	-0.40%	-0.07%	-5.68%	--	9.63%	0.00%			
<b>Portfolio</b>	<b>0.42%</b>	<b>=</b>	<b>0.50%</b>	<b>+</b>	<b>-0.24%</b>	<b>+</b>	<b>0.16%</b>	<b>-2.31%</b>	<b>-2.73%</b>	<b>100.00%</b>	<b>100.00%</b>

**Bivium Intl Equity Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	1.97%	10.44%	0.98%	0.12%	-0.01%	0.12%	-0.02%	-0.08%	0.02%
Belgium	-5.87%	-5.61%	0.27%	0.59%	0.00%	0.01%	0.01%	0.00%	0.01%
Czech Republic*	--	16.24%	0.00%	0.03%	--	-0.01%	0.00%	--	-0.01%
Denmark	1.91%	2.71%	3.42%	1.60%	-0.01%	0.11%	-0.04%	-0.01%	0.04%
Finland	-0.88%	-3.07%	0.33%	0.65%	0.01%	0.00%	0.01%	-0.01%	0.01%
France	-2.12%	-1.57%	12.44%	7.10%	-0.04%	0.10%	-0.11%	-0.03%	-0.09%
Germany	-9.22%	-3.97%	2.24%	5.79%	-0.30%	0.03%	0.07%	0.19%	-0.02%
Greece*	-6.85%	4.70%	0.03%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
Hungary*	--	7.92%	0.00%	0.07%	--	-0.01%	0.00%	--	-0.01%
Ireland	11.54%	0.06%	1.13%	0.44%	0.04%	0.02%	0.01%	0.06%	0.14%
Italy	5.50%	-0.91%	1.47%	1.53%	0.10%	0.00%	0.00%	0.00%	0.09%
Luxembourg	5.54%	-2.72%	0.10%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%
Netherlands	8.38%	3.56%	4.49%	2.69%	0.13%	0.13%	-0.05%	0.09%	0.30%
Norway	-1.07%	5.63%	0.91%	0.32%	-0.02%	0.05%	-0.01%	-0.04%	-0.02%
Poland*	13.93%	1.82%	0.37%	0.22%	0.03%	0.01%	-0.01%	0.02%	0.05%
Portugal	--	3.87%	0.00%	0.11%	--	-0.01%	0.00%	--	-0.01%
Russia*	22.35%	10.32%	0.52%	0.95%	0.13%	-0.05%	-0.01%	-0.06%	0.01%
Spain	-2.14%	-3.16%	1.40%	1.52%	0.02%	0.00%	0.00%	0.00%	0.02%
Sweden	-2.63%	-2.47%	2.62%	2.33%	0.00%	0.00%	-0.01%	0.00%	-0.01%
Switzerland	0.05%	-3.25%	7.61%	6.06%	0.21%	-0.02%	-0.02%	0.05%	0.22%
United Kingdom	-1.14%	-0.25%	9.38%	8.89%	-0.08%	0.02%	-0.01%	0.00%	-0.08%

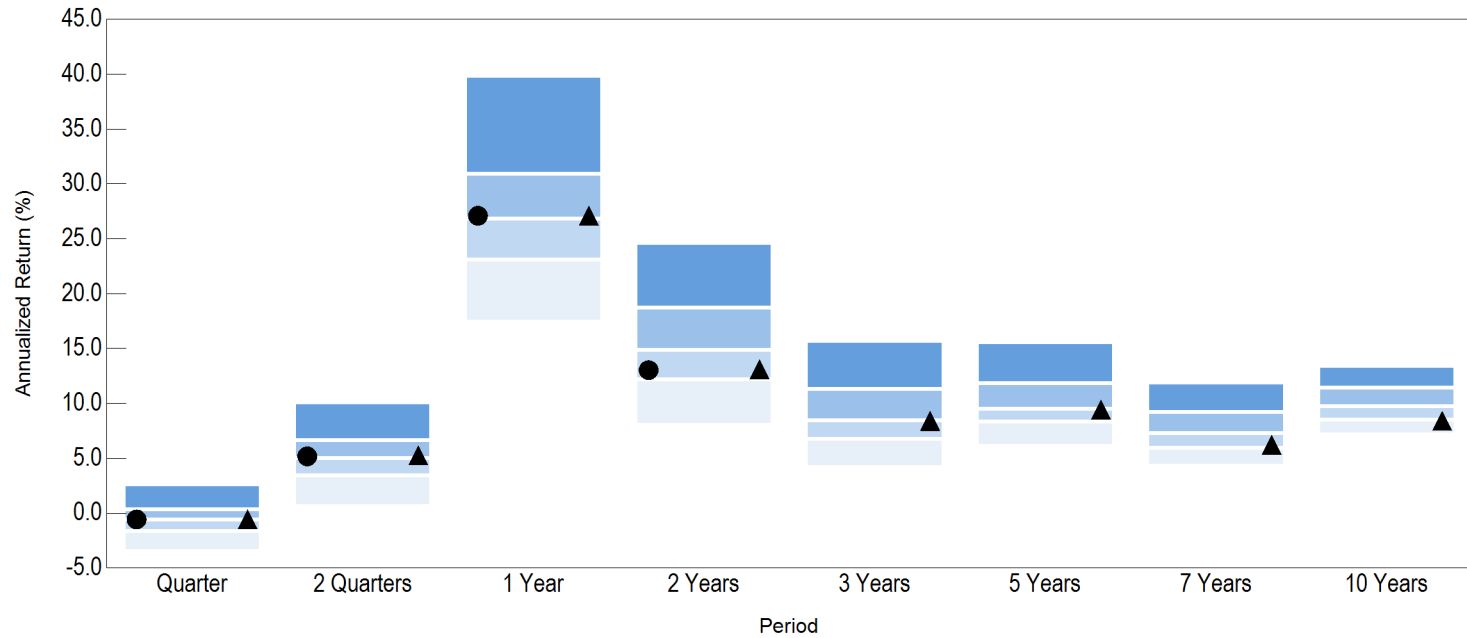
**Bivium Intl Equity Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	-5.29%	-2.75%	1.69%	4.43%	-0.12%	-0.05%	0.09%	0.07%	0.00%
China*	-17.88%	-17.89%	2.24%	11.75%	0.00%	1.58%	0.01%	0.00%	1.59%
Hong Kong	-23.26%	-9.26%	4.71%	2.01%	-0.28%	-0.21%	0.00%	-0.38%	-0.88%
India*	-1.53%	12.83%	1.08%	3.11%	-0.44%	-0.28%	-0.01%	0.29%	-0.44%
Indonesia*	3.60%	10.06%	0.85%	0.35%	-0.02%	0.05%	0.01%	-0.03%	0.00%
Japan	4.18%	4.88%	13.68%	14.34%	-0.10%	-0.04%	0.00%	0.00%	-0.14%
Korea*	-10.43%	-12.71%	3.22%	4.15%	-0.06%	0.07%	0.16%	0.01%	0.18%
Malaysia*	0.29%	0.42%	0.06%	0.39%	0.00%	-0.01%	0.00%	0.00%	-0.01%
New Zealand	1.87%	2.58%	0.67%	0.15%	0.00%	0.02%	0.00%	0.00%	0.01%
Pakistan*	--	-17.25%	0.00%	0.01%	--	0.00%	0.00%	--	0.00%
Philippines*	-12.09%	-3.38%	0.15%	0.19%	-0.02%	0.00%	0.00%	0.00%	-0.01%
Singapore	3.40%	-0.03%	1.43%	0.66%	0.02%	0.02%	-0.01%	0.03%	0.06%
Taiwan*	-5.47%	-1.40%	2.50%	4.38%	-0.17%	0.01%	-0.01%	0.07%	-0.10%
Thailand*	-3.81%	-2.52%	0.07%	0.50%	-0.03%	-0.01%	0.02%	0.02%	0.00%
<b>Americas</b>									
Argentina*	--	22.10%	0.00%	0.04%	--	-0.01%	0.00%	--	-0.01%
Brazil*	-2.47%	-19.95%	1.18%	1.63%	0.31%	0.06%	0.01%	-0.08%	0.29%
Canada	-1.25%	-2.23%	5.97%	7.05%	0.07%	-0.01%	0.02%	-0.01%	0.07%
Chile*	--	-7.23%	0.00%	0.14%	--	-0.01%	0.01%	--	0.01%
Colombia*	--	10.94%	0.00%	0.05%	--	-0.01%	0.00%	--	-0.01%
Mexico*	-4.68%	1.79%	0.22%	0.55%	-0.04%	-0.02%	0.01%	0.02%	-0.02%
Peru*	--	-11.07%	0.00%	0.06%	--	0.01%	0.00%	--	0.01%
United States	-9.55%	0.31%	7.67%	0.00%	0.00%	0.11%	0.00%	-0.76%	-0.64%

**Bivium Intl Equity Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	4.25%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
Israel	6.56%	2.90%	0.30%	0.37%	0.01%	0.00%	0.00%	0.00%	0.01%
Kuwait*	--	9.06%	0.00%	0.16%	--	-0.02%	0.00%	--	-0.02%
Qatar*	--	7.30%	0.00%	0.20%	--	-0.02%	0.00%	--	-0.02%
Saudi Arabia*	--	8.24%	0.00%	0.90%	--	-0.08%	0.00%	--	-0.08%
South Africa*	-14.18%	-4.86%	0.15%	1.11%	-0.16%	-0.01%	0.05%	0.14%	0.02%
Turkey*	--	1.96%	0.00%	0.07%	--	0.00%	0.00%	--	0.00%
United Arab Emirates*	-9.74%	6.36%	0.10%	0.22%	-0.04%	-0.01%	0.00%	0.02%	-0.02%
<b>Totals</b>									
Americas	-5.63%	-5.00%	15.04%	9.51%	-0.20%	-0.05%	0.06%	-0.12%	-0.31%
Europe	0.29%	-1.08%	49.72%	41.05%	0.57%	0.18%	-0.18%	0.12%	0.69%
Asia/Pacific	-4.43%	-4.05%	32.34%	46.40%	-0.37%	0.28%	0.27%	0.11%	0.28%
Other	-2.01%	2.49%	0.54%	3.05%	-0.21%	-0.14%	0.06%	0.17%	-0.12%
Cash	0.01%	--	2.36%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%
Unclassified	--	--	0.00%	0.00%	--	0.00%	0.00%	--	0.00%
<b>Total</b>	<b>-2.15%</b>	<b>-2.72%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>-0.21%</b>	<b>0.30%</b>	<b>0.20%</b>	<b>0.29%</b>	<b>0.58%</b>
<b>Totals</b>									
Developed	-1.61%	-0.45%	84.90%	68.74%	-0.97%	0.39%	-0.06%	-0.23%	-0.87%
Emerging*	-6.15%	-7.72%	12.73%	31.26%	0.41%	0.99%	0.26%	-0.24%	1.42%
Cash	0.01%	--	2.36%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%

eV All EAFE Equity Gross Return Comparison



	Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)			
	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.61	10.07	39.83	24.63	15.68	15.53	11.86	13.38	2.61	10.07	39.83	24.63	15.68	15.53	11.86	13.38
25th Percentile	0.41	6.67	30.94	18.77	11.38	11.88	9.27	11.48	0.41	6.67	30.94	18.77	11.38	11.88	9.27	11.48
Median	-0.54	5.04	26.90	14.89	8.48	9.57	7.34	9.76	-0.54	5.04	26.90	14.89	8.48	9.57	7.34	9.76
75th Percentile	-1.59	3.45	23.15	12.24	6.78	8.38	6.01	8.55	-1.59	3.45	23.15	12.24	6.78	8.38	6.01	8.55
95th Percentile	-3.40	0.70	17.45	8.08	4.24	6.15	4.34	7.23	-3.40	0.70	17.45	8.08	4.24	6.15	4.34	7.23
# of Portfolios	390	390	390	382	373	346	302	253	390	390	390	382	373	346	302	253
● BlackRock MSCI World ex-US Index Fd A	-0.57 (51)	5.18 (47)	27.09 (48)	13.03 (67)	-- (--)	-- (--)	-- (--)	-- (--)	-0.57 (51)	5.18 (47)	27.09 (48)	13.03 (67)	-- (--)	-- (--)	-- (--)	-- (--)
▲ MSCI World ex US Gross	-0.56 (51)	5.26 (46)	27.10 (48)	13.09 (67)	8.41 (52)	9.42 (54)	6.22 (70)	8.41 (79)	-0.56 (51)	5.26 (46)	27.10 (48)	13.09 (67)	8.41 (52)	9.42 (54)	6.22 (70)	8.41 (79)

Characteristics

	Portfolio	MSCI World ex USA
Number of Holdings	938	933
Weighted Avg. Market Cap. (\$B)	77.9	77.9
Median Market Cap. (\$B)	13.8	14.2
Price To Earnings	17.8	17.6
Price To Book	2.7	2.7
Price To Sales	1.6	1.6
Return on Equity (%)	13.7	13.6
Yield (%)	2.7	2.7

Top Holdings

NESTLE SA, CHAM UND VEVEY	1.8%
ASML HOLDING NV	1.7%
ROCHE HOLDING AG	1.3%
LVMH MOET HENNESSY LOUIS VUITTON SE	1.1%
TOYOTA MOTOR CORP	1.0%
ASTRAZENECA PLC	1.0%
NOVARTIS AG	0.9%
NOVO NORDISK 'B'	0.9%
SHOPIFY INC	0.8%
ROYAL BANK OF CANADA	0.8%

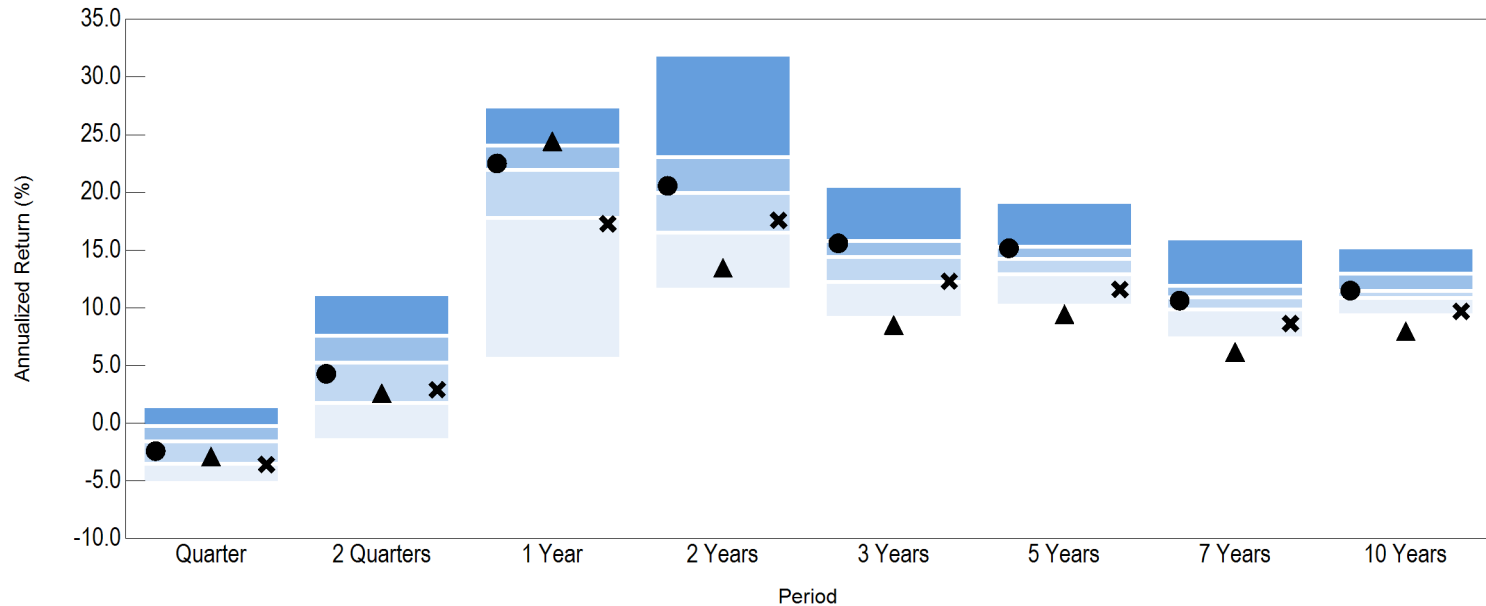
Best Performers

	Return %
WISETECH GLOBAL LTD	62.5%
NIPPON YUSEN KK	52.5%
ILIAD SA	44.2%
NUVEI CORP COM	40.1%
AUSNET SERVICES	39.1%
ROLLS ROYCE HOLDINGS PLC	38.5%
SYDNEY AIRPORT	37.5%
NEMETSCHKE SE	37.4%
JFE HOLDINGS INC	34.2%
SHIONOGI & CO LTD	32.5%

Worst Performers

	Return %
SANDS CHINA LTD	-51.2%
FUTU HOLDINGS LTD (FUTU)	-49.2%
WYNN MACAU LTD	-46.8%
CANOPY GROWTH CORP (WEED.)	-42.6%
MELCO RESORTS & ENTERTAINMENT LTD (MLCO)	-38.2%
SJM HOLDINGS (K:SJM)	-37.7%
GALAXY ENTERTAINMENT GROUP LTD	-35.8%
MAGELLAN FINANCIAL GP. (A:MFGX)	-34.9%
PEPTIDREAM INC	-33.5%
WIX.COM LTD (WIX)	-32.5%

eV ACWI ex-US Large Cap Growth Eq Gross Return Comparison



	Return (Rank)							
	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.46	11.18	27.39	31.88	20.55	19.17	15.99	15.23
25th Percentile	-0.19	7.63	24.07	23.07	15.80	15.33	11.96	12.97
Median	-1.54	5.28	21.96	19.97	14.44	14.28	10.96	11.47
75th Percentile	-3.48	1.80	17.82	16.56	12.27	12.95	9.87	10.87
95th Percentile	-5.15	-1.44	5.62	11.61	9.17	10.20	7.41	9.40
# of Portfolios	38	38	38	36	36	32	27	18
● Capital Group	-2.41 (62)	4.28 (65)	22.51 (47)	20.57 (48)	15.59 (27)	15.17 (30)	10.62 (53)	11.49 (50)
▲ MSCI ACWI ex USA Gross	-2.88 (68)	2.60 (73)	24.44 (24)	13.46 (91)	8.52 (99)	9.44 (97)	6.17 (99)	7.97 (99)
✕ MSCI ACWI ex USA Growth Gross	-3.58 (76)	2.91 (73)	17.27 (78)	17.59 (73)	12.30 (75)	11.59 (87)	8.64 (88)	9.69 (92)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	208	2,348
Weighted Avg. Market Cap. (\$B)	106.5	94.6
Median Market Cap. (\$B)	33.8	10.3
Price To Earnings	27.6	15.8
Price To Book	4.8	2.7
Price To Sales	3.8	1.5
Return on Equity (%)	15.3	13.6
Yield (%)	1.7	2.6
Beta	1.0	1.0

Top Holdings

ASML HOLDING NV	3.9%
EVOLUTION AB (PUBL)	2.8%
KEYENCE CORP	2.6%
YANDEX NV	2.2%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	2.2%
OCADO GROUP PLC	2.0%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	1.9%
TOKYO ELECTRON LTD	1.8%
GENMAB A/S	1.8%
AIA GROUP LTD	1.7%

Best Performers

	Return %
ZOPLUS AG	74.3%
ATLISSIAN CORP PLC (TEAM)	52.4%
SHIFT INC	37.5%
NEMETSCHEK SE	37.4%
GAZPROM PJSC (OGZPY)	34.9%
SHIONOGI & CO LTD	32.5%
TECHNOPRO HOLDINGS INC	28.2%
RECRUIT HOLDINGS CO LTD	24.5%
DAIICHI SANKYO COMPANY LTD	24.4%
STMICROELECTRONICS NV	20.8%

Worst Performers

	Return %
WYNN MACAU LTD	-46.8%
ALIBABA GROUP HOLDING LTD	-35.5%
ALIBABA HEALTH INFORMATION TECHNOLOGY LTD	-35.1%
VALE SA (VALE)	-32.4%
VALE SA	-31.3%
PING AN INSURANCE GROUP	-28.8%
NEXON CO LTD	-27.4%
COUNTRY GARDEN SERVICES HOLDINGS COMPANY LIMITED	-26.9%
NETEASE INC (NTES)	-25.7%
NETEASE INC	-25.2%



Capital Group Performance Attribution vs. MSCI ACWI ex USA Gross

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.12%	0.40%	-0.33%	-0.20%	17.57%	7.15%	1.37%	4.55%			
Materials	-0.51%	-1.16%	0.07%	0.58%	-18.46%	-5.27%	4.91%	8.32%			
Industrials	0.03%	0.03%	0.00%	0.00%	0.82%	0.57%	11.82%	11.74%			
Consumer Discretionary	0.25%	0.55%	-0.33%	0.04%	-7.50%	-11.10%	17.63%	13.79%			
Consumer Staples	-0.25%	-0.38%	0.01%	0.12%	-7.56%	-3.28%	6.70%	8.55%			
Health Care	0.70%	0.57%	0.03%	0.10%	3.83%	-1.88%	12.62%	9.31%			
Financials	-0.55%	-0.75%	-0.34%	0.54%	-2.01%	1.33%	10.31%	18.54%			
Information Technology	1.55%	0.83%	0.18%	0.54%	5.63%	-0.81%	23.44%	12.98%			
Communication Services	0.52%	0.47%	0.17%	-0.12%	-1.66%	-9.30%	4.15%	6.63%			
Utilities	-0.31%	-0.29%	0.00%	-0.03%	-11.04%	-1.59%	3.27%	2.99%			
Real Estate	0.01%	-0.15%	0.06%	0.10%	-11.68%	-6.41%	1.21%	2.61%			
Cash	0.03%	0.00%	0.03%	0.00%	0.01%	--	2.59%	0.00%			
<b>Portfolio</b>	<b>1.35%</b>	<b>=</b>	<b>0.13%</b>	<b>+</b>	<b>-0.45%</b>	<b>+</b>	<b>1.67%</b>	<b>-1.37%</b>	<b>-2.72%</b>	<b>100.00%</b>	<b>100.00%</b>

Capital Group Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	20.25%	10.44%	0.00%	0.12%	0.01%	-0.02%	0.00%	-0.01%	-0.01%
Belgium	-15.40%	-5.61%	1.04%	0.59%	-0.06%	-0.01%	-0.01%	-0.05%	-0.12%
Czech Republic*	--	16.24%	0.00%	0.03%	--	-0.01%	0.00%	--	-0.01%
Denmark	2.44%	2.71%	5.38%	1.60%	-0.01%	0.24%	-0.09%	-0.01%	0.13%
Finland	--	-3.07%	0.00%	0.65%	--	0.00%	0.01%	--	0.01%
France	-6.36%	-1.57%	9.78%	7.10%	-0.35%	0.05%	-0.05%	-0.13%	-0.48%
Germany	2.24%	-3.97%	3.91%	5.79%	0.37%	0.01%	0.03%	-0.12%	0.30%
Greece*	--	4.70%	0.00%	0.04%	--	0.00%	0.00%	--	0.00%
Hungary*	--	7.92%	0.00%	0.07%	--	-0.01%	0.00%	--	-0.01%
Ireland	5.32%	0.06%	0.77%	0.44%	0.02%	0.01%	0.00%	0.02%	0.04%
Italy	-8.65%	-0.91%	1.91%	1.53%	-0.12%	0.01%	-0.01%	-0.03%	-0.15%
Luxembourg	3.04%	-2.72%	0.72%	0.00%	0.00%	0.00%	-0.02%	0.05%	0.03%
Netherlands	8.82%	3.56%	9.17%	2.69%	0.13%	0.46%	-0.12%	0.32%	0.79%
Norway	-10.24%	5.63%	0.48%	0.32%	-0.05%	0.01%	0.00%	-0.03%	-0.07%
Poland*	--	1.82%	0.00%	0.22%	--	-0.02%	0.01%	--	-0.01%
Portugal	7.86%	3.87%	0.23%	0.11%	0.00%	0.01%	0.00%	0.00%	0.02%
Russia*	16.88%	10.32%	1.19%	0.95%	0.07%	0.03%	-0.01%	0.02%	0.10%
Spain	-2.85%	-3.16%	1.02%	1.52%	0.00%	0.00%	0.01%	0.00%	0.01%
Sweden	-1.26%	-2.47%	4.05%	2.33%	0.03%	0.02%	-0.04%	0.02%	0.03%
Switzerland	0.19%	-3.25%	4.77%	6.06%	0.21%	0.02%	0.01%	-0.04%	0.19%
United Kingdom	-6.77%	-0.25%	8.88%	8.89%	-0.60%	0.00%	0.02%	0.00%	-0.58%

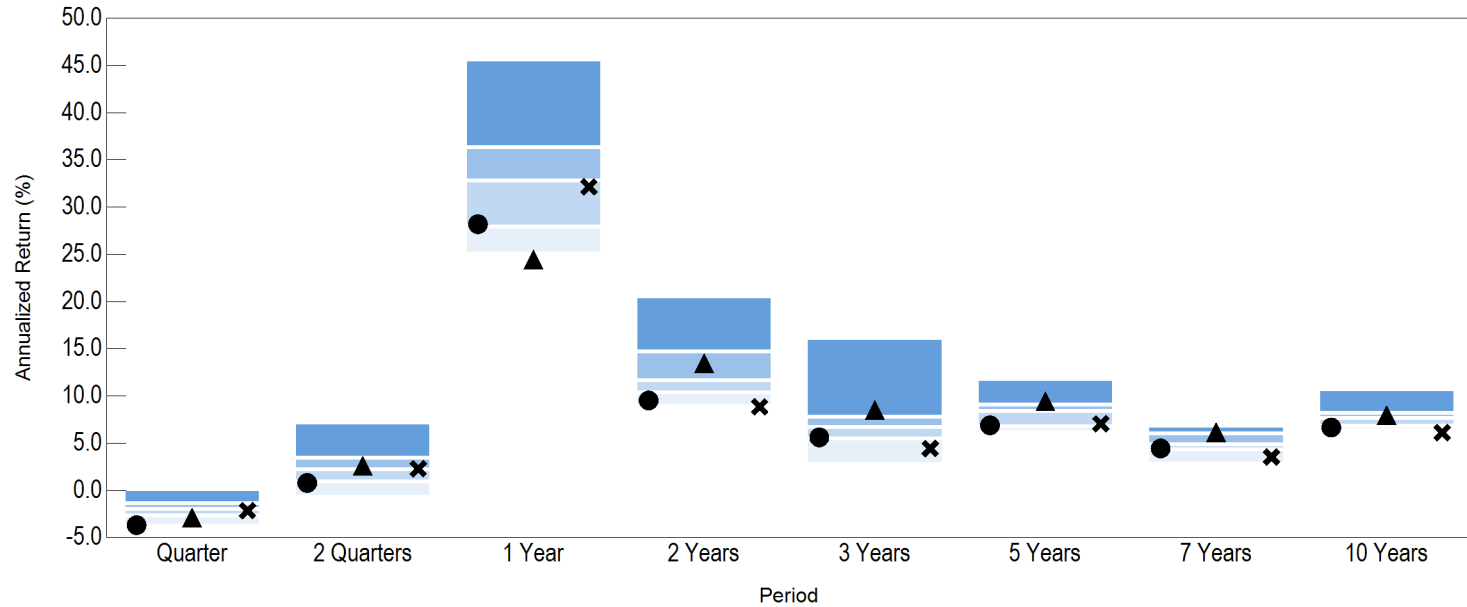
Capital Group Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	52.39%	-2.75%	0.32%	4.43%	2.29%	-0.07%	0.15%	-2.13%	0.24%
China*	-8.57%	-17.89%	6.43%	11.75%	1.08%	0.88%	0.01%	-0.49%	1.49%
Hong Kong	-12.97%	-9.26%	5.04%	2.01%	-0.07%	-0.24%	-0.02%	-0.11%	-0.43%
India*	8.97%	12.83%	1.72%	3.11%	-0.11%	-0.19%	-0.01%	0.05%	-0.26%
Indonesia*	8.27%	10.06%	0.26%	0.35%	-0.01%	-0.01%	0.00%	0.00%	-0.01%
Japan	7.25%	4.88%	13.75%	14.34%	0.34%	-0.04%	0.00%	-0.01%	0.29%
Korea*	-11.74%	-12.71%	0.93%	4.15%	0.04%	0.24%	0.13%	-0.03%	0.38%
Malaysia*	--	0.42%	0.00%	0.39%	--	-0.01%	0.00%	--	-0.01%
New Zealand	--	2.58%	0.00%	0.15%	--	-0.01%	0.00%	--	-0.01%
Pakistan*	--	-17.25%	0.00%	0.01%	--	0.00%	0.00%	--	0.00%
Philippines*	--	-3.38%	0.00%	0.19%	--	0.00%	0.01%	--	0.00%
Singapore	1.89%	-0.03%	0.41%	0.66%	0.01%	-0.01%	0.00%	0.00%	0.00%
Taiwan*	-3.16%	-1.40%	5.22%	4.38%	-0.07%	0.00%	0.00%	-0.01%	-0.09%
Thailand*	-1.97%	-2.52%	0.12%	0.50%	0.00%	-0.01%	0.02%	0.00%	0.01%
<b>Americas</b>									
Argentina*	7.81%	22.10%	1.13%	0.04%	-0.01%	0.25%	0.00%	-0.16%	0.09%
Brazil*	-28.42%	-19.95%	3.42%	1.63%	-0.20%	-0.22%	0.02%	-0.22%	-0.63%
Canada	9.48%	-2.23%	2.26%	7.05%	0.84%	-0.04%	0.09%	-0.57%	0.32%
Chile*	--	-7.23%	0.00%	0.14%	--	-0.01%	0.01%	--	0.01%
Colombia*	--	10.94%	0.00%	0.05%	--	-0.01%	0.00%	--	-0.01%
Mexico*	-12.10%	1.79%	0.08%	0.55%	-0.08%	-0.03%	0.01%	0.07%	-0.02%
Peru*	--	-11.07%	0.00%	0.06%	--	0.01%	0.00%	--	0.01%
United States	-4.82%	0.31%	1.45%	0.00%	0.00%	0.02%	-0.03%	-0.04%	-0.05%

Capital Group Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	4.25%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
Israel	14.78%	2.90%	0.29%	0.37%	0.05%	0.00%	0.00%	-0.01%	0.03%
Kuwait*	--	9.06%	0.00%	0.16%	--	-0.02%	0.00%	--	-0.02%
Qatar*	--	7.30%	0.00%	0.20%	--	-0.02%	0.00%	--	-0.02%
Saudi Arabia*	--	8.24%	0.00%	0.90%	--	-0.08%	0.00%	--	-0.08%
South Africa*	-7.70%	-4.86%	0.78%	1.11%	-0.03%	0.00%	0.02%	0.01%	-0.01%
Turkey*	--	1.96%	0.00%	0.07%	--	0.00%	0.00%	--	0.00%
United Arab Emirates*	--	6.36%	0.00%	0.22%	--	-0.02%	0.00%	--	-0.02%
<b>Totals</b>									
Americas	-9.00%	-5.00%	8.34%	9.51%	-0.46%	0.01%	0.10%	0.06%	-0.29%
Europe	-0.67%	-1.08%	53.79%	41.05%	0.17%	0.26%	-0.25%	0.05%	0.23%
Asia/Pacific	-0.40%	-4.05%	34.20%	46.40%	1.45%	0.24%	0.30%	-0.38%	1.60%
Other	-1.68%	2.49%	1.07%	3.05%	-0.08%	-0.11%	0.02%	0.05%	-0.12%
Cash	0.01%	--	2.61%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%
Unclassified	--	--	0.00%	0.00%	--	0.00%	0.00%	--	0.00%
<b>Total</b>	<b>-1.27%</b>	<b>-2.72%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>1.08%</b>	<b>0.44%</b>	<b>0.16%</b>	<b>-0.22%</b>	<b>1.46%</b>
<b>Totals</b>									
Developed	0.19%	-0.45%	75.63%	68.74%	0.37%	0.17%	-0.05%	0.04%	0.53%
Emerging*	-6.61%	-7.72%	21.28%	31.26%	0.19%	0.53%	0.23%	-0.06%	0.89%
Frontier**	-0.84%	--	0.48%	0.00%	0.00%	0.00%	-0.02%	0.03%	0.00%
Cash	0.01%	--	2.61%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%

eV ACWI ex-US Large Cap Value Eq Gross Return Comparison



	Return (Rank)							
	Quarter	2 Quarters	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	0.12	7.15	45.63	20.55	16.08	11.80	6.86	10.71
25th Percentile	-1.33	3.51	36.38	14.74	7.87	9.13	6.06	8.28
Median	-1.91	2.30	32.89	11.72	6.75	8.47	4.93	7.70
75th Percentile	-2.62	0.98	27.97	10.44	5.57	6.80	4.37	6.88
95th Percentile	-3.70	-0.61	25.12	8.96	2.82	6.23	2.89	6.45
# of Portfolios	20	20	20	20	20	20	19	14
● Mondrian	-3.67 (95)	0.79 (79)	28.20 (73)	9.52 (84)	5.62 (73)	6.89 (72)	4.45 (73)	6.66 (82)
▲ MSCI ACWI ex USA Gross	-2.88 (86)	2.60 (38)	24.44 (99)	13.46 (40)	8.52 (24)	9.44 (21)	6.17 (24)	7.97 (35)
✕ MSCI ACWI ex USA Value Gross	-2.14 (65)	2.30 (51)	32.15 (54)	8.86 (96)	4.43 (91)	7.06 (69)	3.54 (90)	6.11 (99)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	59	2,348
Weighted Avg. Market Cap. (\$B)	53.0	94.6
Median Market Cap. (\$B)	34.0	10.3
Price To Earnings	13.1	15.8
Price To Book	1.7	2.7
Price To Sales	1.1	1.5
Return on Equity (%)	9.1	13.6
Yield (%)	3.4	2.6
Beta	1.0	1.0

Top Holdings

SANOFI	3.7%
FUJIFILM HOLDINGS CORP	3.5%
SCOTTISH AND SOUTHERN ENERGY PLC	3.5%
HONDA MOTOR CO LTD	3.4%
LLOYDS BANKING GROUP PLC	3.3%
CK HUTCHISON HOLDINGS LTD	3.3%
GLAXOSMITHKLINE PLC	3.3%
BANCO SANTANDER SA	3.3%
UNITED OVERSEAS BANK LTD	3.3%
TAKEDA PHARMACEUTICAL CO LTD	3.1%

Best Performers

	Return %
TOKIO MARINE HOLDINGS INC	19.4%
FUJIFILM HOLDINGS CORP	17.0%
ROYAL DUTCH SHELL PLC	16.7%
SONY GROUP CORPORATION	14.9%
ENI SPA	14.4%
ROYAL DUTCH SHELL PLC	13.0%
BOUYGUES, GUYANCOURT	12.5%
RED ELECTRICA CORP SA	8.1%
NIPPON TELEGRAPH & TELEPHONE CORP NTT	7.9%
BP PLC	7.0%

Worst Performers

	Return %
JARDINE MATHESON HOLDINGS LTD	-16.4%
ENEL ENTE NAZIONALE PER L'ENERGIA ELETTRICA SPA, ROMA	-15.0%
CK HUTCHISON HOLDINGS LTD	-13.1%
ISS A/S	-9.9%
KINGFISHER PLC	-9.7%
NOVARTIS AG	-9.7%
SANOFI	-8.1%
COCA-COLA BOTTLERS JAPAN HOLDINGS INC	-7.2%
TELIA COMPANY AB	-7.0%
ESSITY AKTIEBOLAG	-6.3%

**Mondrian Performance Attribution vs. MSCI ACWI ex USA Gross**

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.60%	0.25%	0.29%	0.06%	12.32%	7.15%	7.28%	4.55%			
Materials	0.21%	-0.03%	0.12%	0.13%	-5.74%	-5.25%	2.85%	8.31%			
Industrials	-0.87%	-0.83%	0.07%	-0.10%	-6.01%	0.33%	14.26%	11.81%			
Consumer Discretionary	1.57%	1.51%	0.12%	-0.06%	0.27%	-11.19%	12.35%	13.83%			
Consumer Staples	0.06%	-0.32%	0.03%	0.36%	-7.00%	-3.27%	2.00%	8.49%			
Health Care	-0.34%	-0.20%	0.06%	-0.20%	-3.68%	-1.81%	15.92%	9.30%			
Financials	-0.09%	0.09%	-0.21%	0.04%	1.63%	1.34%	13.71%	18.61%			
Information Technology	0.64%	1.05%	-0.09%	-0.32%	7.65%	-0.77%	8.42%	12.97%			
Communication Services	0.69%	0.68%	-0.09%	0.10%	0.68%	-9.35%	7.89%	6.63%			
Utilities	-0.13%	-0.01%	0.09%	-0.22%	-2.06%	-1.60%	9.93%	2.98%			
Real Estate	0.09%	0.09%	0.04%	-0.04%	-3.25%	-5.65%	1.39%	2.52%			
Cash	0.00%	--	--	--	--	--	0.00%	0.00%			
Unclassified	0.22%	0.00%	0.31%	-0.10%	4.30%	--	4.01%	0.00%			
<b>Portfolio</b>	<b>2.66%</b>	<b>=</b>	<b>2.27%</b>	<b>+</b>	<b>0.73%</b>	<b>+</b>	<b>-0.34%</b>	<b>-0.08%</b>	<b>-2.73%</b>	<b>100.00%</b>	<b>100.00%</b>

Mondrian Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	10.44%	0.00%	0.12%	--	-0.02%	0.00%	--	-0.01%
Belgium	--	-5.61%	0.00%	0.59%	--	0.01%	0.01%	--	0.03%
Czech Republic*	--	16.24%	0.00%	0.03%	--	-0.01%	0.00%	--	-0.01%
Denmark	-9.91%	2.71%	1.76%	1.60%	-0.21%	0.01%	0.00%	-0.02%	-0.22%
Finland	--	-3.07%	0.00%	0.65%	--	0.00%	0.01%	--	0.01%
France	-2.05%	-1.57%	10.26%	7.10%	-0.03%	0.06%	-0.07%	-0.02%	-0.06%
Germany	-5.74%	-3.97%	2.93%	5.79%	-0.10%	0.02%	0.06%	0.05%	0.03%
Greece*	--	4.70%	0.00%	0.04%	--	0.00%	0.00%	--	0.00%
Hungary*	--	7.92%	0.00%	0.07%	--	-0.01%	0.00%	--	-0.01%
Ireland	--	0.06%	0.00%	0.44%	--	-0.02%	0.01%	--	-0.01%
Italy	-3.27%	-0.91%	6.14%	1.53%	-0.04%	0.12%	-0.10%	-0.11%	-0.13%
Netherlands	13.02%	3.56%	1.25%	2.69%	0.26%	-0.10%	0.03%	-0.14%	0.05%
Norway	--	5.63%	0.00%	0.32%	--	-0.03%	0.00%	--	-0.02%
Poland*	--	1.82%	0.00%	0.22%	--	-0.02%	0.01%	--	-0.01%
Portugal	--	3.87%	0.00%	0.11%	--	-0.01%	0.00%	--	-0.01%
Russia*	--	10.32%	0.00%	0.95%	--	-0.10%	-0.01%	--	-0.11%
Spain	-2.56%	-3.16%	5.78%	1.52%	0.01%	0.01%	-0.10%	0.03%	-0.05%
Sweden	-6.85%	-2.47%	3.13%	2.33%	-0.10%	0.01%	-0.01%	-0.04%	-0.15%
Switzerland	-9.52%	-3.25%	3.01%	6.06%	-0.38%	0.04%	0.03%	0.19%	-0.12%
United Kingdom	1.88%	-0.25%	21.22%	8.89%	0.19%	0.39%	-0.29%	0.27%	0.56%

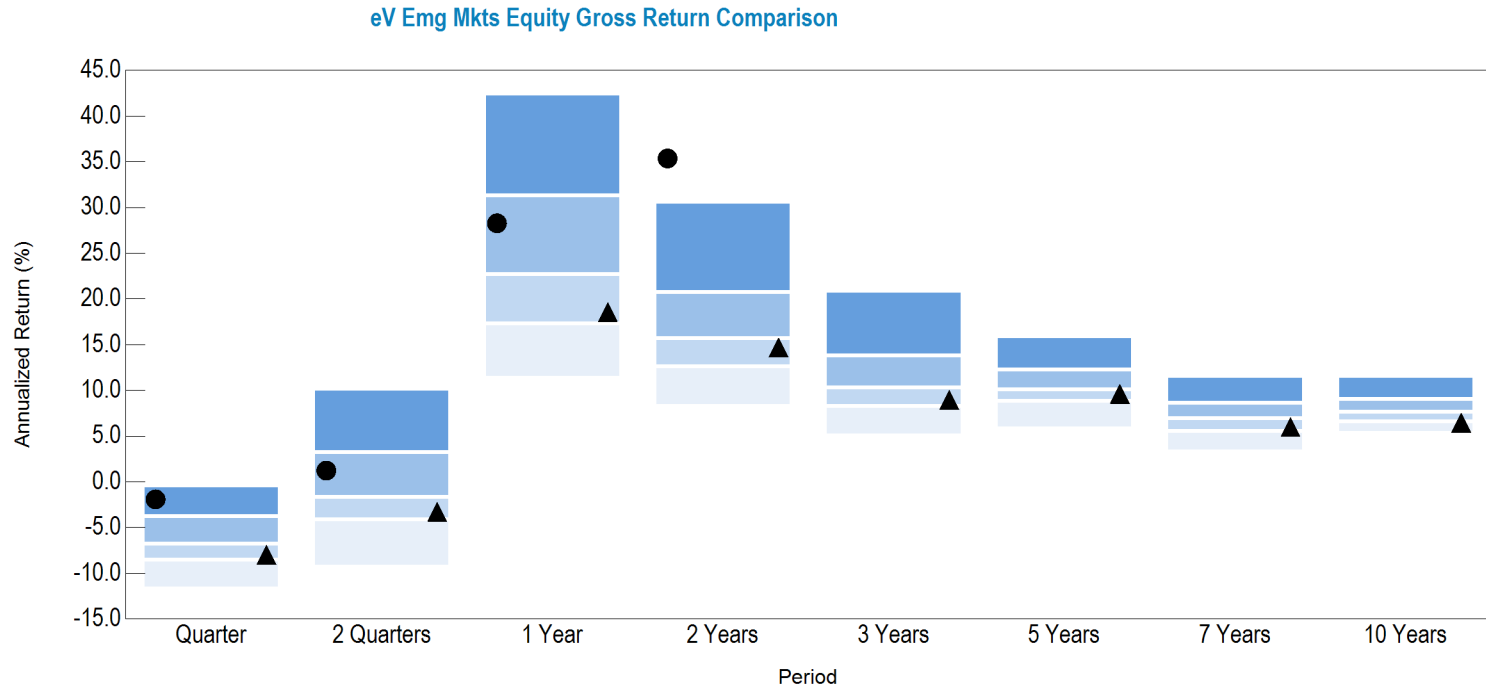


Mondrian Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	--	-2.75%	0.00%	4.43%	--	-0.08%	0.15%	--	0.07%
China*	--	-17.89%	0.00%	11.75%	--	1.95%	0.01%	--	1.97%
Hong Kong	-13.12%	-9.26%	4.22%	2.01%	-0.08%	-0.17%	0.00%	-0.08%	-0.34%
India*	--	12.83%	0.00%	3.11%	--	-0.43%	-0.01%	--	-0.43%
Indonesia*	--	10.06%	0.00%	0.35%	--	-0.03%	-0.01%	--	-0.04%
Japan	4.20%	4.88%	32.65%	14.34%	-0.10%	1.20%	-0.10%	-0.13%	0.88%
Korea*	--	-12.71%	0.00%	4.15%	--	0.32%	0.16%	--	0.48%
Malaysia*	--	0.42%	0.00%	0.39%	--	-0.01%	0.00%	--	-0.01%
New Zealand	--	2.58%	0.00%	0.15%	--	-0.01%	0.00%	--	-0.01%
Pakistan*	--	-17.25%	0.00%	0.01%	--	0.00%	0.00%	--	0.00%
Philippines*	--	-3.38%	0.00%	0.19%	--	0.00%	0.01%	--	0.00%
Singapore	1.50%	-0.03%	3.59%	0.66%	0.01%	0.06%	-0.03%	0.05%	0.09%
Taiwan*	--	-1.40%	0.00%	4.38%	--	0.02%	-0.01%	--	0.01%
Thailand*	--	-2.52%	0.00%	0.50%	--	-0.02%	0.02%	--	0.01%
<b>Americas</b>									
Argentina*	--	22.10%	0.00%	0.04%	--	-0.01%	0.00%	--	-0.01%
Brazil*	--	-19.95%	0.00%	1.63%	--	0.20%	0.11%	--	0.31%
Canada	-3.25%	-2.23%	1.43%	7.05%	-0.07%	-0.05%	0.11%	0.06%	0.05%
Chile*	--	-7.23%	0.00%	0.14%	--	-0.01%	0.01%	--	0.01%
Colombia*	--	10.94%	0.00%	0.05%	--	-0.01%	0.00%	--	-0.01%
Mexico*	--	1.79%	0.00%	0.55%	--	-0.03%	0.02%	--	-0.02%
Peru*	--	-11.07%	0.00%	0.06%	--	0.01%	0.00%	--	0.01%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	4.25%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
Israel	--	2.90%	0.00%	0.37%	--	-0.01%	0.00%	--	-0.02%
Kuwait*	--	9.06%	0.00%	0.16%	--	-0.02%	0.00%	--	-0.02%
Qatar*	--	7.30%	0.00%	0.20%	--	-0.02%	0.00%	--	-0.02%
Saudi Arabia*	--	8.24%	0.00%	0.90%	--	-0.08%	0.00%	--	-0.08%
South Africa*	--	-4.86%	0.00%	1.11%	--	-0.01%	0.05%	--	0.04%
Turkey*	--	1.96%	0.00%	0.07%	--	0.00%	0.00%	--	0.00%
United Arab Emirates*	--	6.36%	0.00%	0.22%	--	-0.02%	0.00%	--	-0.02%
<b>Totals</b>									
Americas	-3.25%	-5.00%	1.43%	9.51%	0.08%	0.08%	0.25%	-0.07%	0.34%
Europe	-1.52%	-1.08%	55.48%	41.05%	-0.09%	0.30%	-0.40%	-0.03%	-0.23%
Asia/Pacific	2.16%	-4.05%	40.45%	46.40%	2.70%	0.12%	0.21%	-0.35%	2.68%
Other	--	2.49%	0.00%	3.05%	--	-0.16%	0.05%	--	-0.11%
Cash	0.01%	--	2.64%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%
<b>Total</b>	<b>-0.01%</b>	<b>-2.72%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>2.68%</b>	<b>0.36%</b>	<b>0.11%</b>	<b>-0.45%</b>	<b>2.71%</b>
<b>Totals</b>									
Developed	-0.02%	-0.45%	97.36%	68.74%	0.14%	0.69%	-0.27%	0.06%	0.62%
Emerging*	--	-7.72%	0.00%	31.26%	--	1.67%	0.39%	--	2.05%
Cash	0.01%	--	2.64%	0.00%	0.00%	0.03%	0.00%	0.00%	0.03%



	Return (Rank)															
<b>5th Percentile</b>	-0.39	10.16	42.46	30.57	20.85	15.86	11.55	11.55								
<b>25th Percentile</b>	-3.72	3.32	31.39	20.78	13.84	12.33	8.66	9.12								
<b>Median</b>	-6.74	-1.59	22.78	15.76	10.34	10.16	7.01	7.67								
<b>75th Percentile</b>	-8.43	-4.07	17.34	12.67	8.31	8.88	5.63	6.64								
<b>95th Percentile</b>	-11.64	-9.23	11.40	8.36	5.09	5.87	3.38	5.41								
<b># of Portfolios</b>	390	390	388	374	359	321	278	200								
<b>● Newton Emerging Mkt</b>	-1.91	(11)	1.23	(32)	28.27	(30)	35.36	(2)	--	(--)	--	(--)	--	(--)	--	(--)
<b>▲ MSCI Emerging Markets Gross</b>	-7.97	(69)	-3.26	(65)	18.58	(70)	14.68	(59)	8.96	(65)	9.62	(59)	6.00	(69)	6.46	(78)

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	52	1,415
Weighted Avg. Market Cap. (\$B)	114.1	136.2
Median Market Cap. (\$B)	19.1	7.1
Price To Earnings	29.1	13.3
Price To Book	4.9	2.8
Price To Sales	5.4	1.5
Return on Equity (%)	15.3	13.4
Yield (%)	0.9	2.5

Top Holdings

TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	5.7%
HOUSING DEVELOPMENT FINANCE CORP LTD	4.6%
AIA GROUP LTD	4.0%
INFO EDGE (INDIA) LTD	3.8%
SAMSUNG SDI CO LTD	3.3%
ILJIN MATERIALS CO LTD	3.2%
MARUTI SUZUKI INDIA LTD	3.1%
LONGI GREEN ENERGY TECHNOLOGY CO LTD	3.0%
ASIAN PAINTS	2.9%
MERCADOLIBRE INC	2.8%

