

Meeting Date

08/20/2025

Agenda Item

#3a.



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



PERIOD ENDING: JUNE 30, 2025

Investment Performance Review for

Contra Costa County Employees' Retirement Association

Table of Contents



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Investment Landscape	TAB I
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Investment Performance Review	TAB II
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PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

**3RD QUARTER 2025
Investment Landscape**

Verus business update

Since our last Investment Landscape webinar:

- Verus hired Carlos Garcia as Accounting Specialist, and three new employees to join the Investment Analytics Team: Jonathan Verceles, Zander Richens, and Nick Utgard.
- Verus promoted Kelli Barkov to Business Operations Director, Anneke Meulblok to Business Operations Manager, Joe Ratliffe to Consulting Associate, and Nico Caballero to Private Markets Research Analyst.
- The 2025 Real Assets Outlook was released.
- Recent research, found at verusinvestments.com/research:
 - *State of the Core Real Estate Fund Universe*
 - *LDI for Public Sponsors*
 - *So, What Now?*
 - *This Matters, and This Doesn't*

Table of contents



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Economic environment 9

Fixed income rates & credit 20

Equity 25

Other assets 36

Appendix 40

Recent Verus research

Visit: verusinvestments.com/research

Thought leadership

STATE OF THE CORE REAL ESTATE FUND UNIVERSE

Verus addresses the state of the core real estate fund universe. Discussion includes the mixed fundamental conditions facing the asset class and the heavy redemption queues that continue to challenge certain funds and frustrate investors who are seeking liquidity.

SO, WHAT NOW?

Our CIO examines the current market environment after global tariffs are released by the U.S. government.

LDI FOR PUBLIC SPONSORS

We explore the dichotomy in LDI adoption between sponsor types. We discuss the characteristics of pension plans that make LDI strategies beneficial. We assess the current environment, to illustrate why LDI may appear relatively attractive today.

THIS MATTERS, AND THIS DOESN'T

We offer a few perspectives regarding what we watch out for to acknowledge or even avoid biases where possible. Deciding what matters most to the portfolio by ensuring a balanced set of information sources, keeping a watchful eye for biases and carefully thinking about incentives, and also determining what doesn't matter.

2nd quarter summary

THE ECONOMY

- Real GDP growth beat expectations in Q2, coming in at 3.0% quarter-over-quarter annualized (2.0% year-over-year) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.
- U.S. inflation remained sticky and above the Fed's target, rising from 2.4% to 2.7%. There is evidence of price increases across particular items such as televisions, auto parts, and medical equipment, but these rises so far are not large enough to materially lift the overall inflation rate. Some broad inflation categories such as 'apparel' and 'new automobiles' have fallen in price since March.

EQUITY

- If U.S. businesses mostly choose to absorb the cost of tariffs rather than hike prices, that would be good for inflation. But this scenario would be damaging to corporate earnings as tariffs hit profit margins. Year-over-year Q2 S&P 500 earnings growth is expected to be +5.6%, according to FactSet as of July 11th. This would mark the weakest growth rate since Q4 2023. Earnings growth is expected to ramp up in the coming quarters, with +9.3% growth for calendar year 2025, according to FactSet.

FIXED INCOME

- The 10-year U.S. Treasury yield ended Q2 relatively unchanged at 4.23%. Shorter-term bond yields came down slightly, contributing to a positive return on short- and medium-term Treasury bonds.
- Credit spreads widened in April following tariff "Liberation Day", but quickly rebounded after delays, progress regarding negotiations, and muted economic impacts helped improve the outlook. Despite widening by nearly 1% in April, high yield bond spreads ended the quarter tighter by 56bps at 2.96%. Investment grade spreads similarly tightened, ending the quarter at 0.88%. These levels are extremely tight relative to history.

ASSET ALLOCATION ISSUES

- Regional equity markets delivered similar returns. U.S. investors experienced substantial underperformance from domestic equities. However, most of this underperformance was a product of changes in U.S. dollar value, rather than differences in returns between domestic and non-U.S. equity. Depreciation in the dollar resulted in large currency gains for unhedged investors.
- Market-priced volatility spiked above 50 to extreme levels in early April as trade policies shocked markets and led to fears of a trade slowdown and global recession. Bilateral de-escalation of tariffs has eased market volatility, as well as announcements of new trade agreements.

The U.S. job market, household spending, and business investment have remained fairly resilient

Surprisingly strong economic data suggests the likelihood of recession is low

What drove the market in Q2?

“The stock market is on the verge of an all-time record”

S&P 500						
Jan 1 st	Feb 1 st	Mar 1 st	Apr 8 th	May 1 st	June 1 st	July 1 st
5868	5994	5849	4982	5604	5935	6198

Article Source: CNN, June 25th, 2025 (April 8th shown as this was the market bottom)

“Israel-Iran Ceasefire Holds, Offering Hope...”

WTI Crude Oil					
April 1 st	April 30 th	May 15 th	May 30 th	June 20 th	June 30 th
\$71.2	\$58.2	\$61.6	\$60.8	\$73.8	\$65.1

Article Source: CBS News, June 25th, 2025

“Dollar drops on Middle East optimism, Euro highest since 2021”

Euro/USD Exchange Rate					
Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25
1.04	1.04	1.08	1.14	1.14	1.18

Article Source: Reuters, June 24th, 2025

“Trump announces sweeping new tariffs to promote U.S. manufacturing, risking inflation and trade wars”

Average U.S. Tariff Rate					
2000	2005	2010	2015	2020	2025*
2.1%	1.8%	1.8%	1.7%	1.5%	15.6%

Article Source: Associated Press, April 3rd, 2025

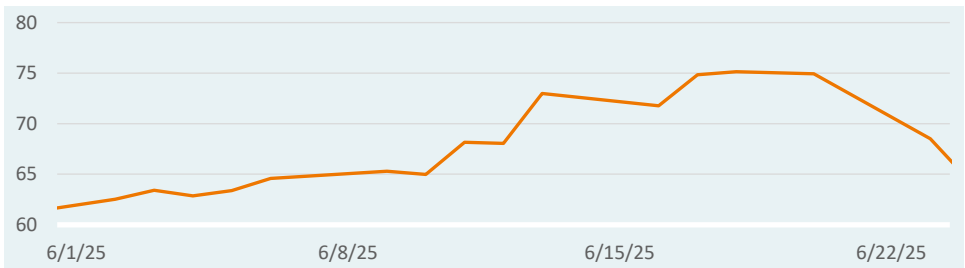
*Yale Budget Lab estimate of tariff rate as of June 1st if tariff policy were to be held perpetually

U.S. EQUITY PERFORMANCE



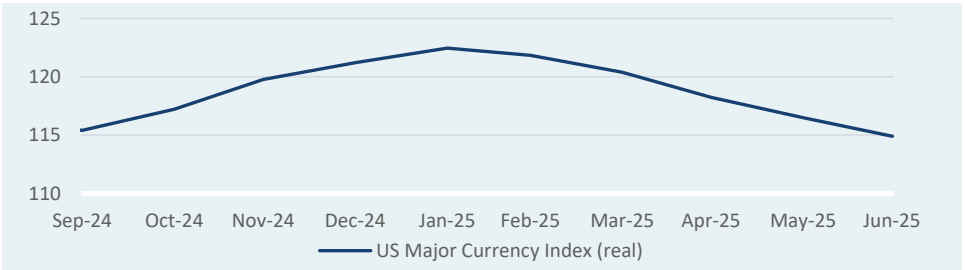
Source: Standard & Poor's, as of 6/30/25

OIL PRICE (WTI CRUDE BBL)



Source: Bloomberg, as of 6/30/25

U.S. DOLLAR VALUE



Source: Bloomberg, as of 6/30/25

Economic environment

U.S. economics summary

- Real GDP growth beat expectations in Q2, coming in at 3.0% QoQ annualized (2.0% YoY) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.
- There has been growing evidence that many worst case scenarios regarding tariffs and trade are unlikely to materialize. U.S. GDP growth rebounded strongly, the job market remains resilient, consumer spending growth is positive, and both business and household sentiment is improving. Inflation levels have fallen rather than risen, although uncertainty exists around how tariffs will impact everyday prices.
- The rate of unemployment fell to 4.1% in June, alongside a jobs report that beat expectations by a wide margin (147,000 vs. 117,500 expected). Weekly jobless claims activity has been very low (the number of individuals who newly filed for unemployment benefits).
- The Federal Reserve kept rates steady again in June at a target range of 4.25%-4.50%, expressing concerns about possible inflationary impacts of tariffs. Chair Jerome Powell at the meeting said that policymakers are “well positioned to wait” and that there are few signs of economic weakening.
- Inflation was sticky and above the Fed’s target during Q2, rising from 2.4% to 2.7%. Excluding food and energy prices, inflation held steady at 2.9% in June relative to 2.8% in March. So far, there is some evidence of tariff-driven inflation but not enough to lift the overall inflation rate.
- Poor consumer sentiment has been a key story of 2025, as households became concerned about inflation, slowing growth, and worse job prospects due to tariffs and shifting U.S. trade policy. However, sentiment improved in June according to the U of Michigan survey. One-year inflation expectations dropped significantly, from 6.6% in May to 5.0% in June, as Americans see that tariffs are not yet leading to broad-based price rises.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.0% 6/30/2025	3.0% 6/30/2024
Inflation (CPI YoY, Core)	2.9% 6/30/2025	3.3% 6/30/2024
Expected Inflation (5yr-5yr forward)	2.3% 6/30/2025	2.3% 6/30/2024
Fed Funds Target Range	4.25% - 4.50% 6/30/2025	5.25% - 5.50% 6/30/2024
10-Year Rate	4.2% 6/30/2025	4.4% 6/30/2024
U-3 Unemployment	4.1% 6/30/2025	4.1% 6/30/2024
U-6 Unemployment	7.7% 6/30/2025	7.4% 6/30/2024

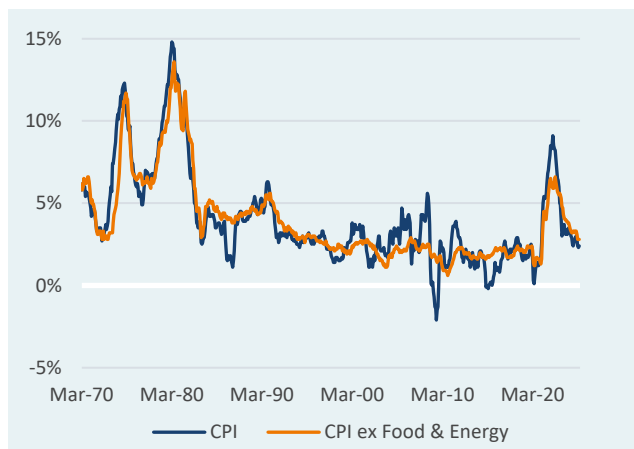
Inflation

U.S. inflation (CPI) remained sticky and above the Fed's target during Q2, rising from 2.4% to 2.7%. Excluding volatile food and energy prices, inflation held steady at 2.9% in June relative to 2.8% in March. We believe there is both some good news and also some bad news around recent inflation trends.

With regard to good news, investors have been watching closely for any signs of tariff-driven price increases, and after the government CPI report in June, there is evidence of price increases across particular items such as televisions, auto parts, and medical equipment, but these rises are so far not large enough to materially lift the overall inflation rate. Some broad inflation categories such as 'apparel' and 'new automobiles' reflect prices that are actually lower than March levels. Investors will need to continue to wait and see the degree to which businesses are passing tariff costs on to customers or are instead absorbing the costs.

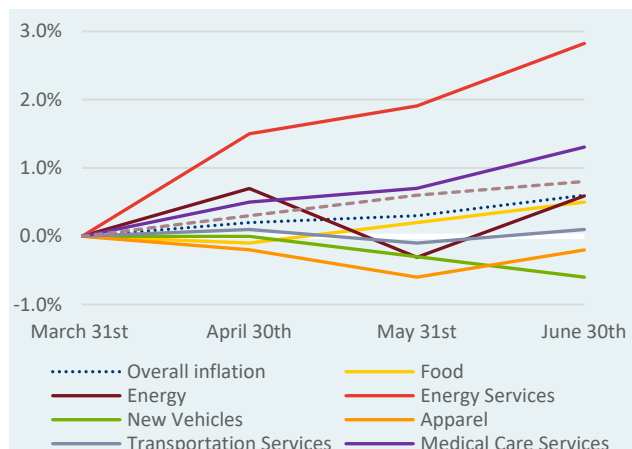
With regard to bad news around inflation, looking across all goods and service price categories, price rises were fairly broad and consistent in June. Inflation trends suggest perhaps a 2.5-3.5% range of inflation in the future—not too far from the recent range. Without further weakness in the economy, it is difficult to imagine price trends slowing materially or reversing, and the potential for tariff-fueled inflation adds some upside risk to the future range of outcomes.

U.S. CPI (YOY)



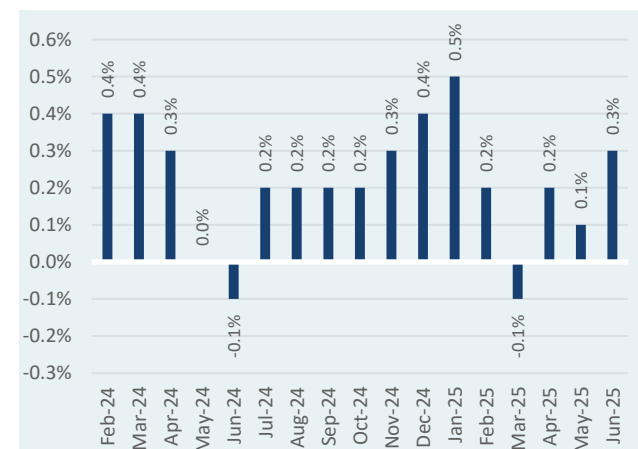
Source: BLS, as of 6/30/25

INFLATION SINCE "LIBERATION DAY"



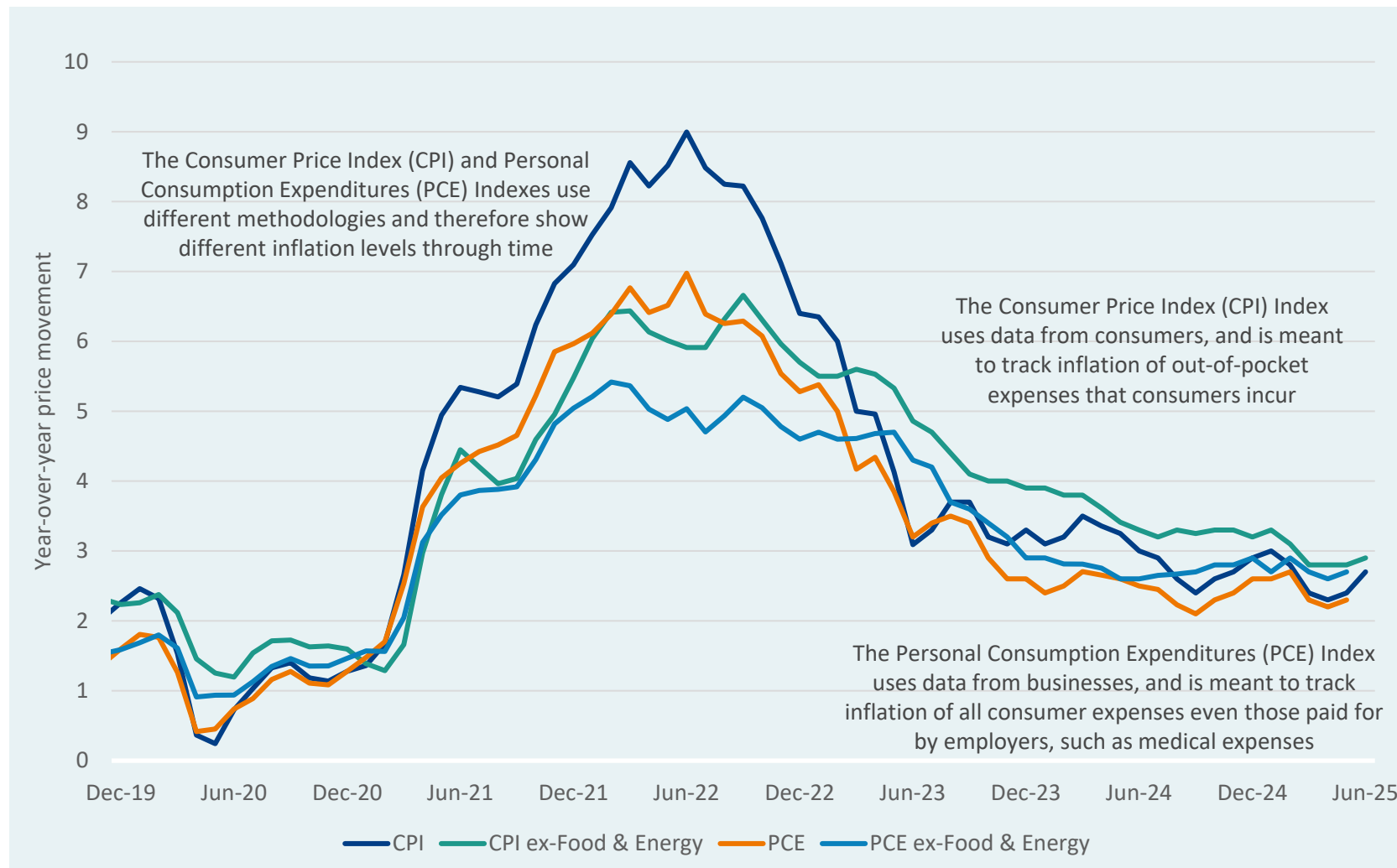
Source: Verus, BLS, as of 6/30/25

MONTHLY PRICE MOVEMENT (CPI)



Source: BLS, as of 6/30/25

U.S. inflation remains above the Fed target



Inflation remained sticky, above the Fed's 2% target

So far, there is little evidence of broad tariff-fueled price rises

Source: FRED, Verus, as of 6/30/25 – or most recent release

GDP growth

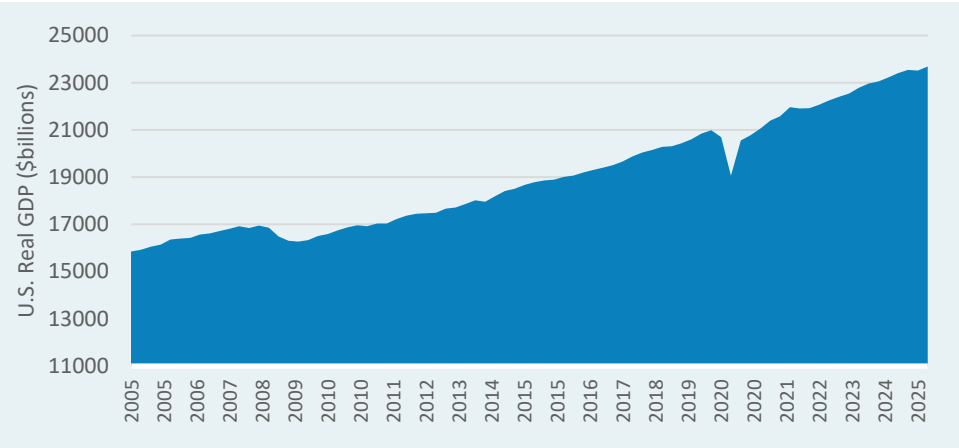
Real GDP growth beat expectations in Q2, coming in at 3.0% quarter-over-quarter annualized (2.0% year-over-year) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.

Consumer spending, which is the largest component of the economy, once again showed a slow growth rate of 1.4% annualized, but growth was positive despite very poor sentiment since April. Business investment was also positive at a 1.9% annualized growth rate as businesses continued to spend and invest despite the shift in U.S. trade policy.