Best Performers

	Return %
TOKIO MARINE HOLDINGS INC	19.4%
FUJIFILM HOLDINGS CORP	17.0%
ROYAL DUTCH SHELL PLC	16.7%
SONY GROUP CORPORATION	14.9%
ENI SPA	14.4%
ROYAL DUTCH SHELL PLC	13.0%
BOUYGUES, GUYANCOURT	12.5%
RED ELECTRICA CORP SA	8.1%
NIPPON TELEGRAPH & TELEPHONE CORP NTT	7.9%
BP PLC	7.0%

Worst Performers

	Return %
JARDINE MATHESON HOLDINGS LTD	-16.4%
ENEL ENTE NAZIONALE PER L'ENERGIA ELETTRICA SPA, ROMA	-15.0%
CK HUTCHISON HOLDINGS LTD	-13.1%
ISS A/S	-9.9%
KINGFISHER PLC	-9.7%
NOVARTIS AG	-9.7%
SANOFI	-8.1%
COCA-COLA BOTTLERS JAPAN HOLDINGS INC	-7.2%
TELIA COMPANY AB	-7.0%
ESSITY AKTIEBOLAG	-6.3%

**Newton Emerging Mkt Performance Attribution vs. MSCI Emerging Markets Gross**

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.81%	--	-0.88%	--	--	9.59%	0.00%	5.05%			
Materials	1.42%	1.24%	0.02%	0.15%	11.30%	-4.42%	8.95%	8.45%			
Industrials	1.06%	1.80%	-0.07%	-0.67%	36.01%	-4.75%	2.68%	4.64%			
Consumer Discretionary	1.37%	1.63%	-0.88%	0.62%	-12.96%	-22.78%	23.36%	17.64%			
Consumer Staples	0.42%	0.18%	0.15%	0.09%	-0.27%	-3.97%	9.00%	5.59%			
Health Care	0.32%	--	0.26%	--	--	-12.79%	0.00%	5.05%			
Financials	-1.10%	-1.11%	-0.09%	0.10%	-4.66%	1.38%	16.83%	17.84%			
Information Technology	3.68%	2.73%	0.15%	0.79%	7.71%	-5.46%	27.33%	20.48%			
Communication Services	0.09%	0.04%	-0.07%	0.11%	-14.12%	-15.48%	11.84%	11.02%			
Utilities	-0.29%	--	-0.32%	--	--	8.06%	0.00%	1.95%			
Real Estate	0.21%	--	0.19%	--	--	-15.71%	0.00%	2.29%			
Cash	0.00%	--	--	--	--	--	0.00%	0.00%			
<b>Portfolio</b>	<b>6.36%</b>	<b>=</b>	<b>6.52%</b>	<b>+</b>	<b>-1.55%</b>	<b>+</b>	<b>1.39%</b>	<b>-1.42%</b>	<b>-7.78%</b>	<b>100.00%</b>	<b>100.00%</b>

**Newton Emerging Mkt Performance Attribution vs. MSCI Emerging Markets Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Czech Republic*	--	16.24%	0.00%	0.10%	--	-0.03%	0.00%	--	-0.02%
Greece*	--	4.70%	0.00%	0.13%	--	-0.02%	0.00%	--	-0.01%
Hungary*	9.17%	7.92%	0.95%	0.22%	0.00%	0.14%	-0.04%	0.01%	0.12%
Luxembourg	28.21%	-7.78%	2.01%	0.00%	0.00%	0.00%	0.00%	0.70%	0.70%
Netherlands	-7.53%	3.38%	4.95%	0.00%	0.00%	0.61%	-0.11%	-0.55%	-0.05%
Poland*	--	1.82%	0.00%	0.70%	--	-0.09%	0.03%	--	-0.06%
Russia*	15.18%	10.32%	1.24%	3.05%	0.17%	-0.29%	-0.02%	-0.10%	-0.24%

**Newton Emerging Mkt Performance Attribution vs. MSCI Emerging Markets Gross**

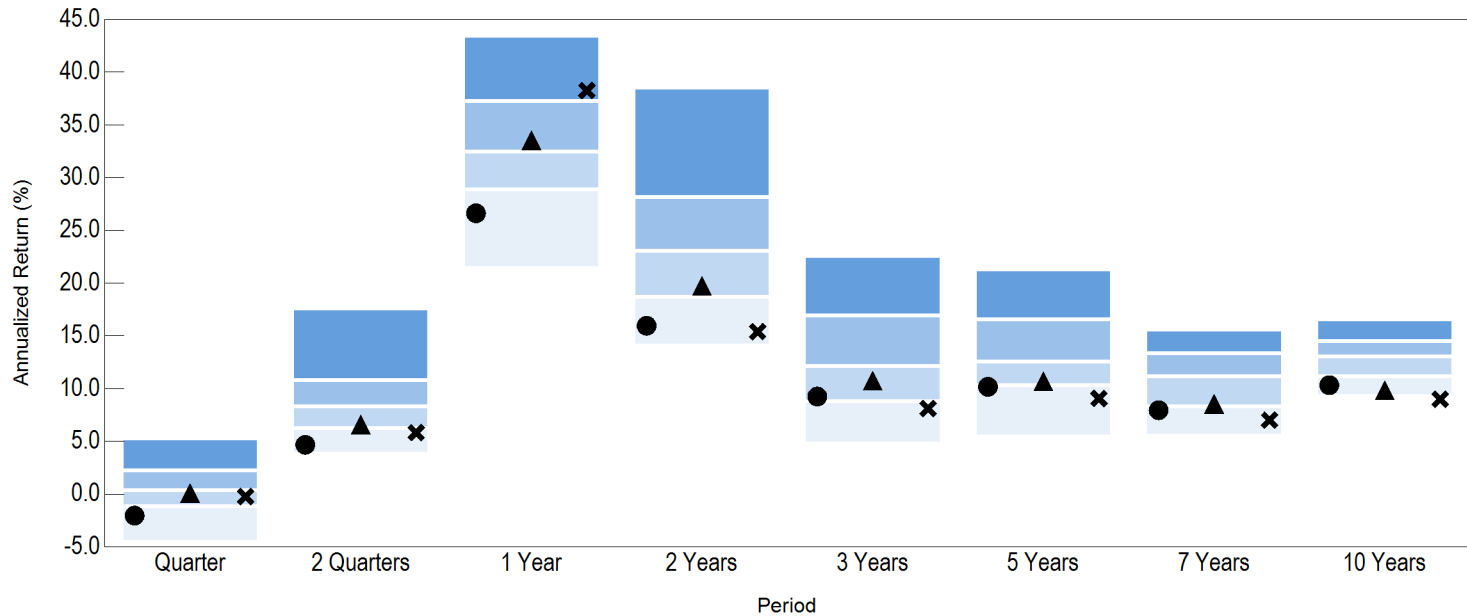
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	29.76%	-2.98%	1.11%	0.00%	0.00%	0.08%	-0.05%	0.38%	0.40%
China*	-17.82%	-18.03%	26.91%	37.62%	0.05%	1.22%	0.03%	-0.01%	1.29%
Hong Kong	-22.01%	-9.41%	8.81%	0.00%	0.00%	-0.23%	-0.02%	-1.11%	-1.36%
India*	14.19%	12.83%	24.30%	9.93%	0.14%	2.75%	0.04%	0.20%	3.11%
Indonesia*	--	10.06%	0.00%	1.11%	--	-0.16%	-0.02%	--	-0.18%
Korea*	4.70%	-12.71%	8.45%	13.26%	2.41%	0.11%	0.12%	-0.88%	1.77%
Malaysia*	--	0.42%	0.00%	1.23%	--	-0.09%	0.01%	--	-0.09%
Pakistan*	--	-17.25%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
Philippines*	-19.56%	-3.38%	0.00%	0.62%	-0.10%	-0.05%	0.03%	0.10%	-0.02%
Taiwan*	-1.01%	-1.40%	6.72%	13.99%	0.05%	-0.35%	-0.02%	-0.03%	-0.35%
Thailand*	--	-2.52%	0.00%	1.61%	--	-0.14%	0.08%	--	-0.06%
<b>Americas</b>									
Argentina*	7.81%	22.10%	2.25%	0.12%	-0.02%	0.61%	0.00%	-0.30%	0.29%
Brazil*	-28.86%	-19.95%	1.46%	5.21%	-0.50%	0.26%	0.25%	0.36%	0.37%
Chile*	14.15%	-7.23%	0.72%	0.44%	0.05%	0.03%	0.04%	0.03%	0.15%
Colombia*	--	10.94%	0.00%	0.15%	--	-0.03%	0.00%	--	-0.03%
Mexico*	4.73%	1.79%	1.32%	1.75%	0.05%	-0.05%	0.01%	-0.01%	0.00%
Peru*	--	-11.07%	0.00%	0.18%	--	0.01%	0.00%	--	0.01%
United States	15.86%	0.31%	4.79%	0.00%	0.00%	0.33%	0.00%	0.75%	1.07%

**Newton Emerging Mkt Performance Attribution vs. MSCI Emerging Markets Gross**

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Other</b>									
Egypt*	--	4.25%	0.00%	0.06%	--	-0.01%	0.00%	--	-0.01%
Kuwait*	--	9.06%	0.00%	0.50%	--	-0.08%	0.00%	--	-0.08%
Qatar*	--	7.30%	0.00%	0.64%	--	-0.09%	0.00%	--	-0.09%
Saudi Arabia*	--	8.24%	0.00%	2.88%	--	-0.43%	0.00%	--	-0.43%
South Africa*	5.59%	-4.86%	1.60%	3.55%	0.39%	-0.13%	0.09%	-0.21%	0.13%
Turkey*	--	1.96%	0.00%	0.24%	--	-0.03%	0.01%	--	-0.02%
United Arab Emirates*	--	6.36%	0.00%	0.70%	--	-0.09%	0.00%	--	-0.09%
<b>Totals</b>									
Americas	6.45%	-12.96%	10.54%	7.85%	1.18%	-0.02%	0.31%	0.40%	1.87%
Europe	5.14%	8.75%	9.15%	4.21%	-0.11%	0.79%	-0.13%	-0.13%	0.43%
Asia/Pacific	-3.44%	-9.24%	76.30%	79.39%	4.43%	0.06%	0.20%	-0.17%	4.51%
Other	5.59%	2.44%	1.60%	8.56%	0.55%	-0.77%	0.09%	-0.45%	-0.57%
Cash	0.01%	--	2.41%	0.00%	0.00%	0.16%	0.00%	0.00%	0.16%
<b>Total</b>	<b>-1.39%</b>	<b>-7.78%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>6.05%</b>	<b>0.21%</b>	<b>0.47%</b>	<b>-0.34%</b>	<b>6.39%</b>
<b>Totals</b>									
Developed	-3.00%	--	21.68%	0.00%	0.00%	0.00%	-0.17%	0.94%	0.77%
Emerging*	-0.97%	-7.78%	75.91%	100.00%	6.35%	0.00%	0.65%	-1.53%	5.47%
Cash	0.01%	--	2.41%	0.00%	0.00%	0.16%	0.00%	0.00%	0.16%



eV ACWI ex-US Small Cap Equity Gross Return Comparison



	Return (Rank)															
	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
5th Percentile	5.25	17.59	43.41	38.47	22.56	21.29	15.54	16.52								
25th Percentile	2.29	10.84	37.31	28.17	16.95	16.62	13.42	14.51								
Median	0.42	8.32	32.50	23.11	12.17	12.61	11.21	13.09								
75th Percentile	-1.13	6.31	28.92	18.73	8.86	10.36	8.35	11.21								
95th Percentile	-4.49	3.86	21.48	14.09	4.84	5.52	5.53	9.34								
# of Portfolios	56	56	56	54	50	45	37	24								
● Templeton	-2.04 (87)	4.67 (94)	26.61 (85)	15.96 (86)	9.25 (68)	10.16 (76)	7.95 (80)	10.32 (86)								
▲ MSCI ACWI ex US Small Cap Gross	0.09 (58)	6.59 (73)	33.54 (40)	19.74 (72)	10.76 (57)	10.69 (71)	8.55 (72)	9.84 (92)								
✕ MSCI ACWI ex US Small Cap Value GD	-0.24 (64)	5.83 (81)	38.25 (23)	15.39 (92)	8.11 (81)	9.06 (86)	7.01 (86)	8.99 (99)								

Characteristics

	Portfolio	MSCI ACWI ex US Small Cap Gross
Number of Holdings	111	4,388
Weighted Avg. Market Cap. (\$B)	2.8	3.1
Median Market Cap. (\$B)	1.8	1.2
Price To Earnings	17.8	15.9
Price To Book	2.6	2.5
Price To Sales	1.5	1.2
Return on Equity (%)	11.6	10.5
Yield (%)	2.5	2.2
Beta	1.0	1.0

Top Holdings

INTERPUMP GROUP SPA, SANT'ILARIO (RE)	2.0%
TECHNOGYM SPA	1.9%
SIEGFRIED HOLDING AG, ZOFINGEN	1.9%
SANLORENZO SPA	1.9%
TSUMURA & CO	1.9%
STOCK SPIRITS GROUP PLC	1.8%
DOMETIC GROUP AB	1.7%
ISHARES MSCI EAFE SMALL-CAP ETF	1.6%
MAN GROUP PLC	1.6%
BUCHER INDUSTRIES AG, NIEDERWENINGEN	1.5%

Best Performers

	Return %
IDOM INC	54.2%
SOLUTIONS 30 SE	42.5%
STOCK SPIRITS GROUP PLC	40.0%
SANLORENZO SPA	32.9%
TECHNOPRO HOLDINGS INC	28.2%
JENOPTIK AG	24.2%
ARCADIS NV, ARNHEM	22.3%
KINEPOLIS GROUP (B:KIN)	20.3%
HOSOKAWA MICRON CORP	19.1%
SHIMA SEIKI MNFG. (J:SHMA)	19.0%

Worst Performers

	Return %
VIVA BIOTECH HOLDINGS	-38.6%
SHANGHAI HAOHAI BIOLOGICAL TECHNOLOGY CO LTD	-34.0%
LOGITECH INTERNATIONAL SA, APPLES (LOGI)	-27.1%
VTECH HOLDINGS LTD	-25.3%
XTEP INTERNATIONAL HOLDINGS LTD	-25.1%
JOHNSON HEALTH TECH. (TW:JHT)	-21.3%
VALUE PARTNERS GROUP LTD	-20.8%
BARCO NV, KORTRIJK	-20.6%
BASWARE OYJ	-20.6%
NISSEI ASB MACHINE CO LTD	-20.4%

Templeton Performance Attribution vs. MSCI ACWI ex US Small Cap Gross

	Total Effects	Attribution Effects				Returns		Sector Weights					
		Selection Effect	Allocation Effect	Currency Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark				
Energy	-0.31%	-0.51%	-0.11%	0.04%	0.27%	-11.58%	8.01%	1.18%	2.48%				
Materials	-0.18%	-0.63%	0.04%	0.11%	0.30%	-6.19%	-0.62%	5.60%	10.81%				
Industrials	0.45%	0.37%	0.01%	0.06%	0.01%	4.13%	2.02%	21.27%	20.93%				
Consumer Discretionary	-0.20%	0.22%	-0.52%	-0.15%	0.24%	-1.48%	-3.57%	26.30%	12.61%				
Consumer Staples	0.53%	0.49%	-0.04%	-0.16%	0.24%	5.88%	-1.42%	8.51%	5.68%				
Health Care	-0.72%	-0.93%	0.02%	0.08%	0.09%	-14.21%	-3.07%	6.84%	7.61%				
Financials	-0.09%	-0.06%	0.00%	-0.04%	0.00%	1.59%	2.50%	10.26%	10.25%				
Information Technology	-1.08%	-1.21%	0.00%	0.07%	0.06%	-8.83%	0.82%	11.23%	11.86%				
Communication Services	0.20%	0.22%	-0.01%	0.06%	-0.08%	7.75%	1.02%	2.75%	4.18%				
Utilities	0.03%	--	-0.03%	0.07%	--	--	0.88%	0.00%	3.30%				
Real Estate	0.20%	--	0.04%	0.17%	--	--	-0.05%	0.00%	10.29%				
Cash	-0.09%	0.00%	-0.09%	0.00%	0.00%	0.01%	--	4.50%	0.00%				
Unclassified	-0.02%	0.00%	-0.02%	0.00%	0.00%	0.34%	--	1.56%	0.00%				
<b>Portfolio</b>	<b>-1.29%</b>	<b>=</b>	<b>-2.03%</b>	<b>+</b>	<b>-0.72%</b>	<b>+</b>	<b>0.32%</b>	<b>+</b>	<b>1.14%</b>	<b>-1.08%</b>	<b>0.21%</b>	<b>100.00%</b>	<b>100.00%</b>

Templeton Performance Attribution vs. MSCI ACWI ex US Small Cap Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	-0.60%	0.00%	0.65%	--	0.00%	0.01%	--	0.02%
Belgium	-7.09%	-0.57%	3.27%	1.11%	-0.07%	0.00%	-0.04%	-0.14%	-0.27%
Czech Republic*	--	9.62%	0.00%	0.01%	--	0.00%	0.00%	--	0.00%
Denmark	4.09%	-3.14%	0.73%	1.21%	0.09%	0.01%	0.01%	-0.04%	0.08%
Finland	-6.11%	-7.68%	2.45%	1.24%	0.02%	-0.09%	-0.03%	0.02%	-0.08%
France	-1.02%	-0.14%	1.37%	2.29%	-0.02%	0.00%	0.02%	0.01%	0.01%
Germany	11.87%	1.17%	2.13%	3.43%	0.38%	-0.02%	0.02%	-0.14%	0.24%
Greece*	0.69%	-6.65%	0.77%	0.29%	0.02%	-0.03%	-0.01%	0.04%	0.02%
Hungary*	--	-3.18%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
Ireland	--	6.22%	0.00%	0.36%	--	-0.02%	0.01%	--	-0.02%
Italy	6.24%	1.31%	7.05%	1.97%	0.10%	0.09%	-0.13%	0.26%	0.32%
Luxembourg	-13.65%	0.21%	1.57%	0.00%	0.00%	0.00%	-0.03%	-0.21%	-0.24%
Netherlands	-5.68%	3.33%	4.43%	1.67%	-0.15%	0.10%	-0.06%	-0.25%	-0.36%
Norway	-10.93%	-2.13%	1.29%	1.66%	-0.15%	0.01%	0.01%	0.03%	-0.10%
Poland*	--	6.73%	0.00%	0.33%	--	-0.03%	0.01%	--	-0.02%
Portugal	--	7.52%	0.00%	0.14%	--	-0.01%	0.00%	--	-0.01%
Russia*	--	-1.41%	0.00%	0.25%	--	0.01%	0.00%	--	0.01%
Spain	-1.14%	1.19%	0.73%	1.31%	-0.03%	-0.01%	0.01%	0.01%	-0.01%
Sweden	-3.65%	0.17%	5.18%	5.09%	-0.20%	0.00%	0.00%	0.00%	-0.20%
Switzerland	-8.91%	1.71%	5.50%	3.51%	-0.38%	0.01%	-0.01%	-0.22%	-0.59%
United Kingdom	10.43%	0.58%	9.94%	11.88%	1.18%	-0.02%	0.03%	-0.19%	1.01%

Templeton Performance Attribution vs. MSCI ACWI ex US Small Cap Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	--	0.46%	0.00%	6.19%	--	-0.13%	0.22%	--	0.09%
China*	-24.22%	-12.89%	4.03%	2.58%	-0.29%	-0.21%	0.00%	-0.16%	-0.67%
Hong Kong	-11.99%	-14.44%	3.64%	1.53%	0.04%	-0.34%	0.00%	0.05%	-0.25%
India*	--	13.20%	0.00%	4.43%	--	-0.49%	-0.01%	--	-0.50%
Indonesia*	15.84%	10.33%	0.67%	0.35%	0.02%	0.02%	0.01%	0.02%	0.06%
Japan	6.89%	3.53%	19.23%	19.26%	0.65%	0.00%	0.00%	0.00%	0.65%
Korea*	4.91%	-4.54%	1.81%	4.55%	0.45%	0.06%	0.11%	-0.27%	0.35%
Malaysia*	--	4.93%	0.00%	0.72%	--	-0.03%	0.01%	--	-0.02%
New Zealand	--	3.09%	0.00%	0.63%	--	-0.01%	0.01%	--	-0.01%
Pakistan*	--	-9.95%	0.00%	0.09%	--	0.00%	0.01%	--	0.01%
Philippines*	9.65%	1.17%	0.64%	0.23%	0.02%	0.02%	-0.02%	0.04%	0.05%
Singapore	--	-0.98%	0.00%	1.26%	--	0.03%	0.01%	--	0.04%
Taiwan*	-5.39%	-3.37%	10.17%	5.47%	-0.11%	-0.26%	0.01%	-0.10%	-0.45%
Thailand*	--	-4.97%	0.00%	0.87%	--	0.02%	0.04%	--	0.06%
<b>Americas</b>									
Argentina*	--	5.70%	0.00%	0.10%	--	0.00%	0.00%	--	0.00%
Brazil*	-4.60%	-17.11%	2.28%	1.71%	0.23%	-0.07%	-0.06%	0.08%	0.18%
Canada	-5.00%	-0.79%	4.85%	6.49%	-0.30%	0.01%	0.05%	0.08%	-0.16%
Chile*	--	-17.42%	0.00%	0.20%	--	0.02%	0.02%	--	0.04%
Colombia*	--	5.79%	0.00%	0.05%	--	0.00%	0.00%	--	0.00%
Mexico*	--	-3.32%	0.00%	0.46%	--	0.01%	0.01%	--	0.02%
Peru*	--	-11.11%	0.00%	0.02%	--	0.00%	0.00%	--	0.00%
United States	0.34%	0.31%	1.61%	0.00%	0.00%	-0.03%	0.00%	0.00%	-0.03%

Templeton Performance Attribution vs. MSCI ACWI ex US Small Cap Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	4.42%	0.00%	0.07%	--	0.00%	0.00%	--	0.00%
Israel	--	3.60%	0.00%	1.92%	--	-0.02%	-0.01%	--	-0.03%
Kuwait*	--	2.66%	0.00%	0.21%	--	0.00%	0.00%	--	0.00%
Qatar*	--	3.48%	0.00%	0.20%	--	0.00%	0.00%	--	0.00%
Saudi Arabia*	--	-1.76%	0.00%	0.61%	--	0.02%	0.00%	--	0.02%
South Africa*	--	1.14%	0.00%	0.90%	--	-0.04%	0.05%	--	0.01%
Turkey*	--	2.12%	0.00%	0.31%	--	-0.01%	0.01%	--	0.00%
United Arab Emirates*	--	2.97%	0.00%	0.14%	--	0.00%	0.00%	--	0.00%
<b>Totals</b>									
Americas	-3.91%	-4.30%	8.74%	9.03%	0.02%	0.01%	0.02%	0.00%	0.05%
Europe	0.16%	0.33%	46.42%	38.42%	-0.08%	0.04%	-0.15%	-0.02%	-0.20%
Asia/Pacific	-0.94%	0.79%	40.19%	48.18%	-1.17%	0.00%	0.37%	0.19%	-0.60%
Other	--	2.18%	0.00%	4.37%	--	-0.05%	0.04%	--	-0.01%
Cash	0.01%	--	4.65%	0.00%	0.00%	-0.09%	0.00%	0.00%	-0.09%
<b>Total</b>	<b>-0.64%</b>	<b>0.21%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>-1.22%</b>	<b>-0.09%</b>	<b>0.28%</b>	<b>0.18%</b>	<b>-0.85%</b>
<b>Totals</b>									
Developed	0.96%	0.85%	74.98%	74.82%	-0.03%	0.00%	0.11%	0.00%	0.08%
Emerging*	-6.71%	-1.70%	20.37%	25.18%	-1.37%	0.09%	0.17%	0.26%	-0.85%
Cash	0.01%	--	4.65%	0.00%	0.00%	-0.09%	0.00%	0.00%	-0.09%

# 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.

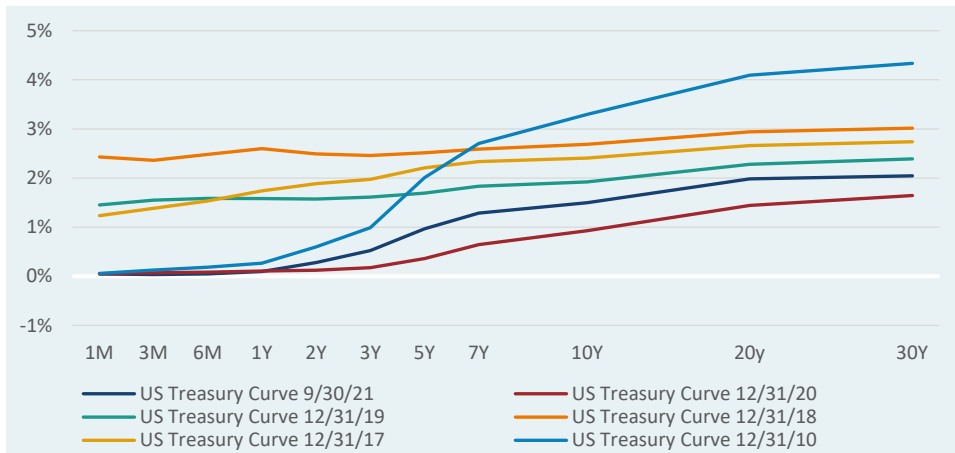
— The four-year discount margin, our preferred spread metric for bank loans, compressed slightly over the quarter from 4.32% to 4.28%.

	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%)

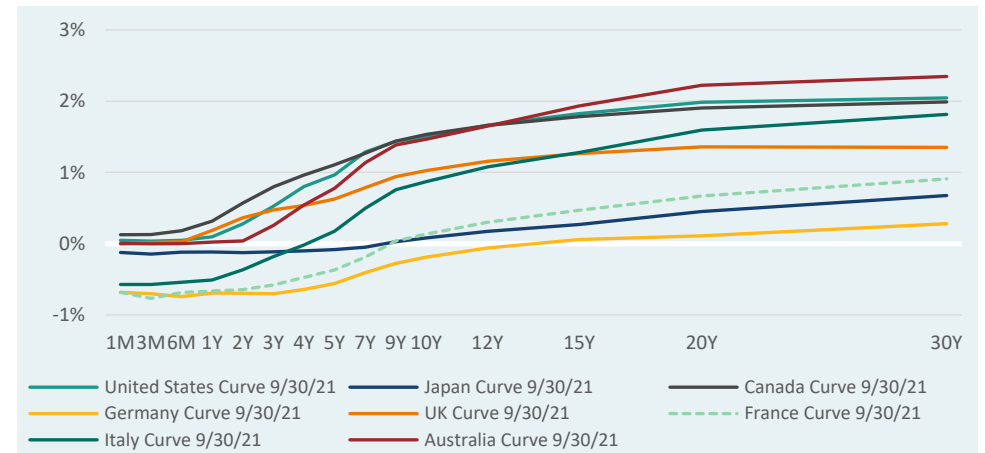
Source: Bloomberg, as of 9/30/21

# Yield environment

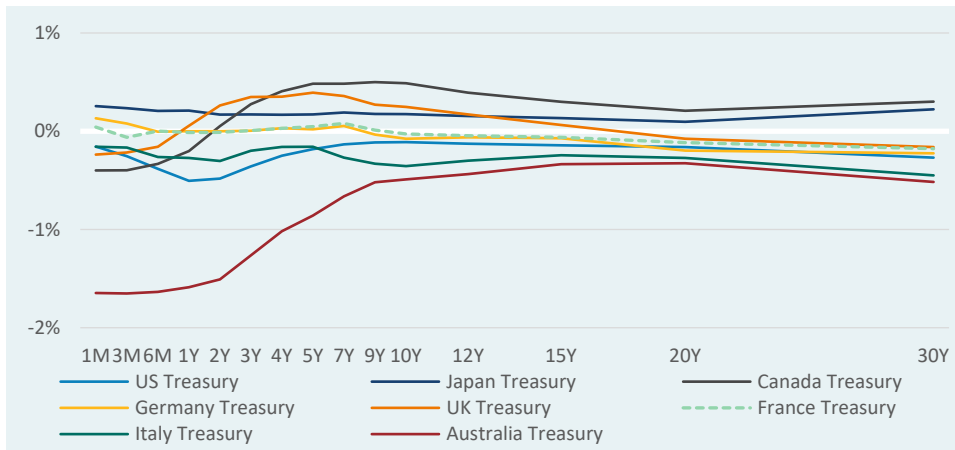
## U.S. YIELD CURVE



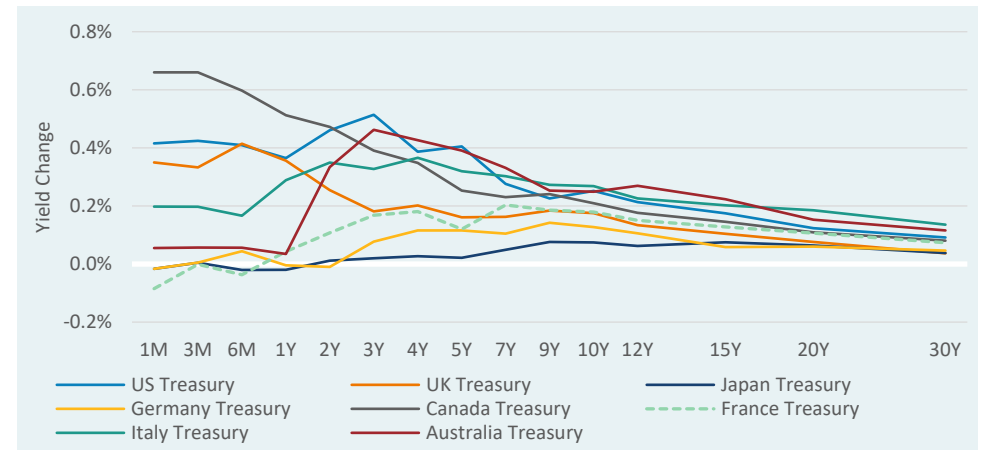
## GLOBAL GOVERNMENT YIELD CURVES



## YIELD CURVE CHANGES OVER LAST FIVE YEARS



## IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/21



# 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.

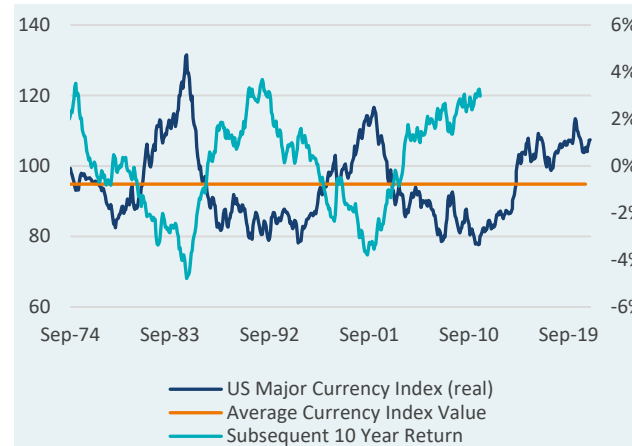
The MSCI Currency Factor Mix Index, Verus' preferred currency beta benchmark, outperformed the currency portfolio of the MSCI ACWI ex-US Index over the twelve months ending September 30<sup>th</sup>, while exhibiting 1.1% less volatility.

**BLOOMBERG DOLLAR SPOT INDEX**



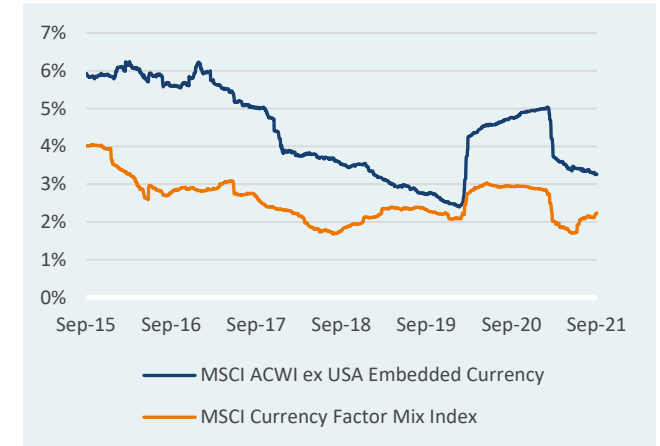
Source: Bloomberg, as of 9/30/21

**U.S. DOLLAR MAJOR CURRENCY INDEX**



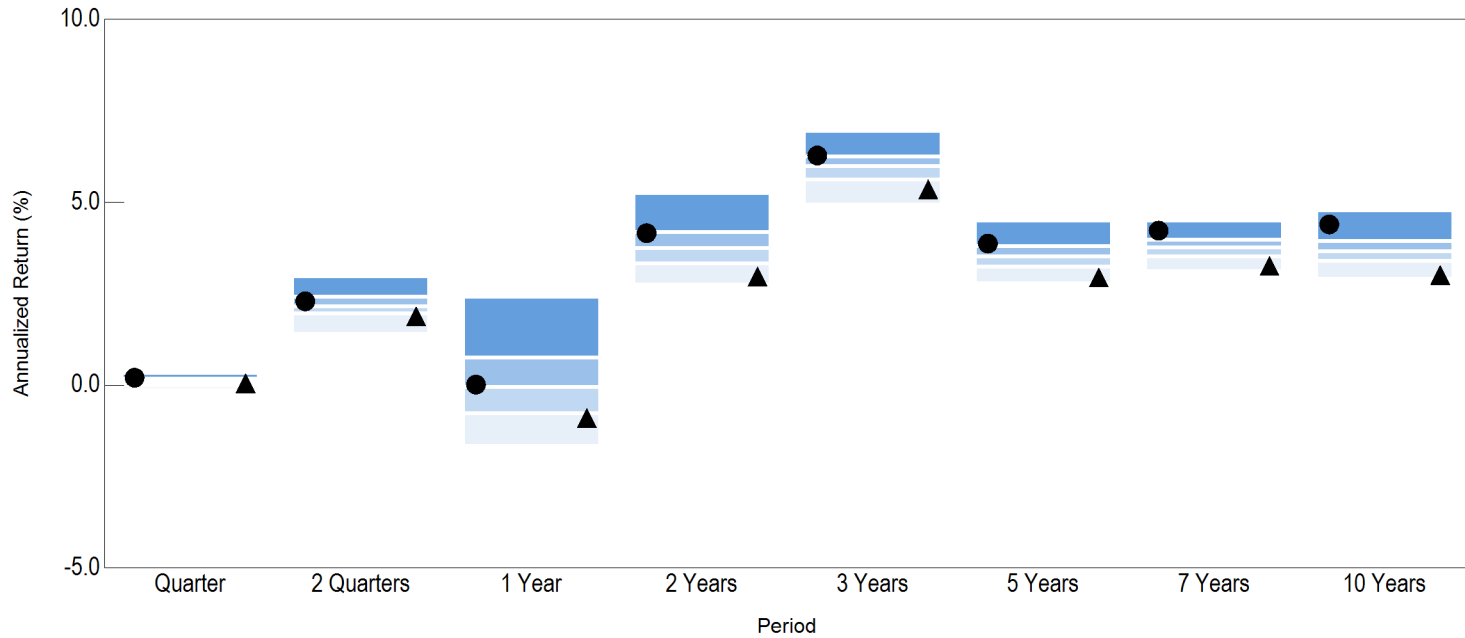
Source: Federal Reserve, as of 9/30/21

**TRAILING ONE-YEAR ANNUALIZED VOLATILITY**



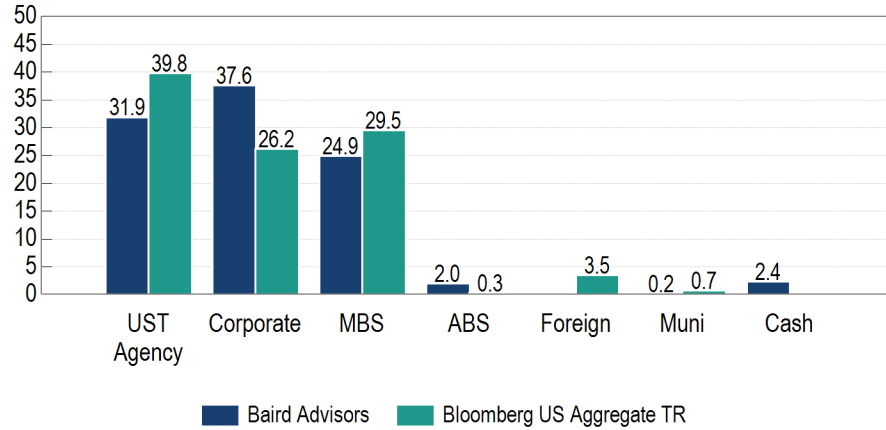
Source: Bloomberg, MSCI, as of 9/30/21

eV US Core Fixed Inc Gross Return Comparison

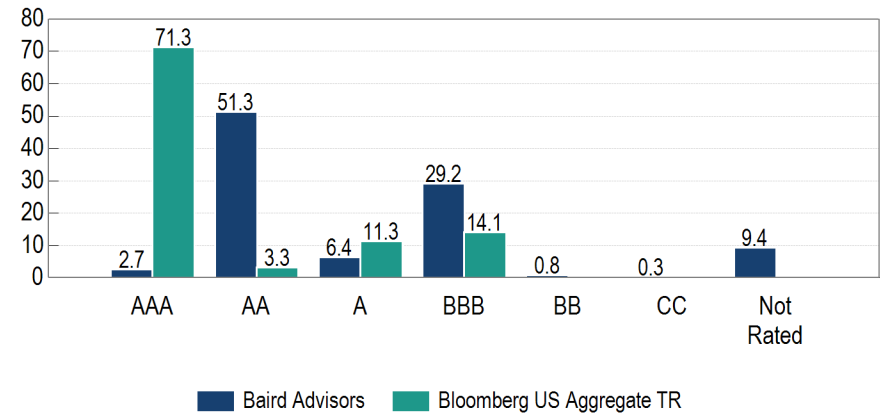


	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>5th Percentile</b>	0.32		2.97		2.41		5.25		6.94		4.49		4.49		4.76	
<b>25th Percentile</b>	0.18		2.43		0.77		4.20		6.27		3.80		3.98		3.94	
<b>Median</b>	0.10		2.16		-0.04		3.76		6.00		3.53		3.77		3.68	
<b>75th Percentile</b>	0.00		1.97		-0.75		3.33		5.62		3.25		3.53		3.41	
<b>95th Percentile</b>	-0.13		1.41		-1.65		2.75		4.95		2.79		3.13		2.91	
<b># of Portfolios</b>	214		214		214		212		210		208		204		200	
<b>● Baird Advisors</b>	0.20	(18)	2.29	(39)	0.01	(48)	4.15	(28)	6.28	(25)	3.87	(23)	4.22	(10)	4.39	(10)
<b>▲ Bloomberg US Aggregate TR</b>	0.05	(62)	1.88	(84)	-0.90	(84)	2.97	(92)	5.36	(88)	2.94	(92)	3.26	(92)	3.01	(95)

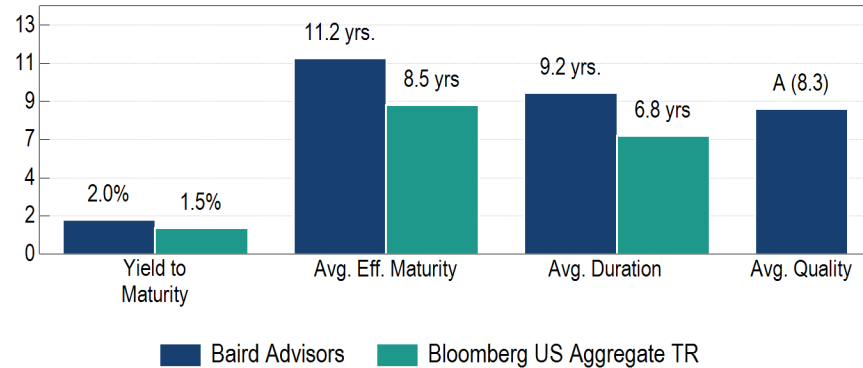
US Sector Allocation  
Baird Advisors



Credit Quality Allocation  
Baird Advisors



Characteristics  
Baird Advisors

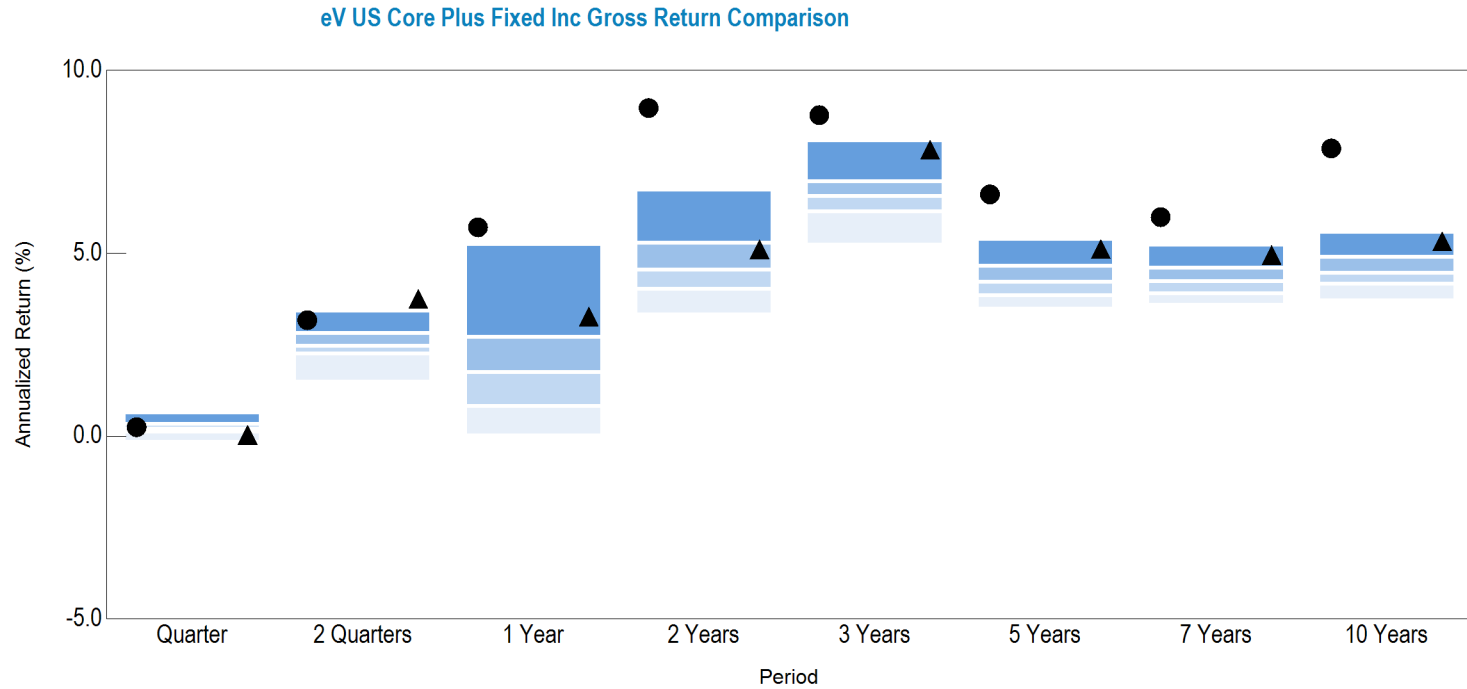


**PERFORMANCE BY QUALITY**

	<u>NUMBER OF ISSUES</u>	<u>FINAL MARKET VALUE (\$000)</u>	<u>FINAL MARKET VALUE %</u>	<u>QUARTERLY RETURN %</u>	<u>QUARTERLY CONTRIBUTION TO TOTAL RETURN %</u>
Cash & Equiv	1	32,504	2.4	0.01	0.00
Govt & Agency	141	698,846	51.6	0.20	0.08
AAA	33	94,805	7.0	0.20	0.01
AA	7	4,063	0.3	1.80	0.01
A	45	135,435	10.0	0.40	0.04
BAA	124	369,738	27.3	0.30	0.08
Below BAA	13	18,961	1.4	1.60	0.02
Other	0	-	0.0	0.00	0.00
<b>Total Account</b>	<b>364</b>	<b>\$1,354,352</b>	<b>100.0</b>	<b>0.24</b>	<b>0.24</b>

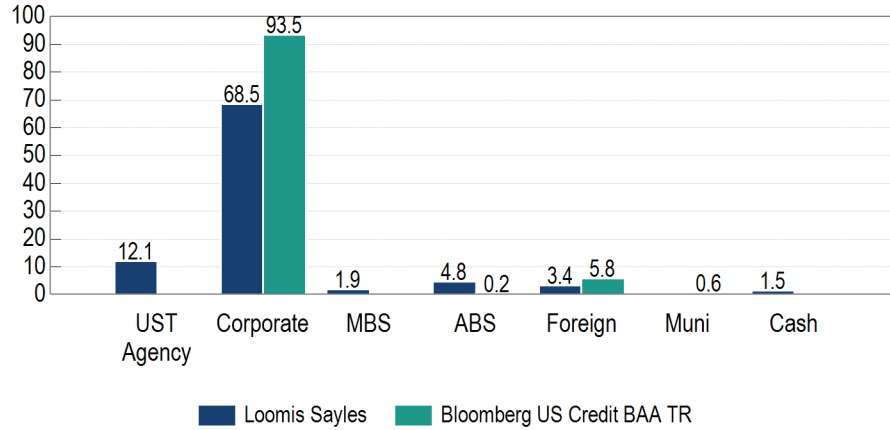
**PERFORMANCE BY DURATION**

	<u>NUMBER OF ISSUES</u>	<u>FINAL MARKET VALUE (\$000)</u>	<u>FINAL MARKET VALUE %</u>	<u>QUARTERLY RETURN %</u>	<u>QUARTERLY CONTRIBUTION TO TOTAL RETURN %</u>
Under 1 Year	17	54,174	4.0	-0.07	0.00
1 - 3 Years	76	265,453	19.6	0.29	0.06
3 - 6 Years	170	549,867	40.6	0.24	0.10
Over 6 Years	101	484,858	35.8	0.26	0.09
<b>Total Account</b>	<b>364</b>	<b>\$1,354,352</b>	<b>100.0</b>	<b>0.24</b>	<b>0.24</b>

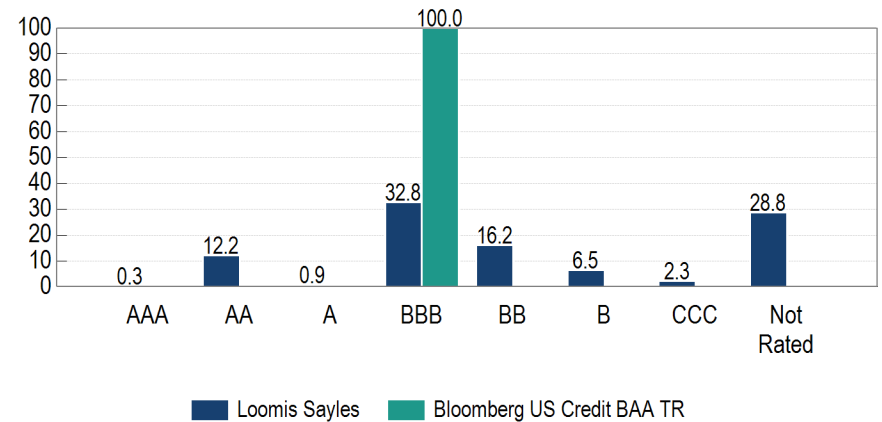


	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>5th Percentile</b>	0.64		3.42		5.24		6.73		8.08		5.39		5.23		5.57	
<b>25th Percentile</b>	0.34		2.83		2.72		5.30		6.98		4.66		4.62		4.91	
<b>Median</b>	0.23		2.48		1.77		4.56		6.57		4.22		4.25		4.47	
<b>75th Percentile</b>	0.14		2.27		0.84		4.04		6.15		3.86		3.91		4.17	
<b>95th Percentile</b>	-0.14		1.50		0.03		3.34		5.25		3.49		3.60		3.72	
<b># of Portfolios</b>	122		122		122		120		117		113		110		101	
<b>● Loomis Sayles</b>	0.24	(46)	3.17	(9)	5.71	(5)	8.97	(2)	8.77	(3)	6.61	(2)	5.99	(2)	7.86	(1)
<b>▲ Bloomberg US Credit BAA TR</b>	0.03	(85)	3.75	(1)	3.27	(16)	5.10	(32)	7.83	(7)	5.11	(11)	4.95	(10)	5.32	(10)