An interesting dynamic in the U.S. economy has been occurring across inventory purchases and import activity (see bottom right chart). The first and second quarters were nearly mirror opposite images of one another in this respect. In Q1, businesses dramatically increased their foreign purchases (imports) in an effort to avoid incoming tariffs. Imports often occur to the detriment of domestic purchases, which means imports dragged growth significantly lower in Q1. In Q2, this reversed as fewer imports were needed after such large Q1 purchases, meaning fewer imports greatly boosted growth in Q2. Inventories showed a similar effect but in opposite order—big inventory purchases occurred in Q1 as businesses avoided tariffs which boosted the economy and then in Q2 fewer inventories were needed which created a drag on the economy.

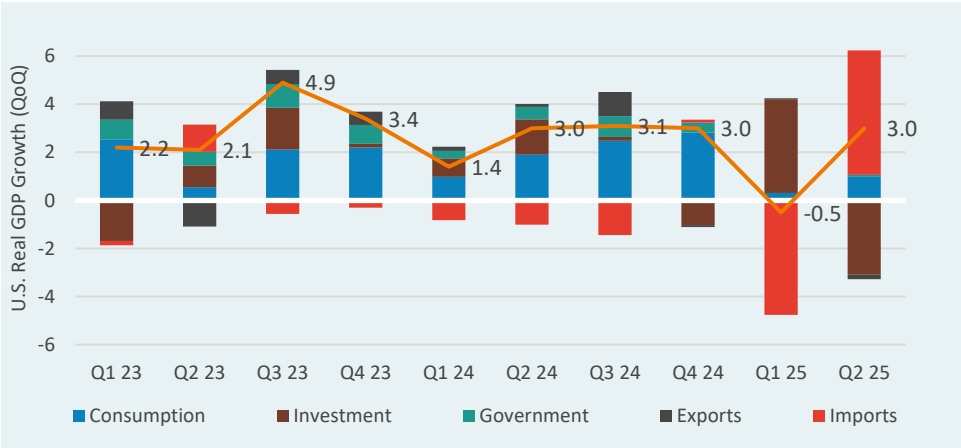
U.S. real GDP growth of 3% beat expectations and provided further evidence that economic activity remains stable

U.S. GDP GROWTH



Source: FRED, as of 6/30/25

U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 6/30/25

Labor market

Most aspects of the labor market continue to suggest good to strong conditions. The rate of unemployment fell to 4.1% in June, alongside a jobs report that beat expectations by a wide margin (147,000 vs. 117,500 expected). Additionally, weekly jobless claims activity has been very low (the number of individuals who newly filed for unemployment benefits). In fact, job openings defied expectations in April and May, rising during both months. However, not all aspects of the job market have shown strength. Hiring activity has been muted and job seekers report having more difficulty finding work. Uncertainty exists around government layoffs and the ability of those workers to find new positions—this may be playing a part in jobs data (a large portion of job gains in June were for

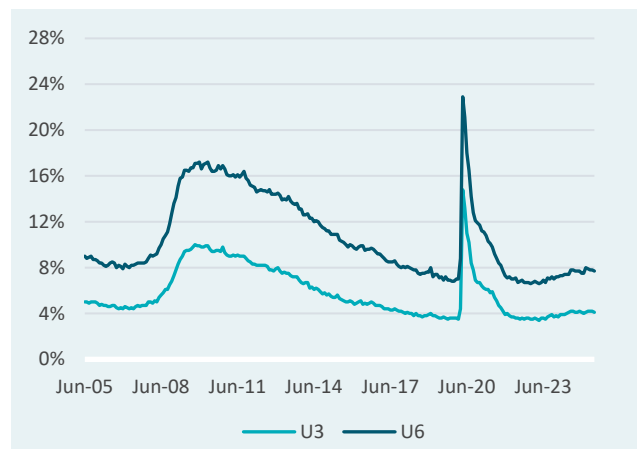
state & local government positions). The labor market tends to be a key indicator of the health of the economy, which suggests recession risk is low.

Less U.S. immigration will likely impact the economy throughout the year—as fewer workers are available in certain occupations and regions, perhaps pushing wages upwards due to less supply of cheap labor. In June it was reported that the Trump administration was considering exempting farms, hotels, and restaurants from immigration crackdowns. As certain businesses face pressure, we would not be surprised to see the executive branch ease immigration enforcement in some targeted ways.

The job market remains relatively strong

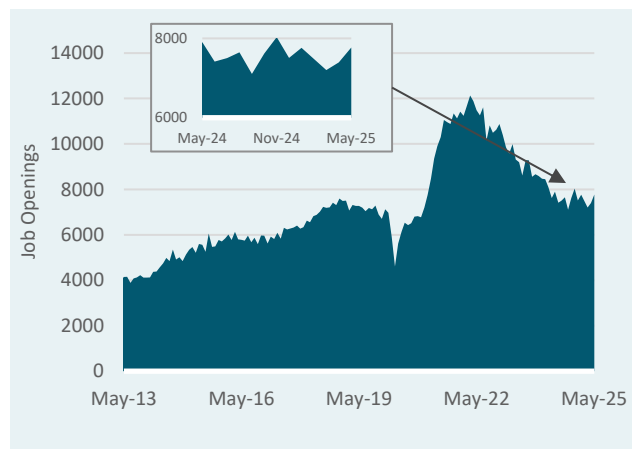
Immigration enforcement may impact business activity & wages in 2025

U.S. UNEMPLOYMENT



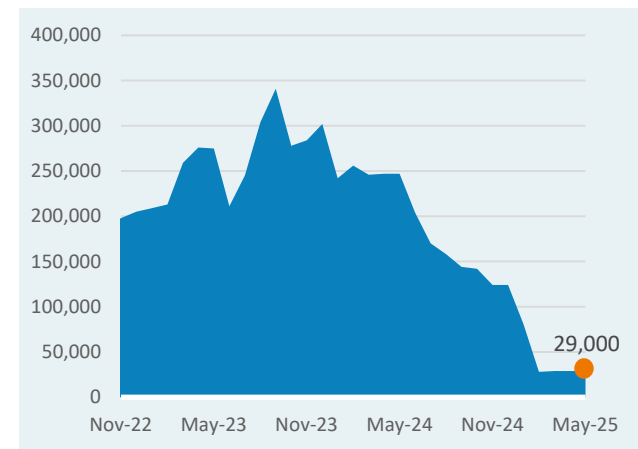
Source: FRED, as of 6/30/25

U.S. JOB CUT ANNOUNCEMENTS



Source: FRED, Nonfarm Job Openings, as of 5/31/25

U.S. BORDER ENCOUNTERS (MONTHLY)



Source: U.S. Customs & Border Protection total national unlawful encounters, as of 5/31/25

The consumer

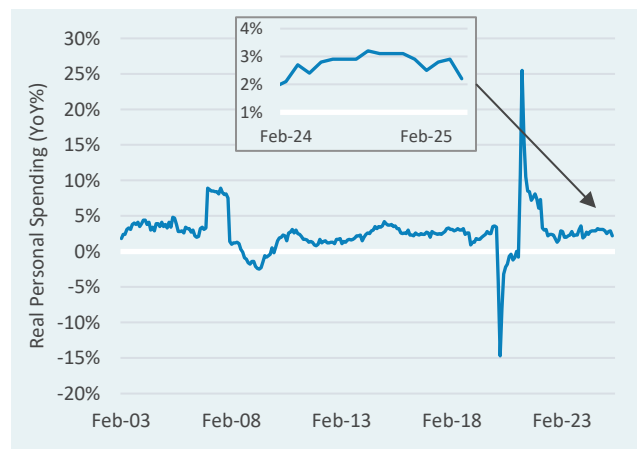
Inflation-adjusted personal spending growth was 2.2% year-over-year in May, materially weaker than the latter-half of 2024 (above 3%) but still at a level that implies a moderate U.S. economic growth rate. Spending has been somewhat volatile month-to-month and there is much uncertainty around the degree to which households are pulling back on purchases.

So far, data suggests a low chance of near-term recession. Consumer spending growth has been positive and, given the recent upturn in consumer sentiment, it would be surprising to see a sharp slowdown many months after the initial shock to confidence amidst tariff fears. Here we show automobile

and overall retail sales as possible barometers of discretionary spending. Auto sales saw large gains in spring but have since fallen back towards early 2025 levels, while retail sales overall have been steady.

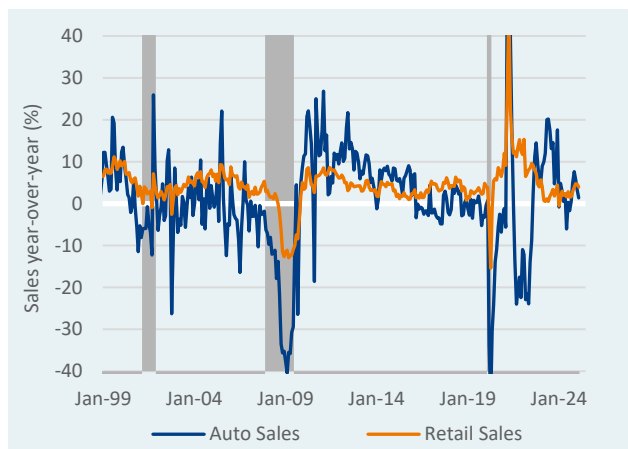
The average household savings rate was relatively stable at 4.5% during the quarter, after rising notably through the first quarter. As always, it is difficult to pin down specific reasons for higher household savings. Elevated savings could be a product of more conservative spending habits if households are more concerned about the future, it could be a natural result of lower U.S. inflation as price rises slow and more income is left over to save, or it could be due to other factors.

REAL PERSONAL SPENDING



Source: FRED, as of 5/31/25

AUTO & RETAIL SALES



Source: FRED, as of 5/31/25

PERSONAL SAVINGS RATE



Source: FRED, as of 5/31/25

Sentiment

Very poor consumer sentiment has been a key story of 2025, as households became concerned about potentially rising inflation, a slowing economy, and worse job prospects as consequences of tariffs and shifting U.S. trade policy. However, sentiment has seen improvement according to popular sentiment surveys. It appears that some fears are easing as the economy and job market remain strong, though households are more pessimistic than prior to the shift in U.S. trade policy.

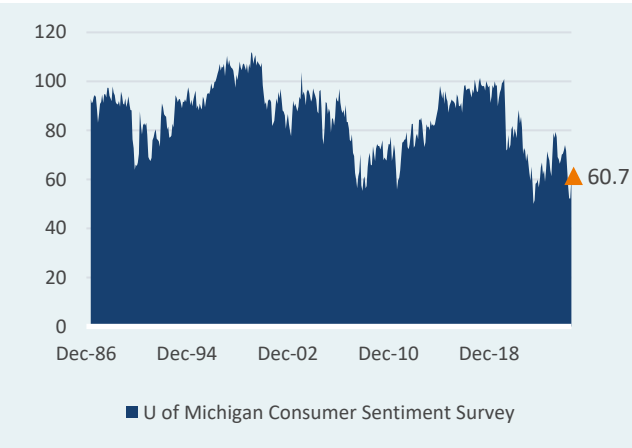
The University of Michigan survey improved in June, due to some easing of fears and acknowledgment that economic conditions remain surprisingly resilient. One-year inflation expectations dropped significantly, from 6.6% in May to 5.0% as Americans see that tariffs are not leading to broad price rises.

The Conference Board Consumer Confidence Index improved after April, but in June saw some deterioration. The Future Expectations portion of the index, which reflects the shorter-term outlook for income, business, and labor market conditions, is at a low level that historically has suggested a recessionary outlook.

Small business sentiment moved slightly higher in Q2, from 97.4 to 98. Conditions are mildly better than the 50-year average level, with more business owners expecting better business conditions in the future. The greatest concern is labor quality with many employers struggling to find qualified workers.

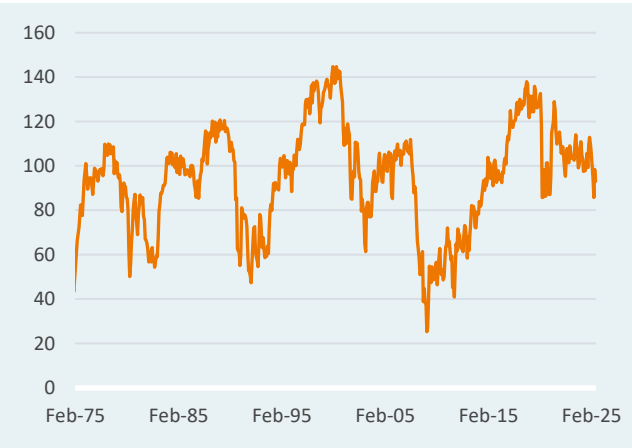
Sentiment was mixed but is better than April levels, as households see that trade policies have not led to recession or materially higher inflation

CONSUMER SENTIMENT (UNIV. OF MICHIGAN)



Source: University of Michigan, as of 6/30/25

CONSUMER CONFIDENCE (CONFERENCE BOARD)



Source: Conference Board, as of 6/30/25

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 5/31/25

Housing

Home prices in the United States rose 1% over the past year nationwide, according to Redfin, although price gains may be set to slow as new construction rises along with overall inventory, and homes are sitting on the market longer.

U.S. residential housing construction activity increased, now closer to long-term average levels. However, sales of those homes have lagged, resulting in historically high inventory levels *relative to sales*. It seems reasonable to assume that extreme unaffordability is contributing to sluggish new home sales. The 30-year average fixed mortgage rate sat at 6.8% to end Q2, only a bit lower than the recent high of 7.8%, which was

the highest mortgage rate since year 2000. The price of an average home has increased approximately 200% since the year 2000, according to the S&P CoreLogic Case-Shiller Index, while average household weekly wages have gone up only 100%.

National average rent costs are down -1% year-over-year according to Redfin. “Apartment construction in America has been hovering near a 50-year high, and even though renter demand is strong, it’s not keeping pace with supply,” said Redfin Senior Economist Sheharyar Bokhari. Oversupply is becoming a problem as new apartment building vacancies sit near record levels.

30-YEAR MORTGAGE RATE (%)



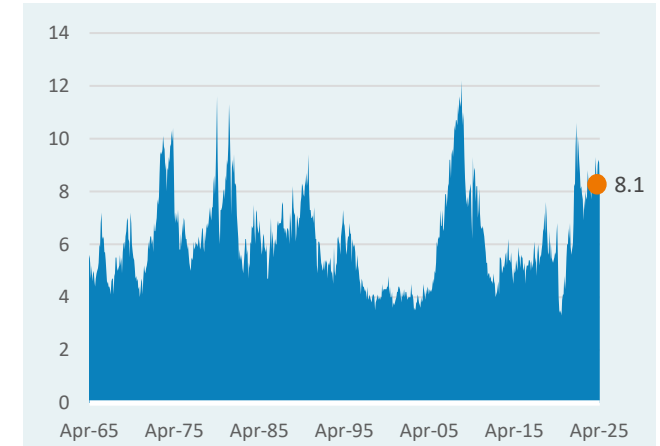
Source: Freddie Mac, as of 6/30/25

EXISTING HOME SALES



Source: National Association of Realtors, as of 5/31/25

DAYS OF NEW HOUSING INVENTORY



Source: FRED, as of 4/30/25 – days of inventory relative to daily sales

International economics summary

- Economic growth for developed economies during 2025 is expected be weak, ranging from 0.2% real GDP growth in Germany, to 0.8% in Japan, 1.0% in the Eurozone, and 1.5% in the U.S. These estimates moved lower alongside trade conflicts and barriers that will crimp economic activity.
- The ECB cut rates in June by 25bps, likely raising tensions between President Trump and Fed Chair Powell regarding U.S. rate policy. President Trump has been placing pressure on Powell very publicly, as he sees lower interest rates as stimulative to the economy and an approach to mitigate high national debt service costs.
- Escalating tensions between Iran and Israel led to fears of broader conflict. A ceasefire between the two nations was achieved after the U.S. executed a direct attack on Iranian nuclear facilities which was followed by a muted military response. This ceasefire agreement has held, although uncertainty remains high as

Iran's leadership ramped up anti-U.S. rhetoric in late-June.

- Following the German election win by the conservative Christian Democratic Union and its alliance the Christian Social Union, Friedrich Merz was elected Chancellor and a grand coalition with the Social Democratic Party was formed. The coalition's main priorities include economic growth, border security, a more pragmatic approach to energy, and further European integration.
- On May 8th, the BOE decided to cut interest rates by 25bps to 4.25%. This marked the fourth rate cut of 25bps since August, when the policy rate was 5.25%. The BOE cited cooling inflation, slowing growth, and a weaker job market as contributing factors.
- As the U.S. administration appears to be focusing maximum pressure on China regarding trade and business practices, the intense market volatility experienced in early April could be setting the stage for the rest of 2025.

	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.0% 6/30/2025	2.7% 6/30/2025	4.1% 6/30/2025
Eurozone	1.4% 6/30/2025	2.0% 6/30/2025	6.2% 6/30/2025
Japan	1.7% 3/31/2025	3.3% 6/30/2025	2.6% 5/31/2025
Canada	1.2% 5/31/2025	1.9% 6/30/2025	6.9% 6/30/2025
BRICS Nations	5.1% 3/31/2025	1.6% 6/30/2025	4.9% 6/30/2025
Brazil	2.9% 3/31/2025	5.4% 6/30/2025	5.8% 6/30/2025
Russia	1.4% 3/31/2025	9.4% 6/30/2025	2.2% 6/30/2025
India	7.4% 3/31/2025	2.1% 6/30/2025	8.5% 12/31/2017
China	5.2% 6/30/2025	0.1% 6/30/2025	5.0% 6/30/2025

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 Eurozone grew 1.5% YoY in Q1. Full year growth is expected at only 0.9%, according to the ECB which cited trade policy uncertainty. On July 4th, the central bank cut rates to 2.0% as inflation continued to moderate, though a prolonged trade war could further weaken the economy and reignite some inflation pressure.

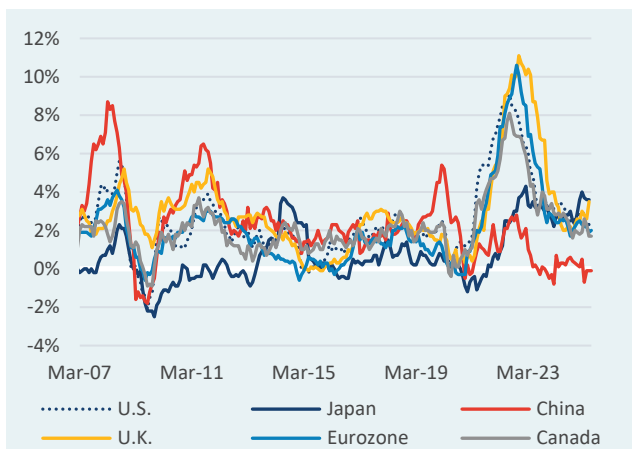
The U.S. expanded the initial February tariff rates on “Liberation Day”, including a 10% baseline and 54% on China, 20% on the EU, and 25% on Canada and Mexico. The U.S. cited business operation onshoring, national defense, improving the trade deficit / foreign terms of trade, and immigration and drug control as goals of tariff policy. No permanent trade deals were secured by mid-July, with partners making concessions but also claiming that they would seek to diversify trade away from the U.S. The trade war with China

escalated after “Liberation Day”, with tariff rates reaching 145% on Chinese goods and 125% on U.S. goods. A 90-day deal in June reduced tariffs to 30% on Chinese goods and 10% on U.S. goods and included a Chinese commitment to continue exports of rare earth minerals, alleviating the recent halt in exports.

Canada, Mexico, and the EU initially imposed counter-tariffs but suspended them after a 90-day pause was announced in May and later extended through August 1, bringing most countries to the baseline tariff rate of 10%. We believe it is likely that 10% baseline tariffs will stay in place long-term.