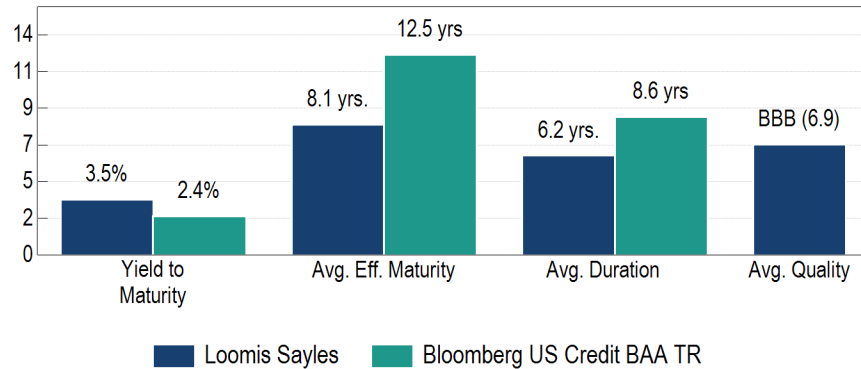
US Sector Allocation  
Loomis Sayles



Credit Quality Allocation  
Loomis Sayles



Characteristics  
Loomis Sayles



## Summary

Account Return	0.22
Benchmark Return	0.03
Excess Return	0.18
Sector Allocation	-0.43
Security Selection	0.74
Trading	-0.13
Pricing Differences	0.00
Compounding	0.00

## Details

Scheme	Average Weight Account	Average Weight Benchmark	Return Account	Return Benchmark	Contribution to Return Account	Contribution to Return Benchmark	Sector Allocation Effect	Security Selection Effect	Total Effect	Excess Total Effect
Total	100.00	100.00	0.35	0.03	0.35	0.03	-0.43	0.74	0.31	0.31
CASH	1.81	0.00	0.43	0.03	0.01	0.00	0.00	-0.03	-0.03	-0.03
AAA	12.62	0.00	0.02	0.03	0.00	0.00	0.00	-0.01	-0.01	-0.01
AA	1.16	0.00	1.25	0.03	0.01	0.00	0.00	0.02	0.02	0.02
A	3.42	0.17	0.12	-0.96	0.00	-0.01	0.00	0.00	0.00	0.00
BAA	40.38	99.67	0.27	0.04	0.11	0.04	0.00	0.09	0.09	0.09
BA	21.73	0.16	0.93	-2.10	0.19	0.00	-0.43	0.64	0.21	0.21
B	7.41	0.00	0.11	0.03	0.01	0.00	0.00	0.01	0.01	0.01
CAA	3.41	0.00	-0.36	0.03	-0.01	0.00	0.00	-0.01	-0.01	-0.01
CA	0.05	0.00	13.22	0.03	0.03	0.00	0.00	0.03	0.03	0.03
C	0.13	0.00	-9.24	0.03	-0.01	0.00	0.00	-0.01	-0.01	-0.01
NR	6.08	0.00	1.16	0.03	0.07	0.00	0.00	0.07	0.07	0.07
Unclassified	1.81	0.00	-1.84	0.03	-0.06	0.00	0.00	-0.06	-0.06	-0.06

### Summary

Account Return	0.22
Benchmark Return	0.03
Excess Return	0.18
Sector Allocation	0.11
Security Selection	0.20
Trading	-0.13
Pricing Differences	0.00
Compounding	0.00

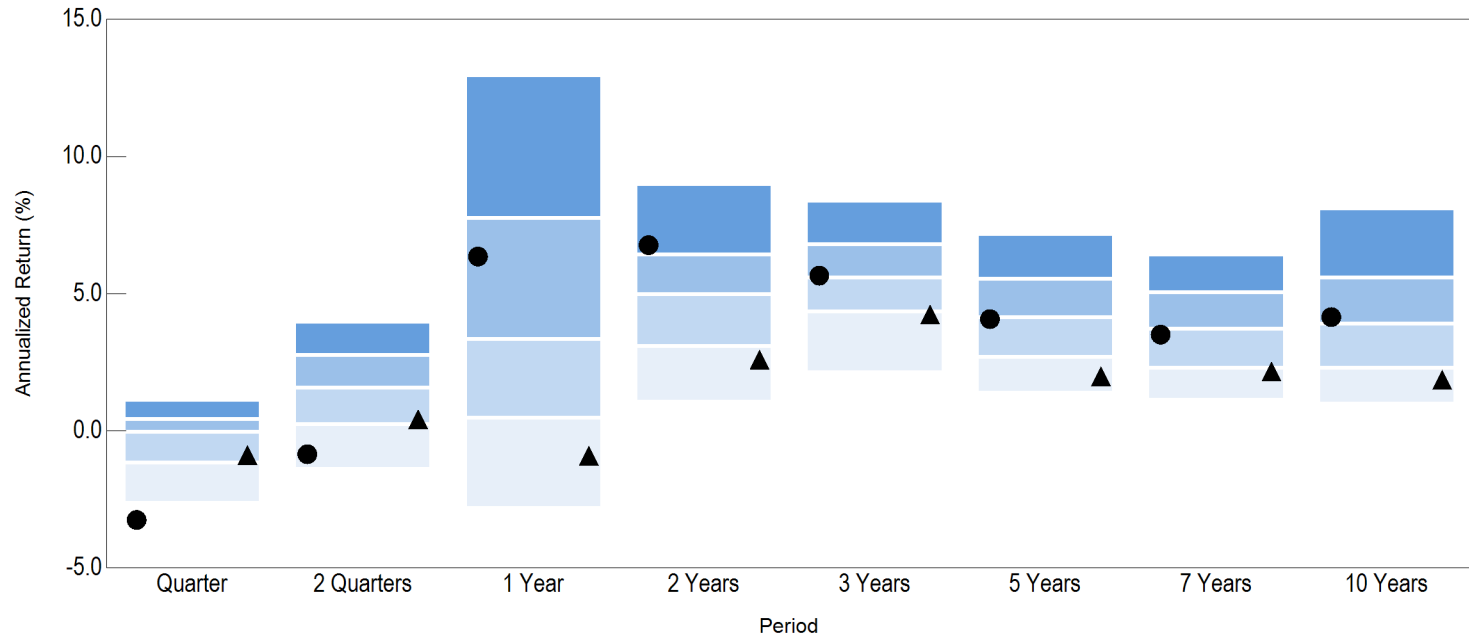
### Details

Scheme	Average Weight Account	Average Weight Benchmark	Return Account	Return Benchmark	Contribution to Return Account	Contribution to Return Benchmark	Sector Allocation Effect	Security Selection Effect	Total Effect	Excess Total Effect
Total	100.00	100.00	0.35	0.03	0.35	0.03	0.11	0.20	0.31	0.31
Less than 0.5	12.74	0.22	0.32	0.48	0.06	0.00	0.01	0.00	0.01	0.01
0.5 - 1.0	2.62	1.18	6.15	0.19	0.15	0.00	0.03	0.14	0.17	0.17
1.0 - 1.5	8.76	3.07	-0.60	0.17	-0.04	0.00	-0.01	-0.06	-0.07	-0.07
1.5 - 2.0	7.02	3.51	-0.09	0.23	0.00	0.01	0.00	-0.01	-0.02	-0.02
2.0 - 2.5	6.26	3.62	0.51	0.19	0.03	0.01	0.03	0.02	0.05	0.05
2.5 - 3.0	5.34	3.38	-0.30	0.24	-0.02	0.01	-0.01	-0.03	-0.04	-0.04
3.0 - 3.5	5.20	5.67	-0.36	0.07	-0.01	0.00	0.00	-0.02	-0.02	-0.02
3.5 - 4.0	3.85	4.13	-1.70	0.02	-0.07	0.00	0.00	-0.07	-0.07	-0.07
4.0 - 4.5	4.53	4.43	-0.35	0.18	-0.01	0.01	0.00	-0.01	-0.01	-0.01
4.5 - 5.0	6.35	4.24	0.69	0.46	0.04	0.02	0.02	0.01	0.03	0.03
5.0 - 5.5	5.35	3.57	0.99	0.47	0.05	0.02	0.01	0.03	0.04	0.04
5.5 - 6.0	4.68	4.14	0.69	0.03	0.04	0.00	0.00	0.03	0.03	0.03
6.0 - 6.5	3.31	3.95	1.21	-0.06	0.03	0.00	0.00	0.05	0.05	0.05
6.5 - 7.0	4.35	2.74	0.24	0.14	0.01	0.00	0.00	0.00	0.01	0.01
7.0 - 7.5	5.63	4.50	0.47	0.06	0.04	0.00	0.00	0.02	0.02	0.02
7.5 - 8.0	3.83	3.51	0.31	0.17	0.00	0.02	0.00	0.01	0.01	0.01
8.0 - 8.5	3.39	3.16	0.75	-0.04	0.03	-0.01	0.00	0.03	0.03	0.03
8.5 - 9.0	0.97	2.32	0.50	0.04	0.00	0.02	0.00	0.00	0.00	0.00
9.0 - 9.5	-8.36	0.75	0.05	0.08	-0.01	0.00	0.00	0.01	0.01	0.01
9.5 - 10.0	0.80	1.13	1.36	-0.25	0.01	-0.01	0.00	0.02	0.02	0.02



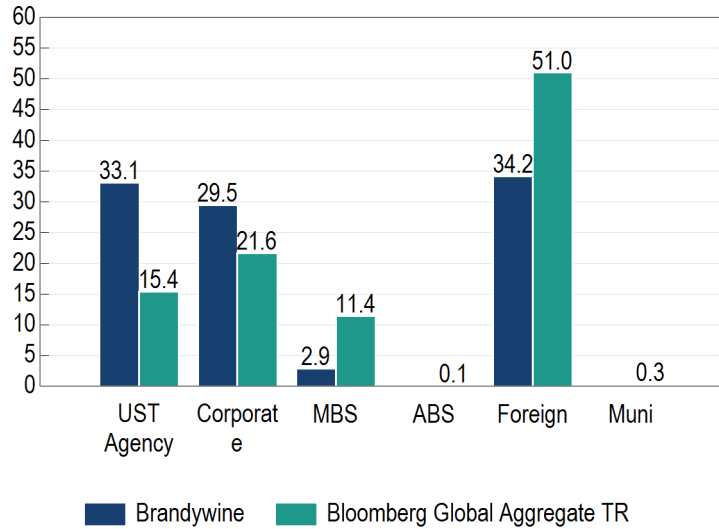
Scheme	Average Weight Account	Average Weight Benchmark	Return Account	Return Benchmark	Contribution to Return Account	Contribution to Return Benchmark	Sector Allocation Effect	Security Selection Effect	Total Effect	Excess Total Effect
10.0 - 10.5	0.14	1.30	4.84	5.14	0.01	0.06	-0.01	0.00	-0.01	-0.01
10.5 - 11.0	0.08	1.61	6.25	5.34	0.00	0.08	-0.02	0.00	-0.02	-0.02
11.0 - 11.5	0.22	2.04	5.78	5.35	0.01	0.11	-0.03	0.00	-0.03	-0.03
11.5 - 12.0	0.39	1.20	2.49	5.85	0.01	0.07	-0.02	-0.01	-0.03	-0.03
12.0 - 12.5	0.10	1.62	1.89	5.85	0.00	0.09	-0.03	0.00	-0.03	-0.03
12.5 - 13.0	0.58	1.08	8.35	6.07	0.03	0.07	-0.02	0.01	-0.01	-0.01
13.0 - 13.5	0.87	1.05	6.93	6.57	0.07	0.06	0.00	0.01	0.01	0.01
13.5 - 14.0	0.99	1.69	6.38	5.99	0.07	0.10	-0.01	0.01	0.00	0.00
14.0 - 14.5	0.63	2.20	6.13	6.34	0.07	0.13	-0.03	0.02	-0.01	-0.01
14.5 - 15.0	0.77	2.75	3.53	6.95	0.02	0.18	-0.06	-0.03	-0.09	-0.09
15.0 - 15.5	1.50	3.19	6.85	6.66	0.06	0.21	-0.07	-0.02	-0.09	-0.08
15.5 - 16.0	1.78	2.67	8.82	7.11	0.17	0.17	-0.01	0.03	0.02	0.02
16.0 - 16.5	0.98	2.81	7.50	6.89	0.06	0.20	-0.05	0.01	-0.04	-0.04
16.5 - 17.0	0.32	2.18	10.50	7.53	0.04	0.18	-0.08	0.01	-0.07	-0.07
17.0 - 17.5	0.79	1.71	6.91	7.38	0.04	0.12	-0.04	-0.01	-0.04	-0.04
17.5 - 18.0	0.48	1.32	3.46	6.76	0.03	0.09	-0.02	-0.01	-0.03	-0.03
18.0 - 18.5	0.24	1.19	18.95	7.07	0.04	0.11	-0.05	0.03	-0.03	-0.03
18.5 - 19.0	0.91	1.45	7.62	7.87	0.02	0.10	-0.05	-0.01	-0.05	-0.05
19.0 - 19.5	1.80	0.88	5.14	8.87	0.17	0.09	0.09	-0.05	0.04	0.04
19.5 - 20.0	0.34	0.63	9.07	6.64	0.04	0.04	0.00	0.00	0.00	0.00
20.0 - 20.5	0.11	0.42	10.80	11.30	0.01	0.06	-0.03	-0.01	-0.04	-0.04
20.5 - 21.0	0.02	0.28	3.43	8.80	0.01	0.03	-0.01	0.01	-0.01	-0.01
21.0 - 21.5	0.00	0.23	0.00	8.62	0.00	0.02	-0.01	0.00	-0.01	-0.01
21.5 - 22.0	0.04	0.08	-5.35	7.98	-0.01	0.01	-0.01	0.00	-0.01	-0.01
22.0 - 22.5	0.12	0.12	10.39	5.75	0.02	0.01	0.00	0.01	0.01	0.01
22.5 - 23.0	0.02	0.07	3.72	15.77	0.01	0.01	-0.01	0.00	-0.01	-0.01
23.0 - 23.5	0.00	0.05	0.00	8.83	0.00	0.00	0.00	0.00	0.00	0.00
23.5 - 24.0	0.00	0.03	0.00	10.59	0.00	0.00	0.00	0.00	0.00	0.00
24.0 - 24.5	0.00	0.01	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00
24.5 - 25.0	0.00	0.01	0.00	-0.49	0.00	0.00	0.00	0.00	0.00	0.00
Greater than 25.0	0.00	0.02	0.00	18.02	0.00	0.00	0.00	0.00	0.00	0.00

eV All Global Fixed Inc Gross Return Comparison

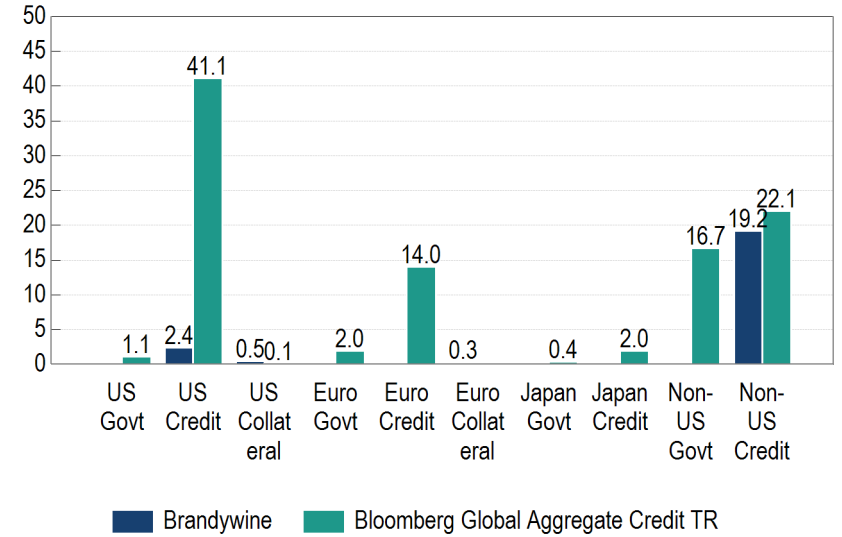


	Quarter		2 Quarters		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>5th Percentile</b>	1.12	3.96	12.96	8.99	8.37	7.17	6.41	8.11								
<b>25th Percentile</b>	0.44	2.77	7.77	6.43	6.81	5.55	5.05	5.60								
<b>Median</b>	-0.03	1.60	3.36	4.99	5.60	4.15	3.73	3.91								
<b>75th Percentile</b>	-1.14	0.26	0.49	3.11	4.37	2.70	2.31	2.32								
<b>95th Percentile</b>	-2.61	-1.39	-2.80	1.07	2.16	1.40	1.14	1.00								
<b># of Portfolios</b>	503	503	503	495	483	449	394	299								
<b>● Brandywine</b>	-3.25 (97)	-0.85 (91)	6.35 (32)	6.77 (22)	5.66 (48)	4.07 (52)	3.50 (53)	4.15 (46)								
<b>▲ Bloomberg Global Aggregate TR</b>	-0.88 (70)	0.42 (73)	-0.91 (87)	2.60 (83)	4.24 (78)	1.99 (88)	2.17 (79)	1.86 (85)								

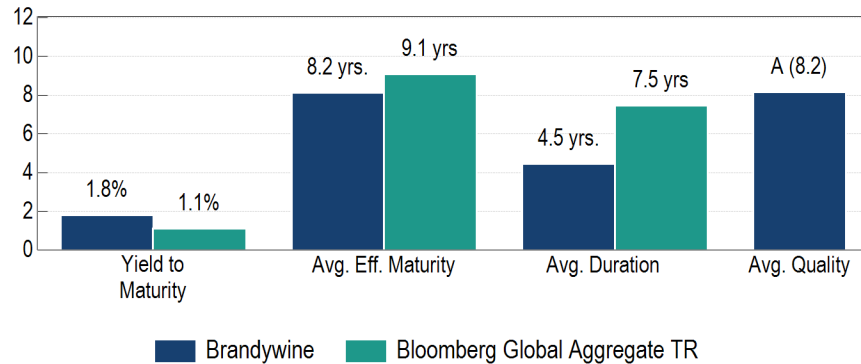
US Sector Allocation



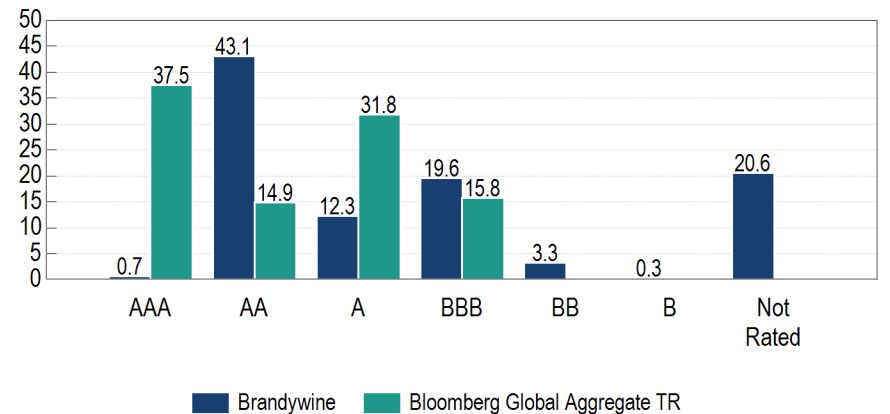
Global Sector Allocation



Characteristics  
Brandywine

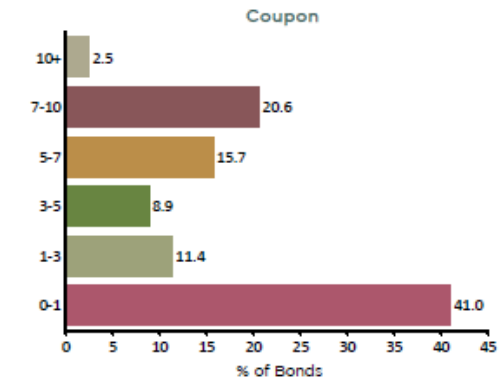
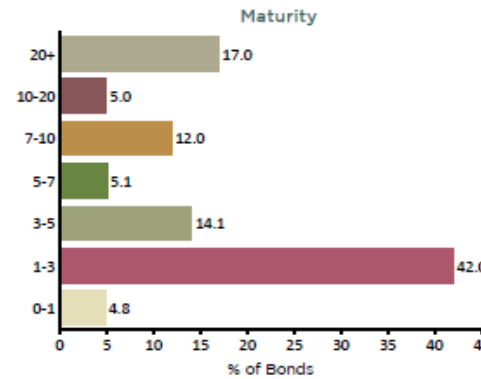


Credit Quality Allocation  
Brandywine



**Portfolio Characteristics**

	Portfolio	Primary Benchmark
Yield to Maturity (%)	3.19	0.60
Yield to Worst (%)	3.15	0.60
Modified Duration	3.02	8.68
Effective Duration	3.02	8.85
Average Maturity	8.08	9.78
Average Market Price	100.94	-
Average Coupon (%)	3.47	1.70
Current Yield (%)	3.24	-
# of Issues	175	1,098



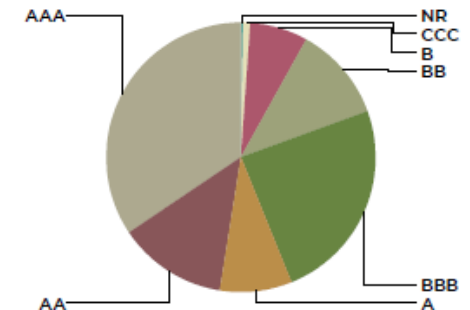
**Sector Breakdown**

	Market Value (%)	Duration Contribution (In Years)
Government Sovereign	59.23	2.42
Corporate Bond - Investment Grade	17.64	0.56
Corporate Bond - High Yield	10.90	0.48
Government Owned - No Guarantee	2.94	0.30
Government Regional Agencies	2.49	0.04
Mortgage Backed Securities	1.90	0.03
Cash	6.35	-
Derivatives	(1.44)	(0.82)
<b>Total:</b>	<b>100.00</b>	<b>3.02</b>

**Portfolio Credit Quality (Blended Weighted Average Rating)**

Combined Rating	%	Cumulative %
AAA	34.6	34.6
AA	13.0	47.6
A	8.6	56.1
BBB	24.5	80.7
BB	11.6	92.2
B	6.8	99.0
CCC	0.9	99.9
NR	0.1	100.0

Average Quality: A



PRIMARY BENCHMARK is FTSE WGBI (USD)

All Averages are US DOLLAR - weighted by the net market value. Average Market Price includes accrued interest. The "Blended Weighted Average Rating" is determined as follows: in line with the methodology used by Barclays Global indices, the middle rating from the three major NRSROs (S & P, Moody's, and Fitch) will be assigned to each security. In the event that ratings are provided by only two agencies, the lowest rating will be assigned. If only one agency assigns a rating, that rating will be applied. If the security is not rated by one of the three major agencies, U.S. treasuries and certain U.S. agencies are given the U.S. issuer rating. Sovereign treasuries are given the sovereign issuer rating. All other unrated securities are given a rating equivalent to a defaulted bond. The equivalent numerical rating is assigned to each security based on the Security Level scale. A Portfolio Level scale is applied on the weighted average calculation to round for fractional numerical ratings and then converted to an alpha weighted average rating. Cash is included and received the highest rating.

Data included on this page show the aggregate holdings of the Brandywine Emerging Markets Debt Fund ("EMD Fund"), in which the portfolio is invested. Holdings in the EMD Fund are not subject to ACERA's Investment Guidelines. Please note that ACERA owns units of the EMD Fund, not the underlying holdings. Data and characteristics shown are for illustrative purposes only.

Derivatives market value represents the unrealized profit/loss of all derivatives in the portfolio.

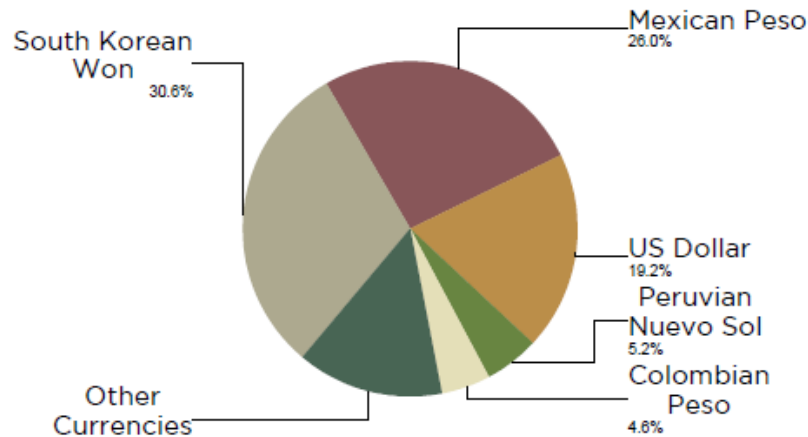
Brandywine  
Country & Currency Allocation

Period Ending: September 30, 2021

Country Allocation	9/30/2021			6/30/2021		Currency Allocation	9/30/2021			6/30/2021	
	Portfolio	Index	Active	Portfolio	Change		Portfolio	Index	Active	Portfolio	Change
Japan	-	16.73	(16.73)	-	-	Euro	5.30	33.32	(28.02)	8.23	(2.93)
*Mexico	12.44	0.59	11.85	12.40	0.04	Japanese Yen	5.01	16.73	(11.73)	-	5.01
France	0.05	8.55	(8.50)	0.07	(0.02)	*Polish Zloty	9.47	0.46	9.01	7.66	1.81
South Korea	7.47	-	7.47	-	7.47	*Chilean Peso	7.36	-	7.36	9.15	(1.79)
United States	45.73	38.81	6.93	51.31	(5.58)	US Dollar	31.69	38.81	(7.12)	30.47	1.22
Australia	6.61	1.51	5.10	4.55	2.06	*Mexican Peso	6.49	0.59	5.89	8.58	(2.09)
Spain	0.19	5.02	(4.83)	0.11	0.08	British Pound Sterling	0.09	4.92	(4.83)	5.38	(5.28)
Canada	5.49	1.62	3.87	5.28	0.21	*Hungarian Forint	3.88	-	3.88	5.88	(2.00)
*Colombia	3.83	-	3.83	4.52	(0.70)	*South African Rand	3.34	-	3.34	0.41	2.93
*Russian Federation	3.81	-	3.81	3.53	0.28	*Russian Ruble	3.26	-	3.26	4.98	(1.72)
*Brazil	2.74	-	2.74	3.69	(0.95)	*Thai Baht	3.20	-	3.20	2.44	0.76
*China	2.42	-	2.42	0.38	2.04	*Malaysian Ringgit	3.34	0.41	2.93	4.56	(1.21)
*Egypt	1.98	-	1.98	1.85	0.13	South Korean Won	2.67	-	2.67	-	2.67
*South Africa	1.94	-	1.94	3.59	(1.65)	*Brazilian Real	2.63	-	2.63	3.82	(1.19)
*Peru	1.91	-	1.91	-	1.91	*Egyptian Pound	1.98	-	1.98	1.85	0.13
*Malaysia	1.79	0.41	1.38	1.69	0.10	*Peruvian Nuevo Sol	1.91	-	1.91	2.00	(0.09)
*Chile	0.44	-	0.44	0.32	0.12	*Czech Koruna	1.86	-	1.86	0.89	0.97
*Turkey	0.37	-	0.37	0.21	0.16	*Colombian Peso	1.74	-	1.74	0.67	1.07
*Zambia	0.37	-	0.37	0.31	0.05	Australian Dollar	3.18	1.51	1.67	0.28	2.90
Bahamas	0.31	-	0.31	0.11	0.20	Canadian Dollar	-	1.62	(1.62)	0.07	(0.07)
*Uruguay	0.24	-	0.24	0.19	0.06	*Indonesian Rupiah	1.61	-	1.61	2.68	(1.07)
Israel	0.55	0.38	0.16	0.48	0.06	Danish Krone	-	0.43	(0.43)	-	-
Luxembourg	0.11	-	0.11	0.07	0.05	Israeli Shekel	-	0.38	(0.38)	-	-
*Panama	0.10	-	0.10	0.06	0.04	Singapore Dollar	-	0.36	(0.36)	-	-
*Ukraine	0.09	-	0.09	0.11	(0.02)	Swedish Krona	-	0.25	(0.25)	-	-
*Poland	0.38	0.46	(0.08)	0.22	0.16	Norwegian Krone	-	0.21	(0.21)	-	-
*Ecuador	0.07	-	0.07	0.04	0.03						
European Union	0.01	-	0.01	0.03	(0.02)	<b>Total:</b>	<b>100.00</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
Other Countries	-	25.91	(25.91)	5.19	(5.19)						
Derivative P/L	(1.44)	-	(1.44)	(0.31)	(1.13)						
<b>Total:</b>	<b>100.00</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>						

\*Emerging Markets are defined as any country and currency included in the JP Morgan Government Bond Index-Emerging Market or the JP Morgan Emerging Market Bond Index Global indices.

Source of Portfolio Duration by Currency Denomination



Modified Duration Contribution by Currency  
(In Years)

Currency	9/30/2021				6/30/2021	
	0-3	>3-10	>10-20	>20+	Total	Total Change
South Korean Won	-	0.47	-	0.45	0.92	0.92
*Mexican Peso	-	0.11	0.13	0.54	0.78	(0.03)
US Dollar	0.02	0.40	(0.75)	0.92	0.58	(0.14)
*Peruvian Nuevo Sol	-	-	0.16	-	0.16	0.16
*Colombian Peso	-	0.14	-	-	0.14	(0.18)
*Russian Ruble	-	0.14	-	-	0.14	0.01
*South African Rand	-	0.04	-	0.09	0.12	(0.15)
Australian Dollar	0.06	-	-	-	0.06	(0.01)
*Malaysian Ringgit	0.00	0.06	-	-	0.06	0.01
*Brazilian Real	-	0.03	-	-	0.03	(0.09)
Euro	-	0.00	-	0.01	0.01	0.00
*Polish Zloty	0.01	-	-	-	0.01	0.00
*Egyptian Pound	0.01	-	-	-	0.01	(0.00)
*Czech Koruna	-	-	-	-	-	(0.13)
*Indonesian Rupiah	-	-	-	-	-	(0.27)
Canadian Dollar	-	-	-	-	-	(0.00)
<b>Total</b>	<b>0.09</b>	<b>1.39</b>	<b>(0.46)</b>	<b>2.00</b>	<b>3.02</b>	<b>0.11</b>

Modified Duration Contribution by Country  
vs. FTSE WGBI (USD)

(In Years)

Country	9/30/2021				Total	Index	6/30/2021	
	0-3	>3-10	>10-20	>20+			Total	Active Change
United States	0.00	0.11	(0.78)	0.62	(0.04)	2.68	(2.72)	(0.25)
Japan	-	-	-	-	-	2.04	(2.04)	-
*Mexico	-	0.14	0.13	0.84	1.11	0.03	1.08	(0.03)
South Korea	-	0.47	-	0.45	0.92	-	0.92	0.92
France	-	0.00	-	-	0.00	0.77	(0.77)	(0.00)
United Kingdom	-	-	-	-	-	0.66	(0.66)	(0.01)
Italy	-	-	-	-	-	0.59	(0.59)	-
Spain	-	-	-	0.01	0.01	0.41	(0.40)	0.00
*Colombia	-	0.17	-	-	0.17	-	0.17	(0.17)
*Peru	-	-	0.16	-	0.16	-	0.16	0.16
*Russian Federation	-	0.14	-	-	0.14	-	0.14	0.01
*South Africa	-	0.04	-	0.09	0.12	-	0.12	(0.15)
Canada	0.00	0.00	-	-	0.00	0.12	(0.12)	(0.00)
*Brazil	-	0.09	0.01	0.00	0.10	-	0.10	(0.06)
*China	0.00	0.08	-	-	0.09	-	0.09	0.08
Australia	0.06	0.01	-	-	0.07	0.11	(0.05)	(0.01)
*Malaysia	0.00	0.06	-	-	0.06	0.03	0.03	0.01
*Chile	-	0.02	-	-	0.02	-	0.02	0.00
*Poland	0.01	-	-	-	0.01	0.02	(0.01)	0.00
Bahamas	0.00	-	0.01	-	0.01	-	0.01	0.01
*Turkey	0.00	0.01	-	-	0.01	-	0.01	0.00
*Ukraine	-	-	0.01	-	0.01	-	0.01	(0.00)
*Panama	-	0.01	-	-	0.01	-	0.01	0.00
Luxembourg	-	0.01	-	-	0.01	-	0.01	0.00
*Zambia	0.00	0.00	-	-	0.01	-	0.01	0.00
*Egypt	0.01	-	-	-	0.01	-	0.01	(0.00)
*Ecuador	-	0.00	-	-	0.00	-	0.00	0.00
*Uruguay	-	0.00	-	-	0.00	-	0.00	0.00
Israel	-	0.02	-	-	0.02	0.03	0.00	0.00
Other Countries	-	-	-	-	-	1.19	(1.19)	(0.42)
<b>Total</b>	<b>0.09</b>	<b>1.39</b>	<b>(0.46)</b>	<b>2.00</b>	<b>3.02</b>	<b>8.69</b>	<b>(5.67)</b>	<b>0.11</b>

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Policy Index and Benchmark History

Period Ending: September 30, 2021

Total Plan Policy Index	As of:															
	6/1/19	10/1/17	7/1/16	1/1/13	10/1/11	4/1/11	1/1/09	7/1/06	4/1/03	6/1/01	10/1/97	1/1/96	10/1/94	1/1/92	1/1/80	
91-day US T-Bill											1%	1%	1%	1%	2%	
Bloomberg US Aggregate	11.40%	11.25%	11.25%	11.25%	15%	18%	18%	21%	23%	26%	33%	29%	32%	37%	30%	
Bloomberg US High Yield	1.60%	1.50%	1.50%	1.50%	2.0%	2.4%	2%	3%	3%	3%						
Bloomberg Commodity	0.75%	0.75%	0.75%													
FTSE WGBI	3.00%	2.25%	2.25%	2.25%	3%	3.6%	3.6%	4%	4%	5%						
CPI-U +3% (RR)				5.00%	5%											
MSCI ACWI ex US							23%	22%	22%	22%						
MSCI ACWI ex US IMI	25.00%	26.00%	26.00%	27.00%	25%	23%										
MSCI EAFE											10%	10%	10%	10%		
MSCI Emg Mkts Free ex Malaysia											3%					
MSCI World net															10%	
NCREIF						6%	6%	9%	9%	9%						
NCREIF ODCE	8.00%	8.00%	8.00%	6.00%	6%											
Russell 3000	25.00%	28.00%	28.00%	32.00%	34%	37%	37%	41%	39%	35%	42%	49%	47%	40%		
HFRI FoF Composite	9.00%	9.00%														
Thomson Reuters CJA Global All PE	8.00%	9.00%														
Russell 3000 +1% (PE)			18.00%	15.00%	10%											
Russell 3000 +1.5% (PE)						10%	10%									
Russell 3000 +4% (AI)											2%					
S&P 500															55%	
S&P Global Infrastructure	1.75%	1.75%	1.75%													
S&P Global Large Mid Commodity & Resource	2.50%	2.50%	2.50%													
S&P/LSTA Leveraged Loan	4.00%															



**ACERA**

**US Equity Benchmark**

As of:

	1/1/92	1/1/80
Russell 3000	100%	0%
S&P 500	0%	100%
	<b>100.0%</b>	<b>100.0%</b>

**International Equity Benchmark**

As of:

	4/1/11	6/1/01	10/1/97	1/1/92	1/1/80
MSCI ACWI ex US		100%			
MSCI ACWI ex US IMI	100%				
MSCI EAFE			77%	100%	
MSCI Emg Mkts Free ex Malaysia			23%		
MSCI World net					100%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Fixed Income Benchmark**

As of:

	6/1/19	6/1/01	1/1/80
Bloomberg US Aggregate	71.25%	75%	100%
Bloomberg US High Yield	10.00%	10%	
FTSE WGBI	18.75%	15%	
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Real Estate Benchmark**

As of:

	1/1/80
NCREIF ODCE	100%
	<b>100.0%</b>

**Real Assets Benchmark**

As of:

	7/1/16	10/1/11
CPI-U +3%		100%
Bloomberg Commodity	15%	
S&P Global Infrastructure	35%	
S&P Global Large Mid Commodity & Resource	50%	
	<b>100.00%</b>	<b>100.0%</b>



# Glossary

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**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:  $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$ .

**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:  $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$ .

**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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**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



PERIOD ENDING: SEPTEMBER 30, 2021

Absolute Return Performance Report

**Alameda County Employees' Retirement Association**

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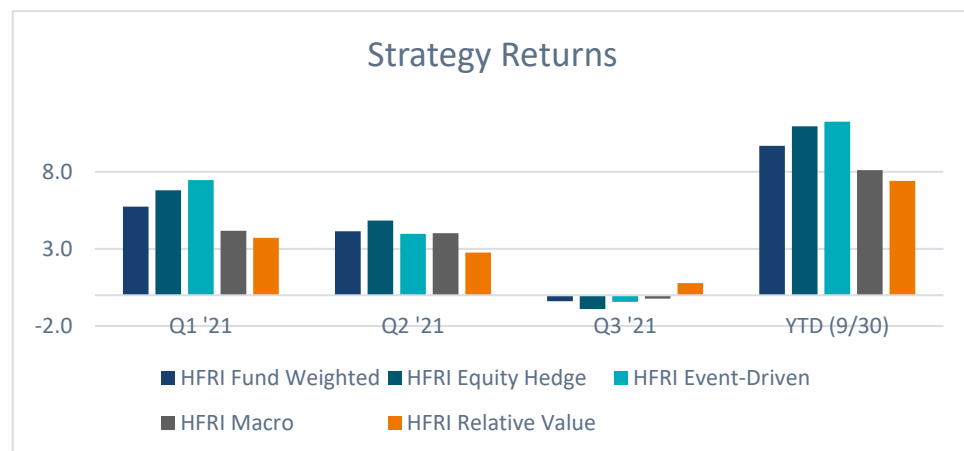
# Hedge Fund Environment

# Hedge fund trends & flows

## Hedge funds see fifth consecutive quarter of inflows

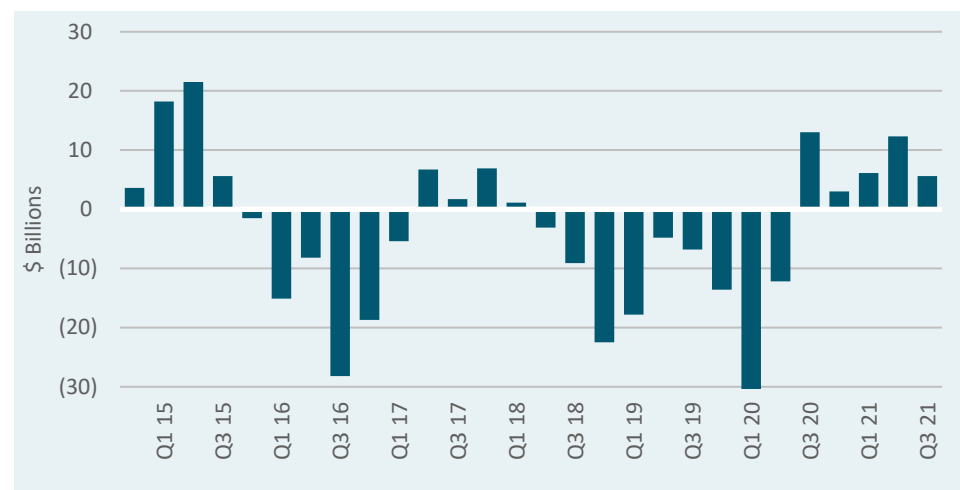
- Muted performance for Q3 (-0.3% for HFRI Fund Weighted Composite) followed a strong first half for the calendar year with a YTD return of 9.1% through September.
- As interest rates rose at the end of Q3, credit and interest rate-sensitive fixed income relative value strategies posted asset growth of \$16.8 billion with contributions from investors and performance-based gains.
- Equity hedge fund strategies had the largest inflow of capital in Q3 as equity volatility increased. Assets held steady at \$1.21 trillion in total AUM with a modest performance decline (-0.8 for Q3) partially offsetting net asset inflows.
- Event driven strategies, which focus on out-of-favor, deep value equity and credit positions, experienced minimal capital changes in Q3.
- After leading inflows in Q2 '21, uncorrelated Macro strategies had modest outflows in Q3 with inflows to commodity-focused strategies but greater outflows in Systematic Diversified CTA strategies.
- Investor inflows were distributed across firms of all sizes, with total inflows for the quarter of \$5.6 billion.

**HFRI STRATEGY RETURNS, LAST 3 QUARTERS**



Source: HFR, eVestment

**QUARTERLY NET FLOWS TO HEDGE FUNDS**



Source: HFR

# Factors returns

Factor	1M	3M	YTD	1 Year	3 Year	5 Year
<b>Momentum</b>	1.5	2.5	3.1	3.0	-0.9	0.1
<b>Leverage</b>	-0.5	-0.5	0.3	1.2	0.7	-0.4
<b>Volatility</b>	-0.5	0.5	1.5	2.7	3.7	1.9
<b>Value</b>	-0.7	-1.3	6.4	6.4	-1.8	-2.5
<b>Growth</b>	0.0	0.5	-0.3	-0.3	2.9	1.9
<b>Size</b>	-0.3	-1.2	0.4	-0.6	1.1	0.8
<b>Dividend Yield</b>	-0.4	-0.9	1.3	0.3	-0.4	0.0

- Factor returns are mostly positive over longer time periods and are a key component of most alternative risk premia strategies.
- 2020 saw major drawdowns in several factors, including Value, with only minor gains to offset losses.
- Factor returns shifted tremendously in late 2020 with Value having a strong rebound. This factor return has since declined and Momentum has been more additive to returns.

Source: Bloomberg; U.S. equity data

# ACERA Performance



# Allocations

## Target

Sub-categories	Target Allocations	Min./Max. Ranges
<b>AR Portfolio</b>	<b>8.0%</b>	<b>4% to 10%</b>
▪ <i>Fund of Funds</i>	6.4%	4% to 10%
▪ <i>Other Alternatives/Oppportunistic</i>	1.6%	0% to 4%

## Current (as of 9/30/2021)

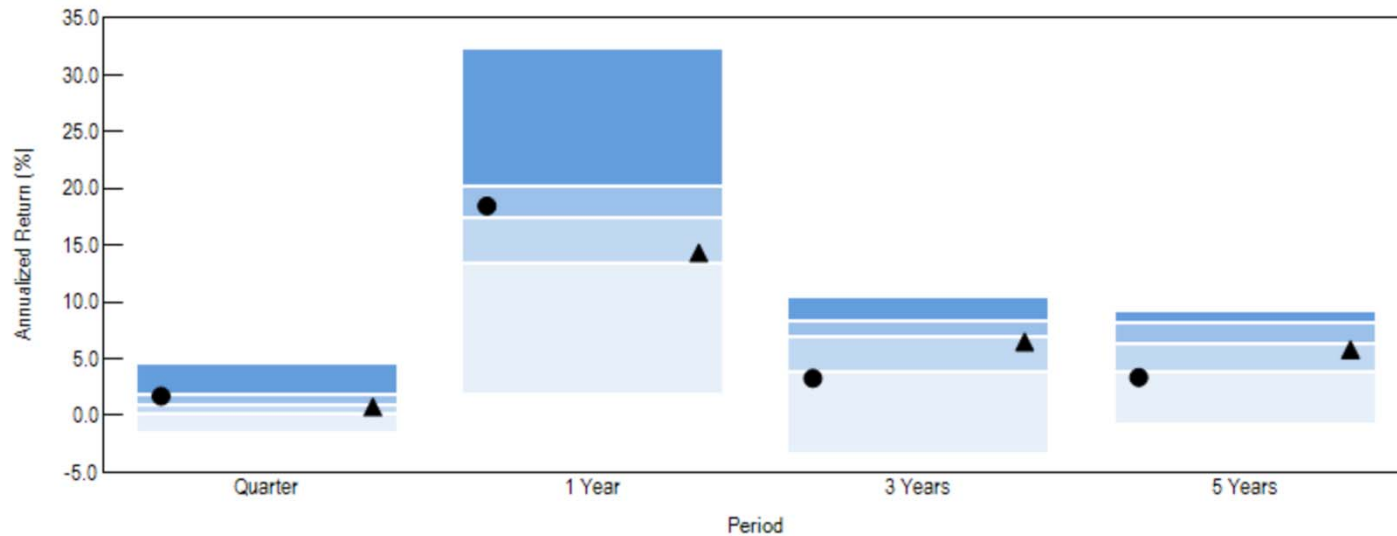
Sub-categories	Current Allocations	Min./Max. Ranges
<b>AR Portfolio</b>	<b>6.4%</b>	<b>4% to 10%</b>
▪ <i>Fund of Funds</i>	3.3%	4% to 10%
▪ <i>Other Alternatives/Oppportunistic</i>	3.1%	0% to 4%

# Performance Summary

	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 (%)	Inception (%)	Inception Date
<b>Absolute Return*</b>	<b>744,911,989</b>	<b>100.0</b>	<b>1.7</b>	<b>10.7</b>	<b>10.7</b>	<b>18.5</b>	<b>3.3</b>	<b>3.4</b>	<b>3.5</b>	<b>-0.6</b>	<b>1.8</b>	<b>-2.2</b>	<b>3.3</b>	<b>5.4</b>	<b>3.5</b>	<b>Sep-11</b>
<i>HFRI Fund of Funds Composite Index</i>			0.8	5.8	5.8	14.3	6.5	5.8	4.5	10.9	8.4	-4.0	7.8	0.5	4.5	Sep-11

# Relative Performance

InvMetrics All DB Hedge Funds Gross Return Comparison  
Ending September 30, 2021



	Return (Rank)			
	Quarter	1 Year	3 Years	5 Years
5th Percentile	4.6	32.3	10.4	9.1
25th Percentile	1.9	20.3	8.4	8.2
Median	1.0	17.5	7.1	6.4
75th Percentile	0.2	13.5	3.9	3.9
95th Percentile	-1.4	1.9	-3.3	-0.7
# of Portfolios	169	168	163	154
● Absolute Return	1.7 (29)	18.5 (42)	3.3 (80)	3.4 (81)
▲ HFRI Fund of Funds Composite Index	0.8 (59)	14.3 (72)	6.5 (57)	5.8 (58)

# Portfolio Statistics\* (as of 9/30/2021)

	Benchmark HFRI FoF Composite	Absolute Return Portfolio	MSCI ACWI
Max Drawdown	-9.0	-10.5	-21.3
Sharpe Ratio	0.72	0.57	0.80
Beta	0.30	0.12	1.00
Correlation to MSCI ACWI	0.84	0.36	1.00
Annualized StDev	4.9	4.4	13.8

\*Since inception of AR Portfolio (9/2011)

Portfolio performance and risk targets are:

AR portfolio returns to exceed benchmark

Correlation to global equities less than or equal to 0.5

# Appendix

# Glossary

**Beta** - A measure of systematic (undiversifiable) 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.

**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 optimize the benefits of diversification when constructing an investment portfolio.

**Internal Rate of Return (IRR)** – the interest rate which is the net present value of all the cash flows (both positive and negative) of an investment.

**Maximum Drawdown** – the maximum loss from a peak to a trough of a portfolio before a new peak attained. Maximum drawdown measures the downside risk over a specified time period.

**Standard Deviation** - A measure of volatility, or risk. Measures risk by indicating how far from the average, or mean, return one is likely to fall in any given time period. The rules of statistics dictate that you will fall within 1 standard deviation of the mean 2/3 of the time and within 2 standard deviations 95% of the time. 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%.

# Glossary

**Sharpe Ratio** - A measure of that explains the return of an investment compared to its risk. The Sharpe Ratio indicates excess portfolio return for each unit of risk over the risk free rate (usually short-term Treasuries or LIBOR) per unit of volatility. The higher the Sharpe Ratio, the greater its risk-adjusted return.

**Time Weighted Return** – A measure of the compound rate of growth in a portfolio, which eliminates the distorting effects of growth rates created by inflows and outflows of money.



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PERIOD ENDING JUNE 30, 2021

Private Equity Review

**Alameda County Employees' Retirement Association**



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Market Commentary **PG 3**

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— Private Credit Portfolio

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# Market Commentary

## DEBT RELATED

- **HY issuance and leveraged loan issuance both were up.** In the first half of 2021, US high yield issuance was up 21.6% at \$267.1 billion compared to 1H 2020<sup>1</sup>. Leverage loan issuance volume was \$763.5 billion in 1H 2021, up 59.7% from the same time last year<sup>2</sup>.
- **Spreads tightened across the board.** US HY Credit Index tightened by 331 bps or 51.0%<sup>3</sup> decrease in 1H 2021 versus the same period last year. BB and B index tightened by 142 bps and 214 bps, a 31.4%<sup>3</sup> and 32.6%<sup>3</sup> decreases versus the same period last year. In the meantime, CCC index decreased by 51.2%<sup>3</sup> in the first half of 2021 from 2020 same period.
- **With significant increase in LBO debt issuance, interest coverage decreased in US.** Total leverage averaged 5.9x (Debt / EBITDA) in 1H 2021 for US new issue loans up 14.0% from 1H 2020<sup>4</sup>. Interest coverage averaged 3.5x (EBITDA / Cash Interest), down 2.0% from 1H 2020<sup>4</sup>. In Europe with 1H 2021 LBO Loan volume at \$64.9 billion up 137.1% from 1H 2020 and down 39.5% from \$137.7 billion peak in 2007<sup>5</sup>, leverage multiples decreased 4.9% to 5.5x in 1H 2021<sup>5</sup>, below 6.1x peak in 2007<sup>5</sup>.