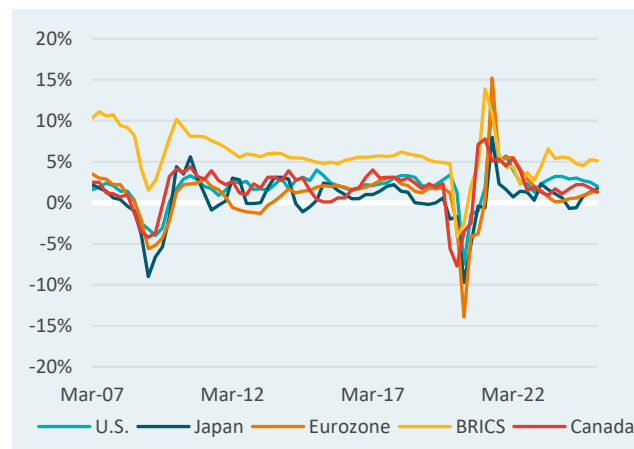
In May, the U.S. and U.K. announced a non-binding Economic Prosperity Deal, maintaining the 10% U.K. tariff while reducing rates on select sectors. The U.K.’s relatively low tariff rate may reflect its strategic alignment with the U.S.

INFLATION (CPI YEAR-OVER-YEAR)



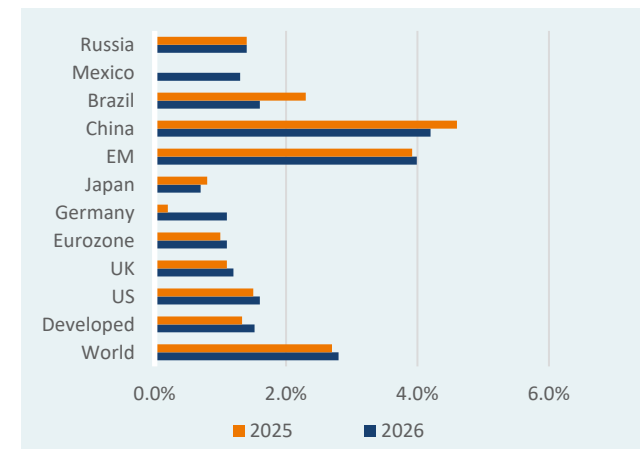
Source: BLS, Verus, as of 6/30/25 or most recent date

REAL GDP GROWTH (YEAR-OVER-YEAR)



Source: BLS, Verus, as of 3/31/25 or most recent date

GDP GROWTH EXPECTATIONS



Source: Bloomberg, as of 6/30/25

Fixed income rates & credit

Fixed income environment

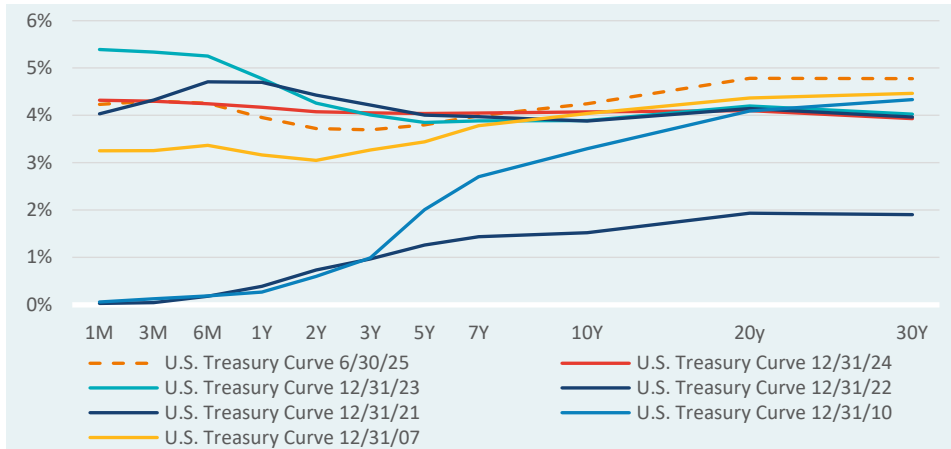
- The 10-year U.S. Treasury yield was unchanged at 4.23% during the quarter, although yields moved in a very wide range from slightly below 4.0% following trade “Liberation Day” to 4.6% after Moody’s downgraded the U.S. credit rating and fears circulated of a debt crisis. With notable upside and also downside risks to yields, investors may be justified in avoiding large bond duration bets.
- The Federal Reserve kept rates steady again in June at a target range of 4.25%-4.50%, expressing concerns about possible inflationary impacts of tariffs. Chair Jerome Powell at the meeting said that policymakers are “well positioned to wait” and that there were few signs of economic weakening. President Trump continued to place pressure on Jerome Powell to cut rates.
- The U.S. yield curve has returned to an upward sloping shape—the steepest since early 2022 when the Federal Reserve began quickly hiking interest rates. The 10-year U.S. Treasury yield was 0.6% higher than the 2-year yield as of June 30th.
- Longer duration credit lagged shorter duration. The yield curve experienced some steepening due primarily to a selloff in the longer end of the curve during April. Long duration corporate bonds lost -1.9% while Bank loans added +2.3% and high yield returned +3.5%.
- Credit spreads widened due to risk off movements, and lower quality spreads experienced the largest shifts. High yield bond spreads tightened by 56bps to 2.96%, while investment grade spreads fell to 0.88%. Leveraged loan spreads likewise tightened 25 basis points to 4.47%. Despite recent widening events, BB- and B- rated credit spreads remain below long-term historical averages while CCC-rated credit remains closer to the long-term average.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	1.2%	6.7%
Core Plus Fixed Income (Bloomberg U.S. Universal)	1.4%	7.1%
U.S. Treasuries (Bloomberg U.S. Treasury)	0.8%	5.9%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	-1.9%	2.1%
U.S. High Yield (Bloomberg U.S. Corporate HY)	3.5%	10.4%
Bank Loans (S&P/LSTA Leveraged Loan)	2.3%	7.3%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	7.6%	14.0%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	3.3%	10.7%
Mortgage-Backed Securities (Bloomberg MBS)	1.1%	7.2%

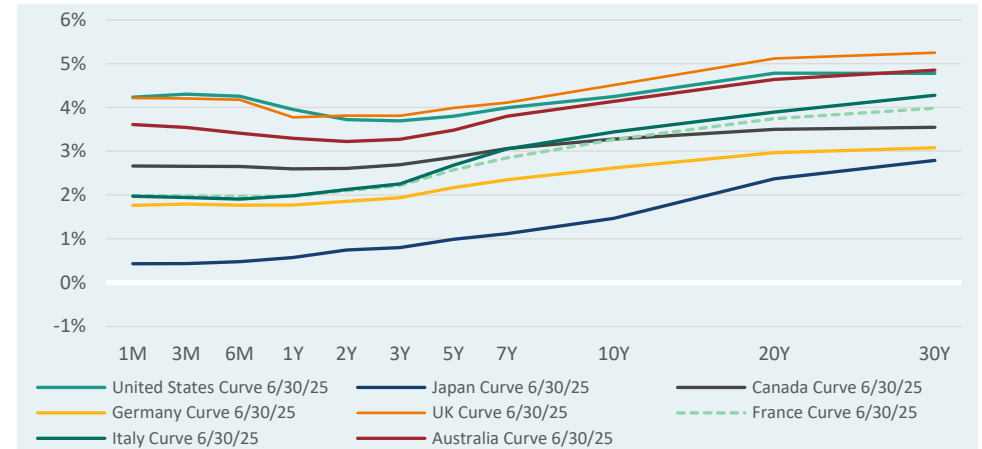
Source: Standard & Poor’s, J.P. Morgan, Bloomberg, as of 6/30/25

Yield environment

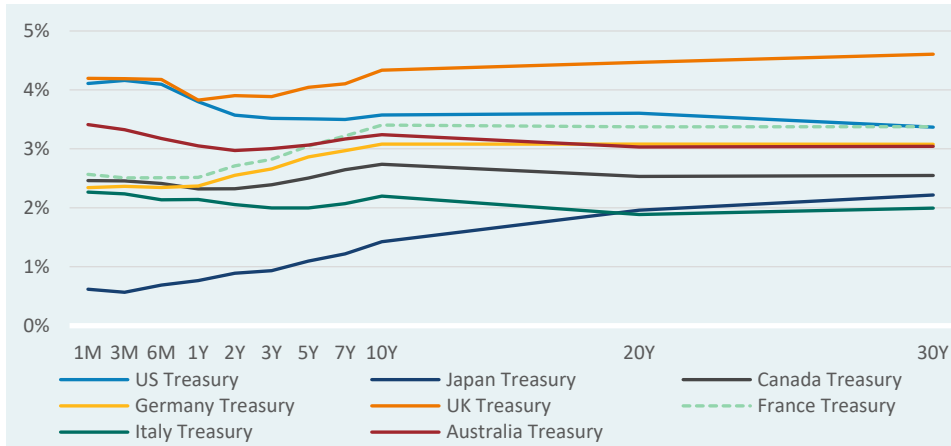
U.S. YIELD CURVE



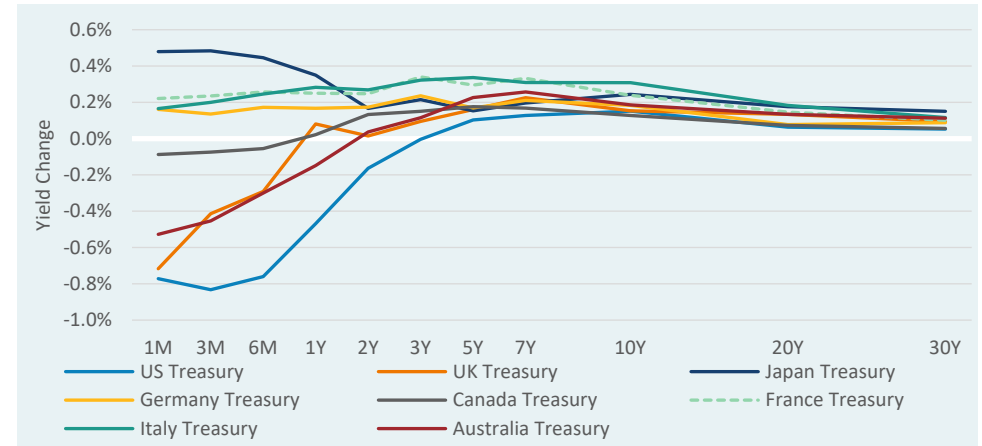
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 6/30/25

Credit environment

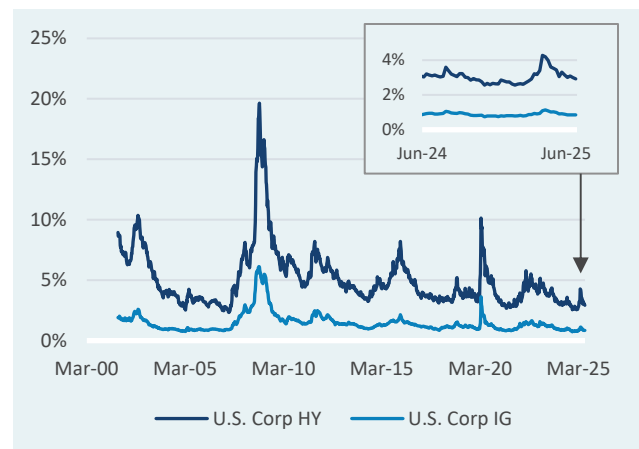
During Q2, longer duration credit noticeably lagged shorter duration credit. The yield curve experienced a bearish steepening event in April due primarily to a selloff in the longer end of the curve (a move higher in yields). Shorter duration credit assets such as bank loans and high yield delivered +2.3% and +3.5% returns respectively, while long duration, higher quality credit lost -1.9%.

Returns within the high yield bond market were positive, with lower quality credits initially lagging BB- and B- rated bonds but outperforming during the months of May and June. Bonds rated CCC, including distressed, returned +4.4% on the quarter, compared to +3.6% and +3.7% for BB- and B- rated bonds, respectively. Lower quality bank loans saw less of a loss during April, subsequently resulting in less return during the rally that followed. CCC-

rated loans returned +2% while B- and BB- rated loans returned +2.6% and +2.3%, respectively.

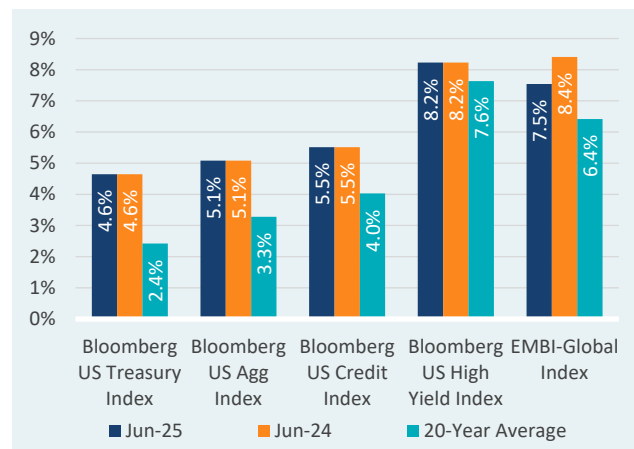
Credit spreads widened in April following “Liberation Day” but quickly rebounded as initial tariffs were delayed and the consumer outlook improved. Despite widening by nearly 1% in April, high yield bond spreads ended the quarter tighter by 56bps at 2.96%. Investment grade spreads similarly tightened, ending the quarter at 0.88%. Bank loan spreads widened less in April but still tightened in May and June, ending the quarter 25bps lower at 4.47%. After the recovery from April’s selloff, credit spreads remain well below long-term historical averages. This continues to reflect an apparent confidence in corporate debt, though the total impact of tariffs on U.S. businesses is not yet known.

SPREADS



Source: Barclays, Bloomberg, as of 6/30/25

YIELD TO MATURITY



Source: Morningstar, as of 6/30/25

CREDIT SPREAD (OAS)

Market	6/30/2025	6/30/2024
Long U.S. Corp	1.0%	1.2%
U.S. Inv Grade Corp	0.8%	0.9%
U.S. High Yield	2.9%	3.1%
U.S. Bank Loans*	4.4%	4.8%

Source: Barclays, Credit Suisse, Bloomberg, as of 6/30/25

*Discount margin (4-year life)

Default & issuance

Default activity trended lower during Q2, with no defaults occurring in June (only the third month of no defaults since 2022). During the full quarter, nine companies defaulted, totaling more than \$2.5 billion in bonds and \$3.9 billion in loans. While higher than Q1 default levels, this activity was half of the average default volume of the prior two years.

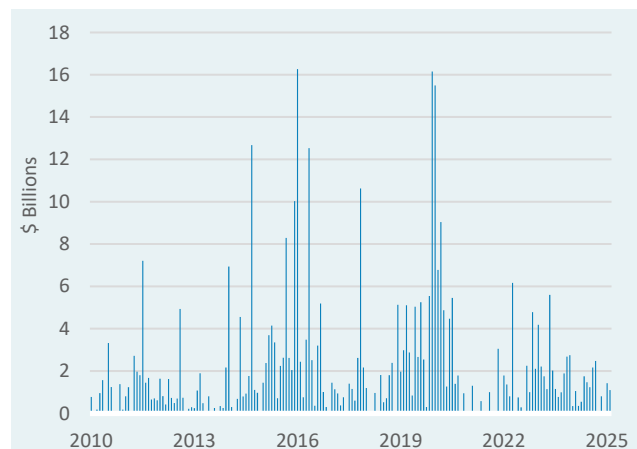
Loans continued to surpass bonds in both default and distressed activity. Distressed exchanges totaled \$2.8 billion in bonds and \$7.7 billion in loans. While this was higher than the recent average, distressed credit volumes have fallen since the nearly \$20 billion that occurred in Q4 of 2024.

High yield bond default rates rose 21bps to 1.4%, well below the long-term annual average of over 3.0%. Loan default rates, by comparison, dropped

slightly to 3.8%. While the default gap between bonds and loans shrank, the gap remains close to the post-2000 high of 3% experienced in 2024.

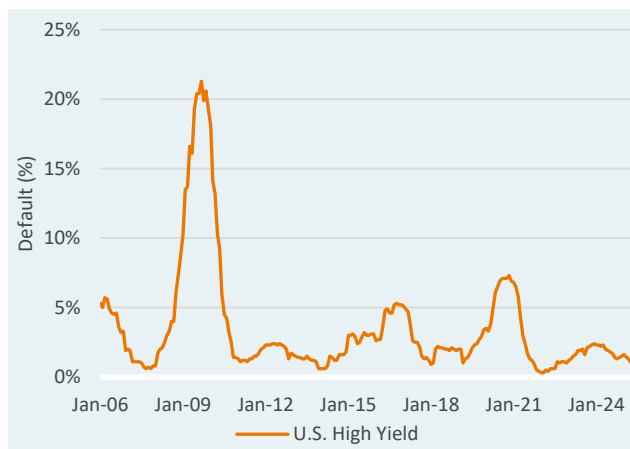
Quarterly issuance volume of high yield bonds was slightly higher, totaling \$77 billion, though still down -12% year-over-year. Notably, the majority of this issuance occurred in June, the highest single month of issuance (\$37 billion) since September 2021. Bank loans issuance slowed to \$103 billion. This figure contrasts with the prior two quarters, which saw the second highest (\$337 billion) and highest (\$505 billion) levels of bank loan issuance on record. That might be attributed to, among other factors, the stalling of deal activity during the month of April following “Liberation Day”, as reflected in April issuance of \$6.2 billion, which marked a 30-month low.

U.S. HIGH YIELD MONTHLY DEFAULTS



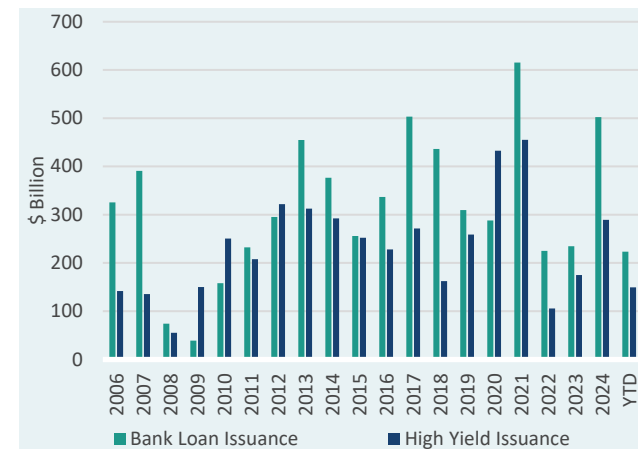
Source: BofA Merrill Lynch, Verus, as of 6/30/25 – par weighted

U.S. HIGH YIELD DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 6/30/25 – par weighted

USD ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, as of 6/30/25

Equity

Equity environment

- Regional equity markets delivered nearly identical returns during Q2. Year-to-date the U.S. market has lagged by a wide margin, although most of this was caused by foreign currency movements (a substantial fall in U.S. dollar value recently created a performance tailwind for U.S. investors with unhedged foreign currency exposure).
- Following the rebound from April's selloff, U.S. equity forward P/E multiples climbed back to very high levels. This recovery to new index highs surprised many investors who point to weaker earnings forecasts, slower economic growth, and a variety of new risks on the horizon.
- Value stocks trailed growth significantly during Q2 (Russell 1000 Value +3.8% vs. Russell 1000 Growth +17.8%). Index concentration in mega-cap growth stocks seems to be contributing to style factor volatility lately. The extreme drawdown of the “Magnificent 7” stocks during 2022 led to the best value stock performance in decades, and then after those seven stocks rebounded led to exceptionally poor value stock performance.
- While Chinese equities rallied strongly during Q1, leading the overall index, this market stalled in Q2, and other regional markets roared back to life (MSCI China +2.1% vs. MSCI EM ex-China +16.5%). Chinese equities remain a laggard over the medium term.
- Market-priced volatility spiked to extreme levels on trade “Liberation Day” as fears of a trade slowdown and global recession circulated. In some places, bilateral de-escalation of tariffs and punitive trade proposals has eased volatility. In other places, the U.S. reached new trade agreements with its partners. This progress has helped bring market volatility back closer to the longer-term average.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	10.9%		14.9%	
U.S. Small Cap (Russell 2000)	8.5%		8.6%	
U.S. Equity (Russell 3000)	11.0%		15.1%	
U.S. Large Value (Russell 1000 Value)	3.8%		14.4%	
U.S. Large Growth (Russell 1000 Growth)	17.8%		16.1%	
Global Equity (MSCI ACWI)	11.5%	9.5%	15.9%	13.9%
International Large (MSCI EAFE)	11.8%	5.3%	17.5%	10.1%
Eurozone (EURO STOXX 50)	11.6%	3.1%	20.5%	12.0%
U.K. (FTSE 100)	9.5%	3.2%	20.5%	11.3%
Japan (TOPIX)	11.1%	8.7%	10.8%	8.0%
Canada (S&P/TSX)	13.3%	8.0%	25.4%	26.7%
Emerging Markets (MSCI Emerging Markets)	12.0%	8.0%	15.1%	12.8%