## GLOBAL

- **Both investment activity and average deal size increased.** During 1H 2021, global PE firms invested in \$960.5 billion worth of deals, up 96.9% from the same time prior year and closed on 27,755 transactions, up 14.5%<sup>6</sup>.
- **PE dry powder decreased globally.** In the first half of 2021, global total PE dry powder was at \$2.3 trillion, down 13.1% from 1H 2020<sup>6</sup>. US total PE was down by 14.5% to \$1.5 trillion<sup>6</sup>; Europe total PE decreased by 4.4% to \$596.7 billion<sup>6</sup>; Asia total PE was down by 21.8% to \$135.4 billion<sup>6</sup>; and the rest of world total PE was down by 36.1% to \$39.0 billion<sup>6</sup>.

## US BUYOUTS

- **Dry powder decreased.** In 1H 2021, US buyout dry powder was \$960.8 billion, down by 15.0% from the same time in 2020<sup>6</sup>.
- **Fundraising activity picked up.** In 1H 2021, US firms across all buyout strategies raised \$155.1 billion, up by 86.9% from same time prior year<sup>6</sup>. Average fund size was down 12.6%, from \$1.2 billion in 1H 2020 to \$1.0 billion in 1H 2020<sup>6</sup>.
- **Investment activity was up significantly.** During the first half of 2021, US buyout firms invested in \$348.0 billion worth of deals +101.8% from 1H 2020 into 2,780 deals (+65.7%)<sup>6</sup>.

# Market Commentary

- **LBO price multiples were up.** As of June 30, 2021, US LBO purchase price multiples (Enterprise Value / EBITDA) were at 11.1x , a 4.6% increase from June 30, 2020<sup>4</sup>.
- **Exit activity increased.** During 1H 2021, US buyout firms exited 496 companies, representing \$290.2 billion in total transaction value<sup>6</sup>. This represented a 61.6% increase in the number of exits and a 161.7% increase in total transaction value compared to the same time last year<sup>6</sup>.

## US VENTURE CAPITAL

- **Dry powder decreased.** In 1H 2021, US VC dry powder was at \$100.5 billion, down 19.6% from 1H 2020<sup>6</sup>.
- **Fundraising activity increased.** US VC firms raised \$74.1 billion during 1H 2021, a 73.4% increase from the same period last year<sup>6</sup>. 338 funds closed in 1H 2021, a 128.4% increase from the same period last year<sup>6</sup>. The average US VC fund size decreased to \$219.2 million by 24.1% versus the same period last year<sup>6</sup>.
- **Investment activity and average deal size increased.** US VC firms deployed \$150.0 billion in capital in 1H 2021, a 117.0% increase from 1H 2020 as deal activity skewed from early to late stage<sup>6</sup>. The number of deals closed at 7,058, a 39.5% increase from the same time last year<sup>6</sup>. The average investment per deal increased to \$21.3 million, a 55.5% increase from prior year<sup>6</sup>.
- **All stages valuations were up.** Compared to June 30, 2020, the average pre-money valuations increased for all stages in 1H 2021: up 6.7% at \$8.0 million<sup>6</sup> for Seed stage, 40% at \$42 million<sup>6</sup> for early-stage VC, and 13.8% at \$136.5 million<sup>6</sup> for late-stage VC.
- **Exit activity increased significantly with larger transactions.** US VC firms exited 699 companies in 1H 2021, up by 85.9% from last year and 66.8% from three years ago<sup>6</sup>. This represented the record high \$372.2 billion in transaction value, up by 721.6% from the same period last year and 1,198.7% from three years ago<sup>6</sup>. Largest sectors exited were Software and Pharma & Biotech.

## EX US

- **Dry powder decreased ex-US.** PE dry powder outside the US decreased 10.2% to \$771.1 billion<sup>6</sup> for 1H 2021. Dry powder outside the US was 50.1% less than dry powder in the US (\$1.5 trillion)<sup>6</sup>.
  - **Europe VC and buyout dry powders both down.** VC at \$53.3 billion and buyout at \$354.7 billion were down 7.4% and 11.0% from 1H 2020, respectively<sup>6</sup>.
  - **In Asia, VC, buyout and growth dry powder decrease paralleled US and Europe.** VC at \$4.6 billion, buyout at \$113.9 billion, and growth at \$7.9 billion were down 44.4%, 15.6% and 37.1% from 1H 2020, respectively<sup>6</sup>.

# Market Commentary

- **Ex-US fundraising up.** In 1H 2021, ex-US fundraising increased 202.3% from 1H 2020 to \$138.4 billion<sup>6</sup>. Fundraising in Europe and Asia increased by 154.0% and 27.7% from 1H 2020 to \$80.1 billion and \$35.2 billion, respectively<sup>6</sup>.
- **Capital deployment increased in all but European buyouts.**
  - **In both Europe and Asia, VCs invested more capital into fewer deals.** Investment activity increase by 59.1% in Europe and 127.2% in Asia from 1H 2020<sup>6</sup>. Capital deployed increased by 155.2% to \$54.6 billion and by 38.8% to \$39.3 billion, respectively, in Europe and Asia<sup>6</sup>.
  - **Buyout deal activity and capital deployment rose in Europe and Asia.** In Europe, buyout firms transacted invested \$274.3 billion in aggregate value (+72.6% from 1H 2020)<sup>6</sup>. Asia buyout firms invested \$33.9 billion in aggregate value (+119.5%)<sup>6</sup>.
- **Europe purchase price multiples increased.** As of June 30, 2021, Europe median purchase price multiples increased 28.6% from 8.1x to 9.3x EBITDA from the same time last year<sup>6</sup>.
- **Similar to US, exit activity strengthened in Asia and Europe.** Europe PE aggregate exit value amounted to \$223.7 billion, a 150.8% increase from 1H 2020, while Asia PE exit value grew by 8.4% to \$75.2 billion<sup>6</sup>.

## Notes

1. <https://www.jdsupra.com/legalnews/high-yield-issuance-surges-in-the-us-2965861>
2. <https://www.lexology.com/library/detail.aspx?g=67ef22e3-f17c-4b06-a66d-48071860b5fe>
3. *Guggenheim High-Yield Bank Loan Outlook*
4. *S&P Global US LBO Review*
5. *S&P Global LCD European Leveraged Buyout Review*
6. *Pitchbook*
7. *Preqin*

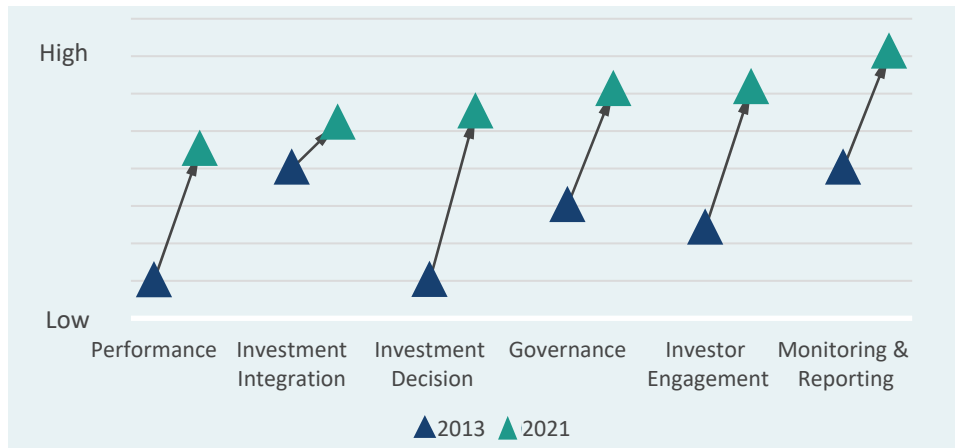
# Topical focus

# ESG gains private equity attention

## Investor appetite brings ESG to mainstream private equity

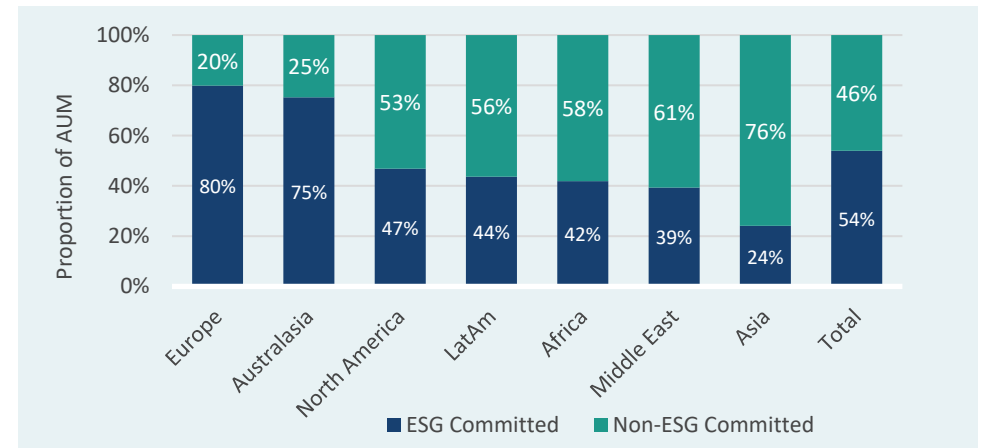
- Private equity firms have continued to make inroads incorporating environmental, social and governance (“ESG”) factors into their investment programs through the formation of dedicated “impact” funds, participation in global responsible investing standards, and use of new metrics and methods in managing portfolio companies.
- Private equity, always focused on governance risk, is increasingly growing aware environmental, social and governance issues are highly interrelated and that the biggest benefits over time accrue to companies that balance efforts between all three.
- Initiatives like the UN Paris Agreement and the European Commission Action Plan have pushed Europe into the epicenter of ESG-commitment (80%); whereas in North America less than half of institutional capital is managed under ESG considerations with Asia even lower at 24%.

### PE FIRMS ARE PLACING GREATER EMPHASIS ON ALL AREAS ESG



Source: PWC Private Equity Responsible Investment Survey 2021 & 2013

### REGIONAL PRIVATE CAPITAL MANAGED UNDER ESG COMMITMENT



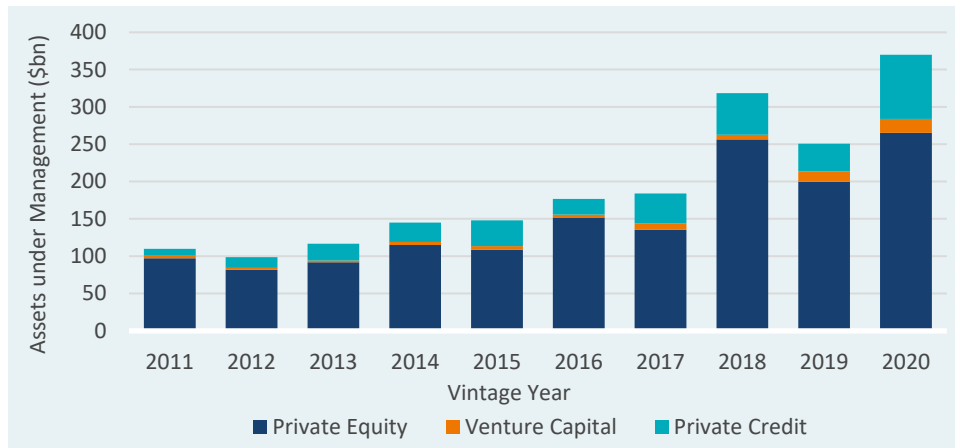
Source: Preqin

# Capital is flowing to ESG strategies

## A new commitment to ESG

- Capital flowing into ESG-related investment strategies saw unprecedented growth in 2020: nearly \$400 billion in cumulative ESG-focused private capital was raised from 2015 to 2020, with over a quarter being raised in 2020 alone<sup>1</sup>.
- Despite the challenges of 2020, ESG-committed fundraising remains strong, led by private credit and buyout strategies. A key driver in this trend has been firmwide ESG commitments by the largest alternatives managers.
- The average size of ESG-committed funds far outpaces that of non-ESG funds; while these vehicles are not solely focused on environmental, social, and governance issues, they are pledging that they will, at the very least, not have a negative impact through their portfolios.

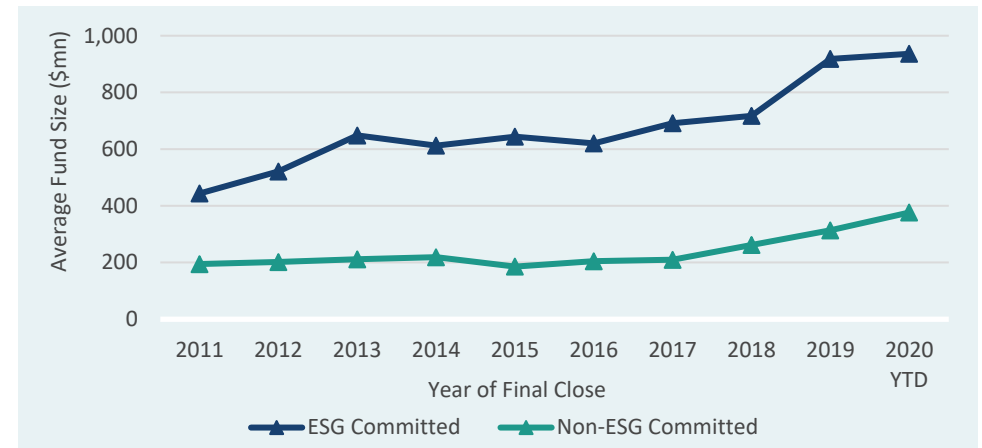
**ESG-COMMITTED PRIVATE CAPITAL AUM BY ASSET CLASS**



Source: Preqin as of September 2020

<sup>1</sup> McKinsey Global Private Markets Review 2021

**AVG FUND SIZE CLOSED ESG-COMMITTED VS. NON-ESG-COMMITTED**



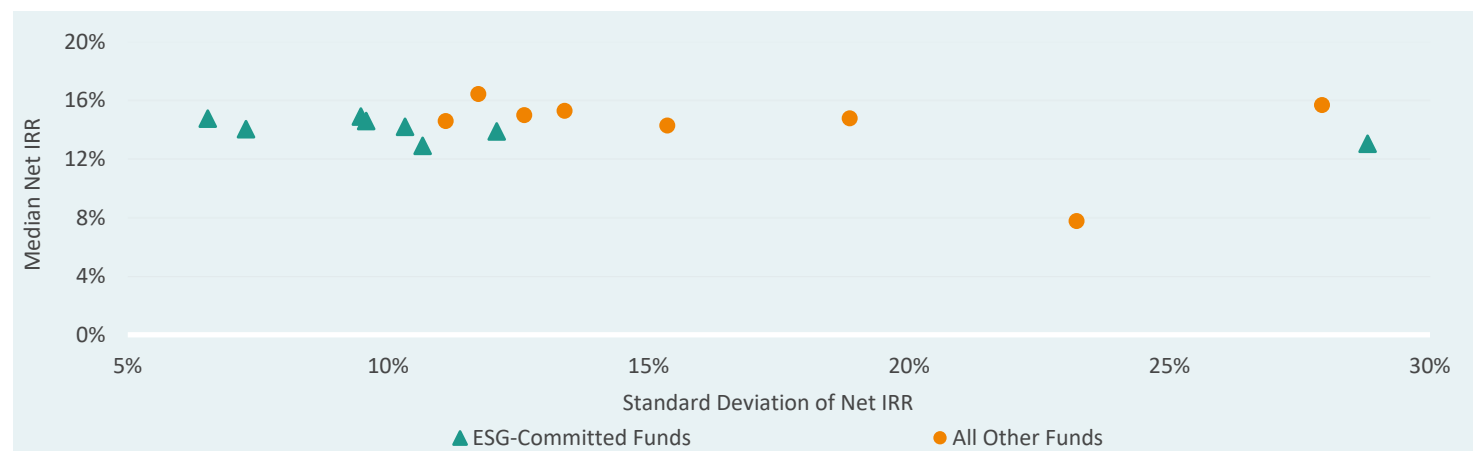
Source: Preqin as of September 2020

# ESG-committed fund performance

## The relationship between ESG factors and company financial performance remains unclear

- A major roadblock to ESG investing is the concern about its impact on returns. Managers and investors worry that by limiting their opportunity set to transactions that meet ESG requirements, they will be losing out.
- According to Preqin, analysis shows that ESG investments perform on par with their non-ESG counterparts and with less dispersion; however, the data is skewed under a relatively small sample set which include the largest private capital managers who broadly commit to ESG.
- Investor demand for ESG is strong, but the lack of high quality, consistent ESG data is the top challenge for fund managers who are also balancing the additional burden on portfolio company management and internal resources.
- Sponsors face the same challenges as public companies emanating from the lack of standardization and clearly adopted definitions of the goals of, and appropriate metrics to measure, ESG or “sustainable investment,” as well as pressure from investors to prioritize ESG. As the broader market becomes more sophisticated in operationalizing ESG, so too will the private equity industry.

### RISK/RETURN OF ESG-COMMITTED FUNDS (VINTAGE 2010-2017)\*



\*Net IRRs are since inception. Source: Preqin



# Private Equity portfolio

	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
<b>ACERA Plan Assets - Total</b>				<b>\$11,457,179</b>		
<b>Private Equity:</b>	<b>11.0%</b>	<b>8-13%</b>	<b>8.6%</b>	<b>\$984,164</b>	<b>\$549,490</b>	<b>\$1,533,654</b>
Buyouts	60.0%	30-80%	51.4%	\$506,074	\$358,548	\$864,622
Venture Capital	20.0%	0-40%	31.4%	\$309,458	\$35,276	\$344,734
Debt-Related/Special Situations	20.0%	0-30%	17.1%	\$168,632	\$155,666	\$324,298

### Portfolio Summary

- As of June 30, 2021, the Private Equity portfolio had a total market value of \$984.2M, with \$506.1M in Buyouts, \$309.5M in Venture Capital, and \$168.6M in Debt-Related / Special Situations. Total market value is the current reported value of investments, excluding the remaining amount of unfunded commitments.
- Since its initial allocation to Private Equity in Q4 2008, ACERA has contributed \$1.1B towards its Private Equity commitments, with \$571.8M to Buyouts, \$183.2M to Venture Capital, and \$315.6M in Debt-Related / Special Situations. Unfunded commitments total \$549.5M
- The portfolio exposure at 8.6% is below the new 11.0% policy target approved in 2021, but within its 8-13% target range. Compared to December 31, 2020, portfolio exposure is down 0.1%, in part due to significant growth in plan value (\$1.8B), coupled with strong distributions from Private Equity (\$138.9M) in 1H'21 . Buyout remains under its policy target, Venture capital above its target and Debt-Related / Special Situations below its policy target but all within policy ranges.

### Portfolio Activity

- In the first half of 2021, ACERA committed \$27.0M to ABRY Senior Equity VI, L.P., 30.0M to Genstar Capital Partners X, L.P., \$20.0M to Peak Rock Capital III, L.P. and \$27.0M to SVP Special Situations Fund V L.P.

# Private Equity Portfolio Performance

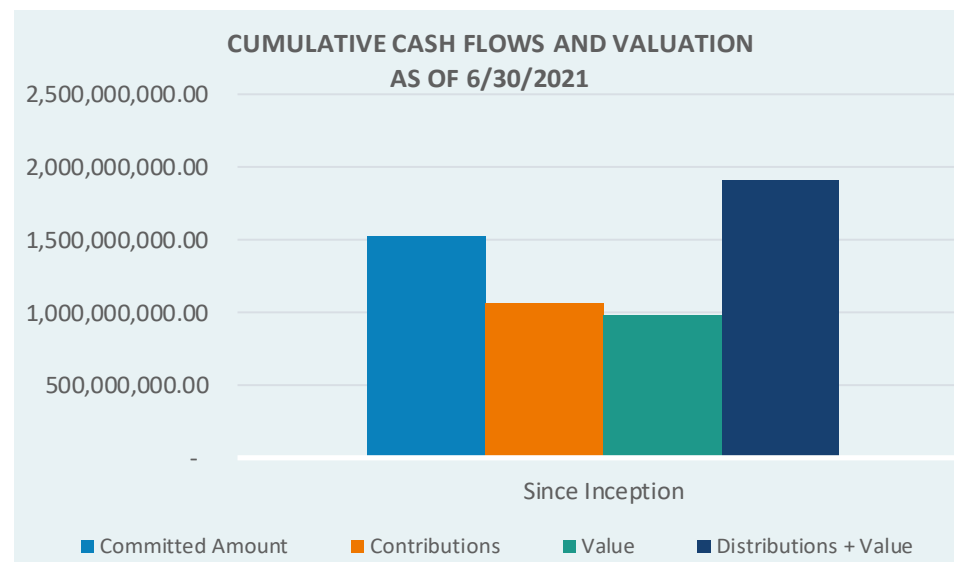
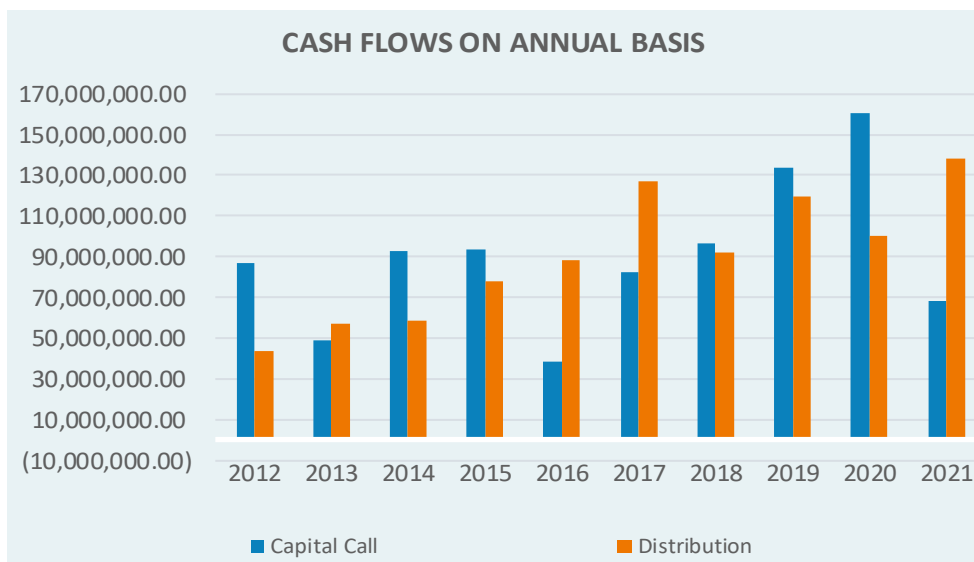
Period Ending: June 30, 2021

## Performance

- Current Private Equity portfolio is valued at \$984.2M. Portfolio investments have a capital-weighted average life of 4.8 years. Since inception (2008):
  - The portfolio has produced +17.63% net IRR, outperforming its Thomson Reuters C|A Global PE benchmark pooled IRR of 16.53% by 110 basis points. Portfolio returns rank above Median on net IRR, Total Value Multiple (TVPI), and Distribution Multiple (DPI).
  - Relative to same Vintage global benchmark peers, Buyout ranks above Median on TVPI, and DPI and below Median on IRR; Venture Capital ranks above Top-Quartile on TVPI and DPI and above Median on IRR; and Debt Related/ Special Situations ranks above Median on IRR and DPI and slightly below Median on TVPI.
- Together with \$926.8M in realized distributions (0.87x cost), Private Equity's Total Value at \$1,911.0M is approximately \$840.3M above \$1070.6M cost (1.78x cost), net of fees. Return drivers include:
  - Venture Capital up \$376.4M/+205.4% versus cost (General Catalyst VI; Khosla Ventures III, IV, V & Seed B; Third Rock Venture II & III; NEA 13, 14, 15; and Great Hill IV, VI, and VII leading), with 136.5% of called capital realized and distributed.

Since inception, this portfolio produced 24.96% net IRR versus its peer global benchmark of 22.55% pooled IRR.

- Buyout up \$374.4M/+65.5% versus cost (Great Hill V and VI, Sycamore Partners I, Warburg XI, Insight II and Peak Rock Capital Fund II leading) with 77.0% of called capital realized and distributed. Since inception, the Buyout portfolio produced 16.59% net IRR versus its peer global benchmark of 17.43% pooled IRR.
  - Debt-Related / Special Situations was up \$89.6M/+28.4% versus cost (ABRY Advanced Securities II and Senior Equity IV and V, Centerbridge Special Credit Partners, Partners Group 2009, and Angelo Grodon CSF1A Annex leading), with 74.9% of called capital realized and distributed. Since inception, this portfolio produced 10.46% net IRR versus its peer global benchmark of 11.10% pooled IRR.
- Distributions outpaced contributions by a ratio of 2.02:1.0 in 1H'21.
  - Within Private Equity, the current allocation of invested capital is 51.4% to Buyouts, 17.1% to Debt / Special Situations and 31.4% to Venture Capital. Of \$926.8M in cash distributions, 47.5% were from Buyouts, 25.5% from Debt-Related/Special Situations, and 27.0% from Venture Capital.



## Portfolio Performance vs. Pooled Benchmark IRR

Period Ending: June 30, 2021

	1-Year	3-Year	5-Year	10-Year	Since Inception <sup>2</sup>
<b>Buyout</b>	<b>55.32%</b>	<b>19.18%</b>	<b>17.15%</b>	<b>17.45%</b>	<b>16.59%</b>
<i>Thomson Reuters C/A Global Buyout Benchmark<sup>1</sup></i>	52.26%	22.65%	22.04%	18.27%	17.43%
<b>Venture Capital</b>	<b>100.88%</b>	<b>38.63%</b>	<b>30.21%</b>	<b>25.28%</b>	<b>24.96%</b>
<i>Thomson Reuters C/A Global Venture Capital &amp; Growth Equity Benchmark<sup>1</sup></i>	74.51%	33.68%	27.45%	23.00%	22.55%
<b>Debt-Related / Special Situation</b>	<b>33.35%</b>	<b>7.29%</b>	<b>9.73%</b>	<b>8.35%</b>	<b>10.46%</b>
<i>Thomson Reuters C/A Global All Debt Benchmark<sup>1</sup></i>	28.97%	10.37%	11.34%	10.00%	11.10%
<b>Total Private Equity</b>	<b>63.57%</b>	<b>23.27%</b>	<b>20.57%</b>	<b>17.77%</b>	<b>17.63%</b>
<i>Thomson Reuters C/A Global All Private Equity Benchmark<sup>1</sup></i>	55.07%	22.39%	20.69%	16.86%	16.53%

**Identical cash flows from the portfolio inception through 6/30/2021 invested in the Russell 3000 Total Return index would yield a 15.59% (Long Nickels). The Private Equity Portfolio outperformed the Russell 3000 by 2.04%. Public Market Equivalent analysis provided by Solovis.**

<sup>1</sup> Benchmarks: Thomson Reuters C/A as of 6/30/2021, vintage 2008 through present.

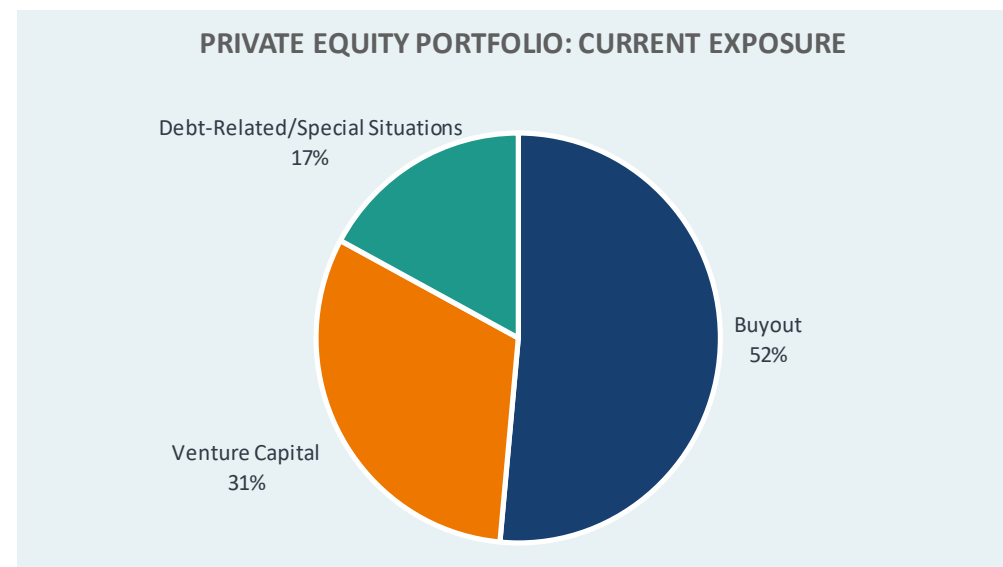
<sup>2</sup> ACERA's inception date of November 21, 2008 vs. Thomson Reuters C/A's inception date of January 1, 2008.

# Portfolio Diversification

Period Ending: June 30, 2021

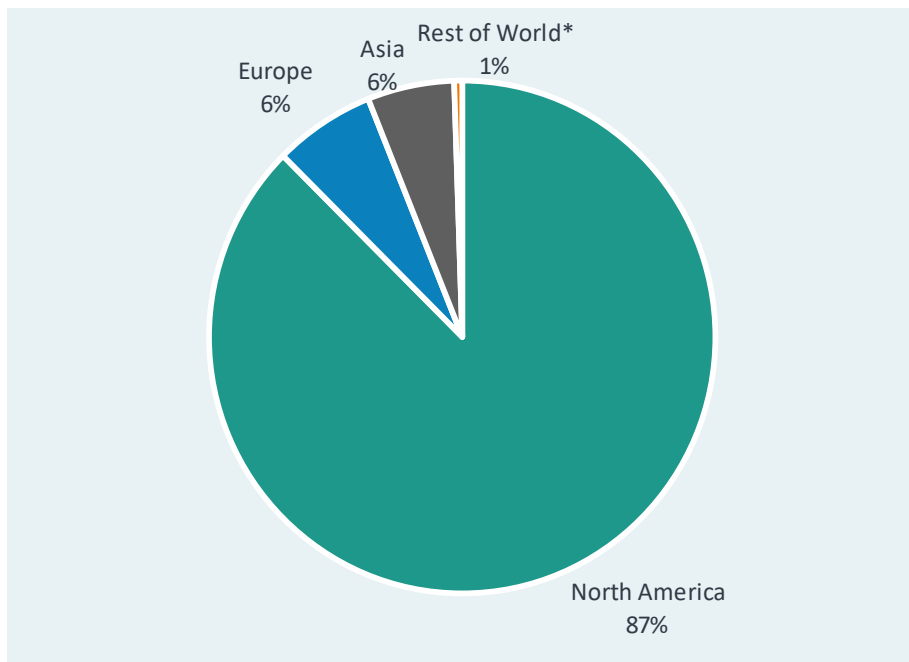
Investment Type	Commitment	Current Exposure	Current Exposure as % of Private Equity
Buyout	856,806,404	506,074,461	51.4%
Venture Capital	218,100,000	309,458,193	31.4%
Debt-Related/Special Situations	379,247,675	168,631,570	17.1%
<b>Total Private Equity</b>	<b>1,454,154,079</b>	<b>984,164,224</b>	<b>100.0%</b>

Investment Type	Target Range	Target Exposure	Current Exposure as % of Target	Difference
Buyout	3.3%-8.8%	6.6%	4.4%	-2.2%
Venture Capital	0.0%-4.4%	2.2%	2.6%	0.4%
Debt-Related/Special Situations	0.0%-3.3%	2.2%	1.6%	-0.6%
<b>Total Private Equity</b>	<b>8%-13%</b>	<b>11.0%</b>	<b>8.6%</b>	<b>-2.4%</b>



Strategy

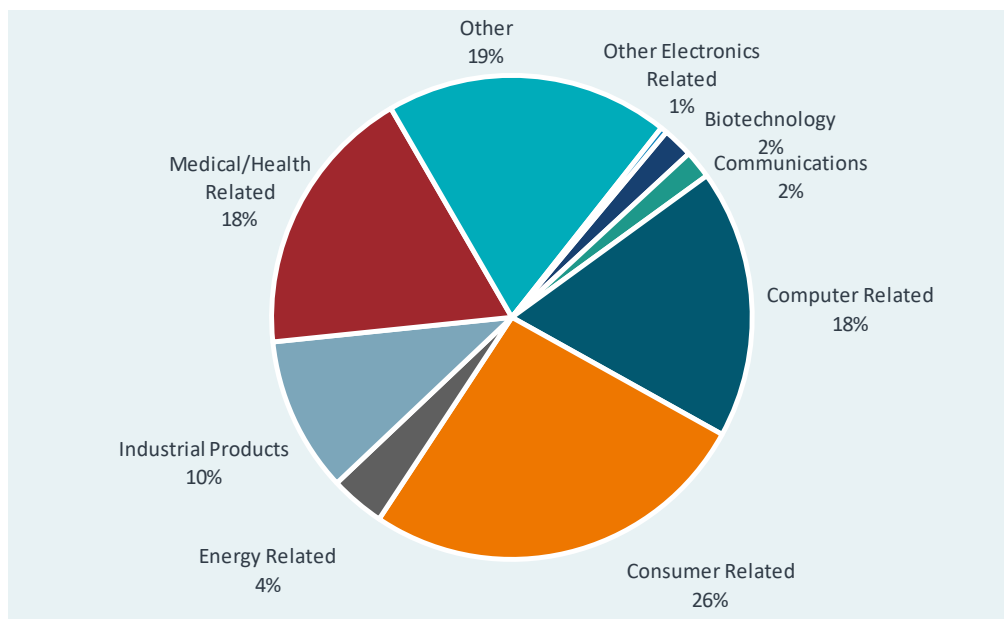
Geography	Current Exposure
North America	852,998,302
Europe	62,980,751
Asia	53,960,985
Rest of World*	5,093,668
<b>Total Private Equity</b>	<b>984,164,224</b>



Based on the value of private equity portfolio companies as of June 30, 2021, as provided by the partnerships. Differences between reported value and the private equity portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed industry breakdown.

\* Rest of World includes: Brazil, New Zealand, Kenya, Israel, United Arab Emirates, Australia, and Turkey.

Industry	Current Exposure
Biotechnology	19,979,186
Communications	18,189,799
Computer Related	174,296,262
Consumer Related	254,563,201
Energy Related	35,606,168
Industrial Products	100,543,551
Medical/Health Related	176,536,739
Other	184,877,312
Other Electronics Related	4,139,175
<b>Total Private Equity</b>	<b>984,164,224</b>

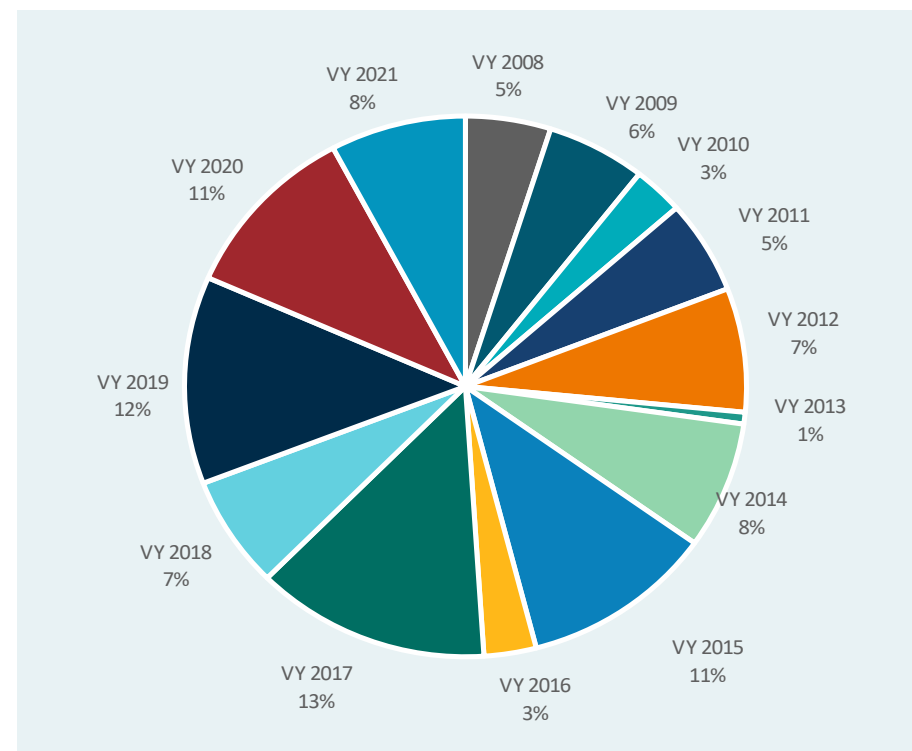


Based on the value of private equity portfolio companies as of June 30, 2021, as provided by the partnerships. Differences between reported value and the private equity portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed industry breakdown.

# Private Equity Portfolio Diversification

Period Ending: June 30, 2021

Vintage Year	Commitment as of 6/30/2021	% of Portfolio Commitment	Reported Value as of 6/30/2021
2008	72,370,855	4.9%	9,652,194
2009	83,500,000	5.7%	32,335,960
2010	42,500,000	2.9%	2,781,944
2011	82,500,000	5.6%	84,938,701
2012	108,500,000	7.4%	145,550,631
2013	10,000,000	0.7%	10,934,257
2014	112,080,000	7.6%	113,693,391
2015	163,250,000	11.1%	175,399,893
2016	43,250,000	3.0%	33,670,644
2017	197,251,820	13.5%	214,970,491
2018	98,000,000	6.7%	34,247,764
2019	181,000,000	12.4%	87,460,902
2020	155,951,404	10.6%	36,603,936
2021	115,000,000	7.8%	1,923,518
<b>Total Private Equity</b>	<b>1,465,154,079</b>	<b>100%</b>	<b>984,164,224</b>



Vintage Year



- **As of June 30, 2021, the Private Equity Portfolio's market value at 8.6%, below its new target allocation of 11.0% approved in 2021, but within its target range.**

# Appendix

Private Credit Portfolio

	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
ACERA Plan Assets - Total				\$11,457,179		
Private Credit:	4.0%	3-5%	1.1%	\$123,327	\$111,509	\$234,836

### Portfolio Summary

- As of June 30, 2021, the Private Credit portfolio had a total market value of \$123.3M. Total market value is the current reported value of investments, excluding the remaining amount of unfunded commitments.
- Since ACERA's initial allocation to Private Credit in Q1 2019, the Plan has contributed \$120.1M towards its Private Credit commitments. Unfunded commitments total \$111.5M.
- The portfolio exposure at 1.1% is below the policy target of 4.0% and falls short of the policy range of 3-5%. ACERA continues to make new commitments to the allocation to reach its policy target.

### Portfolio Activity

- Most recently ACERA made two new commitments to Private Equity in the second half of 2020: \$75.0M to Blackrock Direct Lending Fund IX, L.P, and \$75.0M to HPS Specialty Loan Fund V, L.P.

# Private Credit Portfolio Performance

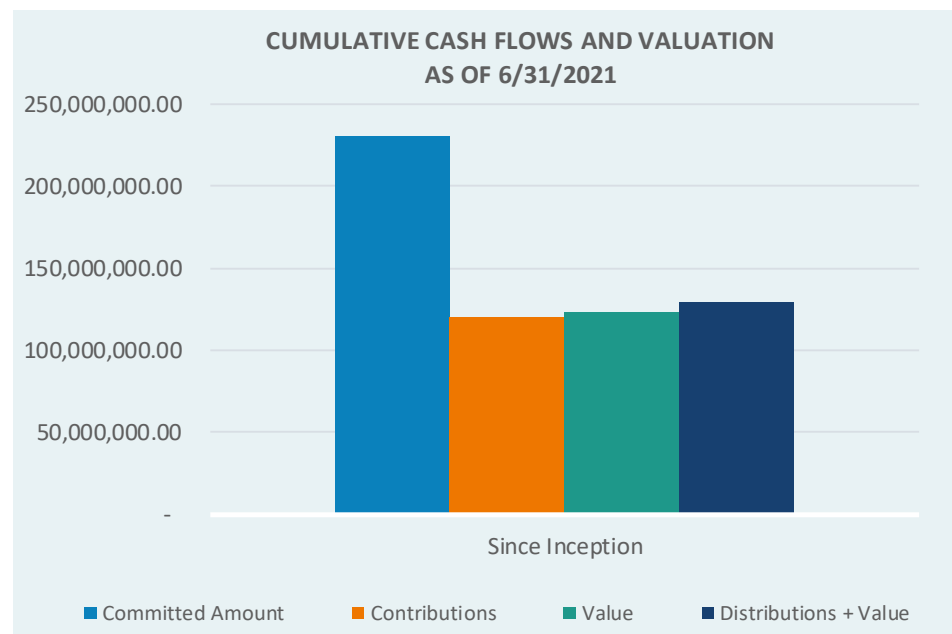
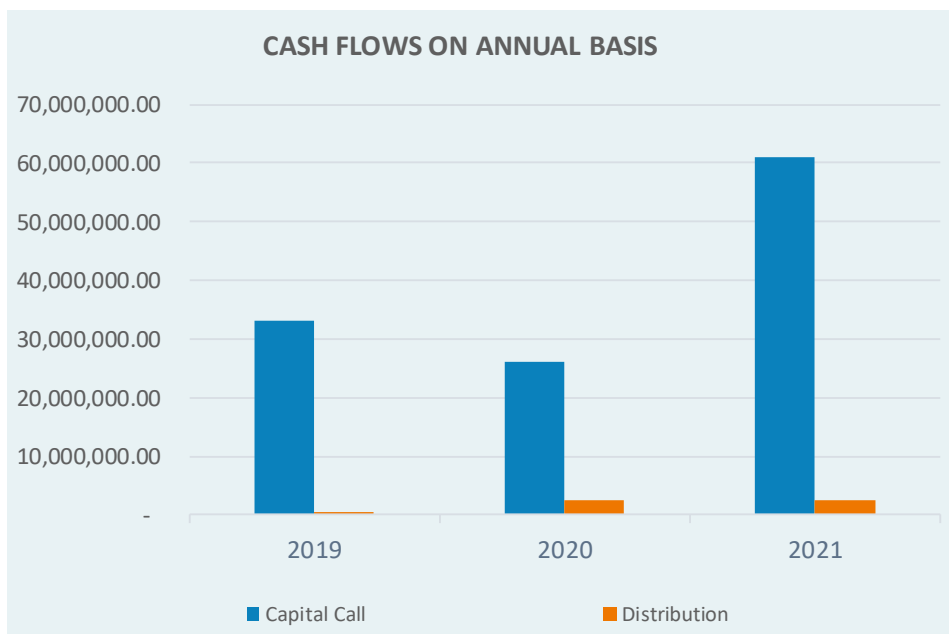
Period Ending: June 30, 2021

## Performance

- The Private Credit’s performance, as measured by net IRR, is 9.56%, 444 bps above the same cash flow invested in the S&P LSTA U.S. Leveraged Loan 100 Index of 5.12%. With a capital-weighted average life of investments at 0.8 years, portfolio IRR is not meaningful.
- The portfolio is currently valued at \$123.3M. Together with \$5.5M in realized distributions (0.05x cost), Private Credit’s Total Value at \$128.81M is approximately \$8.8M above \$120.1M cost (1.07x cost), net of fees.
- Capital calls continued to dominate the portfolio’s cash-flow activity as new investments are made to reach the target exposure.

— The Portfolio has three commitments to date:

▪ Owl Rock First Lien, LP	\$80.0M
▪ HPS Specialty Loan Fund V, LP	\$75.0M
▪ Owl Rock Direct Lending Fund IX, LP	\$75.0M





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**PERIOD ENDING: JUNE 30, 2021**

Real Assets Review

**Alameda County Employees' Retirement Association**

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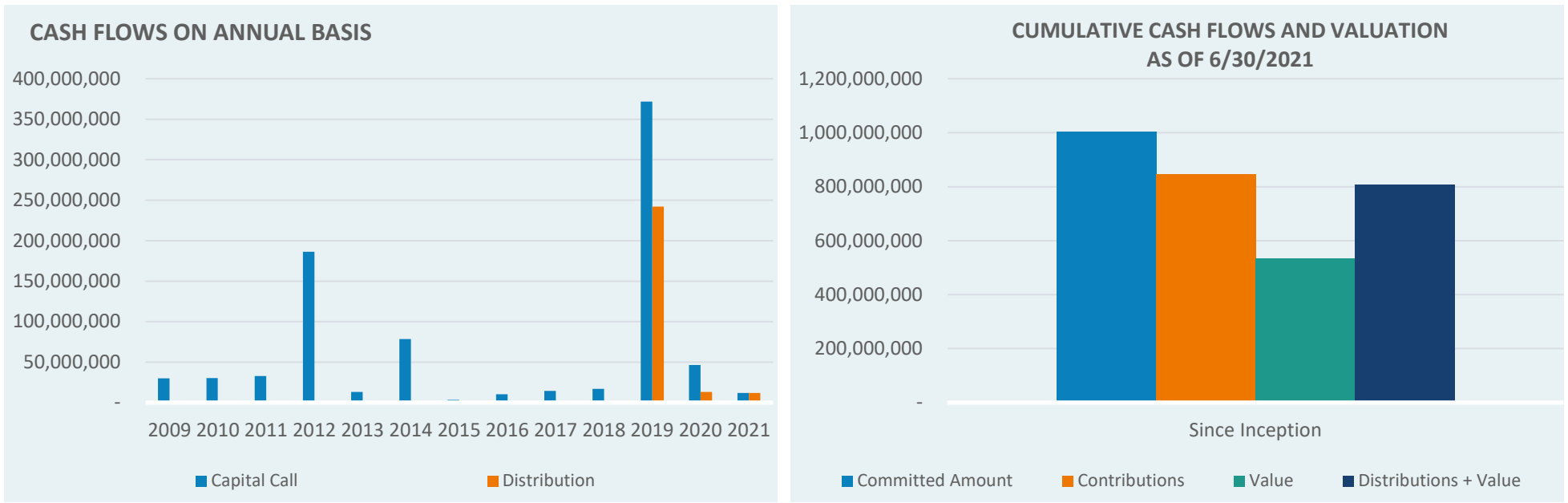
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<ul style="list-style-type: none"><li>— RA Portfolio Diversification by Strategy</li><li>— RA Portfolio Diversification by Geography</li><li>— RA Portfolio Diversification by Vintage Year</li></ul>			

*Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and Verus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.*

# Real Asset Performance

## Performance

— ACERA’s Real Asset Pool has produced a -1.11% IRR since inception. The portfolio’s poor performance has been driven primarily by the large weighting in commodity futures (Gresham and AQR) and from earlier investments in energy (Sheridan). That said, the portfolio is beginning to see the success of more recent fund investments with Quantum now posting positive performance, several of the infrastructure investments have matured and are delivering double digit returns since inception, and the liquid pool has also performed well in 2021.





## Real Assets Performance vs. Pooled Benchmark IRR

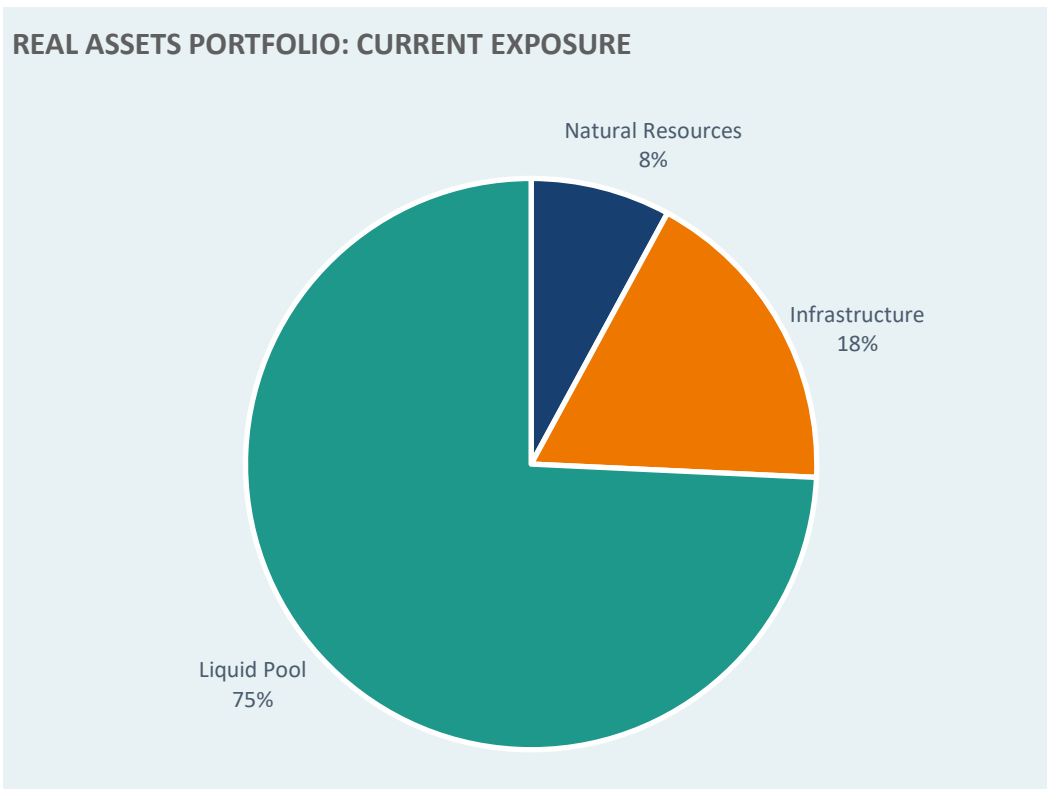
Period Ending: June 30, 2021

	1-Year	3-Year	5-Year	10-Year	Since Inception
<b>Natural Resources Funds</b>	<b>50.35%</b>	<b>0.64%</b>	<b>-2.67%</b>	<b>-3.96%</b>	<b>-3.94%</b>
<i>S&amp;P Global Natural Resources Index<sup>1</sup></i>	48.44%	6.16%	9.44%	4.98%	4.95%
<b>Infrastructure Funds</b>	<b>19.87%</b>	<b>15.32%</b>			<b>13.17%</b>
<i>S&amp;P Global Infrastructure Index<sup>1</sup></i>	23.73%	7.04%	6.30%	6.30%	6.30%
<b>Liquid Pool Funds</b>	<b>33.33%</b>	<b>1.90%</b>	<b>2.77%</b>	<b>-2.34%</b>	<b>-1.60%</b>
<i>Bloomberg Commodity Index<sup>1</sup></i>	49.93%	4.96%	3.32%	-2.99%	-2.39%
<b>Total Real Assets</b>	<b>32.27%</b>	<b>3.10%</b>	<b>3.10%</b>	<b>-1.76%</b>	<b>-1.11%</b>
<i>Blended Real Assets Benchmark<sup>2</sup></i>	33.72%	5.26%	7.21%	5.94%	5.94%

<sup>1</sup> Benchmarks: Identical cash flows invested in the appropriate benchmarks through the life of the portfolio up through 6/30/2021. Analysis provided by Solovis.

<sup>2</sup> Blended Real Assets Benchmark calculated on a time-weighted return basis

Investment Type	Commitment	Current Exposure	Current Exposure as % of Portfolio
Natural Resources	104,000,000	41,822,866	7.8%
Infrastructure	210,000,000	93,931,547	17.6%
Liquid Pool	689,235,893	398,564,703	74.6%
<b>Total Portfolio</b>	<b>1,003,235,893</b>	<b>534,319,116</b>	<b>100.0%</b>

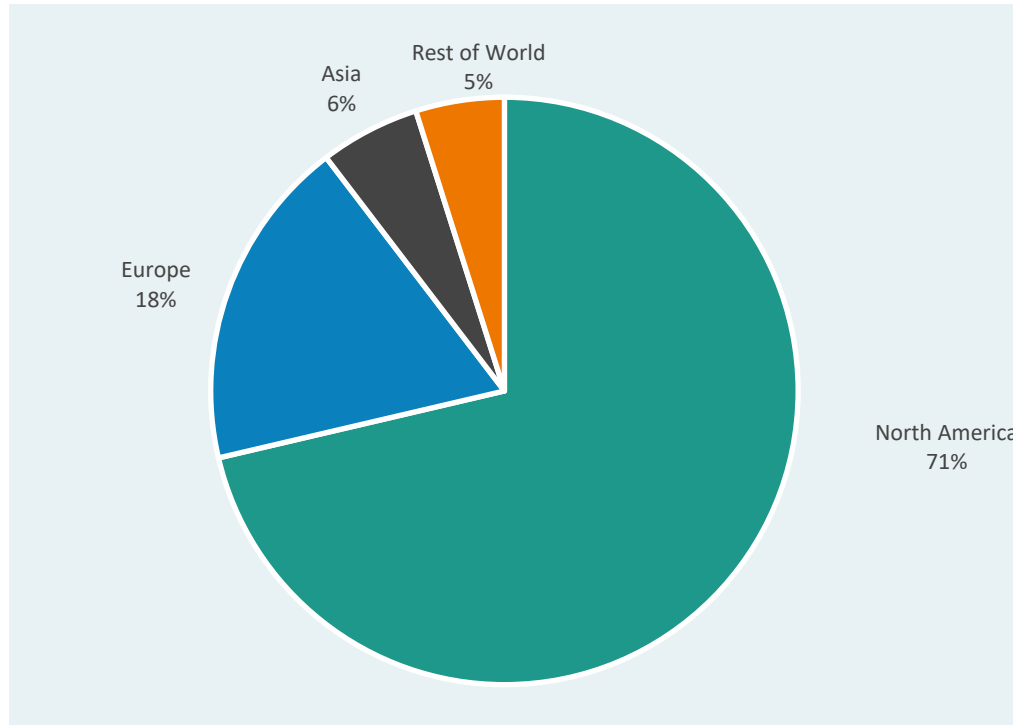


# Geography Portfolio Diversification

Period Ending: June 30, 2021

Geography	Reported Fair Value
North America	96,845,639
Europe	24,818,998
Asia	7,469,161
Rest of World	6,620,615
<b>Total Portfolio*</b>	<b>135,754,413</b>

\* Excludes Liquid assets.

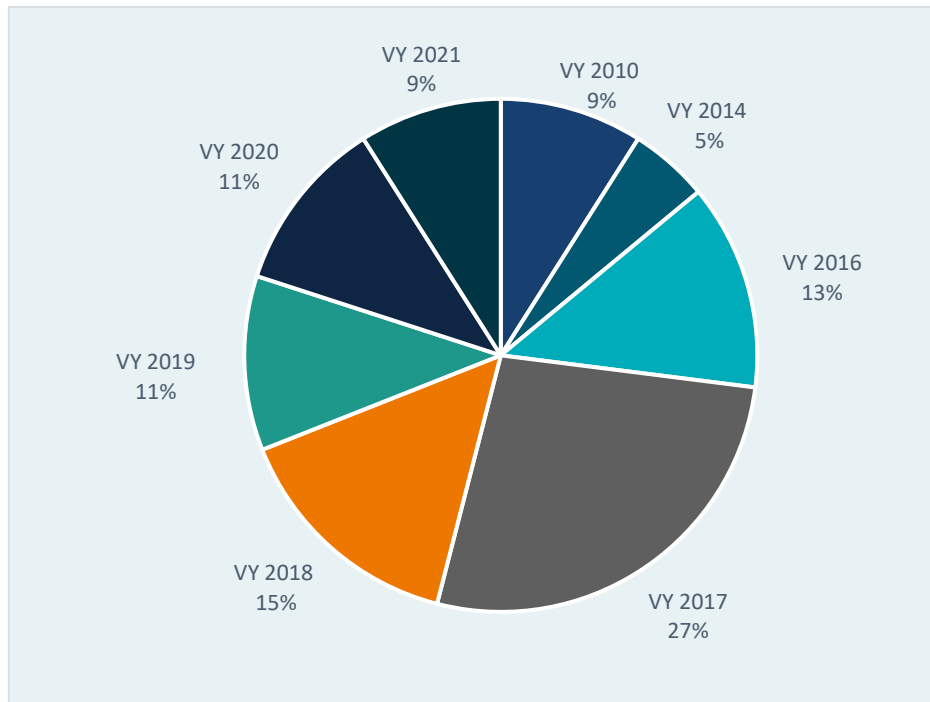


# Vintage Year Portfolio Diversification

Period Ending: June 30, 2021

Vintage Year	Commitment as of 6/30/21	% of Portfolio Commitment	Reported Value as of 6/30/21
2010	24,000,000	8.8%	0
2014	15,000,000	5.5%	8,881,311
2016	35,000,000	12.8%	31,339,042
2017	75,000,000	27.4%	62,261,256
2018	40,000,000	14.6%	29,330,807
2019	30,000,000	10.9%	3,941,997
2020	30,000,000	10.9%	0
2021	25,000,000	9.1%	0
<b>Total Portfolio</b>	<b>274,000,000</b>	<b>100%</b>	<b>135,754,413</b>

\* Excludes open-end vehicles and liquid assets.



- ACERA committed \$25 million to Vision Ridge Sustainable Asset Fund III within the infrastructure portfolio at the March Investment Committee Meeting.
- Verus plans to recommend a \$25-30 million investment in a growth-oriented infrastructure fund at the December board meeting.
- As mentioned previously, we plan to increase the allocation to infrastructure investments at the expense of natural resource strategies as we move away from investments in the oil & gas industry.

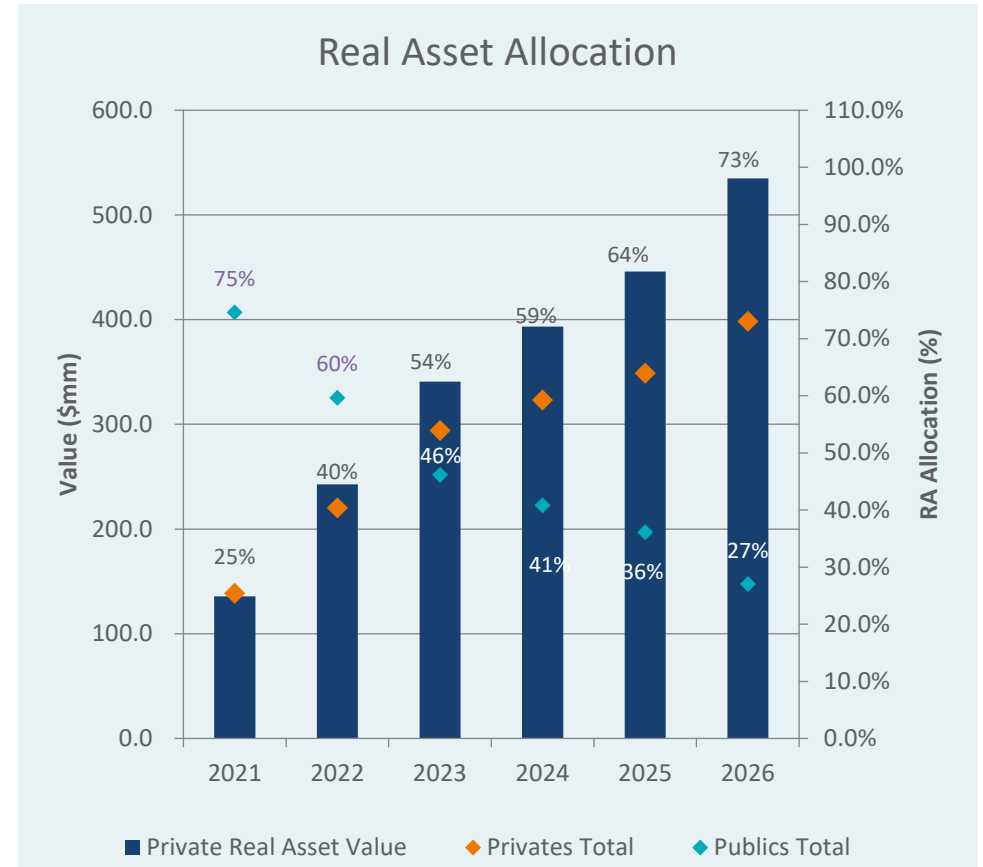
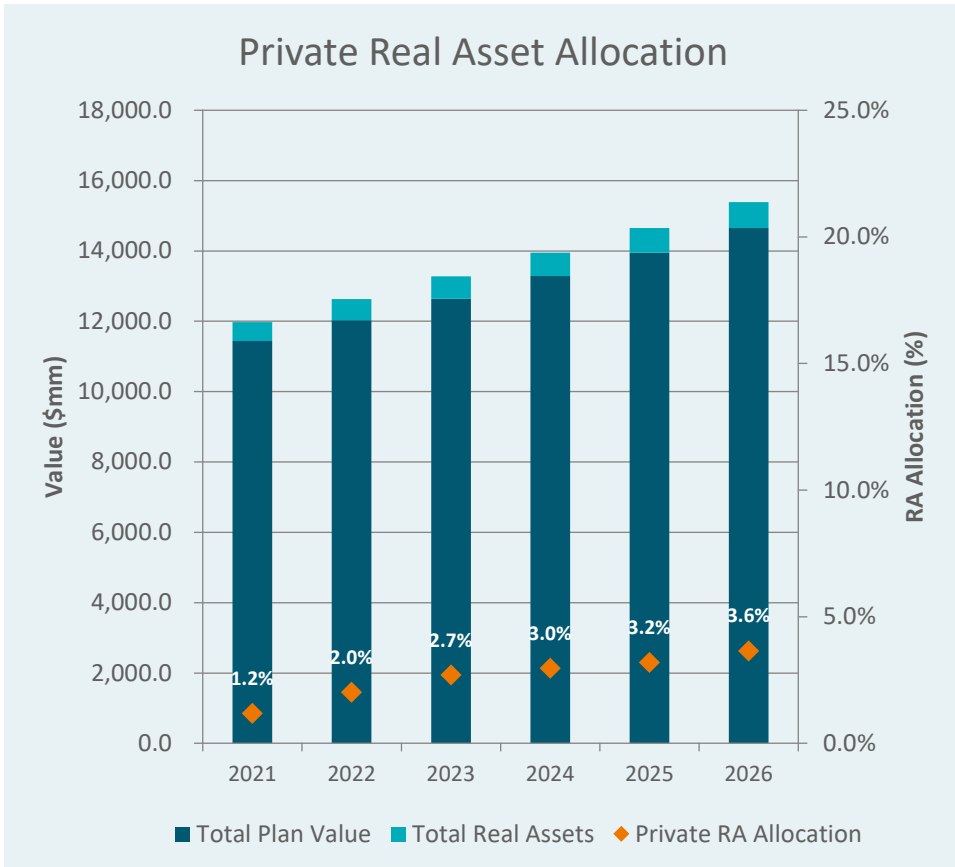
# Real Asset Pacing Study

RA Category	2021	2022	2023	2024	2025	2026
	Projected Commit (\$)	Projected Commit (\$)	Projected Commit (\$)	Projected Commit (\$)	Projected Commit (\$)	Projected Commit (\$)
Value-Add Infrastructure	\$ 55,000,000	\$ 50,000,000		\$ 50,000,000	\$ 50,000,000	
Core Infrastructure			\$ 50,000,000			\$ 50,000,000
Natural Resources	\$ -	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000
<b>Total RA Portfolio</b>	<b>\$ 55,000,000</b>	<b>\$ 100,000,000</b>	<b>\$ 100,000,000</b>	<b>\$ 100,000,000</b>	<b>\$ 100,000,000</b>	<b>\$ 100,000,000</b>

Listed Infrastructure		\$ (40,915,514)	\$ (55,683,359)	\$ (24,699,786)	\$ (22,981,934)	\$ (43,030,931)
Listed Natural Resources		\$ (22,890,900)	\$ (31,603,217)	\$ (13,694,450)	\$ (12,742,550)	\$ (24,484,527)
Commodities		\$ (2,851,636)	\$ (4,138,142)	\$ (1,650,453)	\$ (1,535,973)	\$ (3,233,425)
<b>Total Public</b>		<b>\$ (66,658,050)</b>	<b>\$ (91,424,717)</b>	<b>\$ (40,044,689)</b>	<b>\$ (37,260,457)</b>	<b>\$ (70,748,883)</b>

	Projected Commit (#)	Projected Commit (#)	Projected Commit (#)	Projected Commit (#)	Projected Commit (#)	Projected Commit (#)
Value-Add Infrastructure	2	1		1	1	
Core Infrastructure			1			1
Natural Resources		1	1	1	1	1
<b>Total</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

- This pacing model assumes a 5.0% target allocation to real assets with a private to public ratio of 75:25.
- Deploying ~\$100M/year should result in hitting the target allocation in 5-6 years.







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**DECEMBER 8, 2021**

ESG Implementation Issues and Recommendations

**ACERA**

# ACERA ESG policy review and DOL update

# ESG

## Agenda:

- ACERA ESG Policy key aspects review
  - DOL update
- Discussion of ESG survey results
- Discussion of ESG implementation options
- ESG implementation recommendations

# Key aspects of ACERA ESG policy

- Designed to be consistent with “*guidance found in DOL publications*”
- Policy states ACERA’s primary ESG lens and implementation approach is one of risk mitigation. ESG factors that may materially impact Fund’s long-term financial returns will be considered by ACERA’s Board
  - Improvement of Fund returns is in context of materiality of ESG factors risks to returns (i.e., risks worth taking or avoiding)
- Specific with respect to ESG risk factors:
  - *Environmental* – ACERA will seek to advance its interests in mitigating climate change risk through available tools, including proxy voting
  - *Social* – ACERA will monitor social risk factors including diversity and inclusion and human capital risk issues for ACERA’s investment managers and other service providers. Proxy voting is a tool Fund may employ to augment material social risk mitigation
  - *Governance* – primary tool will be proxy voting though Board may identify other avenues to incorporate mitigation of these risk factors
- (Non-separately managed accounts) ACERA’s managers will disclose ESG risk considerations and proxy voting results to enable Board to monitor ESG risk mitigation activities

# ESG – DOL Ruling

## Current Rule:

- It is the Department's view that many plan fiduciaries already undertake such evaluations, though many that consider ESG and similar factors may not be treating those as pecuniary factors within the risk-return evaluation

## New Proposal

- The proposed rule, “[Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights](#),” follows Executive Order 14030, signed by President Biden on May 20, 2021.
- The order directs the federal government to implement policies to help safeguard the financial security of America’s families, businesses and workers from climate-related financial risk that may threaten the life savings and pensions of U.S. workers and families.

# ESG – DOL Ruling

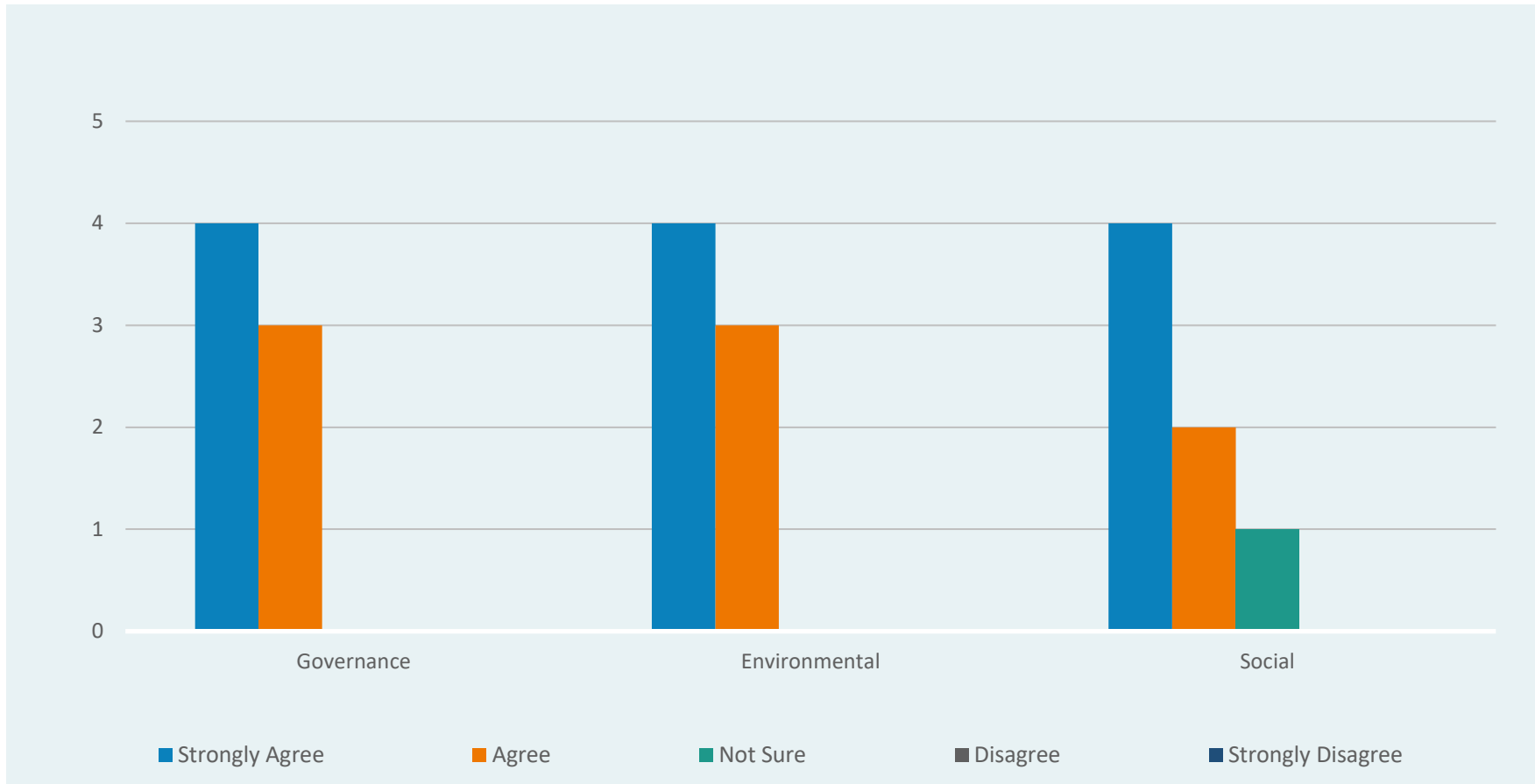
## Timing/considerations:

- There is 60-day comment period after publication
- New ruling expected to be issued mid-December
- ACERA ESG draft policy abides by existing rule which limits ESG risk/return considerations to implementation for primarily risk mitigation
- Once ruling finalized, Verus recommends revisiting policy to incorporate new emphasis on addressing climate risk and potentially clarifying scope to include specific approach regarding climate risk mitigation

# Survey Results

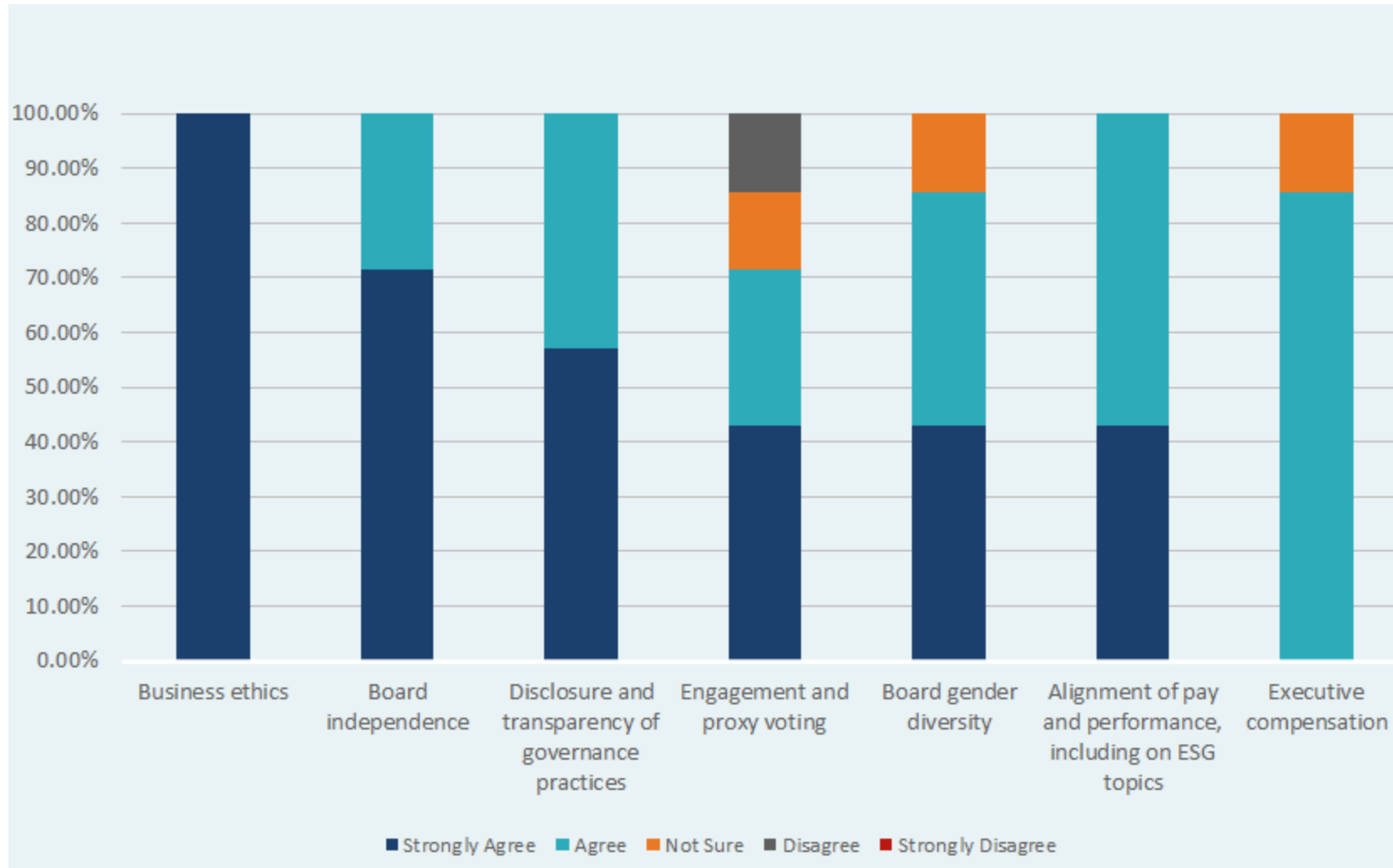
# Risk Factors

Can the following risk factors have a negative effect on ACERA's Long Term financial results?



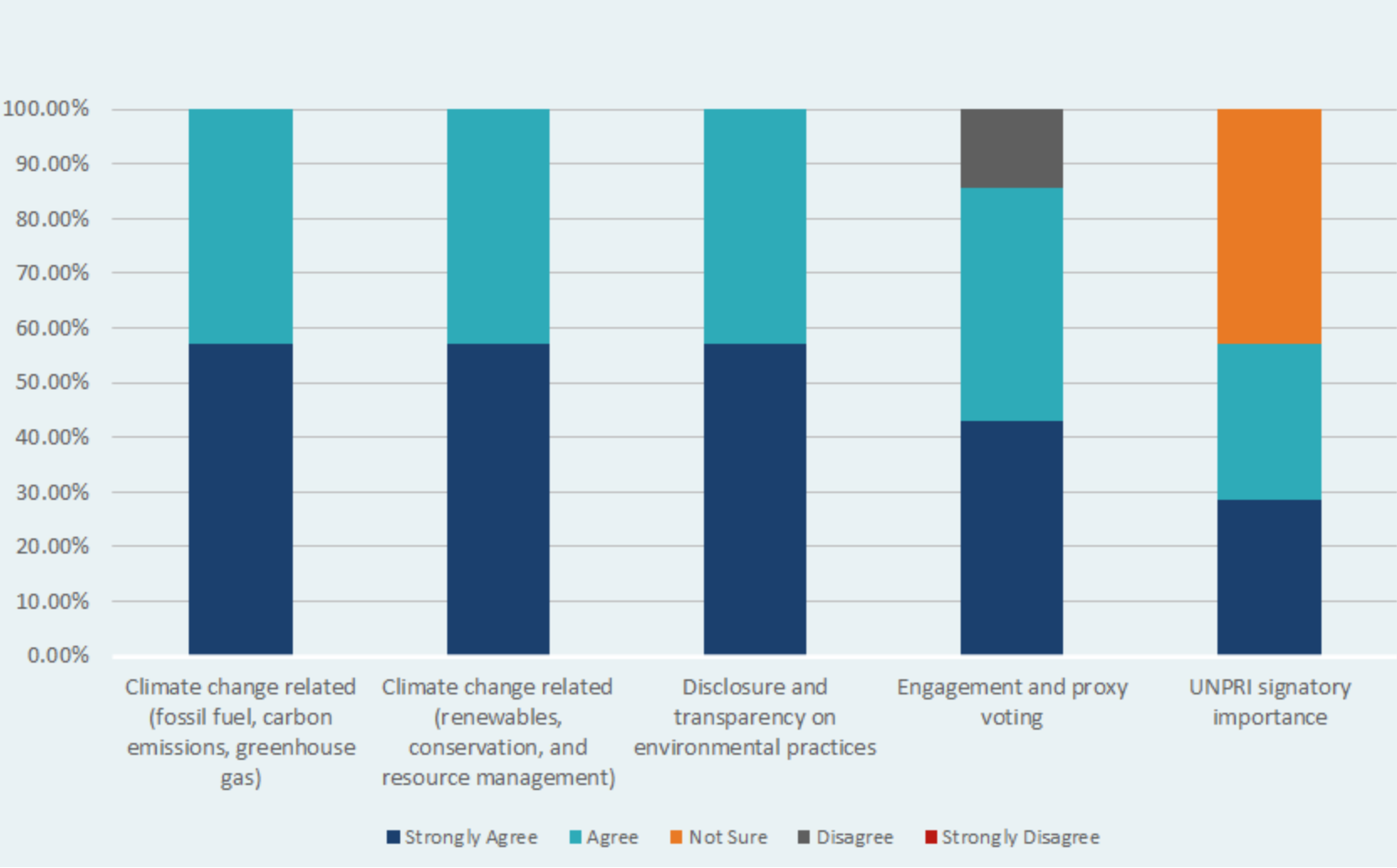


# Governance: Materiality of risk factors

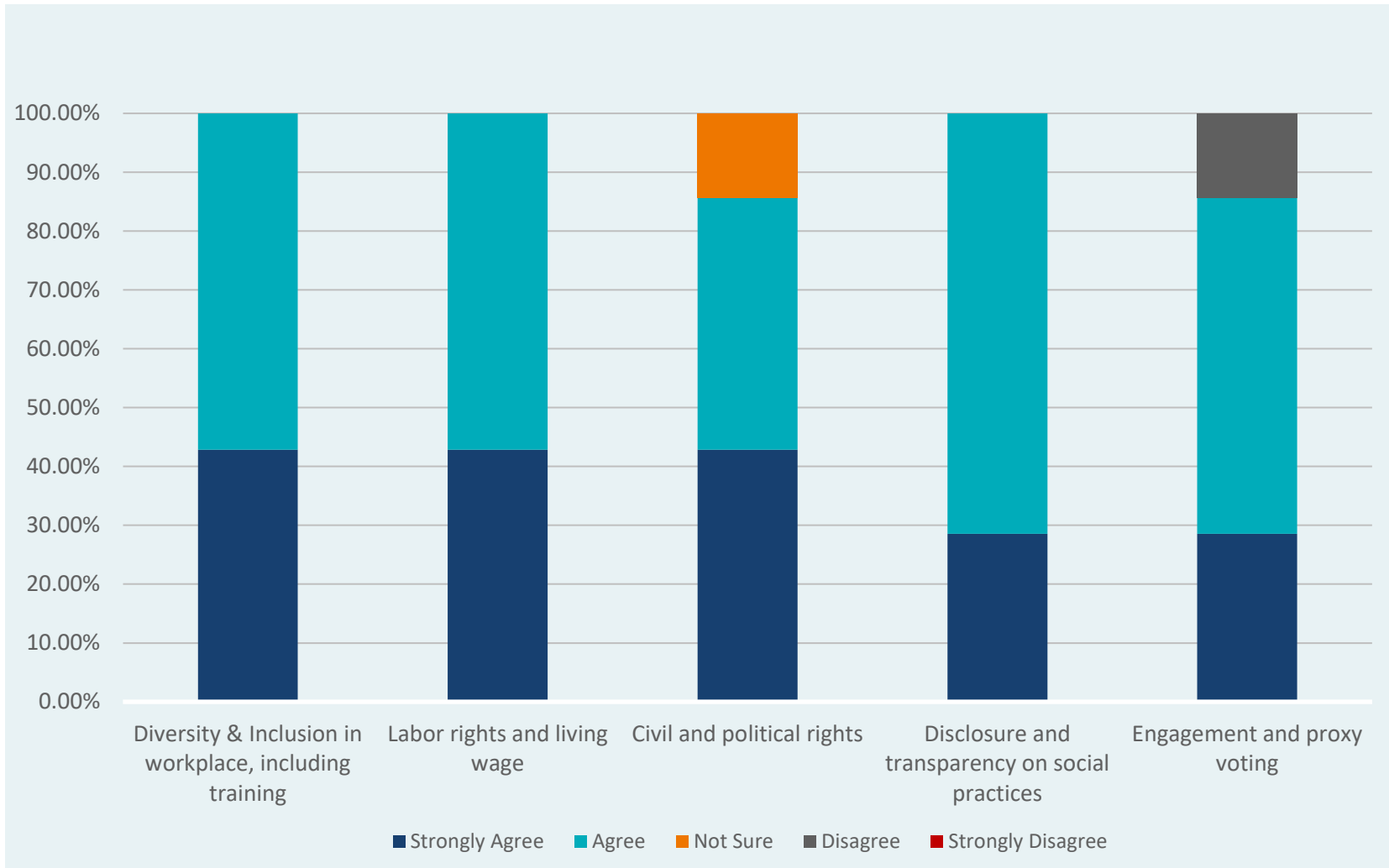


\*Average of the responses

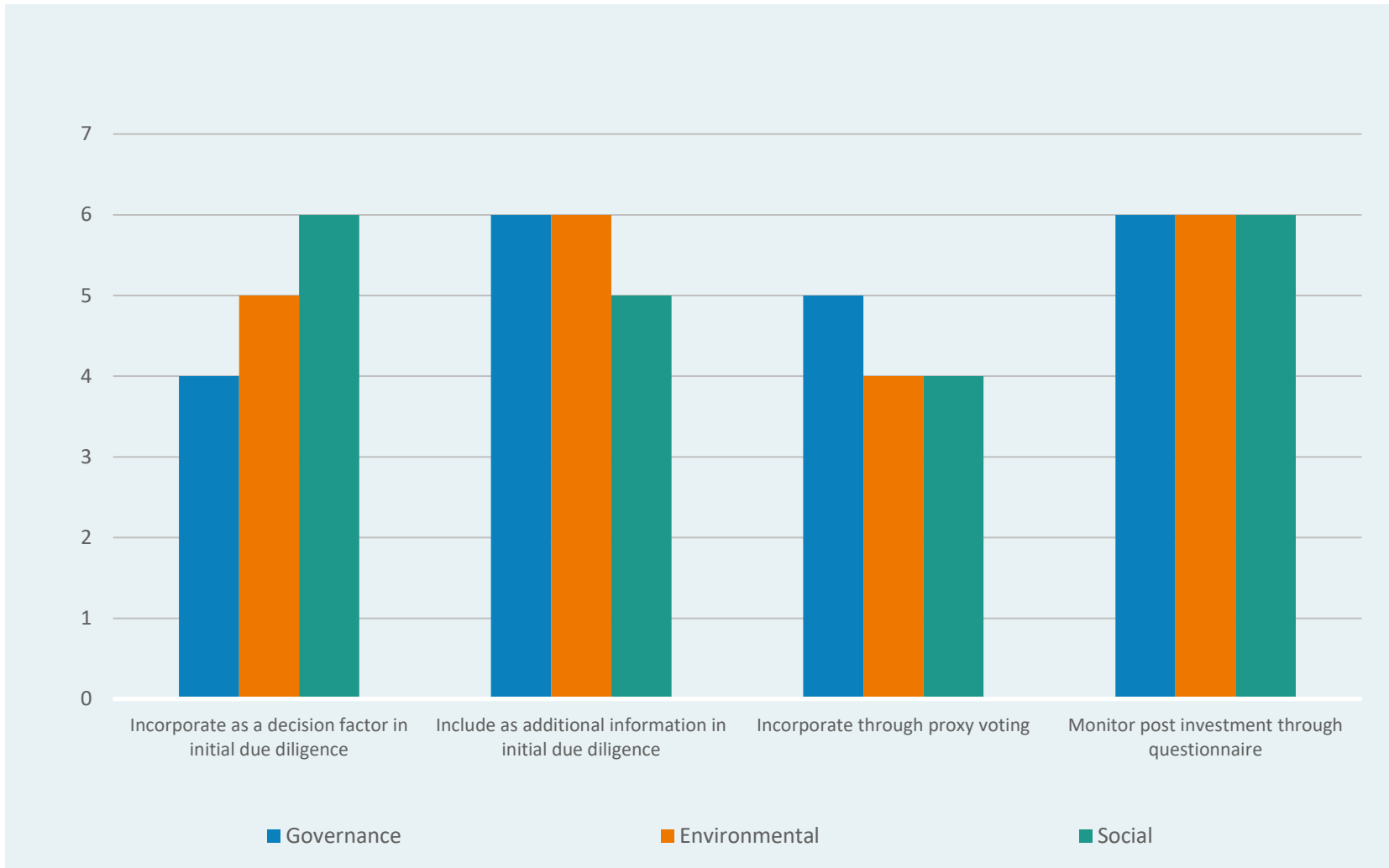
# Environmental: Materiality of risk factors



# Social: Materiality of risk factors

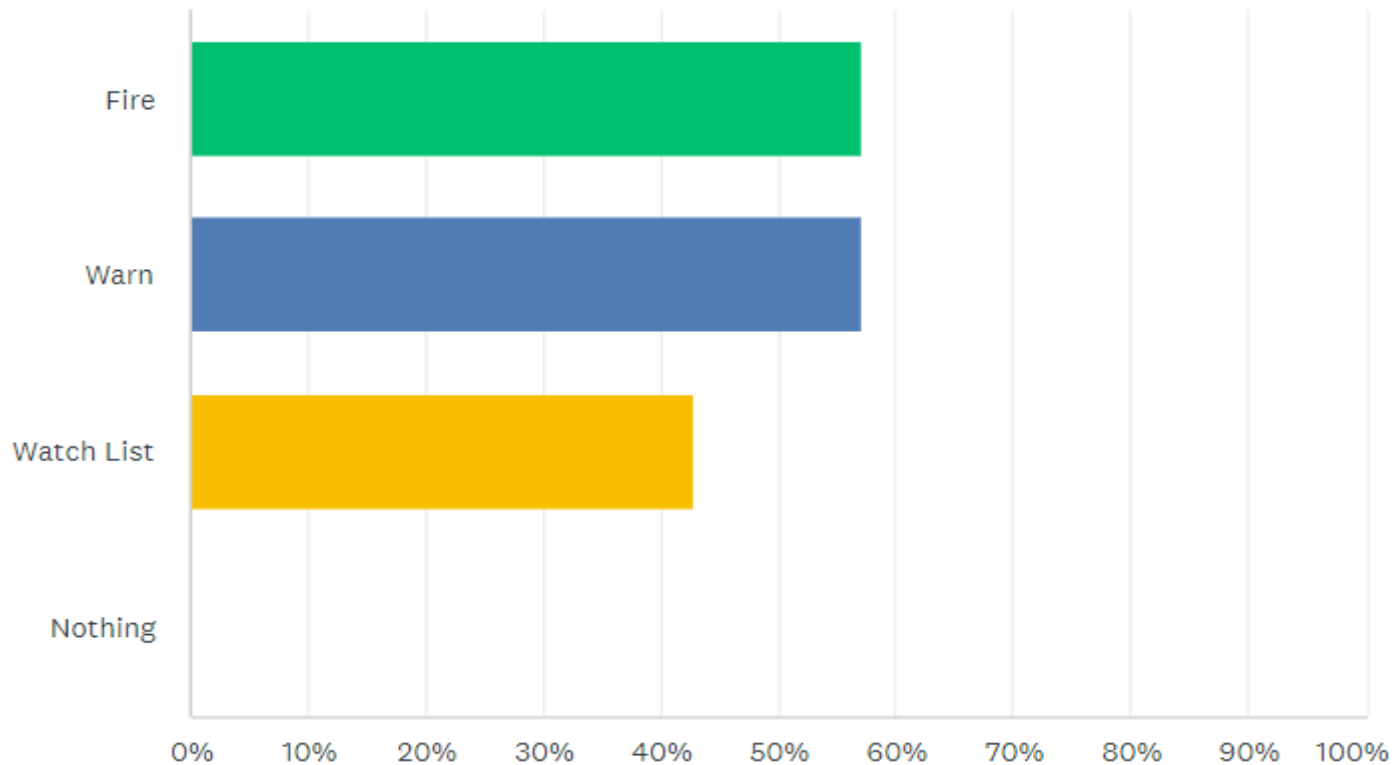


# Incorporating ESG



# Incorporating ESG – current managers

What should we do with current managers that don't consider ACERA's ESG factors?



Respondents' preference was for a tiered approach starting with watch list (least severe) and gradually moving towards termination if warranted

# Key takeaways from survey results

- The Board, through the survey, strongly agreed that the following risk factors are most important to the plan:
  - 1 – Business Ethics (governance)
  - 2 – Board Independence (governance)
  - 3- Tie Climate change/ Disclosure & transparency on environment and governance
- Governance risks are currently addressed through proxy voting process. This appears to be preferred approach by Board
  - Most ACERA peers are addressing Governance through proxy voting unless there are dedicated ESG resources (i.e., personnel).
    - Impact through engagement and potential divestment are employed in addition where dedicated resources exist
- Board should use these results to discuss what should be incorporated into ESG implementation approach

# Implementation

# CA public fund peers

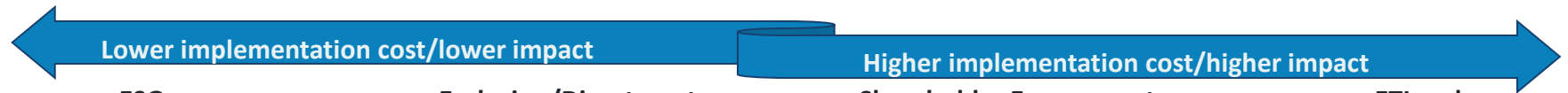
- ACERA Staff and Verus polled several other 37' Act counties on ESG implementation but received limited responses
- Majority of 37' Act counties queried either:
  1. Do not explicitly address ESG as policy issue and are not at any stage of ESG implementationor
  2. Do not have stand alone ESG policy but rather section of their IPS devoted to ESG. Implementation tends to be in form of ESG incorporation in manager/strategy due diligence or monitoring processes and customized proxy voting with engagement
- Preferred ESG implementation approach appears to be integration. Larger funds (i.e., CalSTRS, CalPERS, LACERA) also utilize impact ESG approach
- Exclusion does not appear to be preferred ESG implementation approach



# Considerations for ACERA

- As next step, ESG implementation approach needs to be adopted and incorporated into ESG policy
- What are potential implementation paths? There are four:
  - 1. Divestment or exclusion** (i.e., fossil fuel divestment)
    - Reduces ESG risk, but not necessarily investment or financial risk (potentially can increase these risks)
    - Most sophisticated Boards (e.g., CalSTRS and CalPERS) do not employ this approach as it removes their ability to act as change agent and can be materially detrimental to Fund returns in both short and long term (i.e., 5 – 10 years)
  - 2. Integration**
    - ESG factors incorporated into Board fiduciary oversight responsibilities (i.e., proxy voting, due diligence, watch list determination, manager/vendor/strategy evaluation, selection and monitoring)
    - Require ESG factors be integrated into manager/strategy investment processes
    - Allows for positive ESG risk taking (i.e., perceived benefits)
  - 3. Shareholder engagement**
    - Proactive and targeted engagement with companies to effect specific objectives related to ESG (e.g., reducing carbon footprint (“E”), improvement of working conditions (“S”), restructuring of executive pay and incentives (“G”)), usually with defined metrics for measurement purposes
  - 4. Impact**
    - Direct investment in strategies with objective to achieve specific ESG goals (e.g., Economically Targeted Investments (“ETIs”)),

# Comparison of different approaches



	ESG Integration	Exclusion/Divestment	Shareholder Engagement	ETI and Impact Investing
Cost considerations	<p>Least resource-intensive in terms of staff and; may result in increased costs</p> <p>Proxy voting can be tool</p>	<p>Requires more staff time and resources. Proxy voting can be tool</p> <p>Necessity for custom benchmarks may increase custody or analytic service fees</p> <p>May increase fees for typically lower cost mandates (i.e., passive indexes)</p>	<p>Higher resource (e.g., dedicated ESG staff) requirements to actively follow, engage with and monitor companies</p> <p>Proxy voting can be tool</p> <p>Likely higher legal and administrative related fees</p>	<p>Highest cost in terms of resources, oversight and due diligence</p> <p>Often requires utilizing specialist partner(s) to proactively seek ESG opportunities</p>
Implementation considerations	<p><i>Mutual funds, commingled funds and separate accounts:</i> onus is on investment manager(s) to integrate ESG in investment decision making</p>	<p><i>Mutual funds, commingled funds and separate accounts:</i> onus is on investment manager(s) to implement funds' exclusion rules and provide reporting</p>	<p><i>Mutual funds, commingled funds and separate accounts:</i> onus is on investment manager(s) to exercise active ownership on behalf of investors</p>	<p>Most time and labor intensive to implement relative to other approaches.</p> <p>Dedicated ESG staff optimal for success</p>
	<p><i>Direct investments:</i> onus is on asset owner to incorporate ESG into mandate guidelines and conduct due diligence and monitoring</p>	<p><i>Direct investments:</i> onus is on asset owner to develop exclusion mandate guidelines and conduct due diligence and monitoring to ensure adherence</p>	<p><i>Direct investments:</i> asset owner directly engages with investee companies</p>	<p>Can only be implemented via direct investment separate account mandates</p>
	<p>Managers and/or consultants can provide ESG reporting in fulfillment of Fund oversight requirements</p>	<p>Custodian bank and/or consultant can provide reporting and support for oversight</p>	<p>Asset owners conduct monitoring and evaluation of engagement activities</p>	<p>Opportunities tend to be limited; scalability can be issue for larger Funds. Asset owners conduct monitoring and evaluation activities</p>

# ESG implementation recommendations

- Given current ESG policy, Verus believes best initial implementation approach for ACERA is integration
- Integration could be implemented most quickly and at lowest cost in terms of staff resources and current vendor (i.e., consultant, custodian bank) support
  - ACERA staff and Verus already incorporating discreet steps in due diligence process to evaluate ESG integration at manager/strategy level during manager searches and meetings
    - Verus' manager research staff develops ESG ratings for all strategies as part of strategy assessment process. This includes client investment manager mandates
  - Verus has evaluated current ACERA public markets manager ESG integration and is in process of developing customized ESG monitoring dashboard to be included in quarterly performance report
- Verus recommends customized approach to proxy voting (e.g., climate change tilt or “sleeve”) as this addresses all three ESG elements, doesn't require any additional staff or vendor resource, and involves only minimal additional cost

# Conclusion

# Next steps

- At January meeting, Board will take action on preferred ESG implementation approach including discussion and potential adoption of both ISS Public Fund Policy and ISS Climate Policy in replacement of current ISS Benchmark (i.e., standard) Policy

# Appendix

## ACERA public markets manager ESG review results<sup>1</sup>

# Manager-reported ESG Data

Firm Name	Alta Capital Management	Applied Research Investments, LLC	ARGA Investment Management, LP	Baird Advisors	Bivium Capital Partners, LLC
Is the firm a PRI signatory?	--	Yes	Yes	Yes	--
Do you align investment processes to best practices for responsible investment and ESG integration?	--	--	--	--	--
Please list the year the firm first signed the PRI	--	2020	2018	2021	--
What is the firm's most recent PRI Strategy and Governance firm score?	--	--	A	--	--
Are you a member of any responsible investment collaborative organizations?	--	Yes	Yes	No	--
Does your firm currently advocate, or belong to advocacy groups, for ESG issues?	--	Yes	No	No	--
Does the firm engage or advocate for ESG improvements within its portfolio holdings?	--	Yes	Yes	Yes	--
How are potential engagements identified, prioritized, and tracked?*					
Do you have a formal engagement policy?	--	Yes	Yes	Yes	--
Does the firm exercise its ownership rights through voting?	--	Yes	Yes	Yes	--
Does the firm have a global policy around proxy voting?	--	Yes	Yes	Yes	--
Description of proxy voting policy*					
Is there a dedicated ESG oversight function at your firm?	--	Yes	Yes	Yes	--
How many full-time Responsible Investing / ESG professionals does the firm employ?	--	8	3	0	--
ESG monitoring oversight by dedicated group or within investment teams?	--	Inv Teams	Hybrid	Inv Teams	--
Policies to promote diversity in recruiting, workforce, leadership, and/or board representation?	--	Yes	Yes	Yes	--
Policies in place to increase of gender/ethnic diversity of senior leadership and investment teams?	--	Not yet	Yes	Yes	--
Does firm track KPIs related to staff diversity initiatives?	--	--	Not yet	Yes	--
Does your firm have a mentorship program available for women/minorities?	--	Yes	No	Yes	--
Has your firm undertaken a gender or ethnic diversity pay gap study?	--	No	Not yet	Yes	--
Policies in place to remedy pay gaps?	--	--	--	--	--
Does your firm have a pay-parity policy in place?	--	Yes	No	Yes	--
Does your firm have an ethics code and/or code of conduct?	--	Both	Both	Both	--
Do you have a firm-wide policy on ESG/Responsible Investment?	--	Yes	Yes	Yes	--
Does firm have committees/councils that address ESG issues in the workplace?	--	Yes	No	Yes	--
Does your firm publish an annual sustainability report?	--	No	No	No	--
Does the firm have efforts in place to measure/reduce its carbon footprint?	--	Yes	Yes	Yes	--