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 6/30/25 – performance quoted from perspective of U.S. dollar investor

Domestic equity

U.S. equities rallied back strongly in Q2 (S&P 500 +10.9%) despite some weakening of economic conditions and ongoing inflation fears. This brought the domestic market to +6.2% year-to-date, which at first glance implies that the U.S. market has been one of the worst performers among global markets. However, most of the outperformance of international equity markets recently has been due to foreign currency movements rather than strong underlying equity market gains (most U.S. investors do not hedge foreign currency risk which exposes those investors to currency swings).

Year-over-year Q2 earnings growth of the S&P 500 is expected to be +5.6%, according to FactSet as of July 18th. This would

mark the weakest earnings growth since Q4 2023. However, given that most corporations end up beating earnings expectations, based on past trends reported earnings could ultimately top a +9% growth figure. For full year 2025, earnings growth is expected to rise to a +9.3% growth rate.

As domestic stocks have become more expensive, and as more of the index is composed of growth stocks with lower dividend payouts, the dividend yield of the S&P 500 reached an incredibly low 1.3% in Q2—the lowest level in market history other than what was seen during the late-1990s dot-com bubble. Investors will be far more dependent on earnings growth in the future, given a lack of dividend yield.

U.S. equities roared back in Q2, fully recovering April losses despite risks remaining on the horizon

S&P 500 PRICE INDEX



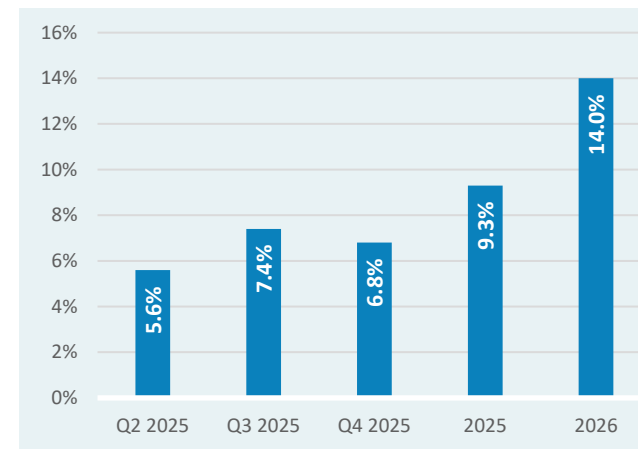
Source: Standard & Poor's, as of 6/30/25

S&P 500 DIVIDEND YIELD



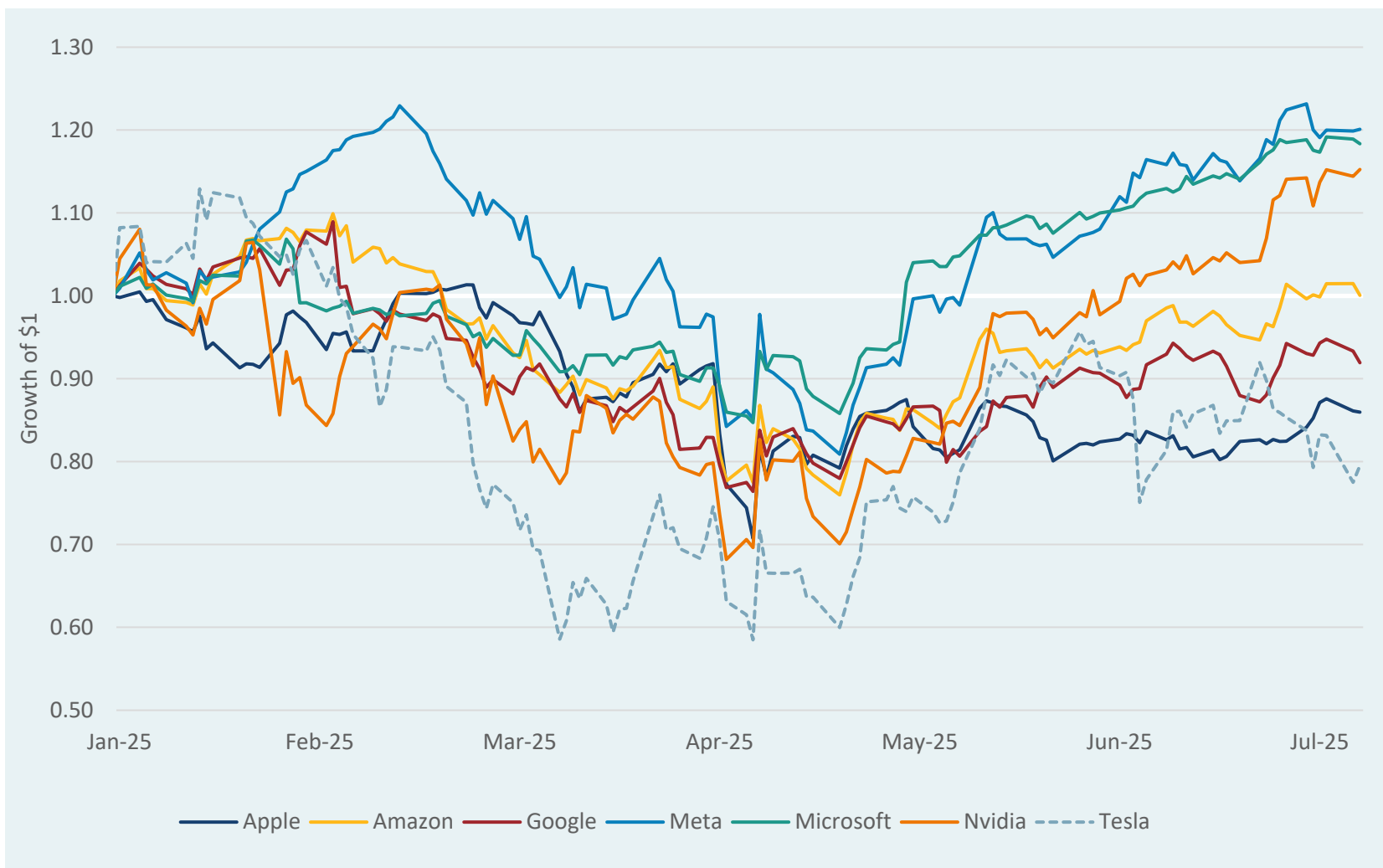
Source: Bloomberg, as of 6/30/25

S&P 500 EARNINGS FORECASTS (YOY)



Source: Factset, Verus, as of 7/18/25

Magnificent 7



Following a deep selloff during April, the Magnificent 7 stocks have recovered much of their year-to-date losses

Source: Bloomberg, Verus, as of 6/30/25

Domestic equity size & style

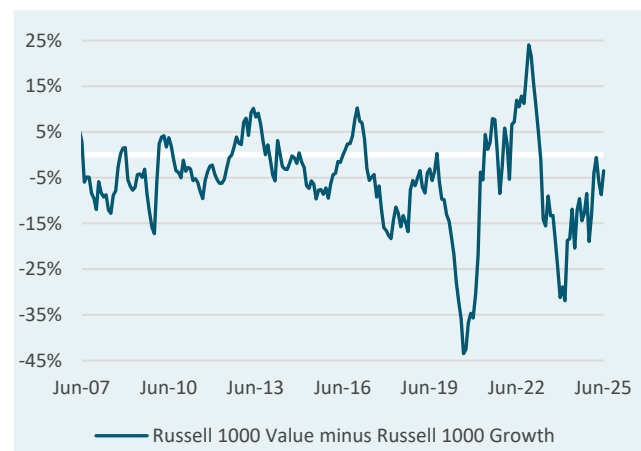
Small cap equities underperformed large caps during Q2 (FTSE Russell 2000 +8.5% vs. FTSE Russell 1000 +11.1%) and also year-to-date (-1.8% vs. +6.1%), continuing a long string of underperformance. Value stocks underperformed growth by a large margin during Q2 (Russell 1000 Value +3.8% vs. Russell 1000 Growth +17.8%) but were on par year-to-date (+6.0% vs 6.1%) as growth sectors saw bigger losses following “Liberation Day” but have since rebounded.

Very high index concentration in mega-cap growth stocks has contributed to style factor volatility lately. For example, as

shown in the chart below, the extreme drawdown of the “Magnificent 7” stocks during 2022 led to the best value stock performance in decades, and then once those seven stocks rebounded led to exceptionally poor value stock performance. We suspect that index concentration and sector effects are creating an even more difficult environment for investors to successfully make shorter-term factor tilts. We continue to believe that factor investing should be accomplished through longer-term strategic positioning, unless an unusually attractive tactical opportunity presents itself (and that these opportunities arise perhaps only once every decade or so).