\* - Separate table included

# Manager-reported ESG Data

Firm Name	BlackRock	Brandywine Global Investment Management, LLC	Capital Group	Denali Advisors, LLC	Dundas Partners LLP
Is the firm a PRI signatory?	Yes	Yes	Yes	No	Yes
Do you align investment processes to best practices for responsible investment and ESG integration?	---	---	---	---	---
Please list the year the firm first signed the PRI	2008	2016	2010	---	2012
What is the firm's most recent PRI Strategy and Governance firm score?	A+	A	A+	---	A
Are you a member of any responsible investment collaborative organizations?	Yes	Yes	Yes	No	No
Does your firm currently advocate, or belong to advocacy groups, for ESG issues?	Yes	Yes	Yes	No	Yes
Does the firm engage or advocate for ESG improvements within its portfolio holdings?	Yes	Yes	Yes	Yes	Yes
How are potential engagements identified, prioritized, and tracked?*					
Do you have a formal engagement policy?	Yes	Yes	Yes	No	Yes
Does the firm exercise its ownership rights through voting?	Yes	Yes	Yes	Yes	Yes
Does the firm have a global policy around proxy voting?	Yes	Yes	Yes	Yes	Yes
Description of proxy voting policy*					
Is there a dedicated ESG oversight function at your firm?	Yes	Yes	Yes	No	Yes
How many full-time Responsible Investing / ESG professionals does the firm employ?	---	1	43	---	---
ESG monitoring oversight by dedicated group or within investment teams?	Hybrid	Hybrid	Hybrid	Inv Teams	Hybrid
Policies to promote diversity in recruiting, workforce, leadership, and/or board representation?	Yes	Yes	Yes	Yes	Yes
Policies in place to increase of gender/ethnic diversity of senior leadership and investment teams?	Yes	No	Yes	Yes	Yes
Does firm track KPIs related to staff diversity initiatives?	Yes	---	Yes	No	No
Does your firm have a mentorship program available for women/minorities?	Yes	Yes	Yes	No	No
Has your firm undertaken a gender or ethnic diversity pay gap study?	Yes	Yes	Yes	No	No
Policies in place to remedy pay gaps?	Yes	Not yet	Yes	---	---
Does your firm have a pay-parity policy in place?	Yes	No	Yes	No	---
Does your firm have an ethics code and/or code of conduct?	Both	Both	Both	Both	Both
Do you have a firm-wide policy on ESG/Responsible Investment?	Yes	Yes	Yes	No	Yes
Does firm have committees/councils that address ESG issues in the workplace?	No	Yes	Yes	No	Yes
Does your firm publish an annual sustainability report?	Yes	No	Yes	No	Yes
Does the firm have efforts in place to measure/reduce its carbon footprint?	Yes	Yes	Yes	No	Yes

\* - Separate table included



# Manager-reported ESG Data

Firm Name	Franklin Resources, Inc.	Global Alpha Capital Management Ltd.	Huber Capital Management, LLC	Kennedy Capital Management, Inc.	Loomis, Sayles & Company, L.P.
Is the firm a PRI signatory?	Yes	Yes	No	Yes	Yes
Do you align investment processes to best practices for responsible investment and ESG integration?	---	---	---	---	---
Please list the year the firm first signed the PRI	2013	2012	---	2018	2015
What is the firm's most recent PRI Strategy and Governance firm score?	A+	A+	---	A+	A
Are you a member of any responsible investment collaborative organizations?	Yes	Yes	No	Yes	Yes
Does your firm currently advocate, or belong to advocacy groups, for ESG issues?	Yes	Yes	No	Yes	---
Does the firm engage or advocate for ESG improvements within its portfolio holdings?	Yes	Yes	No	Yes	Yes
How are potential engagements identified, prioritized, and tracked?*					
Do you have a formal engagement policy?	Yes	Yes	---	No	No
Does the firm exercise its ownership rights through voting?	Yes	Yes	Yes	Yes	Yes
Does the firm have a global policy around proxy voting?	Yes	Yes	---	Yes	Yes
Description of proxy voting policy*					
Is there a dedicated ESG oversight function at your firm?	Yes	Yes	No	Yes	Yes
How many full-time Responsible Investing / ESG professionals does the firm employ?	9	1	---	1	1
ESG monitoring oversight by dedicated group or within investment teams?	Hybrid	Hybrid	---	Inv Teams	Inv Teams
Policies to promote diversity in recruiting, workforce, leadership, and/or board representation?	Yes	Yes	---	Yes	Yes
Policies in place to increase of gender/ethnic diversity of senior leadership and investment teams?	Not yet	No	---	Yes	Yes
Does firm track KPIs related to staff diversity initiatives?	---	---	---	Yes	Not yet
Does your firm have a mentorship program available for women/minorities?	Yes	No	---	No	Yes
Has your firm undertaken a gender or ethnic diversity pay gap study?	Yes	No	---	No	Yes
Policies in place to remedy pay gaps?	Yes	---	---	---	Yes
Does your firm have a pay-parity policy in place?	Yes	No	---	No	---
Does your firm have an ethics code and/or code of conduct?	Both	Both	---	Both	---
Do you have a firm-wide policy on ESG/Responsible Investment?	Yes	Yes	No	Yes	Yes
Does firm have committees/councils that address ESG issues in the workplace?	Yes	Yes	No	Yes	Yes
Does your firm publish an annual sustainability report?	No	No	No	Yes	No
Does the firm have efforts in place to measure/reduce its carbon footprint?	Yes	Yes	---	Yes	---

\* - Separate table included

# Manager-reported ESG Data

Firm Name	Mondrian Investment Partners Limited	Newton Investment Management Group	Radin Capital Partners Inc.	Redwood Investments, LLC	RVX Asset Management LLC
Is the firm a PRI signatory?	Yes	---	--	Yes	No
Do you align investment processes to best practices for responsible investment and ESG integration?	---	---	--	--	--
Please list the year the firm first signed the PRI	2016	---	--	2014	--
What is the firm's most recent PRI Strategy and Governance firm score?	---	---	--	B	--
Are you a member of any responsible investment collaborative organizations?	Yes	---	--	No	--
Does your firm currently advocate, or belong to advocacy groups, for ESG issues?	Yes	---	--	Yes	No
Does the firm engage or advocate for ESG improvements within its portfolio holdings?	Yes	---	--	Yes	No
How are potential engagements identified, prioritized, and tracked?*					
Do you have a formal engagement policy?	Yes	---	--	Yes	--
Does the firm exercise its ownership rights through voting?	Yes	---	--	Yes	--
Does the firm have a global policy around proxy voting?	Yes	---	--	Yes	--
Description of proxy voting policy*					
Is there a dedicated ESG oversight function at your firm?	Yes	---	--	No	--
How many full-time Responsible Investing / ESG professionals does the firm employ?	1	---	--	0	--
ESG monitoring oversight by dedicated group or within investment teams?	Inv Teams	---	--	Inv Teams	--
Policies to promote diversity in recruiting, workforce, leadership, and/or board representation?	Yes	Yes	--	Yes	--
Policies in place to increase of gender/ethnic diversity of senior leadership and investment teams?	No	Yes	--	Yes	--
Does firm track KPIs related to staff diversity initiatives?	---	Yes	--	Yes	--
Does your firm have a mentorship program available for women/minorities?	No	Yes	--	Yes	--
Has your firm undertaken a gender or ethnic diversity pay gap study?	No	Yes	--	Not yet	--
Policies in place to remedy pay gaps?	---	Yes	--	--	--
Does your firm have a pay-parity policy in place?	Yes	Yes	--	No	--
Does your firm have an ethics code and/or code of conduct?	Both	Both	--	Both	--
Do you have a firm-wide policy on ESG/Responsible Investment?	Yes	---	--	Yes	--
Does firm have committees/councils that address ESG issues in the workplace?	No	---	--	Yes	--
Does your firm publish an annual sustainability report?	No	---	--	No	--
Does the firm have efforts in place to measure/reduce its carbon footprint?	Yes	---	--	Yes	--

\* - Separate table included

# Manager-reported ESG Data

Firm Name	The TCW Group, Inc.	William Blair Investment Management, LLC
Is the firm a PRI signatory?	Yes	Yes
Do you align investment processes to best practices for responsible investment and ESG integration?	---	---
Please list the year the firm first signed the PRI	2019	2011
What is the firm's most recent PRI Strategy and Governance firm score?	---	A
Are you a member of any responsible investment collaborative organizations?	Yes	Yes
Does your firm currently advocate, or belong to advocacy groups, for ESG issues?	No	Yes
Does the firm engage or advocate for ESG improvements within its portfolio holdings?	Yes	Yes
How are potential engagements identified, prioritized, and tracked?*		
Do you have a formal engagement policy?	Yes	Yes
Does the firm exercise its ownership rights through voting?	Yes	Yes
Does the firm have a global policy around proxy voting?	Yes	Yes
Description of proxy voting policy*		
Is there a dedicated ESG oversight function at your firm?	Yes	Yes
How many full-time Responsible Investing / ESG professionals does the firm employ?	---	1
ESG monitoring oversight by dedicated group or within investment teams?	Inv Teams	Hybrid
Policies to promote diversity in recruiting, workforce, leadership, and/or board representation?	Yes	Yes
Policies in place to increase of gender/ethnic diversity of senior leadership and investment teams?	Yes	Yes
Does firm track KPIs related to staff diversity initiatives?	Yes	No
Does your firm have a mentorship program available for women/minorities?	No	Yes
Has your firm undertaken a gender or ethnic diversity pay gap study?	Not yet	No
Policies in place to remedy pay gaps?	---	---
Does your firm have a pay-parity policy in place?	Yes	No
Does your firm have an ethics code and/or code of conduct?	Both	Both
Do you have a firm-wide policy on ESG/Responsible Investment?	Yes	Yes
Does firm have committees/councils that address ESG issues in the workplace?	Yes	Yes
Does your firm publish an annual sustainability report?	No	No
Does the firm have efforts in place to measure/reduce its carbon footprint?	Yes	Yes

\* - Separate table included

# Manager Engagement with Portfolio Companies

Firm Name	How are potential engagements identified, prioritized, and tracked?
Alta Capital Management	---
Applied Research Investments, LLC	Criteria 3 of the investment process (Management's Operational Track Record), may address Governance factors included in SASB Materiality Map for a specific company in an industry.
ARGA Investment Management, LP	<p>Company engagement is an integral part of our investment process. Once we have identified the key drivers of long term returns of a company and the key risks to these, including ESG, we engage with management to understand how they approach these risks. Given our focus on how the business makes money in the long-run rather than short-term issues, we generally elicit much openness by management as to how their business operates. On occasion, when a company takes action or announces plans to pursue a course of action which we believe would be particularly damaging to shareholder interests, we increase our level of engagement by directly contacting company management/boards and reaching out to other shareholders and proxy voting research and governance organizations, such as Institutional Shareholder Services (ISS). Company meetings and calls with managements also provide opportunities to validate our research conclusions on an ongoing basis. Analysts fully prepare for company conversations with proprietary forecasts and detailed lists of well-structured questions (including ESG related ones) that do not "lead" management. Meeting agendas are set by the ARGA analyst, not company management. The CIO and the Director of Research or Research Managers review the question list prior to the meeting.</p> <p>Since we do not aim to be activist investors, we do not anchor a significant valuation uplift on our ability to precipitate management change. For this reason, we place a great deal of importance on understanding all potential risks to a firm ahead of investing, and incorporating these risks in our valuation models. That being said, we also believe that it is important for us to voice our opinions to company management.</p> <p>On occasion, when a company takes action or announces plans to pursue a course of action, which we believe, would be particularly damaging to shareholder interests, we increase our level of engagement by directly contacting company management/boards and reaching out to other shareholders and organizations such as ISS. In such cases, we actively partner with our clients, which include a number of large institutions. We first make them aware of the potential adverse impact of the course of action being pursued by the company and work closely with them to apply pressure to the management/board with the aim of influencing outcomes.</p>
Baird Advisors	<p>*Baird Funds, Inc. is a signatory of the Principles for Responsible Investment (PRI).</p> <p>We see increasing emphasis in the market on environmental, social and governance issues and remain attentive to how these issues will impact valuation and creditworthiness of the companies in which we invest. Our Research Director and Head of Corporate Research initiate and oversee engagement activity. Investment personnel engage with companies to gain better information on the quality of management, their attentiveness to ESG issues, risk profile and other characteristics that have long-term implications on the company's sustainability overall. We engage with companies on several different levels depending on our needs for information. Many issuers visit with our team to provide updates and allow us an opportunity for detailed Q&amp;A with management. Secondly, we proactively have calls with companies to discuss pertinent issues or concerns with senior management of the company. This is more prevalent with smaller companies where access to information may be less readily available. Thirdly, we participate in new deal roadshows for companies issuing debt. These are small group meetings where top management is available for in-depth Q&amp;A sessions. Finally, we participate on earnings calls of companies we follow/own. If we have unanswered questions, we do follow-up calls with management to get those answers and share our views.</p>
Bivium Capital Partners, LLC	---



# Manager Engagement with Portfolio Companies

Firm Name	How are potential engagements identified, prioritized, and tracked?
BlackRock	<p>BlackRock frames its investment stewardship program, including the treatment of environmental, social, and corporate governance factors (ESG), within an investment context. The firm believes that a sound corporate governance framework promotes strong leadership by boards of directors and good management practices, contributing to the long-term success of companies and better risk-adjusted returns to clients. BlackRock recognizes that corporate governance practices and expectations differ around the world. Even so, there are high-level corporate governance principles that the firm believes apply universally: transparency and accountability to those who provide capital; oversight by a well-informed, experienced board; robust accounting and risk management systems; and sound policies on business management issues such as employee and supplier relations, environmental impacts and compliance with regulations.</p> <p>BlackRock takes a long-term perspective in its investment stewardship program informed by two key characteristics of the business: 1) the majority of clients are saving for long-term goals, so BlackRock presumes they are long-term shareholders, and 2) the majority of the firm's equity holdings are in index-tracked portfolios so clients are, by definition, long-term shareholders.</p> <p>BlackRock's stewardship program applies to companies in all sectors and regions and to holdings in index-tracked and active portfolios. The corporate governance program led by the Investment Stewardship team is integrated within all portfolios investing in public companies, whether clients invest in thematic sustainable investing funds or in the firm's core index and active investment strategies. The Investment Stewardship team acts as a central clearinghouse of BlackRock's views across the various portfolios with holdings in individual companies and aims to present a clear and consistent message about their expectations in relation to corporate governance and business practices.</p> <p>Engagement is core to BlackRock's stewardship program as it helps us assess a company's approach to governance, including the management of relevant environmental and social factors. To that end, the Investment Stewardship team conducts approximately 3,000 engagements a year on a range of ESG issues likely to impact our client's long-term economic interests. BlackRock meets with executives and board directors, communicate with the company's advisors, and engage with other shareholders where appropriate.</p> <p>BlackRock's Investment Stewardship team identifies companies for engagement through internal processes that are based on 1) our prior history of engagement with the company, 2) our engagement priorities, 3) our vote history with the company, and 4) our assessment of a company's financial and governance performance relative to its peers. The firm also considers events that have impacted or may impact long-term shareholder value and the management of sector-specific concerns, which are also material to long-term shareholder value. BlackRock prioritizes engagements based on the team's level of concern and the likelihood that engagement can lead to positive change. In many instances, the Investment Stewardship team engages because companies have not provided sufficient information in their disclosures to fully inform our assessment of the quality of governance, including the exposure to and management of material environmental and social factors. BlackRock asks companies to review their reporting in light of their investors' informational needs. In our view, companies that report only to meet the regulatory disclosure requirements are missing a prime opportunity to more comprehensively engage new and existing investors about how effectively a business is led and managed. Where reporting requirements are silent on an emerging issue, the firm believes it is important for companies and investors to develop disclosure guidelines.</p> <p>The BlackRock Investment Stewardship team has developed a global engagement tracking module that facilitates the team's ability to monitor and report engagements. Features in the module allow the team to record if a company is in line with our standards and expectations (as outlined in our governance principles and voting guidelines), track timeframes for change, map environmental, social, and governance (ESG) key performance indicators to engagement priorities and ESG issues, and define and note engagement outcomes. This monitoring and tracking mechanism enables our team to measure progress over time, especially as many of our engagements are long-term and ongoing.</p>
Brandywine Global Investment Management,	ESG factors are considerations in all of our investment strategies. The manifestation of that ESG integration varies by product. For instance, within our fundamental equity strategies ESG factors are considered within the bottom-up, fundamental research analysis, proxy voting and engagement, whereas within our quantitative strategies ESG considerations are exercised primarily within proxy voting.

# Manager Engagement with Portfolio Companies

Firm Name	How are potential engagements identified, prioritized, and tracked?
Capital Group	<p>We strive for engagement and constructive dialogue with companies and issuers on a variety of matters. ESG topics are a fundamental area of assessment for both Capital Group and our shareholders, and we believe that our stewardship approach allows us to help companies deliver outcomes that are beneficial for all stakeholders. Our investment frameworks and ESG monitoring process inform the topics on which we engage management teams.</p> <p>In terms of prioritization:</p> <ul style="list-style-type: none"> <li>•Our most important engagements are our holistic ones. These cover how an issuer is performing based our investment framework overlaid with a data-driven assessment of ESG performance across various fronts. Preparation time is approximately 20 hours, based on a variety of data sources and close partnership with the covering analyst. We prioritize where Capital Group has significant exposure and the potential impact is high. Objectives span both information gathering and significant requests for change and are tracked over time.</li> <li>•Our second priority is focused conversations about select ESG issues facing an issuer. Target issuers are identified through the ESG monitoring process, by the Issuer Oversight Committee (IOC) and from requests by investment analysts /portfolio managers, and holistic engagement follow up. In addition, fixed income and small cap issuers will typically be covered here and we will also target companies to understand best-in-class performance. Engagements that are a result of the IOC process will be specific and time bound requests for change.</li> <li>•Our lowest priority engagements are our relationship building engagements where we share our approach to issues such as compensation, ESG materiality or diversity. These engagements are naturally less resource intensive as they draw on our existing materials and are largely in response to our investee companies.</li> </ul> <p>For inbound engagement requests the process considers the following:</p> <ul style="list-style-type: none"> <li>•The size of our holding</li> <li>•Our assessment of the company's ESG performance and exposures. This will include an assessment against peers with a focus on laggards</li> <li>•Accepting all C-suite email requests</li> <li>•If we have voted against management practices in the past.</li> </ul> <p>We document the goals we discuss with them and measure progress toward those goals. The ESG team tracks our engagement activity. Clear records detailing the purpose of the meeting, topics discussed, and outcomes are recorded. The team uses the detailed records to focus future engagements and monitor company progress.</p>

# Manager Engagement with Portfolio Companies

Firm Name	How are potential engagements identified, prioritized, and tracked?
Denali Advisors, LLC	<p>Our ongoing quantitative tools and models allow us to continually assess the hard financial and pricing data for our entire investment universe. We overlay this with a final qualitative judgment by the portfolio team which allows us to include “non-hard” data, including an assessment of ESG related issues.</p> <p>For clients where we have proxy voting authority we have regularly voted against managements when their proxy suggestion on compensation (e.g., stock awards) was too high, or not tied to company results. We have sold stock or negated purchase when management was implicated in possible fraudulent activity. An example is the Volkswagen emissions cheating scandal which caused us to sell our position in the security and reduce our portfolio weight in the auto industry.</p>
Dundas Partners LLP	<p>Analysis of ESG factors is integrated into the investment process in line with our policies on sustainability and stewardship. Operating as a small team with tight lines of communication allows for focused engagement with both investee companies and prospects. The aim is to understand how ESG issues impact business success and we will engage with companies to that end.</p> <p>As a part of the ongoing stock monitoring process, the investment team reviews each investment case at least annually and will arrange calls, meetings or engagements to address ESG issues or controversies. Priority will be given to any issue that we view as a material risk to a stock’s ability to deliver sustainable dividend growth. All company interactions, engagements and voting are tracked and reviewed by the Investment Committee.</p>
Franklin Resources, Inc.	<p>We consider two types of engagement:</p> <ol style="list-style-type: none"> <li>1) ‘Engagement for change’ which is a purposeful dialogue to influence positive change, with defined objectives; and</li> <li>2) ‘Engagement for information’ which forms part of issuer monitoring and is value additive in communicating what’s important to us, building relationships, and achieving a more complete understanding of an issuer’s strategy and practices.</li> </ol> <p>We believe that good stewardship plays a role in enhancing overall financial market stability and sustainable economic growth. Our approach to stewardship therefore also includes engagement on public policy and best practice with regulators, standard setters and other relevant stakeholders. Lastly, we understand that the ability to vote is one of our key formal rights as investors and an important way to communicate with the companies in which we invest. Therefore, we endeavour to exercise our voting rights, wherever practicable and in our clients’ best interests.</p>
Global Alpha Capital Management Ltd.	<p>Engagement refers to interactions which Global Alpha may have with companies to exercise influence in relation to ESG issues. Global Alpha’s investment team interacts with management of companies, which Global Alpha is or may be invested in on behalf of their clients, regularly on ESG issues. The purposes are to support company research, to influence corporate practice (or identify the need to influence) on ESG issues, and to encourage improved ESG disclosure.</p> <p>A comprehensive engagement includes multiple, substantive, detailed discussions or interactions with a company (e.g. letters, meetings and calls) over a period of months or years relating to a particular ESG issue.</p> <p>Global Alpha’s most recent initiative has been to engage companies with respect to their executive compensation policies. Global Alpha has developed a policy and presents that policy to each company they meet. Over time, Global Alpha remains in contact with those companies in order to assess and review changes to executive compensation policies.</p>
Huber Capital Management, LLC	---



# Manager Engagement with Portfolio Companies

Firm Name	How are potential engagements identified, prioritized, and tracked?
Kennedy Capital Management, Inc.	<p>Engagement opportunities are identified and prioritized by KCM's analysts and portfolio managers. Regular management interaction is a longstanding component of our research process, which provides a platform for engagement. The bulk of this engagement focuses on governance, particularly management compensation, shareholder rights, and board structure.</p> <p>Currently, tracking of management engagements is decentralized and is the responsibility of the associated analyst or portfolio manager. However, the firm is undertaking a feasibility analysis regarding a more robust, firm level approach to the tracking of engagements.</p>
Loomis, Sayles & Company, L.P.	<p>Engagement is an integral part of our fundamental analysis across all asset classes. ESG criteria are an inextricable part of this analysis. Direct engagement by our fixed income and equity investment professionals allows the assessment of the quality of a company's management, strategy, and operations. Our sovereign investment professionals also engage with policymakers and regulators. At the firm level, Loomis Sayles seeks to collaborate with various investor and industry groups to foster the best investment management practices.</p> <p>Our ESG Engagement Database is a proprietary application developed several years ago to collect our analysts' discussions about ESG topics with issuer management teams. Over time, we will have the ability to use this database to review the climate change-related engagement of our analysts. We have now been using our internally developed ESG engagement database for four full years, and we enhance the quality of the tracking each year.</p>
Mondrian Investment Partners Limited	<p><b>Equity</b> Mondrian has a systematic method to track engagements across all equity products. Engagements for all equity teams are captured in our Corporate Access Logs. Information collected for each engagement with current and prospective holdings includes ESG issues discussed, ESG issue materiality, meeting format and location, amongst other meeting details. Corporate Access Logs are updated on a continuous basis and reviewed regularly by the relevant investment team. Outputs of the Corporate Access Logs are provided to both Client Services for client and consultant reporting purposes, as well as Mondrian's Compliance Team on a quarterly basis.</p> <p><b>Fixed Income</b> Our process has evolved in recent years to formalise and document the ESG specific aspects of our engagement activities. We raise the ESG issues we deem material to a company at the time of each credit review and follow up on at least an annual basis as part of a structured program of ESG engagement.</p>
Newton Investment Management Group	---
Radin Capital Partners Inc.	---
Redwood Investments, LLC	<p>Redwood does not take positions in companies with the objective of becoming an Activist Investor. However, a key input to our investment process is the direct engagement with companies to understand long term plans for growth. We speak directly with company management covering a wide range of topics from management strategy, product development and business pipeline, competitor analysis and risk of displacement. These meetings help inform how ESG and other factors play a part within a company's operating and decision-making framework. During these discussions, we are proactive in providing our thoughts to managers regarding their strategic initiatives and governance policies. Conclusions derived from this engagement will affect our decision to invest or divest shares in a company.</p>
RVX Asset Management LLC	---
The TCW Group, Inc.	Each investment team has developed a strategy for engagement.
William Blair Investment Management, LLC	<p>Engagements are identified through our research process and assessment of each company's unique exposures and management of material ESG risks and opportunities. Engagements are the primary responsibility of our fundamental analysts, who prioritize their activity based on financial materiality and relevance to our investment thesis. Engagement activity is documented and tracked systematically in our proprietary online research platform, Summit.</p>



# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
Alta Capital Management	---
Applied Research Investments, LLC	Proxy Voting. When shareholder proposals on the proxy include ESG, AR's policy is to vote in favor of ESG proposals. AR's belief is that these ESG factors may affect investment performance over the long run and require appropriate consideration to protect the client's investment. AR is of the view that behaving in a socially responsible manner should reduce potential liability and therefore be an additional factor that guides AR's risk management and proxy voting standards.
ARGA Investment Management, LP	ARGA's Proxy Voting Policy details our approach to ESG issues in our proxy voting activity. The policy is attached below.
Baird Advisors	While Baird Advisors does not typically recommend or select securities for client accounts that have voting rights, Baird votes proxies in a manner that it believes is consistent with the client's best interests.
Bivium Capital Partners, LLC	---
BlackRock	<p>As a fiduciary to our clients, BlackRock is built to enhance the value of our clients' assets. From BlackRock's perspective, sound management of business-relevant sustainability issues can contribute to a company's sustainable long-term financial performance. Incorporating these considerations into the investment research, portfolio construction, and stewardship process can enhance long-term risk adjusted returns for our clients.</p> <p>Voting is the most broad-based form of engagement BlackRock has with companies, providing a channel for feedback to the board and management about investor perceptions of their performance and governance practices. BlackRock votes annually at more than 16,000 shareholder meetings, taking a case-by-case approach to the items put to a shareholder vote. Analysis is informed by the firm's internally developed proxy voting guidelines, pre-vote engagements, research, and the situational factors at a particular company.</p> <p>The Investment Stewardship team aims to vote at all shareholder meetings of companies in which BlackRock's clients are invested. In cases where there are significant obstacles to voting, such as share blocking or requirements for a power of attorney, they will review the resolutions to assess the extent of the restrictions on voting against the potential benefits. They generally prefer to engage with the company in the first instance where concerns are identified and give management time to address the issue. The team will vote in favor of proposals where they support the approach taken by a company's management or where they have engaged on matters of concern and anticipate management will address them. BlackRock will vote against management proposals where they believe the board or management may not have adequately acted to advance the interests of long-term investors. The team ordinarily refrains from abstaining from both management and shareholder proposals, unless abstaining is the valid vote option (in accordance with company by-laws) for voting against management, there is a lack of disclosure regarding the proposal to be voted, or an abstention is the only way to implement our voting intention. In all situations the economic interests of our clients will be paramount.</p> <p>Voting guidelines are intended to help clients and companies understand the Investment Stewardship team's thinking on key governance matters. They are the benchmark against which the team assesses a company's approach to corporate governance and the items on the agenda to be voted on at the shareholder meeting. They apply their guidelines pragmatically, taking into account a company's unique circumstances where relevant. They inform the firm's vote decisions through research and engage as necessary. They review their voting guidelines annually and update them as necessary to reflect changes in market standards, evolving governance practice and insights gained from engagement over the prior year.</p> <p>BlackRock's annual and quarterly stewardship reports can be found in the following link:  <a href="https://www.blackrock.com/corporate/about-us/investment-stewardship#engagement-and-voting-history">https://www.blackrock.com/corporate/about-us/investment-stewardship#engagement-and-voting-history</a></p>

# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
Brandywine Global Investment Management	<p>Brandywine Global has implemented policies and procedures that are reasonably designed to ensure that proxies are voted in the best interest of clients. Brandywine Global's authority to vote proxies is established through investment management agreements or comparable documents.</p> <p>Brandywine Global's proxy voting policies and procedures include procedures designed to identify and address any material conflicts that may arise between Brandywine Global's interests and the interests of its clients before a proxy is voted. To seek to identify conflicts of interest, Brandywine Global requires its employees to annually complete a questionnaire designed to elicit information that may reveal potential conflicts of interest. Brandywine Global treats significant client relationships as a potential conflict of interest in voting proxies of securities issued by the client or the client's known affiliates.</p> <p>Brandywine Global's Investment Committee reviews and addresses potential conflicts of interest brought to its attention. With respect to such a conflict of interest, the Investment Committee first determines whether the conflict of interest is material. A conflict of interest is considered material to the extent that it is determined that the conflict is likely to influence, or appear to influence Brandywine Global's decision-making in voting proxies. If it is determined by the Investment Committee that a conflict of interest is not material, Brandywine Global may vote proxies notwithstanding the existence of the conflict.</p> <p>If it is determined by the Investment Committee that a conflict of interest is material, the Investment Committee shall determine an appropriate method or combination methods to resolve such conflict of interest before the proxy affected by the conflict of interest is voted by Brandywine Global. Such determination shall be based on the particular facts and circumstances, including the importance of the proxy issue, the nature of the conflict of interest, etc. Such methods may include: (i) confirming that the proxy will be voted in accordance with a stated position or positions in the Proxy Voting Policy (ii) confirming that the proxy will be voted in accordance with the recommendations of an independent proxy service firm retained by Brandywine Global; (iii) in the case of a conflict of interest resulting from a particular employee's personal relationships or circumstances, removing such employee from the decision-making process with respect to such proxy vote; (iv) disclosing the conflict to clients and obtaining their consent before voting; (v) suggesting to clients that they engage another party to vote the proxy on their behalf; or (vi) such other method as is deemed appropriate given the particular facts and circumstances. A written record of the method used to resolve a material conflict of interest shall be maintained.</p> <p>In exercising its voting authority, Brandywine Global will not consult or enter into agreements with officers, directors or employees of its parent, Legg Mason Inc., or any of its affiliates, regarding the voting of any securities owned by its clients.</p> <p>Brandywine Global's procedures include guidelines that are intended to provide a benchmark for voting standards. Each vote is ultimately cast on a case-by-case basis, taking into consideration Brandywine Global's contractual obligations to its clients and all other relevant facts and circumstances at the time of the vote, such that these guidelines may be overridden to the extent Brandywine Global believes appropriate.</p> <p>When the client indicates that they would like Brandywine Global to vote proxies, Brandywine Global will only vote proxies for the securities currently held in the client's account. Brandywine Global will not be responsible for voting proxies for: (1) securities no longer held in the client's account after the proxy vote record date; or (2) securities held in the account that are not part of Brandywine Global's investment mandate, such as unsupervised assets. Please see Brandywine Global's Form ADV for further information related to proxy voting.</p>

# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
Capital Group	<p>Capital Group believes exercising our proxy voting rights for the entities in which we invest is fundamental to fulfilling our obligations to investors. Our approach is made more powerful by the fact that our proxy voting is led by our investment professionals, giving consistent messages to companies on areas where we want to see progress. Our policy is to vote consistently at all shareholder meetings globally, following the same guidelines.</p> <p>We have robust policies for major governance and proxy voting matters and our policy is to vote at all shareholder meetings. Our voting process ensures that proxy votes are analyzed on a case-by-case basis and benefits from multiple decision-makers bringing the weight of their collective experience to bear on the specific issues.</p> <p>All proxy voting decisions are made in-house based on what we believe are the long-term interests of our clients. Our Governance Analysis &amp; Proxy (GAP) team coordinates and facilitates the proxy voting process, drawing on their deep local knowledge, institutional expertise, and our proxy voting guidelines. Investment analysts develop (or review, as the case may be) the voting recommendations, which are then reviewed by senior investment analysts serving as proxy coordinators, and further reviewed and debated by our regional proxy voting committees, who make the final voting decision. Our proxy voting committees primarily comprise investment professionals who bring a wide range of experience and views to each voting decision.</p> <p>When evaluating proxy proposals relating to ESG issues, we assess the impact to the company's shareholders, the specific circumstances at each individual company and the company's current policies and practices. We typically support greater disclosure of environmental-related information, as such information can help us better assess the long-term value of a company.</p> <p>We do not generally issue statements or campaign publicly on issues and we would only requisition a shareholder meeting or submit a shareholder resolution in exceptional circumstances.</p> <p>In 2020, we voted at more than 1,850 annual and special general meetings (AGMs and SGMs) on behalf of our clients. Our commitment to rigorous global research and individual accountability means that only the highest conviction ideas make it into our portfolios. As such, we usually vote in agreement with management. In 2020, we voted against approximately 8% of proposals put forward at AGMs and EGMs.</p>
Denali Advisors, LLC	Glass Lewis Proxy Voting Policy
Dundas Partners LLP	<p>Members of the investment team are responsible for reviewing proposals, approving votes, and reporting this internally. Dundas has engaged Institutional Shareholder Services Inc. (ISS) to support with the processing and management portions of the proxy process. ISS receive the proxy ballots, execute votes on the Firm's behalf, maintain voting records and provide comprehensive reports on all votes cast.</p> <p>We will generally vote according to the ISS Global Voting Principles with the exception of any custom client policy. The Principles provide for four key tenets on accountability, stewardship, independence, and transparency, taking into account relevant laws, customs, and best practice codes of each market and region. These principles underlie their approach to developing recommendations on management and shareholder proposals. These principles align with the client's best interest, by promoting long-term shareholder value creation. However, this does not mean that we will always vote with ISS recommendations. On any aspect of business strategy where we believe the recommendation is not aligned with the client's best interest, we will make the final decision.</p> <p>If, over time, common and recurring themes of disagreement with ISS recommendations are identified, the Investment Committee may develop alternate guidelines to be used in place of ISS's Global Voting Principles. Any such additional guidelines will be incorporated into our policy.</p> <p>ISS carry out daily audits, detailed vote reconciliation and automated, end-of-day production checks to ensure all votes are executed accurately. Discrepancies are reported to the Firm, discussed by the Investment Committee and if necessary, reviewed by the Compliance Committee. The role of ISS is reviewed and assessed annually by the Investment Committee.</p>



# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
Franklin Resources, Inc.	Please refer to the Firm Proxy Voting policies & procedures document uploaded in the "upload documents" section.
Global Alpha Capital Management Ltd.	<p>Voting refers to voting on management and/or shareholder resolutions as well as filing shareholder resolutions. Voting is tracked using a third party system developed by Institutional Shareholders Services Canada (ISS). Global Alpha receives a report of all upcoming meetings, reviews the items along with ISS's recommendations, and votes the proxy accordingly. Clients may obtain information about proxies upon request.</p> <p>For engagements related to proxy voting, Global Alpha is supported by the Engagement &amp; Stewardship team within Connor, Clark &amp; Lunn Financial Group (CCLFG). In these instances, the Engagement &amp; Stewardship team reaches out the company on behalf of the portfolio manager highlighting the issue at hand. The results of the dialogue are reviewed by the portfolio manager responsible for the stock who subsequently makes a final voting decision.</p> <p>Examples:</p> <p>In October 2019 we engaged with Advance Resident Investment Corp regarding board independence and gender diversity. We identified that director Yoshitsugu Oba had previously worked for the company's auditor, Deloitte Touche Tohmatsu, and that the board had no female representation. We raised both these issues with the company. The company responded that Mr. Oba was never the auditor assigned to Advance Resident Investment Corp and that he had been unassociated with the audit firm for more than three years. As we did not feel this was sufficient, we elected to vote against Mr. Oba. The company also noted that they had greater diversity in mind but had so far been unable to find an appropriate female candidate and that they would continue to seek greater diversity going forward. As such, the issue was flagged for follow-up before the next AGM.</p> <p>In May 2019 we engaged with Rothschild &amp; Co ahead of the 2019 AGM. We identified issues regarding the level of board independence, share repurchases and executive compensation. After dialogue with the company we elected to vote in favor of directors Arielle Malard de Rothschild and Adam Keswick. Although Rothschild &amp; Co. does not meet ISS' definition of a controlled company (51% ownership), it is a family firm with the Rothschild family holding 49.5% of shares and 63% of voting rights. Therefore we felt that the company was effectively controlled and thus a 1/3 independence threshold was sufficient. In contrast, after dialogue with the company, we voted against the proposed share repurchase plan because it could be used as an anti-takeover defense and against the issue of shares for use in a stock option plan given the lack of performance targets and lack of disclosure regarding vesting period.</p> <p>Engagement undertaken as part of company research is tracked by the portfolio manager in the relevant stock notes. Engagements undertaken by the Engagement &amp; Stewardship team in collaboration with the portfolio managers are tracked by the Engagement &amp; Stewardship team and the notes centrally stored.</p> <p>Global Alpha engages with portfolio companies on a regular basis, both as part regular company research and proxy voting</p>
Huber Capital Management, LLC	---

# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
Kennedy Capital Management, Inc.	<p>For those clients who have elected to have KCM vote proxies for their accounts, KCM has engaged a third party proxy voting advisory service to assist us with proxy research and vote recommendations. We also utilize a proxy administrator for vote execution and reporting. KCM has a proxy voting policy and a proxy committee which is charged with helping to resolve conflicts should any arise.</p> <p>Although KCM generally votes in accordance with the recommendations of our proxy service provider, KCM's portfolio managers (PMs) and analysts are consulted to determine how to vote on issues when the service provider's recommendation differs from the recommendation of the issuer's management. Furthermore, a PM or analyst may direct that proxies be voted in a manner different from that recommended by the service provider if he or she has determined that a different vote is appropriate and in the best interests of KCM's clients.</p> <p>In addition, proxies for all securities held in the ESG SMID Cap strategy are reviewed by the PM, who determines what vote is appropriate and in the best interest of KCM's clients in the ESG SMID Cap strategy.</p>
Loomis, Sayles & Company, L.P.	<p>Our proxy voting policies are available on our website:</p> <p><a href="https://www.loomissayles.com/website/about-us/proxy-voting">https://www.loomissayles.com/website/about-us/proxy-voting</a></p>
Mondrian Investment Partners Limited	<p>Mondrian is typically delegated the authority to vote proxies for securities held in a client's account, and votes proxies on behalf of clients pursuant to its Proxy Voting Policy and Procedures. The aim is not to micro-manage but to ensure that each company is run in the best interests of the shareholders.</p> <p>In order to facilitate the actual process of voting proxies, Mondrian has contracted with an independent company, Institutional Shareholder Services ("ISS").</p> <p>A portfolio manager will review each voluntary corporate action and proxy voting proposal to decide the best course of action for each client. In making that decision the portfolio manager will take into account Mondrian's internal analysis as well as the analysis of ISS-GS or other third party proxy provider as appropriate. If the portfolio manager proposes to vote counter to the ISS-GS recommended vote, a Mondrian Proxy Voting Committee is convened to review the proposal and determine how to vote on the issue in a manner consistent with Mondrian's Proxy Voting Policies and Procedures and in the best interests of each client.</p> <p>Please refer to the Mondrian Proxy Voting Policy and Procedures, which is available on our website at <a href="http://www.mondrian.com">www.mondrian.com</a>.</p>
Newton Investment Management Group	---
Radin Capital Partners Inc.	---
Redwood Investments, LLC	---
RVX Asset Management LLC	---

# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
The TCW Group, Inc.	<p>The TCW Group, Inc. and certain of its affiliates (collectively referred to as "TCW") act as investment advisors for a variety of clients, including mutual funds. If TCW has responsibility for voting proxies in connection with these investment advisory duties, or has the responsibility to specify to an agent of the client how to vote the proxies, TCW exercises such voting responsibilities for its clients through the corporate proxy voting process. TCW believes that the right to vote proxies is a significant asset of its clients' holdings.</p> <p>TCW has a fiduciary duty to act in the best long-term interests of its clients. In this fiduciary role, TCW believes that environmental, social, and governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). As a signatory to the U.N. Principles for Responsible Investing, TCW also recognizes that applying certain ESG principles may better align investors with broader objectives of society. Therefore, where consistent with its fiduciary responsibilities, TCW strives to:</p> <ul style="list-style-type: none"> <li>• Seek appropriate disclosure on ESG issues by the entities in which it invests</li> <li>• Incorporate ESG issues into investment analysis and decision-making processes</li> <li>• Engage with management teams and/or board members on material business issues, including ESG matters</li> <li>• Incorporate ESG issues into its ownership and proxy voting decisions</li> <li>• Provide transparency with regard to its proxy voting record and its rationale</li> </ul> <p>In order to carry out its fiduciary responsibilities in the voting of proxies for its clients, TCW has established a proxy voting committee (the "Proxy Committee"). The Proxy Committee generally meets quarterly (or at such other frequency as determined by the Proxy Committee), and its duties include establishing proxy voting guidelines and procedures (the "Guidelines"), overseeing the internal proxy voting process, and reviewing proxy voting issues.</p> <p>When voting proxies, TCW's utmost concern is that all decisions be made in the best interests of the client and in accordance with their objectives. Generally, proposals will be voted in accordance with the Guidelines and any applicable guidelines provided by TCW's clients.</p> <p>TCW believes that its portfolio managers, who are primarily responsible for evaluating the individual holdings of TCW's clients, are best able to determine how to further client interests and goals. The portfolio managers may, in their discretion, take into account the recommendations of TCW management, the Proxy Committee, and an Outside Service.</p> <p>TCW's portfolio management teams incorporate environmental, social and governance (ESG) factors into their evaluations as appropriate to their respective strategies, conducive to meeting their clients' investment objectives, and generally in the best interest of their clients. This approach is consistent with TCW's underlying view that companies or countries with stronger ESG practices are more likely to be beneficiaries of investment capital, while poor stewards are more likely to trade with higher risk premiums. Accordingly, the consideration of ESG factors in proxy voting process is a matter not only of good investment practice but also better aligns TCW's interests with those of its clients. Further information concerning each portfolio management team's approach to ESG may be found in TCW's ESG Policy.</p> <p>Individual portfolio managers, in the exercise of their best judgment and discretion, may from time to time override the Guidelines and vote proxies in a manner that they believe will enhance the economic value of clients' assets, keeping in mind the best interests of the beneficial owners. A portfolio manager choosing to abstain on a vote or override the Guidelines must deliver a written rationale for each such decision to TCW's Proxy Specialist (the "Proxy Specialist"), who will maintain such documentation in TCW's proxy voting records and deliver a quarterly report to the Proxy Committee of all votes cast other than in accordance with the Guidelines.</p>

# Manager Proxy Voting Policy

Firm Name	Description of proxy voting policy
William Blair Investment Management, LLC	<p>William Blair's policy is to vote proxies of its clients solely in the interest of their participants and beneficiaries and for the exclusive purpose of providing benefits to them. The firm's written procedures contains steps for complying with this policy and specifically address resolution of conflicts of interest, disclosure to clients, and provision of requested copies of the proxy voting policy statement and procedures, as required by Rule206(4)-6 under the Investment Advisers Act of 1940.</p> <p>Although William Blair is not an activist investor, corporate governance and the treatment of minority investors are of significant importance to us. Our investment process takes into consideration issues that may affect shareholders prior to our investing in a particular company. If we are not satisfied that the entity has placed shareholder interests foremost in its thinking regarding its capital allocation and business practice decisions, then we will not invest.</p> <p>In October 2018, William Blair worked in tandem with ISS to adopt proxy voting guidelines that are focused on financial returns and consistent with the objectives of sustainability-minded investors. Sustainability-minded investors are concerned with economic returns and with ESG principles that could materially affect future financial outcomes. The guideline changes affects our overall voting approach to environmental and social issues, while governance-related voting guidelines remain unchanged. William Blair has long believed in the importance of integrating key environmental, social and governance (ESG) considerations into our investment process. We have found that integrating targeted ESG factors alongside traditional financial metrics in our fundamental research helps us to make a more holistic assessment of corporate risk and opportunities, and is commensurate with the pursuit of superior risk-adjusted returns on behalf of our clients and their beneficiaries. ESG integration at William Blair also encompasses responsible ownership practices. We take seriously our responsibility to monitor the effectiveness of company management and exert influence on governance practices through the exercise of proxy voting rights.</p> <p>We use Institutional Shareholder Services (ISS) as our proxy research provider as well as our proxy voting agent.</p>



December 2021

**Semi-Annual Real Estate  
Performance Measurement Report**

Callan

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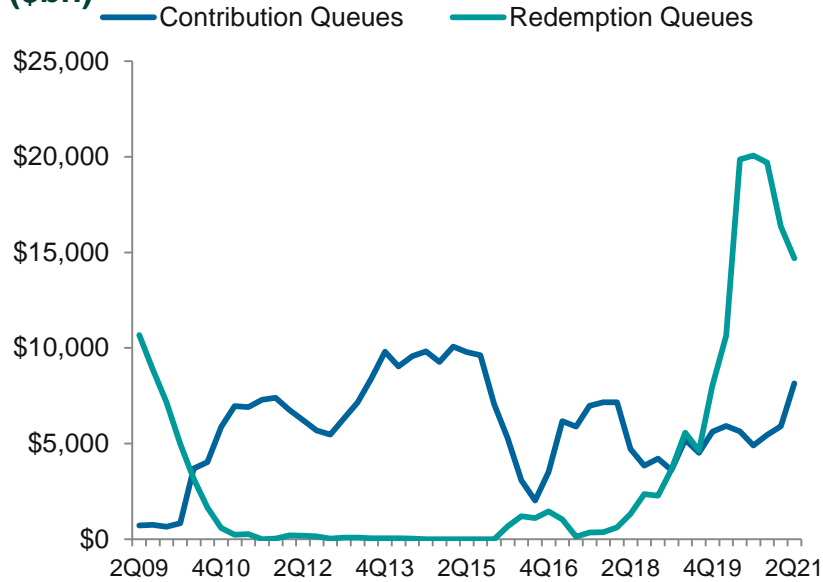
**Avery Robinson, CAIA**  
Senior Vice President



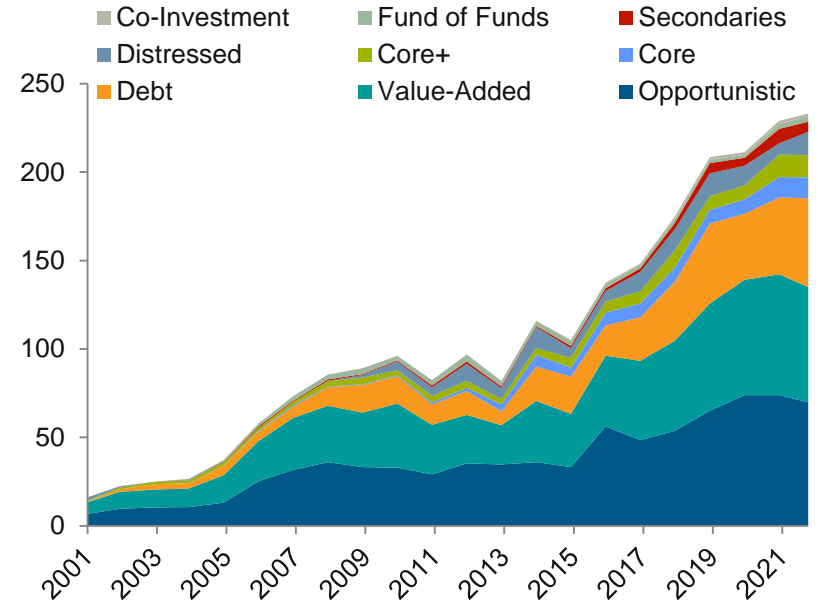
# U.S. Private Real Estate Market Trends

Dry powder increasing and exceeds \$200 billion

## Core Fund Contribution/Redemption Queues (\$bn)



## Dry Powder Available for CRE investment in North America (\$bn)



- Net core activity has rebounded considerably during the past two quarters.
- >\$200 billion of capital waiting to be deployed in North America
- Majority of dry powder capital in opportunistic, value-add, and debt funds

Sources: NCREIF, AEW, Prequin

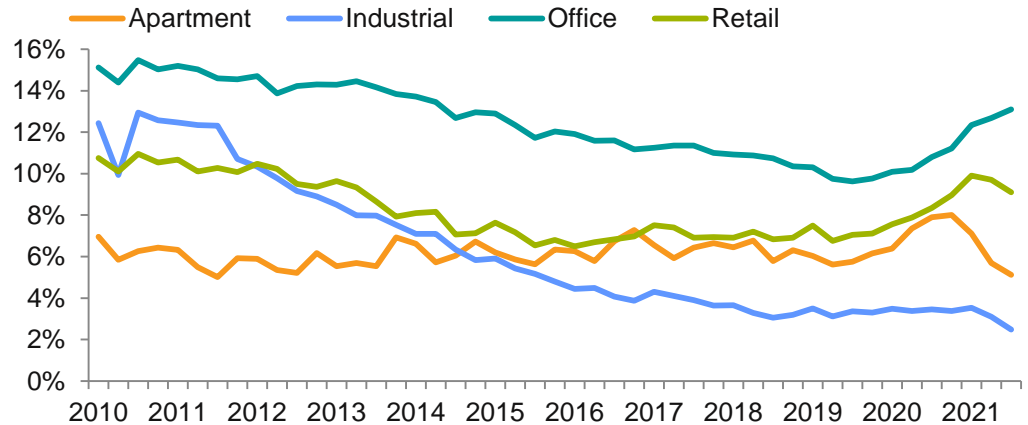
# U.S. Private Real Estate Market Trends

## Signs of recovery in retail (3Q21)

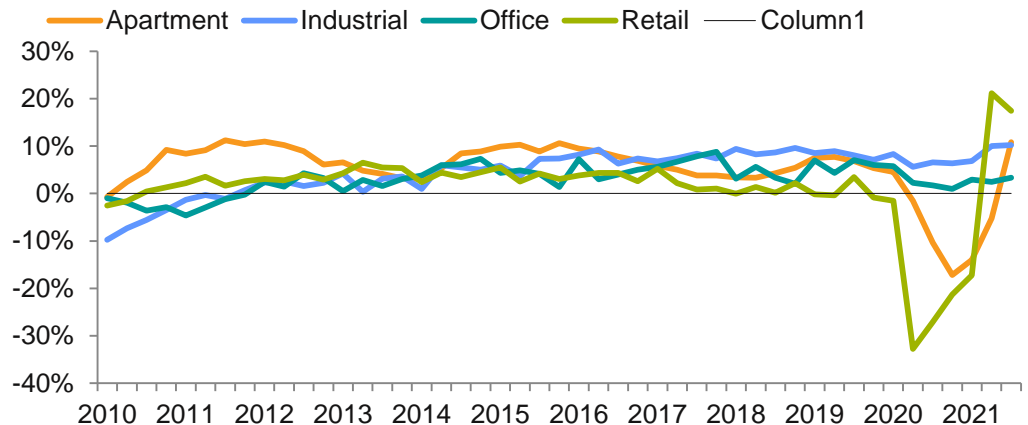
### Compression in vacancy rates

- Vacancy rates kept compressing in Industrial and Multifamily as demand continued.
- Net operating income remained negative for Retail but the recovery continue; pent-up demand was evident through foot traffic in retail centers.
- 3Q21 rent collections have stabilized across all sectors.
- Demand outpaced supply as new construction of preleased Industrial and Multifamily occurred.

Vacancy by Property Type



Rolling 4-Quarter NOI Growth by Property Type



Source: NCREIF

# Alameda County Employees' Retirement Association Performance Measurement Report Summary

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## Portfolio Measurement Presentation

This is the Performance Measurement Report presentation for the Alameda County Employees' Retirement Association ("ACERA") Real Estate Portfolio ("Portfolio") Quarter ending September 30, 2021 ("Quarter").

## Funding Status as of September 30, 2021

	(\$) Millions	(%)
ACERA Plan Assets	11,490.116	100.00%
Real Estate Target <sup>(1)</sup>	1,034.111	9.00%
Plan's Real Estate Market Value	696.651	6.06%
Net Unfunded Commitments	119.297	1.04%
RE Market Value & Unfunded Commitments	815.948	7.10%
Remaining Allocation	337.459	2.94%

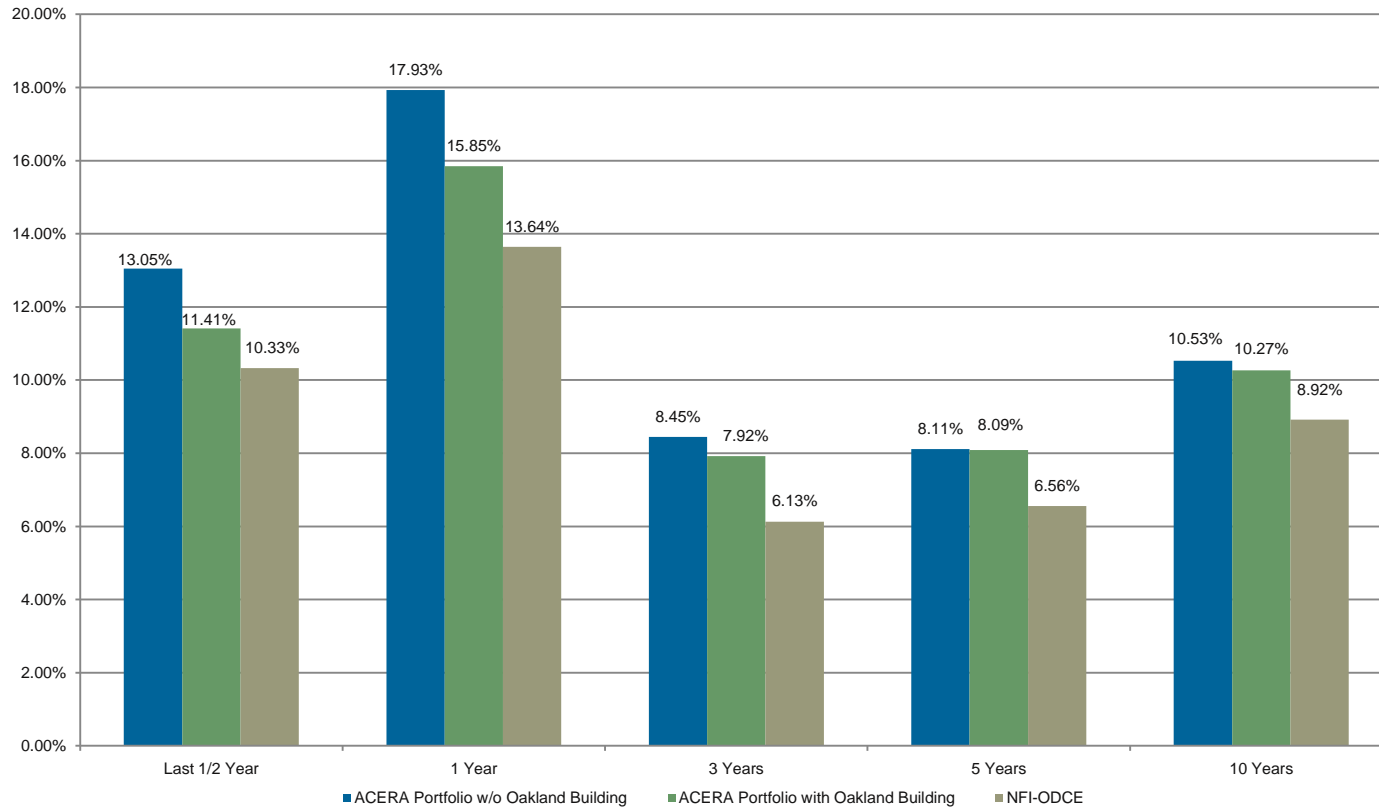
	Target	Funded	Funded & Committed
Core	70.00%	75.83%	64.74%
Non-Core	30.00%	24.17%	35.26%

<sup>(1)</sup> The real estate target changed from 8% to 9% effective 6/30/2021.

# Portfolio Net Returns

For Period Ended September 30, 2021

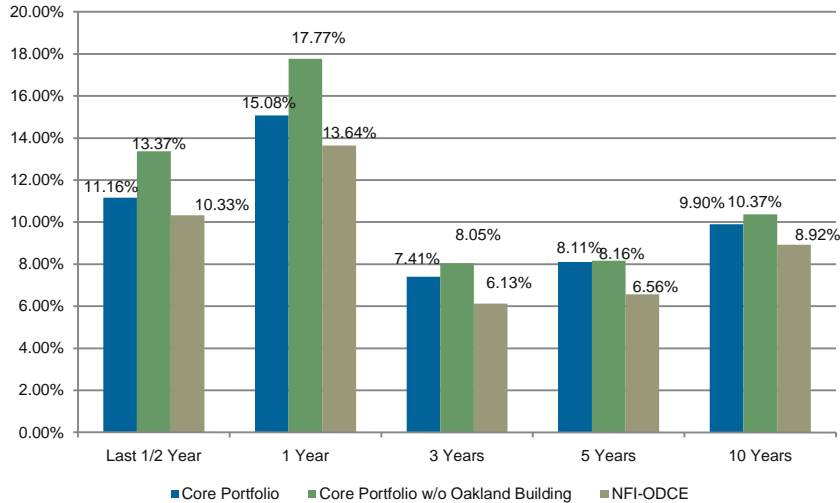
### Total Net Real Estate Portfolio Returns



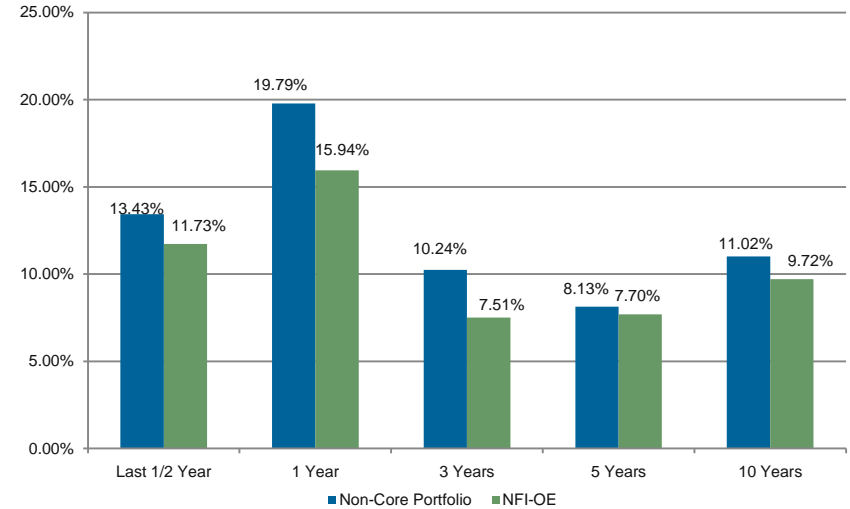
# Portfolio Returns by Style

For Period Ended September 30, 2021

Net Core Returns



Net Non-Core Returns



Net Portfolio w/o Oakland Building	Last ½ Year	1 Year	3 Years	5 Years	10 Years
Core Portfolio w/o Oakland Building	13.37%	17.77%	8.05%	8.16%	10.37%
Non-Core Portfolio	13.43%	19.79%	10.24%	8.13%	11.02%
<b>Total Portfolio w/o Oakland Building</b>	<b>13.05%</b>	<b>17.93%</b>	<b>8.45%</b>	<b>8.11%</b>	<b>10.53%</b>

Net Total Portfolio	Last ½ Year	1 Year	3 Years	5 Years	10 Years
Core Portfolio	11.16%	15.08%	7.41%	8.11%	9.90%
Non-Core Portfolio	13.43%	19.79%	10.24%	8.13%	11.02%
<b>Total Portfolio</b>	<b>11.41%</b>	<b>15.85%</b>	<b>7.92%</b>	<b>8.09%</b>	<b>10.27%</b>

# Performance Drivers and Detractors by Style

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## Core Portfolio (Excluding Oakland Building)

- The ACERA Core Portfolio outperformed the NFI-ODCE Value Weight Index (Net) by 83 bps for the half year ending 09/30/2021. The core portfolio has outperformed the benchmark over the last year, last 3 years, last 5 years, and last 10 years.
- The Lion Industrial Trust was once again the strongest performer over the period.
- Jamestown Premier Property Fund was the largest detractor from performance over the last half year.

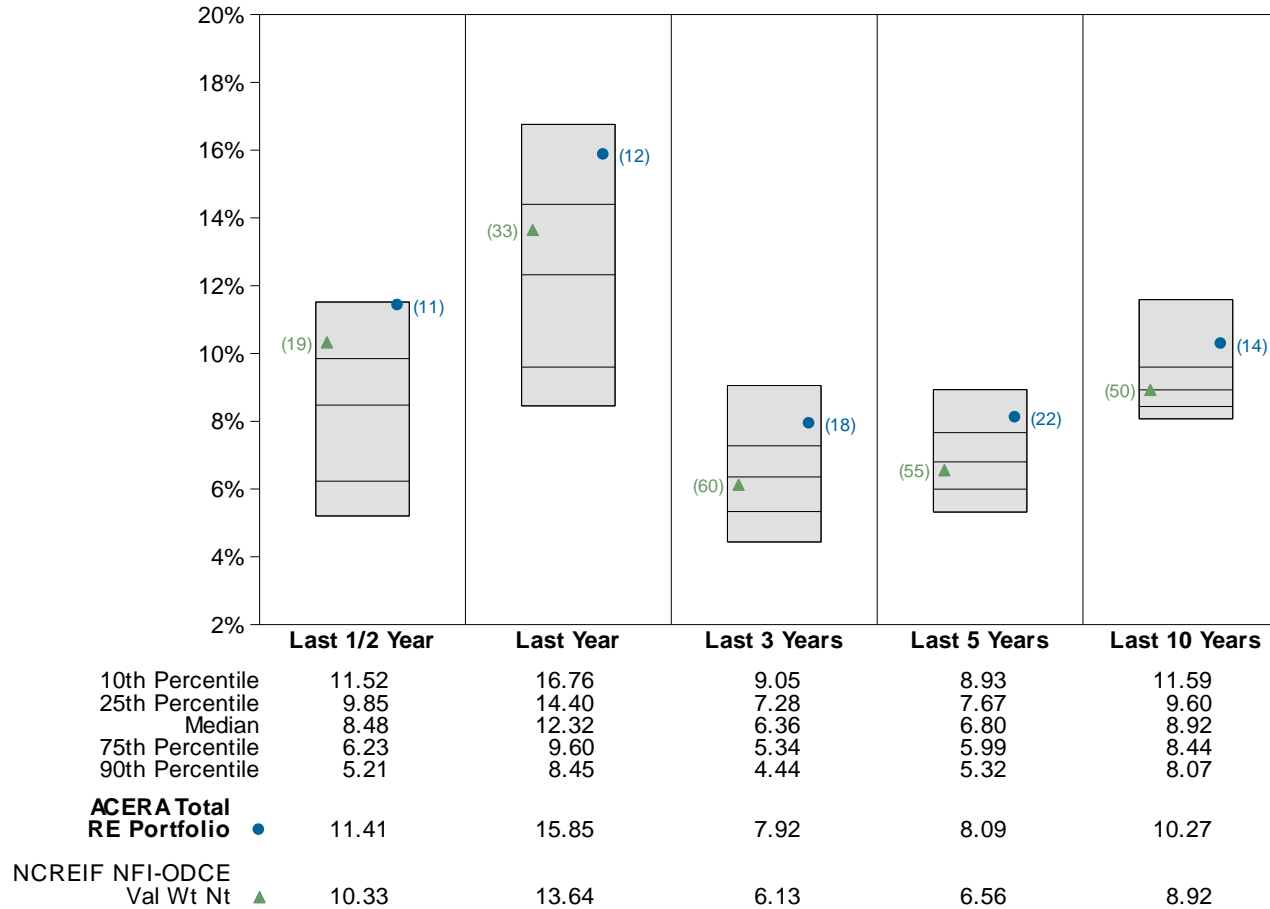
## Non-Core Portfolio

- The Non-Core Portfolio outperformed the NFI-OE Value Weight Index (Net) by 17 bps for the period.
- AEW Partners VIII was the primary driver of performance, while CIM VI was the largest detractor.

# Performance vs. Peer Group

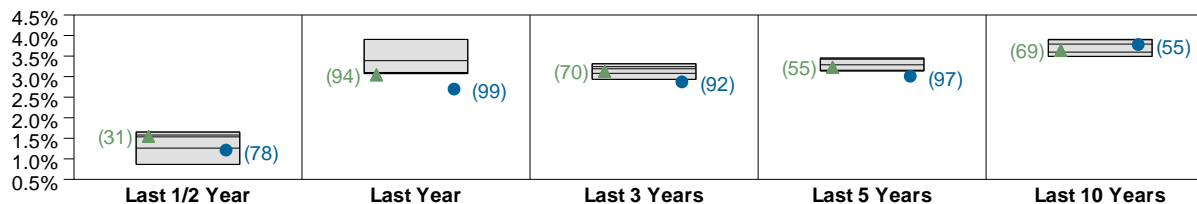
For Period Ended September 30, 2021

Performance vs Callan Open End Core Cmmingled Real Est



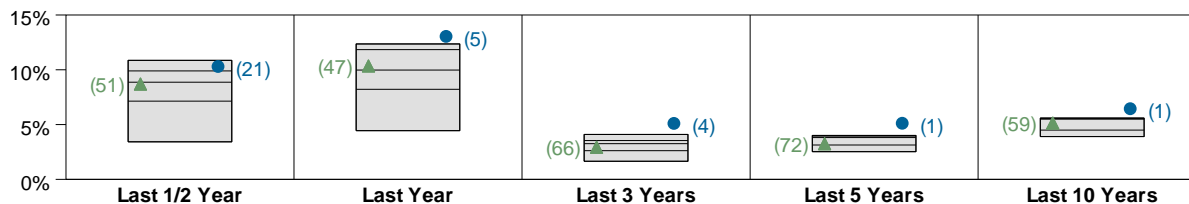
# Performance vs. Peer Group

## Income Rankings vs Callan OE Core Cmngld RE Periods ended September 30, 2021



	Last 1/2 Year	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	1.66	3.91	3.31	3.45	3.91
25th Percentile	1.58	3.39	3.24	3.43	3.90
Median	1.54	3.10	3.19	3.29	3.79
75th Percentile	1.26	3.09	3.08	3.16	3.60
90th Percentile	0.87	3.07	2.94	3.14	3.50
<b>ACERA Total RE Portfolio</b> ●	1.18	2.67	2.84	2.98	3.75
NCREIF NFI-ODCE Val Wt Nt ▲	1.55	3.05	3.13	3.23	3.64

## Appreciation Rankings vs Callan OE Core Cmngld RE Periods ended September 30, 2021



	Last 1/2 Year	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	10.87	12.36	4.11	4.01	5.59
25th Percentile	9.90	11.84	3.54	3.95	5.59
Median	8.87	9.97	3.26	3.82	5.50
75th Percentile	7.14	8.22	2.62	3.15	4.50
90th Percentile	3.43	4.44	1.66	2.53	3.91
<b>ACERA Total RE Portfolio</b> ●	10.17	12.92	4.98	5.00	6.31
NCREIF NFI-ODCE Val Wt Nt ▲	8.71	10.36	2.94	3.25	5.14

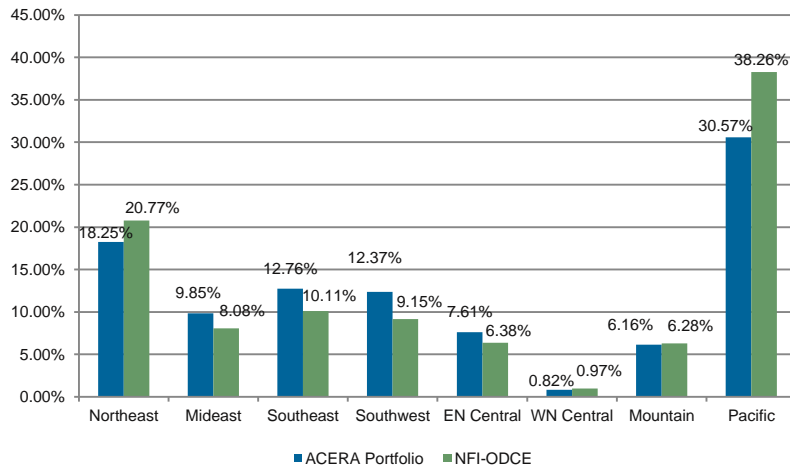


# Diversification & Debt

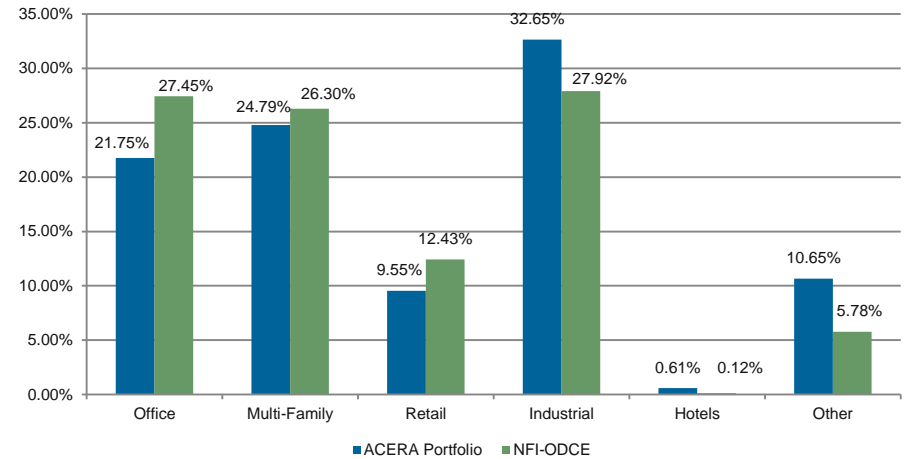
## Diversification – Total Portfolio (excluding Oakland Building)

- The ACERA Portfolio is well diversified by both property type and region.

Geographic Diversification



Property Type Diversification



## Debt Compliance

- The ACERA Strategic Plan limits leverage to 40.0% at the Portfolio level. As of September 30, 2021, the loan-to-value (“LTV”) ratio of the Portfolio was 29.40%.

# Definitions

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## **Performance**

Capitalization rate: Commonly known as cap rate, is a rate that helps in evaluating a real estate investment.  $\text{Cap rate} = \text{Net operating income} / \text{Current market value (Sale price) of the asset}$ .

Net operating income: Commonly known as NOI, is the annual income generated by an income-producing property, taking into account all income collected from operations, and deducting all expenses incurred from operations.

Real Estate Appraisal: The act of estimating the value of a property. A real estate appraisal may take into account the quality of the property, values of surrounding properties, and market conditions in the area.

Income Return (“INC”): Net operating income net of debt service before deduction of capital items (e.g., roof replacement, renovations, etc.)

Appreciation Return (“APP”): Increase or decrease in an investment's value based on internal or third party appraisal, recognition of capital expenditures which did not add value, uncollectible accrued income, or realized gain or loss from sales.

Total Gross Return (“TGRS”): The sum of the income return and appreciation return before adjusting for fees paid to and/or accrued by the manager.

Total Net Return (“TNET”): Total gross return less Advisor fees reported. All fees are requested (asset management, accrued incentives, paid incentives). No fee data is verified. May not include any fees paid directly by the investor as opposed to those paid from cash flows.

Inception Returns: The total net return for an investment or portfolio over the period of time the client has had funds invested. Total portfolio Inception Returns may include returns from investments no longer held in the current portfolio.

Net IRR: IRR after advisory fees, incentive, and promote. This includes actual cash flows and a reversion representing the LP Net Assets at market value as of the period end reporting date.

Equity Multiple: The ratio of Total Value to Paid-in-Capital (TVPIC). It represents the Total Return of the investment to the original investment not taking into consideration the time invested. Total Value is computed by adding the Residual Value and Distributions. It is calculated net of all investment advisory and incentive fees and promote.

# Definitions

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## **Style Groups**

The Style Groups consist of returns from commingled funds with similar risk/return investment strategies. Investor portfolios/investments are compared to comparable style groupings.

**Core:** Direct investments in operating, fully leased, office, retail, industrial, or multifamily properties using little or no leverage (normally less than 30%).

**Value-Added:** Core returning investments that take on moderate additional risk from one or more of the following sources: leasing, re-development, exposure to non-traditional property types, the use of leverage.

**Opportunistic:** Investments that take on additional risk in order to achieve a higher return. Typical sources of risks are: development, land investing, operating company investing, international exposure, high leverage, distressed properties.

# Definitions

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## **Indices**

Stylized Index: Weights the various style group participants so as to be comparable to the investor's portfolio holdings for each period.

Open-End Diversified Core Equity Index ("ODCE"): A core index that includes only open-end diversified core strategy funds with at least 95% of their investments in U.S. markets. The ODCE is the first of the NCREIF Fund Database products, created in May 2005, and is an index of investment returns reporting on both a historical and current basis (24 active vehicles). The ODCE Index is capitalization-weighted and is reported gross and net of fees. Measurement is time-weighted and includes leverage.

NCREIF Fund Index Open-End Index ("OE"): NFI-OE is an aggregate of open-end, commingled equity real estate funds with diverse investment strategies. Funds comprising NFI-OE have varied concentrations of sector and region, core and non-core, leverage, and life cycle.

NAREIT Equity Index: This is an index of Equity Real Estate Investment Trust returns reflecting the stock value changes of REIT issues as determined through public market transactions.

# Definitions

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## **Cash Flow Statements**

Beginning Market Value: Value of real estate, cash, and other holdings from prior period end.

Contributions: Cash funded to the investment for acquisition and capital items (i.e., initial investment cost or significant capital improvements).

Distributions: Actual cash returned from the investment, representing distributions of income from operations.

Withdrawals: Cash returned from the investment, representing returns of capital or net sales proceeds.

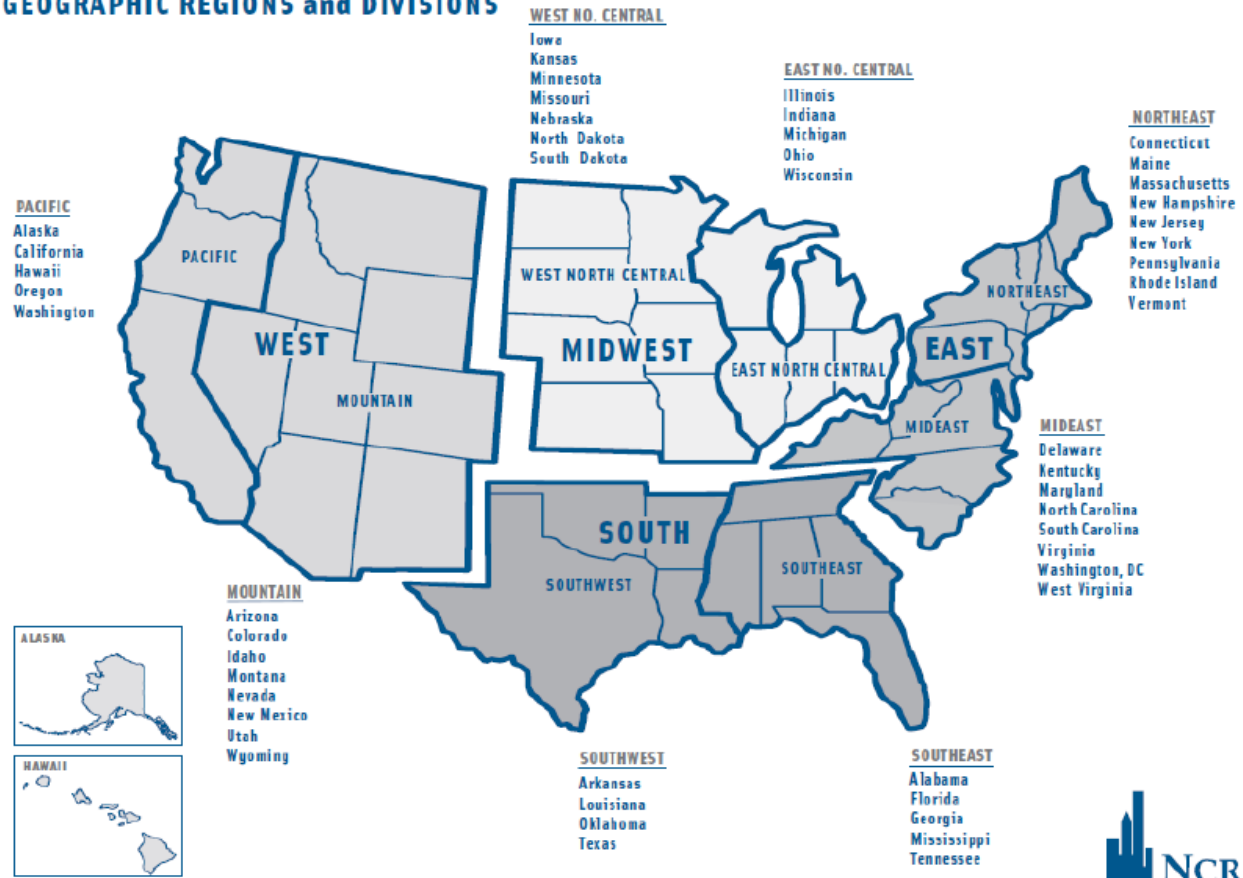
Ending Market Value: The value of an investment as determined by actual sales dollars invested and withdrawn plus the effects of appreciation and reinvestment; market value is equal to the ending cumulative balance of the cash flow statement (NAV).

Unfunded Commitments: Capital allocated to managers which has not yet been called for investment. Amounts are as reported by managers.


Remaining Allocation: The difference between the ending market value + the unfunded commitments and the target allocation. This figure represents dollars available for allocation.

# NCREIF Region Map

## GEOGRAPHIC REGIONS and DIVISIONS





TO: Members of the Investment Committee  
FROM: John Ta, Investment Officer   
DATE: December 8, 2021  
SUBJECT: CA Gov. Code § 7514.7 Alternative Investment Vehicles Information Report

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**Recommendation:**

Not Applicable – This is an information item.

**Background:**

California Government Code Section 7514.7 (“Section 7514.7”) requires that California public pension funds such as ACERA disclose certain information regarding the alternative investment vehicles (“AIVs”) in which they invest at least once annually in a meeting open to the public. Specifically, Section 7514.7 mandates the disclosure of certain fees and expenses, as well as performance data and other information required to be disclosed under the California Public Records Act. (See CA Gov. Code § 6254.26(b).) The reporting is required for alternative investment contracts entered into on and after January 1, 2017. For contracts that pre-date January 1, 2017, the pension fund must undertake reasonable efforts to obtain the information. The intent of this statute is to increase transparency into the AIV fees and expenses paid by public pension plans.

**Discussion:**

Staff has created two disclosure charts, one to address the information required in Section 7514.7 (See **Attachment #1**) and another to address Section 6254.26 (b) (See **Attachment #2**). The charts reflect information for the calendar year ending December 31, 2020.

The Section 7514.7 Chart includes both the mandatory disclosure information for contracts entered into after January 1, 2017 (“Mandatory Funds”) and the voluntary disclosure information for contracts executed prior to January 1, 2017 (“Voluntary Funds.”) For earlier investment contracts, Staff has made considerable efforts to obtain the information either via contract amendment or information arrangement. For those legacy managers that agreed to provide the data, their information is listed under Voluntary Funds.

The Section 6254.26(b) Chart applies to all AIVs in which ACERA is invested, as the data contained in this Chart can be disclosed under the California Public Records Act.

**Attachments:**

- #1 Section 7514.7 Chart, prepared by ACERA Staff
- #2 Section 6254.26(b) Chart, prepared by ACERA Staff

**Attachment #1 - Section 7514.7 Chart\***

Fund Name	Board Approval Date**	Fees and Expenses		Carried Interest Distributed <sup>3</sup> (FY 2020)	Aggregate Fees and Expenses Paid by Portfolio Companies <sup>4</sup> (FY 2020)	Gross IRR <sup>5</sup> (Since Inception)	Net IRR <sup>6</sup> (Since Inception)
		Paid Directly <sup>1</sup> (FY 2020)****	Indirectly (from AIV) <sup>2</sup> (FY 2020)****				
<b>Voluntary Funds (Pre-2017)</b>							
Angeles Equity Partners I, L.P.	Aug-2016	\$0	\$510,568	\$0	\$285,866	32.0%	17.3%
CIM Infrastructure Fund II, L.P.	Dec-2015	\$0	\$272,070	\$0	\$0	17.3%	10.9%
CIM VI-2 (Urban REIT), LLC	Apr-2012	\$0	\$343,058	\$0	\$0	7.2%	6.0%
Global Strategy LLC	May-2013	\$0	\$950,476	\$1,580,097	\$0	7.7%***	3.8%***
Great Hill Equity Partners IV, L.P.	Oct-2008	\$0	\$5,025	\$0	\$0	36.9%	27.0%
Great Hill Equity Partners V, L.P.	Aug-2013	\$0	\$406,029	\$3,251,777	\$1,427	34.7%	24.9%
Heitman American Real Estate Trust, L.P.	Jan-2013	\$0	\$493,181	\$0	\$0	7.5%	7.2%
Jamestown Premier Property Fund, L.P.	Sep-2012	\$0	\$255,839	\$281,650	\$0	12.0%	9.2%
JLL Partners Fund VII, L.P.	Feb-2014	\$0	\$375,629	\$0	\$142,116	16.3%	12.2%
MetLife Core Property Fund, L.P.	Nov-2013	\$0	\$332,595	\$0	\$0	9.7%	9.4%
PRISA	Sep-2007	\$0	\$524,021	\$0	\$0	4.9%	3.9%
PRISA III	Mar-2013	\$0	\$700,425	\$0	\$0	14.5%	11.4%
Sycamore I, L.P.	Mar-2012	\$0	\$122,879	\$0	\$352	39.0%	26.6%
Sycamore II, L.P.	May-2014	\$0	\$344,709	\$0	\$20,652	7.0%	1.8%
UBS Trumbull Property Fund	Jul-2014	\$0	\$382,291	\$0	\$0	5.4%	4.4%
Warburg Pincus Energy, L.P.	Apr-2014	\$0	\$421,942	\$0	\$254	-12.4%	-12.7%
Warburg Pincus Private Equity XI, L.P.	Sep-2012	\$0	\$298,400	\$136,875	\$65,214	15.7%	13.1%
Warburg Pincus Private Equity XII, L.P.	Oct-2015	\$0	\$477,933	\$201,025	\$174	19.2%	15.9%
<b>Mandatory Funds (2017-2020)</b>							
ABRY Advanced Securities Fund IV, L.P.	Sep-2018	\$0	\$678,000	\$0	\$0	15.9% <sup>^</sup>	5.9% <sup>^</sup>
AEW Partners Real Estate Fund VIII, L.P.	Apr-2018	\$0	\$295,612	\$0	\$0	15.2% <sup>^</sup>	10.1% <sup>^</sup>
AEW Partners Real Estate Fund IX, L.P.	Mar-2020	\$0	\$197,556	\$0	\$0	N/A	N/A
AG CSF1A (Annex) Dislocation, L.P.	Apr-2020	\$0	\$107,612	\$0	\$0	N/A	36.2% <sup>^</sup>
AG Realty Value Fund X, L.P.	Jul-2018	\$0	\$410,461	\$0	\$3,309	18.0% <sup>^</sup>	12.4% <sup>^</sup>
Altas Partners Holdings II, L.P.	Jun-2019	\$0	\$446,704	\$0	\$463	12.9% <sup>^</sup>	5.0% <sup>^</sup>
Artemis Real Estate Partners Income and Growth Fund, L.P.	Nov-2019	\$0	\$530,498	\$0	\$0	10.0% <sup>^</sup>	-8.8% <sup>^</sup>
Audax Private Equity Fund VI, L.P.	Aug-2018	\$0	\$311,705	\$0	\$183,300	45.5% <sup>^</sup>	60.4% <sup>^</sup>
BGP Fund II, L.P.	Oct-2017	\$0	\$967,314	\$0	\$0	25.6% <sup>^</sup>	12.0% <sup>^</sup>
BlackRock Direct Lending Fund IX, L.P.	Sep-2020	\$0	\$0	\$0	\$0	N/A	N/A
Blackstone Strategic Opportunity Fund L.P.	Dec-2017	\$0	\$850,279	\$139,156	\$0	7.4%***	4.6%***
Brookfield Super-Core Infrastructure Partners	Jul-2020	\$0	\$0	\$0	\$0	N/A	N/A
Canvas Ventures III, L.P.	Nov-2020	\$0	\$0	\$0	\$0	N/A	N/A
CapVest Equity Partners IV, L.P.	Jun-2018	\$0	\$695,023	\$0	\$0	N/A	N/A
CD&R XI, L.P.	Sep-2020	\$0	\$165,267	\$0	\$0	N/A	N/A
CFM Institutional Systematic Diversified Fund LLC	May-2018	\$0	\$677,307	\$0	\$0	-5.7%***	-6.3%***
EQT Infrastructure Fund IV, L.P.	Nov-2018	\$0	\$971,298	\$0	\$1,825	16.0% <sup>^</sup>	10.0% <sup>^</sup>
EQT Infrastructure V - USD	Oct-2020	\$0	-\$395,598	\$0	\$0	N/A	N/A
Genstar Capital Partners IX, L.P.	Feb-2019	\$0	\$445,314	\$0	\$0	29.6% <sup>^</sup>	38.0% <sup>^</sup>
Great Hill Equity Partners VI, L.P.	Jan-2017	\$0	\$947,354	\$1,018,254	\$4,158	43.0% <sup>^</sup>	56.5% <sup>^</sup>
Great Hill Equity Partners VII, L.P.	May-2019	\$0	\$686,385	\$0	\$0	162.7% <sup>^</sup>	N/A
Heitman Value Partners IV, L.P.	Jun-2017 / Mar-2018	\$0	\$151,788	\$0	\$0	9.4% <sup>^</sup>	7.7% <sup>^</sup>
HPS Specialty Loan Fund V, L.P.	Oct-2020	\$0	\$109,617	\$0	\$0	N/A	N/A
ISQ Global Infrastructure Fund II, L.P.	Dec-2017	\$0	\$704,030	\$0	\$0	21.5% <sup>^</sup>	16.8% <sup>^</sup>
Khosla Ventures Seed D, L.P.	Mar-2018	\$0	\$80,524	\$0	\$91	13.6% <sup>^</sup>	3.3% <sup>^</sup>
Khosla Ventures VI, L.P.	Mar-2018	\$0	\$148,122	\$0	\$2,071	19.3% <sup>^</sup>	8.0% <sup>^</sup>
KPS Special Situations Fund V, L.P.	Oct-2019	\$0	\$55,825	\$0	\$104,111	6.9% <sup>^</sup>	-1.6% <sup>^</sup>
KPS Special Situations Mid-Cap Fund, L.P.	Oct-2019	\$0	\$61,266	\$0	\$5,624	15.8% <sup>^</sup>	2.6% <sup>^</sup>
LHP Strategic Alpha Fund, LLC	Nov-2015 / May-2018	\$0	\$2,138,085	\$0	\$0	6.4%***	5.5%***
Lion Industrial Trust	Mar-2018	\$0	\$796,543	\$0	\$0	N/A	14.5% <sup>^</sup>
NEA 16, L.P.	Mar-2017	\$0	\$162,577	\$0	\$1,200	31.1% <sup>^</sup>	22.1% <sup>^</sup>
Owl Rock First Lien Fund, L.P.	Sept-2019	\$0	\$3,545,650	\$0	\$0	11.2% <sup>^</sup>	6.4% <sup>^</sup>
Peak Rock Capital Credit Fund II, L.P.	Sep-2017	\$0	\$56,022	\$0	\$0	8.0% <sup>^</sup>	0.6% <sup>^</sup>
Peak Rock Capital Fund II, L.P.	Sep-2017	\$0	\$537,915	\$0	\$139,019	70.6% <sup>^</sup>	45.5% <sup>^</sup>
Quantum Energy Partners VII Co-Investment Fund, L.P.	Sep-2017	\$0	\$5,505	\$0	\$0	21.0% <sup>^</sup>	20.0% <sup>^</sup>
Quantum Energy Partners VII, L.P.	Sep-2017	\$0	\$604,061	\$0	\$1,668	19.0% <sup>^</sup>	11.0% <sup>^</sup>
SSGA Custom Real Assets Non-Lending Strategy	Nov-2018	\$530,544	\$0	\$0	\$0	2.3%***	2.1%***
Sycamore III, L.P.	Jan-2018	\$0	\$880,000	\$0	\$10,481	15.0% <sup>^</sup>	-13.9% <sup>^</sup>
Taurus Mining Finance Fund No.2, L.P.	Feb-2019	\$0	\$653,154	\$0	\$0	49.0% <sup>^</sup>	21.8% <sup>^</sup>
Two Sigma Risk Premia Fund, L.P.	Oct-2019	\$0	\$1,210,426	\$0	\$0	0.0%***	-6.2%***
Vista Foundation IV, L.P.	Dec-2019	\$0	-\$651,111	\$0	\$0	N/A	N/A

\* The information on this chart is prepared by ACERA. This chart has not been prepared, reviewed or approved by the fund managers.  
 \*\* Date the Board approved the investment.  
 \*\*\* Returns expressed as annualized total return instead of IRR.  
 \*\*\*\* The total management fees and partnership expenses are net offsets and rebates, where applicable.  
 ^ Calculated/Reported IRRs are typically not meaningful within the early stages of a fund's life due to a short time frame and lack of cash flows.  
 N/A: Not available or not applicable.

**Footnotes for the information being requested for each Alternative Investment Vehicle:**

1. The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.
2. The Investor's pro rata share of fees and expenses not included in footnote #1 that are paid from the alternative investment vehicle to the fund manager or related parties.
3. The Investor's pro rata share of carried interest distributed by the Partnership to the fund manager or related parties. For non private equity type vehicles, this category represents the performance fee charged in addition to a management fee.
4. The Investor's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held by the alternative investment vehicle to fund manager or related parties. This aggregate sum may or may not offset (or partially offset) management fees.
5. Gross internal rate of return.
6. Net internal rate of return.



## Attachment #2 - Section 6254.26(b) Chart\*

Fund Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>1</sup>	Commitment <sup>2</sup>	Cash	Cash	Cash Distributions		Net IRR <sup>6</sup> (Since Inception)	Investment Multiple <sup>7</sup> (Since Inception)	Management Fees & Costs <sup>8</sup> (FY 2020)	Profit <sup>9</sup> (FY 2020)
				Contributions <sup>3</sup> (Since Inception)	Distributions <sup>4</sup> (FY 2020)	+ NAV <sup>5</sup> (FY 2020)	NAV** (FY 2020)				
ABRY Advanced Securities Fund II, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2011	\$25,000,000	\$18,502,837	\$745,971	\$1,975,668	\$1,229,697	13.22%	1.64x	\$47,919	-\$489,336
ABRY Advanced Securities Fund III, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2014	\$20,000,000	\$23,010,815	-\$1,271,158	\$16,939,199	\$18,210,357	-3.33%	0.92x	\$400,000	-\$6,517,022
ABRY Advanced Securities Fund IV, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2018	\$33,000,000	\$15,710,830	\$1,168,552	\$16,583,752	\$15,415,200	5.87%	1.06x	\$165,000	\$921,122
ABRY Partners VII, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2011	\$12,500,000	\$13,855,982	\$274	\$3,933,372	\$3,933,098	13.00%	1.60x	\$30,410	-\$421,837
ABRY Partners VIII, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2015	\$18,000,000	\$19,358,611	\$5,438,615	\$17,567,881	\$12,129,266	10.09%	1.39x	\$51,147	\$1,981,083
ABRY Senior Equity IV, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2012	\$7,500,000	\$7,745,037	\$1,967,584	\$4,467,282	\$2,499,698	14.72%	1.64x	\$26,596	\$124,880
ABRY Senior Equity V, L.P.	888 Boylston, Ste. 1600, Boston, MA 02199	2017	\$8,250,000	\$6,427,241	\$653,992	\$6,673,033	\$6,019,041	12.85%	1.17x	\$80,076	\$510,467
AEW Partners Real Estate Fund VIII, L.P.	2 Seaport Lane, Boston, MA 02210	2018	\$25,000,000	\$20,533,462	\$5,533,543	\$19,914,756	\$14,381,213	10.11%	1.13x	\$229,026	\$754,210
AEW Partners Real Estate Fund IX, L.P.	2 Seaport Lane, Boston, MA 02210	2020	\$35,000,000	\$0	\$0	\$0	\$0	N/A	N/A	\$197,556	-\$265,098
AG CSF1A (Annex) Dislocation, L.P.	245 Park Avenue, 26th Floor, New York, NY 10167	2020	\$26,250,000	\$23,813,595	\$3,735,892	\$28,295,123	\$24,559,231	36.18%	1.19x	\$173,938	\$4,495,123
AG Opportunistic Whole Loan Fund, L.P.	245 Park Avenue, 26th Floor, New York, NY 10167	2014	\$50,000,000	\$50,000,000	\$3,030,871	\$8,229,033	\$5,198,162	6.62%	1.23x	\$74,835	-\$463,383
AG Realty Value Fund X, L.P.	245 Park Avenue, 26th Floor, New York, NY 10167	2019	\$35,000,000	\$21,525,000	\$160,618	\$14,795,198	\$14,634,580	12.39%	1.12x	\$414,334	\$1,665,875
AG Securitized Asset Recovery Fund, L.P.	245 Park Avenue, 26th Floor, New York, NY 10167	2012	\$25,000,000	\$25,134,858	\$2,502,157	\$2,526,636	\$24,479	11.97%	1.54x	\$18,905	-\$129,607
Altas Partners Holdings II, L.P.	79 Wellington Street West, Suite 3500, Toronto, Ontario, CA M5K 1K7	2019	\$33,000,000	\$12,994,939	\$27	\$13,522,826	\$13,522,799	4.96%	1.04x	\$302,663	\$741,475
Angeles Equity Partners I, L.P.	11661 San Vicente Blvd STE 808, Los Angeles, CA 90049	2016	\$35,000,000	\$18,128,339	\$2,927,765	\$21,076,027	\$21,148,262	17.26%	1.41x	\$403,679	\$8,993,684
Artemis Real Estate Partners Healthcare Fund I, L.P.	5404 Wisconsin Ave., Chevy Chase, MD 20815	2017	\$25,000,000	\$22,043,431	\$1,142,512	\$12,988,286	\$11,845,774	22.24%	1.10x	\$326,851	\$620,977
Artemis Real Estate Partners Income and Growth Fund, L.P.	5404 Wisconsin Ave., Chevy Chase, MD 20815	2019	\$35,000,000	\$9,580,829	\$143,934	\$8,700,807	\$8,556,873	-8.79%	0.93x	\$904,009	-\$645,471
Audax Private Equity Fund VI, L.P.	101 California Street, Suite 4750, San Francisco, CA 94111	2018	\$25,000,000	\$6,496,498	\$265,290	\$9,103,193	\$8,837,903	60.38%	1.45x	\$177,943	\$1,995,533
Avista Capital Partners II, L.P.	65 East 55th Street, 18th Floor, New York, NY 10022	2010	\$30,000,000	\$39,435,718	\$0	\$2,602,733	\$2,602,733	12.28%	1.48x	\$0	\$2,389,306
Bernhard Capital Partners II, L.P.	400 Convention Street, Suite 1010, Baton Rouge, LA 70802	2018	\$44,000,000	\$13,146,987	\$485,160	\$14,697,125	\$14,211,965	12.01%	1.12x	-\$562,641	\$3,571,470
BlackRock Direct Lending Fund IX, L.P.	2951 28th Street, Suite 1000, Santa Monica, CA 90405	2020	\$75,000,000	\$0	\$0	\$0	\$0	N/A	N/A	N/A	N/A
Blackstone Strategic Opportunity Fund, L.P.	345 Park Avenue, New York, NY 10154	2018	\$80,000,000	\$80,000,000	\$0	\$89,481,754	\$89,481,754	6.71%	1.12x	\$850,279	\$3,615,159
Bridgepoint Credit Opportunities III, L.P.	95 Wigmore Street, London, W1U 1FB	2017	\$38,501,820	\$28,678,893	\$5,864	\$28,715,325	\$28,709,462	5.56%	1.07x	\$429,849	\$1,888,273
Brookfield Super-Core Infrastructure Partners	Brookfield Place, Suite 300, 181 Bay Street, Toronto ON M5J2T3	2020	\$40,000,000	\$0	\$0	\$0	\$0	N/A	N/A	N/A	N/A
Canvas Ventures III, L.P.	32200 Alpine Road, Portola Valley, CA 94028	2020	\$10,000,000	\$474,699	\$0	\$474,699	\$474,699	0.00%	1.00x	N/A	N/A
CapVest Equity Partners IV, L.P.	8, Rue Lou Hemmer, Findel, Lu L-1748	2018	\$29,701,404	\$2,058,719	\$0	\$446,585	\$446,585	-100.00%	0.22x	N/A	N/A
Catalyst Fund V, L.P.	181 Bay Street, Suite 4700, P.O. Box 792, Toronto, Ontario M5J 2T3, Canada	2015	\$50,000,000	\$40,234,668	\$9,876,699	\$31,877,020	\$22,000,321	-6.90%	0.90x	\$887,978	-\$678,012
CD&R XI, L.P.	375 Park Avenue, 18th Floor, New York, NY 10152	2020	\$35,000,000	\$0	\$0	\$348,314	\$348,314	N/A	N/A	\$57,882	-\$165,267
Centerbridge Special Credit Partners, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2009	\$35,000,000	\$33,291,096	\$272,544	\$895,723	\$623,179	13.36%	1.60x	\$0	-\$459,143
CFM Institutional Systematic Diversified Fund LLC	23 rue de l'Universite, 75007 Paris, France	2018	\$170,000,000	\$170,000,000	\$60,000,000	\$155,113,746	\$95,113,746	-4.39%	0.91x	\$622,570	-\$17,556,295
CIM Infrastructure Fund II, L.P.	4700 Wilshire Boulevard, Los Angeles, CA 90010	2016	\$35,000,000	\$19,481,581	\$0	\$24,479,505	\$24,479,505	10.87%	1.31x	\$272,070	\$2,742,761
CIM VI-2 (Urban REIT), LLC	4700 Wilshire Boulevard, Los Angeles, CA 90010	2012	\$25,000,000	\$25,000,000	\$6,408,773	\$30,304,291	\$23,895,518	5.98%	1.47x	\$0	-\$1,939,893
Dyal II US Investors LP	325 North Saint Paul Street, Suite 4900, Dallas, Texas 75201	2014	\$40,000,000	\$35,961,374	\$907,556	\$28,005,352	\$28,005,796	-1.12%	0.97x	\$759,733	\$5,760,524
EQT Infrastructure IV	26A, Boulevard Royal, Luxembourg, Luxembourg L-2449	2018	\$40,000,000	\$23,593,531	\$25,000	\$25,882,701	\$25,857,701	9.95%	1.10x	\$660,000	\$2,392,510
EQT Infrastructure V	26A, Boulevard Royal, Luxembourg, Luxembourg L-2449	2020	\$30,000,000	\$0	\$0	\$0	\$0	N/A	N/A	\$170,410	-\$332,095
General Catalyst Group VI, L.P.	20 University Rd., Suite 450, Cambridge, MA 02138	2012	\$10,000,000	\$9,850,000	\$10,979,197	\$54,534,975	\$43,555,778	34.85%	6.45x	\$182,249	\$28,922,508
Genstar Capital Partners IX, L.P.	4 Embarcadero Center, Suite 1900, San Francisco, CA 94111	2019	\$25,000,000	\$9,814,138	\$583,334	\$12,944,409	\$12,361,075	38.02%	1.32x	\$424,657	\$2,976,478
Global Strategy LLC	75 State Street, 31st Floor, Boston, MA 02109	2013	\$25,000,000	\$25,000,000	\$0	\$33,192,333	\$33,192,333	3.78%	1.33x	\$861,890	-\$8,181,395
Great Hill Equity Partners IV, L.P.	One Liberty Square, Boston, MA 02109	2008	\$10,000,000	\$10,009,292	\$0	\$7,029,209	\$7,029,209	27.00%	3.08x	\$0	\$20,820,524
Great Hill Equity Partners V, L.P.	One Liberty Square, Boston, MA 02109	2014	\$25,000,000	\$25,000,000	\$19,180,814	\$39,688,974	\$20,508,160	24.93%	2.45x	\$394,344	\$36,163,974
Great Hill Equity Partners VI, L.P.	One Liberty Square, Boston, MA 02109	2017	\$50,000,000	\$45,384,962	\$0	\$68,974,868	\$68,974,868	56.50%	1.84x	\$550,294	\$38,266,835
Great Hill Equity Partners VII, L.P.	One Liberty Square, Boston, MA 02109	2019	\$60,000,000	\$2,558,754	\$0	\$11,734,508	\$11,734,508	N/A	4.70x	\$4,451	\$9,175,754
Heitman American Real Estate Trust, L.P.	191 North Wacker Drive, Suite 2500, Chicago, IL 60606	2013	\$40,000,000	\$40,000,000	\$1,465,945	\$52,986,697	\$51,520,752	7.21%	1.57x	\$493,181	-\$678,705
Heitman Value Partners IV, L.P. (HVP IV)	191 North Wacker Drive, Suite 2500, Chicago, IL 60606	2018	\$30,000,000	\$19,870,798	\$3,550,218	\$15,563,738	\$15,013,520	7.66%	1.06x	\$151,787	\$786,962
HPS Specialty Loan Fund V, L.P.	40 West 57th Street, 33rd Floor, New York, NY 10019	2020	\$75,000,000	\$0	\$0	\$0	\$0	N/A	N/A	\$9,374	-\$90,917
Insight Equity II, L.P.	1400 Civic Place, Suite 250, Southlake, TX 76092	2009	\$16,875,000	\$17,306,380	\$4,378,006	\$15,875,779	\$11,497,773	10.26%	1.72x	\$97,373	\$1,114,536
Insight Equity Mezzanine, L.P.	1400 Civic Place, Suite 250, Southlake, TX 76092	2009	\$5,625,000	\$5,599,653	\$1,170,285	\$2,109,365	\$939,080	6.62%	1.36x	\$0	\$22,257
ISQ Global Infrastructure Fund II, L.P.	410 Park Avenue, Suite 830, New York, NY 10022	2018	\$40,000,000	\$26,342,051	\$1,199,443	\$30,796,560	\$29,597,117	16.82%	1.24x	\$504,738	\$4,230,188
Jamestown Premier Property Fund	675 Ponce De Leon Ave. NE, 7th Floor, Atlanta, GA	2012	\$20,000,000	\$20,000,000	\$58,502	\$28,236,700	\$28,178,198	9.23%	1.51x	\$200,630	\$2,842,408
JLL Partners Fund VII, L.P.	450 Lexington Avenue, 31st Floor, New York, NY 10017	2015	\$47,250,000	\$42,802,499	\$2,216,021	\$59,215,450	\$56,999,429	12.17%	1.42x	\$357,629	\$2,984,933
JP Morgan Strategic Property Fund	270 Park Avenue, New York, NY 10017	2007	\$50,000,000	\$50,000,000	\$1,970,415	\$72,436,635	\$70,466,220	4.40%	1.67x	\$715,722	\$279,864
Khosla Ventures III, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2009	\$12,000,000	\$11,893,157	\$151,200	\$24,715,739	\$24,564,539	18.03%	3.60x	\$46,832	\$21,669,320
Khosla Ventures IV, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2011	\$15,000,000	\$14,715,000	\$3,316,435	\$40,845,762	\$37,529,327	25.96%	4.13x	\$168,750	\$17,410,241
Khosla Ventures Seed B, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2012	\$5,000,000	\$4,985,000	\$300,280	\$15,650,832	\$15,350,552	21.93%	3.63x	\$80,835	\$5,641,474
Khosla Ventures Seed D, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2018	\$3,000,000	\$2,100,000	\$0	\$2,183,036	\$2,183,036	3.32%	1.04x	\$74,909	\$104,127
Khosla Ventures Seed, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2009	\$3,000,000	\$3,000,555	\$0	\$3,733,388	\$3,733,388	4.59%	1.45x	\$30,000	-\$112,492
Khosla Ventures V, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2014	\$10,000,000	\$9,650,000	\$0	\$16,555,356	\$16,555,356	15.21%	1.77x	\$200,000	\$3,592,662
Khosla Ventures VI, L.P.	2128 Sand Hill Road, Menlo Park, CA 94025	2018	\$7,000,000	\$4,697,000	\$0	\$5,158,302	\$5,158,302	7.97%	1.10x	\$137,929	\$493,952
KPS Special Situations Fund IV, L.P.	485 Lexington Ave., 31st Floor, New York, NY 10017	2014	\$14,580,000	\$13,053,815	\$3,176	\$14,347,092	\$14,343,916	16.74%	1.35x	\$0	\$1,984,678
KPS Special Situations Fund V, L.P.	485 Lexington Ave., 31st Floor, New York, NY 10017	2019	\$20,000,000	\$3,786,405	\$0	\$3,764,406	\$3,764,406	-1.61%	0.99x	\$21,931	-\$10,121
KPS Special Situations Mid-Cap Fund, L.P.	485 Lexington Ave., 31st Floor, New York, NY 10017	2019	\$5,000,000	\$919,992	\$0	\$942,545	\$942,545	2.59%	1.02x	\$56,876	-\$16,870
LHP Strategic Alpha Fund, LLC	3801 PGA Blvd., Suite 500, Palm Beach Gardens, FL 33410	2015	\$278,000,000	\$278,000,000	\$0	\$335,735,625	\$335,735,625	5.45%	1.21x	\$1,907,554	\$45,032,265
Lindsay Goldberg III L.P.	630 Fifth Avenue, 30th Floor, New York, NY 10111	2008	\$45,000,000	\$43,599,225	\$0	\$324,957	\$324,957	8.12%	1.36x	\$0	\$15,017
Lion Industrial Trust	230 Park Avenue, New York, NY 10169	2012	\$55,000,000	\$55,000,000	\$2,922,462	\$91,291,935	\$88,369,473	14.53%	1.77x	\$1,000,848	\$9,926,598
MetLife Core Property Fund, L.P.	One MetLife Way, Whippany, NJ 07981	2013	\$50,000,000	\$50,000,000	\$1,328,648	\$70,630,124	\$69,301,476	9.44%	1.74x	\$429,770	\$350,390
NEA 13, L.P.	5425 Wisconsin Avenue, Chevy Chase, MD 20815	2009	\$11,000,000	\$11,007,739	\$7,895,867	\$15,862,290	\$7,966,423	17.51%	2.64x	\$88,082	\$7,678,832
NEA 14, L.P.	5425 Wisconsin Avenue, Chevy Chase, MD 20815	2012	\$11,000,000	\$10,618,976	\$1,132,028	\$16,705,317	\$15,573,289	18.07%	2.51x	\$94,321	\$2,845,663
NEA 15, L.P.	5425 Wisconsin Avenue, Chevy Chase, MD 20815	2015	\$5,000,000	\$4,725,000	\$88,220	\$9,512,491	\$9,424,271	23.20%	2.24x	\$58,190	\$2,207,453
NEA 16, L.P.											

Attachment #2 - Section 6254.26(b) Chart\*

Fund Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>1</sup>	Commitment <sup>2</sup>	Cash	Cash	Cash Distributions		NAV** (FY 2020)	Net IRR <sup>6</sup> (Since Inception)	Investment Multiple <sup>7</sup> (Since Inception)	Management Fees & Costs <sup>8</sup> (FY 2020)	Profit <sup>9</sup> (FY 2020)
				Contributions <sup>3</sup> (Since Inception)	Distributions <sup>4</sup> (FY 2020)	+ NAV <sup>5</sup> (FY 2020)						
Partners Group Secondary 2008, L.P.	Zugerstrasse 57, Baar, Zug 6341, Switzerland	2008	\$17,370,855	\$18,650,571	\$447,462	\$2,002,307	\$1,554,845	8.90%	1.50x	\$0	\$86,744	
Peak Rock Capital Credit Fund II, L.P.	13413 Galleria Circle, Suite Q-300, Austin, TX 78738	2017	\$8,750,000	\$2,738,962	\$533,319	\$1,489,995	\$956,676	0.61%	1.00x	\$15,003	\$124,829	
Peak Rock Capital Fund II, L.P.	13413 Galleria Circle, Suite Q-300, Austin, TX 78738	2018	\$35,000,000	\$23,257,006	\$7,325,188	\$28,072,816	\$20,747,628	45.50%	1.46x	\$451,633	\$6,968,894	
PRISA	655 Broad St., Newark, NJ 07102	2007	\$50,000,000	\$50,000,000	\$1,781,579	\$56,089,295	\$54,307,716	3.38%	1.44x	\$524,021	\$854,180	
PRISA III	655 Broad St., Newark, NJ 07102	2013	\$35,936,048	\$35,936,048	\$3,349,525	\$47,246,245	\$43,896,720	11.40%	1.65x	\$700,425	\$4,030,501	
Quantum Energy Partners VII Co-Investment Fund, L.P.	1401 Mckinney Street, Suite 2700, Houston, TX 77010	2017	\$31,818,182	\$18,535,288	\$547,050	\$23,241,903	\$22,694,853	11.19%	1.25x	\$0	\$864,962	
Quantum Energy Partners VII, L.P.	1401 Mckinney Street, Suite 2700, Houston, TX 77010	2017	\$3,181,818	\$1,263,302	-\$211,770	\$1,702,019	\$1,913,789	19.48%	1.52x	\$539,674	\$5,099,483	
SSGA Custom Real Assets Non-Lending Strategy	1 Iron Street, Boston, MA 02210	2019	\$341,556,035	\$341,556,035	\$0	\$360,931,073	\$360,931,073	4.26%	1.06x	\$530,544	-\$1,556,552	
Sycamore Partners II, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2014	\$42,500,000	\$37,101,282	\$1,008,139	\$24,726,360	\$23,718,221	1.80%	1.05x	\$324,057	-\$2,499,717	
Sycamore Partners III, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2018	\$44,000,000	\$14,753,056	\$4,178,523	\$12,978,014	\$8,799,491	-13.94%	0.88x	\$869,519	\$440,232	
Sycamore Partners, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2011	\$30,000,000	\$39,427,125	\$0	\$27,339,609	\$27,339,609	26.67%	1.83x	\$80,686	-\$5,270,924	
Taurus Mining Finance Fund No.2	Suite 4101, Level 41, 1 Macquarie Place, Sydney NSW 2000, Australia	2019	\$30,000,000	\$18,032,827	\$10,937,711	\$20,128,737	\$9,191,026	21.80%	1.13x	\$638,736	\$2,108,582	
Third Rock Ventures II, L.P.	29 Newbury St., Suite 301, Boston, MA 02116	2010	\$12,500,000	\$12,500,000	\$158,540	\$1,318,324	\$1,159,784	38.71%	3.48x	\$194,780	\$581,354	
Third Rock Ventures III, L.P.	29 Newbury St., Suite 301, Boston, MA 02116	2013	\$10,000,000	\$10,000,000	\$1,345,556	\$21,646,183	\$20,300,627	28.38%	2.77x	\$200,622	\$10,697,668	
Two Sigma Risk Premia Fund, L.p.	100 Avenue of the Americas 16th Floor, New York, NY 10013	2019	\$100,000,000	\$100,000,000	\$0	\$93,441,237	\$93,441,237	-6.16%	0.93x	\$1,210,426	-\$7,310,240	
UBS Trumbull Property Fund	10 State House Square, 15th Floor, Hartford, CT	2014	\$40,000,000	\$40,000,000	\$1,354,827	\$44,051,685	\$42,696,858	4.40%	1.29x	\$382,291	-\$2,190,535	
Vista Foundation IV, L.P.	401 Congress Avenue, Suite 3100, Austin, TX 78701	2020	\$35,000,000	\$601,923	\$0	-\$49,188	-\$49,188	N/A	-0.08x	\$601,923	-\$651,111	
Warburg Pincus Energy, L.P.	450 Lexington Avenue, New York, NY 10017	2014	\$15,000,000	\$13,292,582	\$780,120	\$7,572,759	\$6,792,639	-12.47%	0.69x	\$363,203	-\$5,464,028	
Warburg Pincus Private Equity XI, L.P.	450 Lexington Avenue, New York, NY 10017	2012	\$75,000,000	\$75,876,966	\$4,715,925	\$52,314,699	\$47,598,774	13.11%	1.70x	\$185,076	\$5,312,598	
Warburg Pincus Private Equity XII, L.P.	450 Lexington Avenue, New York, NY 10017	2015	\$43,000,000	\$42,419,500	\$4,721,400	\$59,357,242	\$54,635,842	15.85%	1.49x	\$403,127	\$9,920,573	

\*The information on this chart is prepared by ACERA. This chart has not been prepared, reviewed or approved by the fund managers.

\*\*This column is calculated by taking the difference between the data in footnote #5 and footnote #4.

Footnotes:

- The address, name and vintage year of each alternative investment vehicle.
- The dollar amount of the commitment made to each alternative investment vehicle by public investment fund since inception.
- The dollar amount of cash contributions made by the public investment fund to each alternative investment vehicle since inception.
- The dollar amount, on a fiscal yearend basis, of cash distributions received by the public investment fund from each alternative investment vehicle.
- The dollar amount, on a fiscal yearend basis, of cash distributions received by the public investment fund plus remaining value of partnership assets attributable to the public investment fund's investment in each alternative investment vehicle.
- The net internal rate of return of each alternative investment vehicle since inception.
- The investment multiple of each alternative investment vehicle since inception.
- The dollar amount of the total management fees and costs paid on an annual fiscal yearend basis, by the public investment fund to each alternative investment vehicle.
- The dollar amount of cash profit received by public investment funds from each alternative investment vehicle on a fiscal year-end basis. This item is understood to represent a net increase (or decrease) in capital from operations net of incentive allocations.

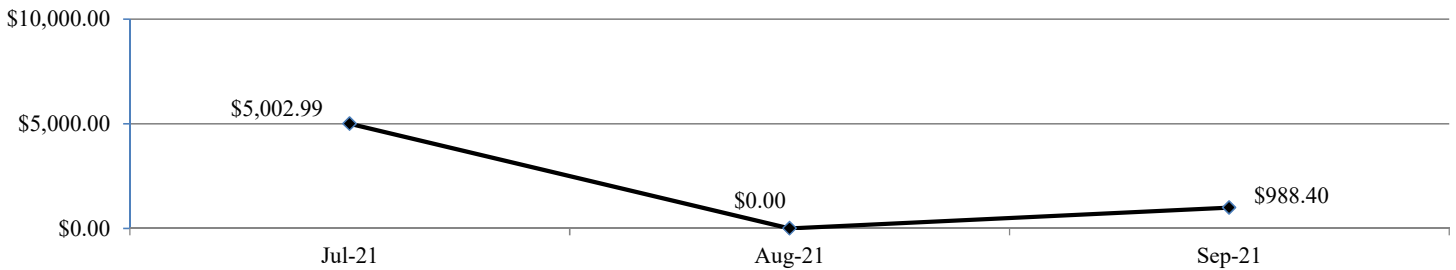


# Alameda County Employees' Retirement Association Third Quarter 2021 Directed Brokerage Report

## Quarterly Commentary

In 3Q21, the total recaptured dollar amount for ACERA's Directed Brokerage (DB) Program was \$5,991.39. Since inception<sup>1</sup>, ACERA has recaptured \$2,092,497.92. For the quarter, William Blair directed the highest percentage (36.11%) of trading volume and William Blair also generated the largest recaptured directed commission dollar amount (\$7,130.48). CAPIS received 100.0% of ACERA's directed trades among the network of correspondent brokers. On average the program continues to operate in compliance with ACERA's DB Policy.

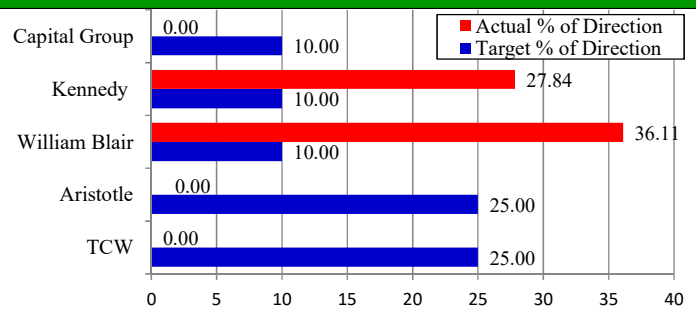
## Monthly Recaptured



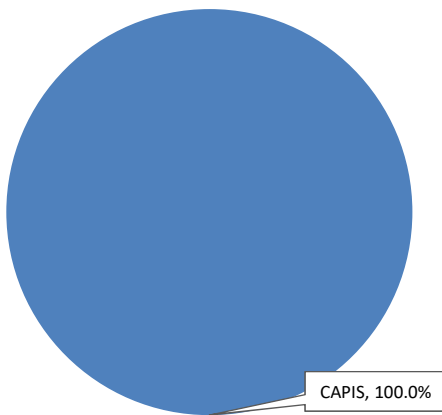
### Directed Commission \$<sup>2</sup>

Manager	3Q2021	YTD
Capital Group	0.00	0.00
Kennedy	6,679.27	18,642.22
William Blair	7,130.48	11,374.30
Aristotle Capital	0.00	0.00
TCW	0.00	12.64
<b>Total</b>	<b>\$13,809.75</b>	<b>\$30,029.16</b>

### Directed %<sup>3</sup>



## Directed % to Correspondent Brokers<sup>4</sup>



- |                         |                                      |
|-------------------------|--------------------------------------|
| Andes Capital Group     | Instinet LLC                         |
| B. Riley & Co.          | ITG, Inc.                            |
| Barclays (US Algo/DMA)  | LAM Securities                       |
| BIDS Trading            | Liquidnet                            |
| Bley Investment Group   | Merrill Lynch (U.S.)                 |
| Cabrera Capital Markets | Mischler Financial Group             |
| CAPIS                   | North South Capital                  |
| CAPIS Step Out          | O'Neil Securities                    |
| CF Global Trading       | Penserra Securities, LLC             |
| Cowen Securities (U.S.) | Pershing, LLC                        |
| Drexel Hamilton         | Piper Sandler                        |
| HSBC James Capel        | Societe Generale                     |
| ICAP (U.S.)             | State Street Global Markets (Europe) |
| Imperial Capital        | Virtu America LLC                    |

**Brokers are selected at the discretion of the Investment Managers, pursuant to Best Execution and ACERA's DB Policy.**

1. ACERA's DB Program began in September 2006. Mondrian, Bivium do not participate in Commission Recapture; Blackrock, Newton, and Templeton are comingled accounts and do not participate.  
 2. Data provided by CAPIS. Directed Commission \$ - Dollar amount of commissions from directed trades - this amount is split among ACERA (43.39% for 3Q2021), CAPIS, & the Correspondent Brokers.  
 3. Data provided by Zeno Consulting Group (Zeno). Directed % - Calculated by dividing Manager's directed trading volume by its total trading volume and compared to its assigned target. Target percentages are ranges (e.g. up to 25% for TCW).  
 4. Data provided by CAPIS.



**INVESTMENT MANAGER,  
CONSULTANT, AND CUSTODIAN FEES**  
For Quarter Ending Sept 30, 2021

**INVESTMENT NET ASSET VALUE AND INVESTMENT MANAGER FEES  
FOR THE QUARTER ENDED SEPT 30, 2021**

For the Quarter Ended Sept 30, 2021	NAV <sup>2</sup> (\$) As of 3/31/21	Q1 - Total Fees (\$)	bps of NAV	NAV <sup>2</sup> (\$) As of 6/30/21	Q2 - Total Fees (\$)	bps of NAV	NAV <sup>2</sup> (\$) As of 9/30/20	Q3 - Total Fees (\$)	bps of NAV
Name of Fund									
<b>Domestic Equity<sup>1</sup></b>									
Aristotle Capital	150,730,357	136,658	9.07	160,122,732	152,621	9.53	159,628,093	161,253	10.10
BlackRock R1000 Index Fund	2,251,830,085	46,533	0.21	2,409,566,427	50,694	0.21	2,451,477,372	54,043	0.22
Kennedy Capital	155,506,940	278,600	17.92	163,736,003	323,529	19.76	156,918,667	318,655	20.31
Trust Co. of the West	130,365,332	141,509	10.85	151,211,171	152,141	10.06	162,513,862	172,928	10.64
William Blair Small Cap Growth	163,621,954	310,642	18.99	171,569,253	322,748	18.81	157,117,239	311,865	19.85
Total Domestic Equity	2,852,054,668	913,943	3.20	3,056,205,586	1,001,732	3.28	3,087,655,233	1,018,744	3.30
<b>International Equity<sup>1</sup></b>									
BlackRock MSCI World ex-US	696,986,292	41,872	0.60	737,297,934	45,797	0.62	770,724,093	49,231	0.64
Bivium International Equity	141,465,263	271,534	19.19	150,898,722	294,838	19.54	155,722,747	320,296	20.57
Capital Group	679,744,520	1,184,087	17.42	726,094,505	1,254,066	17.27	757,197,338	1,177,633	15.55
Franklin Templeton Inv.	282,843,282	409,560	14.48	302,213,800	437,977	14.49	310,682,583	469,165	15.10
Mondrian	712,184,500	595,149	8.36	744,613,507	636,937	8.55	742,658,205	655,924	8.83
Newton Emerging Market Equity Fund	258,003,949	331,592	12.85	266,275,485	332,844	12.50	310,767,815	655,924	21.11
Total International Equity	2,771,227,806	2,833,795	10.23	2,927,393,953	3,002,460	10.26	3,047,752,781	3,328,174	10.92
<b>Fixed Income<sup>1</sup></b>									
Baird Advisors	854,968,230	154,416	1.81	872,487,802	160,038	1.83	1,354,352,403	221,671	1.64
Loomis Sayles	413,294,810	326,107	7.89	425,029,011	331,035	7.79	436,762,093	348,909	7.99
Brandywine Global FI	385,136,541	267,114	6.94	394,409,463	270,193	6.85	220,110,754	184,979	8.40
Total Fixed Income	1,653,399,581	747,637	4.52	1,691,926,276	761,265	4.50	2,011,225,250	755,559	3.76
<b>Real Estate<sup>5,6</sup></b>									
Total Real Estate	628,099,861	1,645,485	26.20	658,023,226	1,723,106	26.19	687,607,130	1,744,837	25.38
<b>Private Equity<sup>4,5,6</sup></b>									
Total Private Equity	929,908,240	3,014,241	32.41	967,246,420	2,770,055	28.64	966,626,903	3,622,697	37.48
<b>Absolute Return<sup>5,6</sup></b>									
Total Absolute Return	703,563,642	1,461,590	20.77	731,321,626	1,267,015	17.32	745,366,817	1,490,051	19.99
<b>Real Assets<sup>4,5,6</sup></b>									
Total Real Assets	506,512,344	609,490	12.03	533,663,716	815,084	15.27	702,539,133	579,259	8.25
<b>Private Credit<sup>4,5,6</sup></b>									
Total Private Credit	91,839,895	433,988	47.25	114,207,103	405,677	35.52	145,501,638	485,773	33.39
<b>Cash</b>	36,276,009			837,761,043			91,852,195*		
<b>TOTAL<sup>7</sup></b>	<b>10,172,882,047</b>	<b>11,660,169</b>	<b>11.46</b>	<b>11,517,748,949</b>	<b>11,746,393</b>	<b>10.20</b>	<b>11,486,127,080</b>	<b>13,025,094</b>	<b>11.34</b>

Notes:

\*Cash total includes the Parametric Cash Overlay NAV

- Domestic, International Equity, and Fixed Income managers' fees are based on staff validated manager invoices.
- NAVs may use estimates at the time of this report's production.
- Some accounts contain submanaged funds; the fees shown include all assets in the account.
- Sometimes fees may be estimates. According to the Limited Partnership Agreements, management fees are based on committed amounts and/or assets under management.
- Detailed records regarding these investments of public pension funds are exempt from disclosure under California Government Code Section 6254.26
- As of 1Q 2021, the management fee totals no longer includes estimates for other expenses and carried interest allocations. This additional information will be reported in the annual 7514.7 Alternative Investment Vehicles Information Report presented each December.
- Previous quarter's amounts may change as estimates are true up to actual amounts. Each true up is made using the most recent information.

**CONSULTANT/CUSTODIAN FEES  
FOR THE QUARTER ENDED SEPT 30, 2021**

	<b>Q1 - Fees (\$)</b>	<b>Q2 - Fees (\$)</b>	<b>Q3 - Fees (\$)</b>
<b>Consultant</b>			
Doug McCalla	12,616	12,616	12,616
Callan Associates	56,250	56,250	56,250
Verus Advisory, Inc.	178,750	178,750	178,750
Institutional Shareholders Services	13,575	13,575	13,575
Zeno Consulting Group	11,250	11,250	11,250
Sub-total Consultant	272,441	272,441	264,692
<b>Custodian</b>			
State Street Bank	142,930	142,930	142,930
<b>TOTAL OF CONSULTANT / CUSTODIAN FEES <sup>1</sup></b>	<b>415,371</b>	<b>415,371</b>	<b>407,622</b>

Notes:

1. Previous quarter's amounts may change as estimates are true up to actual amounts. Each true up is made using the most recent information.



**ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

475 14th Street, Suite 1000, Oakland, CA 94612    800/838-1932    510/628-3000    fax: 510/268-9574    www.acera.org

TO:                    Members of the Investment Committee

FROM:                Agnes Ducanes – Administrative Specialist II *A. Ducanes*

DATE:                December 8, 2021

SUBJECT:            Quarterly report on ACERA's Investment Products and Services  
Introductions (IPSI) Program

In the third quarter of 2021, Staff received 21 investment products and services inquiries from prospective providers. We met with 9 managers who presented through the IPSI process.

The purpose of IPSI is to provide prospective vendors an opportunity to gain a better understanding of ACERA's investment objectives and for Staff to learn about the vendors' investment products/services through face-to-face meetings, teleconferences, or video conferences. Staff has designated the morning of the third Wednesday of every month as ACERA's IPSI day. Each introductory session is approximately 45 minutes.

Below please find a chart depicting the types of IPSI sessions that were held in the third quarter of 2021.

<b>ASSET CLASS</b>	<b>Q1 '21</b>	<b>Q2 '21</b>	<b>Q3 '21</b>	<b>Q4'21</b>	<b>TOTAL</b>
<b>U.S. Equities</b>	0	0	0	0	0
<b>Int'l Equities</b>	0	0	1	0	1
<b>Fixed Income</b>	0	0	0	0	0
<b>Real Estate</b>	0	1	1	0	2
<b>Private Equities</b>	0	0	0	0	0
<b>Absolute Return</b>	0	11	0	0	11
<b>Real Assets</b>	2	0	1	0	3
<b>Private Credit</b>	5	0	2	0	7
<b>Other Services</b>	0	1	4	0	5
<b>TOTAL:</b>	<b>7</b>	<b>13</b>	<b>9</b>	<b>0</b>	<b>29</b>



**ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

475-14th Street, Suite 1000, Oakland, CA 94612 800/838-1932 510/628-3000 fax: 510/268-9574 www.acera.org

TO: Members of the Investment Committee

FROM: Thomas Taylor, Investment Officer *Thomas Taylor*

DATE: December 8, 2021

SUBJECT: Summary of Rebalancing and Cash Activities Completed in 3Q2021

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**Recommendation:**

Not Applicable – This is an information item.

**Background/Discussion:**

1. For the 3Q2021, there was no action required to rebalance the Total Fund for the quarter ending September 30, 2021. In accordance with ACERA's General Investment Guidelines, Policies and Procedures, Section V: Asset Allocation and Rebalancing, Schedule IA: Asset Allocation Targets, and Schedule IC: Asset Allocation Portfolio Rebalancing, no rebalancing signal was given or received during the period.
2. Regarding significant cash-flows for 3Q2021, Staff implemented the following changes to manage excess cash, make the supplemental month-end retiree benefits and administrative payroll, and to meet the capital calls and provide operating funds:
  - a. **Month-end payroll and Total Fund Withdrawals:** Staff withdrew a net \$60.0 million from the Total Fund to supplement for month-end payroll for the three-months ending September 30, 2021. Staff wired out \$20.5M in July, \$19.5M in August, and \$23.0M in September to ACERA'S Wells Fargo Bank account. Fiscal Services wired in \$2.0M in July, and \$1.0M in August to State Street Bank (#HI1A) from Wells Fargo Bank. The reason for noting the incoming wires is not all employer contributions are received before the month-end and administrative payroll for that month. Year-to-date withdrawals total a net \$195.8 million.
  - b. **Capital Calls, Distributions:** In general, wire-payments of \$115.2M in aggregate were made to meet capital calls and fund investments for ACERA's privately placed investments. Distributions, which include cash and in-kind distributions and return of principal (manly real estate distributions), totaled \$123.04 million for the second quarter. This dollar amount does not include other incidental income from other programs<sup>1</sup>.

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<sup>1</sup> Securities Lending Income (\$212.6K), Securities Litigation Income (\$102.0K) and Commission Recapture Income (\$4.6K) totaled \$319.2K. (Dividend and interest income from traditional managed accounts are reinvested and calculated separately, as part of the manager returns.)





- c. **Other Activity:** To meet the cash flow needs noted above (a. and b.), Staff raised \$60M from the Blackrock Russell 1000 Index Fund on 9/2/2021. The U.S. Equity asset calls was the most overweight of the traditional asset classes in May and staff, following standard procedures, withdrew funds from the domestic index fund.

Separately, the \$812.6M contribution from the County and the Livermore Area Recreation and Park District on 6/29/2021 (previously reported in the 2Q2021 Quarterly Rebalancing Report) was invested and/or rebalanced in the following accounts:

**Additions**

Baird	\$ 315,000,000
Bivium	\$ 10,000,000
Capital Group	\$ 50,000,000
FTI	\$ 15,000,000
Loomis Sayles	\$ 11,000,000
Mondrian	\$ 27,000,000
Newton	\$ 50,000,000
SSGA Liquid Pool	\$ 153,000,000
TCW	\$ 8,500,000

**Withdrawals**

Brandywine	-\$ 165,000,000
Kennedy	-\$ 5,000,000
William Blair	-\$ 15,000,000

**Summary**

Total Received	\$ 812,600,000
Net Invested	<u>\$ 752,500,000</u>
Cash Unallocated	\$ 60,100,000

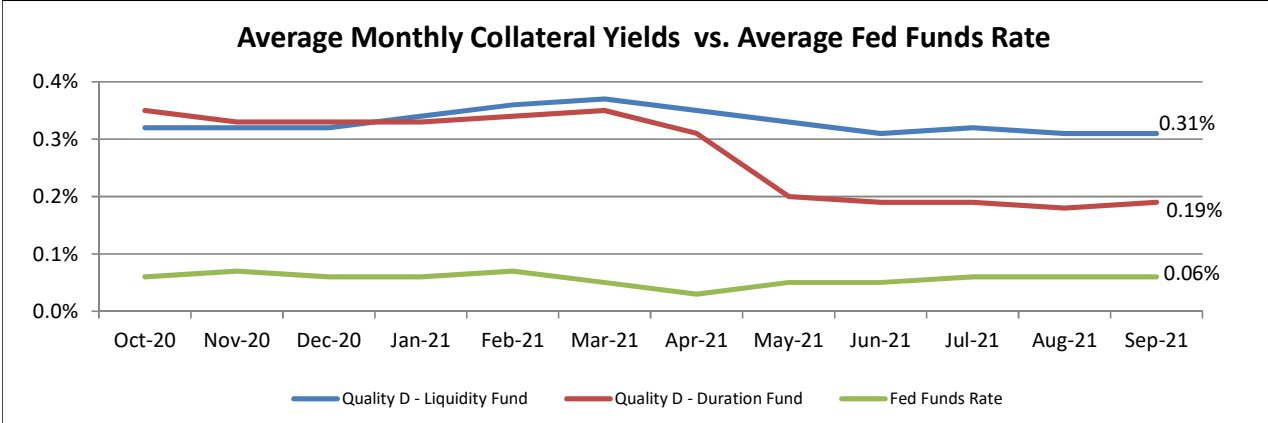
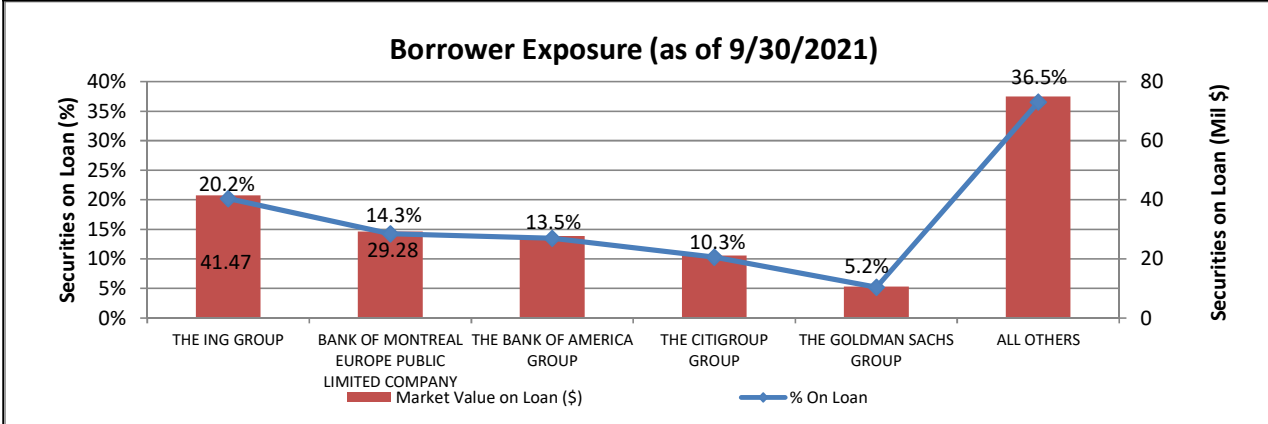
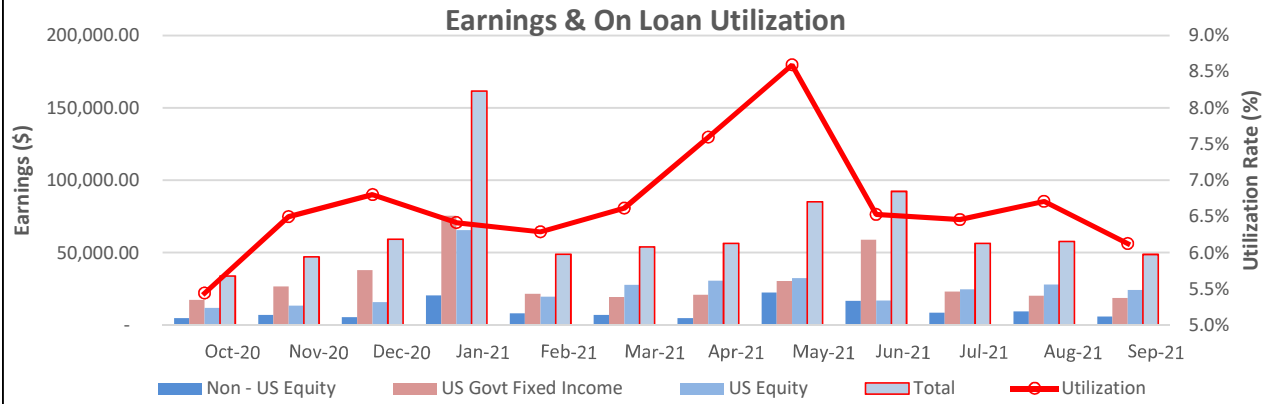
Reporting of rebalancing activities will continue to be submitted to the Investment Committee on a quarterly basis.

# Alameda County Employees' Retirement Association

## 3rd Quarter 2021 Securities Lending Report

### Quarterly Summary

In 3Q2021, ACERA's earnings from Securities Lending activities were \$163,092.03. U.S. Equities generated the highest earnings of \$62,154.18. For the quarter ending September 30, 2021, the average value of securities out on loan was \$225,913,267.67. The average lendable amount for the same period was \$2.986 billion. The ING Group was the largest borrower of ACERA's securities with 20.2% or \$41.47 million.



**Notes:**

- Quality D Liquidity and Quality D Duration Funds are managed by an affiliate of State Street Bank (SSB); these funds are common pools in which many securities lending clients of SSB invest their cash collateral generated from their security lending activities. ACERA invests the cash collateral received from its security lending activities into Quality D Liquidity and Quality D Duration Funds. As of 9/30/2021, ACERA's combined NAV per unit of the Quality D Liquidity (1.00) and Quality D Duration Funds (96.55) was \$0.9999. As of 9/30/2021, Quality D Liquidity had 184,790,316.54 units and Quality D Duration had 230,407.36 units.

(2) Data represents past performance and is not necessarily indicative of future results.

*Securities Lending Report Provided by Staff*

(3) Data Source: my.statestreet.com and Securities Finance Business Intelligence

ICM 12/8/2021



## Investment Committee Workplan for 2021

December 8, 2021

	<b>Action Items</b>	<b>Information Items</b>
January 8	<ol style="list-style-type: none"> <li>1. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$35 million Investment in Peak Rock Fund III as part of ACERA’s Private Equity Portfolio – Buyout</li> <li>2. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$25 million Investment in Artemis Real Estate Partners Healthcare Fund II as part of ACERA’s Real Estate Portfolio – Value-Added</li> </ol> <hr/> <p style="text-align: center;">Adjournment into Closed Session</p> <p style="text-align: center;">Consider the Purchase or Sale of Particular, Specific Pension Fund Investments (CA Gov. Code § 54956.81) (One Investment)</p>	<ol style="list-style-type: none"> <li>1. CA Gov. Code § 7514.7 Alternative Investment Vehicle Information Report</li> <li>2. Proposed Investment Committee Work Plan for 2021</li> </ol>
February 10	<ol style="list-style-type: none"> <li>1. Discussion of and Possible Motion to Recommend that the Board Adopt the 2021 – 2022 Investment Plan for ACERA’s Real Estate Asset Class</li> </ol>	<ol style="list-style-type: none"> <li>1. Investment Committee Work Plan 2021</li> </ol>
March 10	<ol style="list-style-type: none"> <li>1. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$30 million Investment in Genstar Capital Partners Fund X as part of ACERA’s Private Equity Portfolio – Buyout, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> <li>2. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$27 million Investment in Strategic Value</li> </ol>	<ol style="list-style-type: none"> <li>1. <i>Quarterly report of ACERA’s investment manager, consultant, and custodian bank fees for the fourth quarter of 2020</i></li> <li>2. <i>Quarterly report on ACERA’s rebalancing activities for the fourth quarter 2020</i></li> <li>3. <i>Quarterly report on ACERA’s securities lending activities for the fourth quarter of 2020</i></li> </ol>

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## Investment Committee Workplan for 2021

December 8, 2021

### Action Items

### Information Items

	Action Items	Information Items
	<p>Special Situations Fund V as part of ACERA’s Private Equity Portfolio – Debt Related/Special Situations, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</p> <p>3. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$25 million Investment in Vision Ridge Partners Sustainable Asset Fund III as part of ACERA’s Real Assets Portfolio – Infrastructure, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</p> <p>4. Discussion and Possible Motion to Recommend that the Board Adopt the Proposed Environmental, Social and Governance (ESG) Investment Policy</p>	<p>4. <i>Quarterly report on ACERA’s Directed Brokerage (DB) Program for the fourth quarter of 2020</i></p> <p>5. <i>Quarterly report on Investment Products and Services Introductions (IPSI) for the fourth quarter of 2020</i></p> <p>6. <i>Investment Committee Work Plan 2021</i></p>
April 14	<p>1. Discussion of and Possible Motion to Recommend that the Board Approve Certain Changes to the Absolute Return Asset Class Structure</p> <p>2. Discussion and Possible Motion to Recommend that the Board Hire an Overlay Services Provider, Pending Completion of Legal and Operational Due Diligence and Successful Contract Negotiations</p>	
May 5 (meeting moved to third Wednesday due to SACRS Conference)	<p>1. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$40 million Investment in CBRE Strategic Partners U.S. Value 9 as part of ACERA’s Real Estate Portfolio – Value Added, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</p> <p>2. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$27 million Investment in ABRY Senior Equity VI, L.P. as part of ACERA’s Private Equity Portfolio – Debt</p>	

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## Investment Committee Workplan for 2021

December 8, 2021

	<b>Action Items</b>	<b>Information Items</b>
	Related/Special Situations, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations	
June 9	<ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$50 million Investment in Starwood Distressed Opportunity Fund XII as part of ACERA’s Real Estate Portfolio – Opportunistic, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> <li>2. Discussion and Possible Motion to Recommend that the Board Approve Changes to ACERA’s Portfolio Asset Allocation</li> </ol>	<ol style="list-style-type: none"> <li>1. Semiannual Performance Review for the Period Ending March 31, 2021 – Real Estate</li> <li>2. Semiannual Performance Review for the Period Ending March 31, 2021 – Equities and Fixed Income</li> <li>3. Semiannual Performance Review for the Period Ending March 31, 2021 – Absolute Return</li> <li>4. Semiannual Performance Review for the Period Ending September 30, 2020 – Private Equity</li> <li>5. Semiannual Performance Review for the Period Ending December 31, 2020 – Private Credit</li> <li>6. Semiannual Performance Review for the Period Ending December 31, 2020 – Real Assets</li> <li>7. <i>Quarterly report of ACERA’s investment manager, consultant, and custodian fees for the first quarter of 2021</i></li> <li>8. <i>Quarterly report on ACERA’s rebalancing activities for the first quarter of 2021</i></li> <li>9. <i>Quarterly report on ACERA’s securities lending activities for the first quarter of 2021</i></li> <li>10. <i>Quarterly report on ACERA’s Directed Brokerage (DB) Program for the first quarter of 2021</i></li> <li>11. <i>Quarterly report on Investment Products and Services Introduction (IPSI) for the first quarter of 2021</i></li> <li>12. <i>Updated Investment Committee Work Plan 2021</i></li> </ol>

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## Investment Committee Workplan for 2021

December 8, 2021

<b>Action Items</b>	<b>Information Items</b>
<p>July 14</p> <ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to recommend that the Board Approve an Updated Absolute Return Policy</li> </ol>	<ol style="list-style-type: none"> <li>1. Report on the Proposed Timeline, Search Criteria, and Evaluation Matrix for ACERA’s Absolute Return (Custom Fund of Hedge Funds) Manager Search</li> <li>2. Oral Status Update on Implementing the Following:               <ol style="list-style-type: none"> <li>a. The newly approved Asset Allocation</li> <li>b. The pre-fundings from Alameda County and LARPD</li> </ol> </li> </ol>
<p>August 11</p> <ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to Recommend that the Board Approve the Proposed Timeline, Minimum Qualifications, and Evaluation Matrix for ACERA’s Absolute Return (Custom Fund of Hedge Funds) Manager Search</li> </ol>	<ol style="list-style-type: none"> <li>1. Proxy Voting Education and Discussion of ACERA’s Proxy Voting Policy</li> </ol>
<p>September 8</p> <ol style="list-style-type: none"> <li>1. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$70 million Investment in Ares Senior Direct Lending Fund II as part of ACERA’s Private Credit Portfolio - Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> <li>2. Discussion of and Possible Motion to Recommend to the Board to Adopt an up to \$25 million Investment in Summit Partners Growth Equity XI as part of ACERA’s Private Equity Portfolio – Venture Capital, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> </ol>	<ol style="list-style-type: none"> <li>1. Review of ACERA’s Dedicated Emerging Markets Equity Manager Newton Investment Management</li> <li>2. Verus firm update – Introduction of Eileen Neill, CFA, Managing Director/Senior Consultant</li> <li>3. <i>Quarterly report of ACERA’s investment manager, consultant, and custodian bank fees for the second quarter of 2021</i></li> <li>4. <i>Quarterly report on ACERA’s rebalancing activities for the second quarter of 2021</i></li> <li>5. <i>Quarterly report on ACERA’s securities lending activities for the second quarter of 2021</i></li> </ol>

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## Investment Committee Workplan for 2021

December 8, 2021

Action Items	Information Items
	<ol style="list-style-type: none"> <li>6. <i>Quarterly report on ACERA's Directed Brokerage (DB) Program for the second quarter of 2021</i></li> <li>7. <i>Quarterly report on Investment Products and Services Introduction (IPSI) for the second quarter of 2021</i></li> <li>8. <i>Updated Investment Committee Work Plan for 2021</i></li> </ol>
<p>October 13</p> <ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to Recommend that the Board to Adopt an up to \$XX million Investment in Angelo Gordon Credit Solutions Fund II as part of ACERA's Private Equity Portfolio – Debt-Related/Special Situations, Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> <li>2. Discussion and Possible Motion to Recommend that the Board Adopt an Updated Private Equity Investment Policy</li> <li>3. Discussion and Possible Motion to Recommend that the Board Adopt a New Private Equity Investment Plan</li> </ol>	<ol style="list-style-type: none"> <li>1. Review of Jamestown Premier Property Fund – (Real Estate)</li> <li>2. Review of ESG Reporting and Monitoring on ACERA Portfolio (Placeholder)</li> </ol>
<p>November 3 (meeting moved to first Wednesday due to SACRS Conference)</p> <ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to Recommend to the Board the Timeline, Minimum Qualifications, and Scoring Matrix for the Emerging Markets Equity Manager Search</li> <li>2. Discussion and Possible Motion to Recommend that the Board Adopt an Amended ACERA Real Estate Investment Guidelines, Policies and Procedures</li> <li>3. Discussion and Possible Motion to Recommend that the Board Adopt a New Investment Plan for ACERA's Real Estate Asset Class</li> <li>4. Discussion and Possible Motion to Recommend that the Board Direct Staff to Send Proposed Letter to ACERA's Real Estate Managers Regarding the Expiration of the Eviction Moratorium</li> </ol>	

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## Investment Committee Workplan for 2021

December 8, 2021

	<b>Action Items</b>	<b>Information Items</b>
	Investment Due Diligence and Successful Contract Negotiations	
December 8	<ol style="list-style-type: none"> <li>1. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$30 million Investment in Tiger Infrastructure Partners Fund III as part of ACERA’s Real Asset Portfolio – Infrastructure Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> <li>2. Discussion and Possible Motion to Recommend that the Board Adopt an up to \$75 million Investment in Monroe Capital Private Credit Fund IV as part of ACERA’s Private Credit Portfolio – Pending Completion of Legal and Investment Due Diligence and Successful Contract Negotiations</li> </ol>	<ol style="list-style-type: none"> <li>1. Semiannual Performance Review for the Period Ending June 30, 2021 – Real Assets</li> <li>2. Discussion on ESG implementation for ACERA</li> <li>3. Semiannual Performance Review for the Period Ending September 30, 2021 – Real Estate</li> <li>4. Semiannual Performance Review for the Period Ending September 30, 2021 – Equities and Fixed Income</li> <li>5. Semiannual Performance Review for the Period Ending September 30, 2021 – Absolute Return</li> <li>6. Semiannual Performance Review for the Period Ending June 30, 2021 – Private Equity</li> <li>7. Semiannual Performance Review for the Period Ending June 30, 2021 – Private Credit</li> <li>8. CA Gov. Code § 7514.7 Information Report</li> <li>9. <i>Quarterly report of ACERA’s investment manager, consultant, and custodian bank fees for the third quarter of 2021</i></li> <li>10. <i>Quarterly report on ACERA’s rebalancing activities for the third quarter 2021</i></li> <li>11. <i>Quarterly report on ACERA’s securities lending activities for the third quarter of 2021</i></li> <li>12. <i>Quarterly report on ACERA’s Directed Brokerage (DB) Program for the third quarter of 2021</i></li> </ol>

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## Investment Committee Workplan for 2021

December 8, 2021

### Action Items

### Information Items

		<i>13. Quarterly report on Investment Products and Services Introductions (IPSI) for the third quarter of 2021</i> <i>14. Updated Investment Committee Work Plan 2021</i>
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