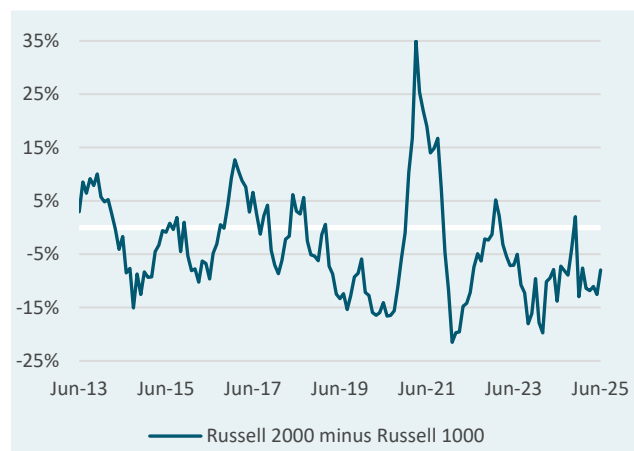
Small caps & value stocks both underperformed during Q2

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



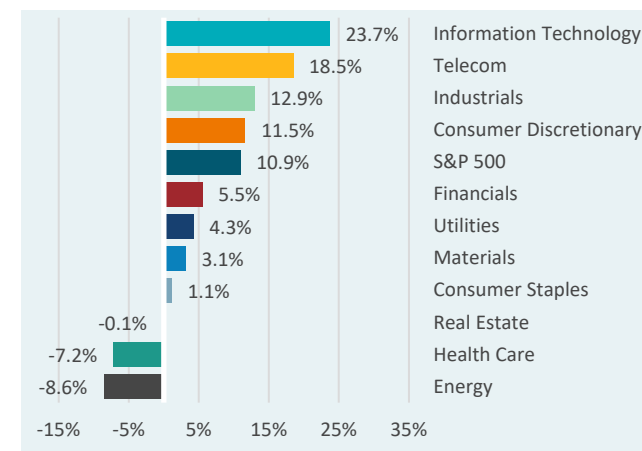
Source: FTSE, as of 6/30/25

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE Russell, as of 6/30/25

Q2 PERFORMANCE

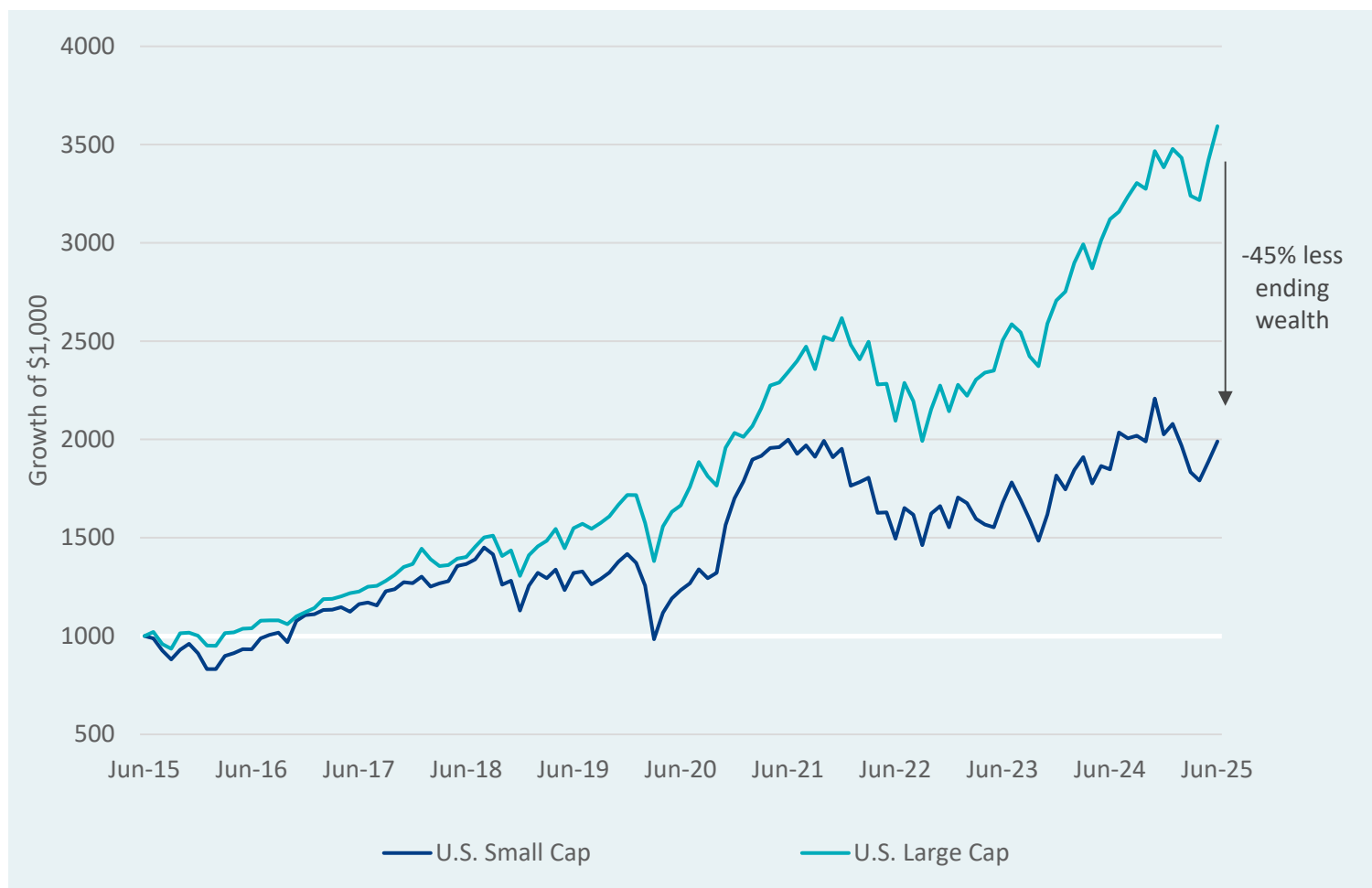


Source: Morningstar, as of 6/30/25

A difficult decade for small caps

Small caps have consistently underperformed large caps for an extended period

Domestic small cap stocks have consistently underperformed large cap stocks for an extended period of time. Over the past decade, an investment in small caps would have ended in -45% less wealth than an investment in large caps¹. During that time, small caps underperformed in 2015, 2017, 2018, 2019, 2021, 2022, 2023, 2024, and 2025 year-to-date as of June 30th. Given weak earnings growth, aging businesses, and a rising portion of index companies that are unprofitable, many investors are questioning the case for a dedicated U.S. small cap allocation. However, we believe skilled active management has and may continue to assist investors in achieving alpha and mitigating some of these benchmark issues.



¹U.S. Large Cap defined as S&P 500, U.S. Small Cap defined as FTSE Russell 2000. While these indexes are not perfect academic representations of small cap vs. large cap performance, they are the most common indexes that investors use across the two asset classes.

Source: Verus, Standard & Poor's, FTSE Russell, as of 6/30/25

International developed equity

Broad regional equity markets delivered very positive, and nearly identical, results during Q2 as many of the worst trade war fears failed to materialize. International developed shares (MSCI EAFE +11.8%) and emerging market equities (MSCI EM +12.0%) both outperformed domestic stocks (S&P 500 +10.9%).

Non-U.S. markets have substantially outperformed domestic stocks year-to-date, although most of this outperformance was caused by foreign currency movements (because few U.S. investors hedge currency risk, this showed as an extreme impact on performance). So far in 2025, corporate earnings forecasts have been revised lower in the U.S., perhaps reflecting a marginally more bearish earnings outlook as trade frictions unfold.

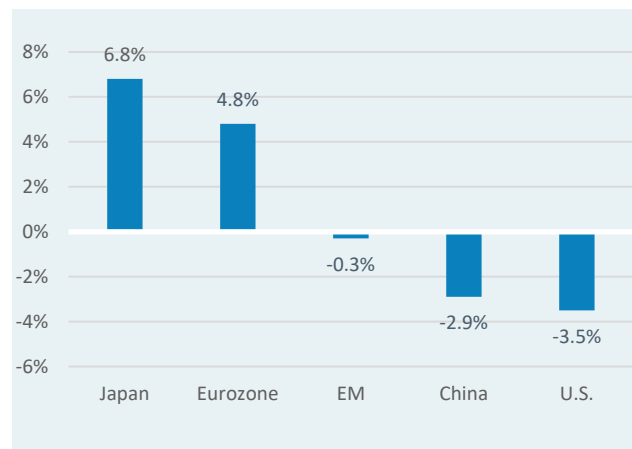
At the onset of the trade war earlier in the year, it may have been reasonable to assume that trading partners with the most to lose from a conflict with the United States would have seen notably poor equity market performance in recent months. So far, this has not been the case, as many countries and regions that have gone tit-for-tat with the U.S. regarding terms of trade have fared well in market performance year-to-date, significantly outperforming the U.S. market. We suspect that as investors learn more about how the trade war has impacted these economies so far, and what trade agreements are likely to be for the longer-term, more performance differentiation will be seen across markets.

INTERNATIONAL DEVELOPED EQUITY



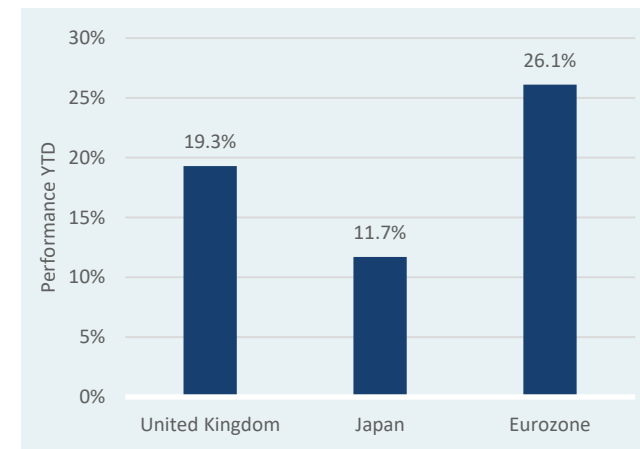
Source: MSCI, as of 6/30/25

YTD REVISIONS TO 2025 EARNINGS FORECASTS



Source: J.P. Morgan, FactSet - all indexes are MSCI other than the U.S. market which is represented by the S&P 500, as of 5/31/25

REGIONAL RETURNS (YEAR-TO-DATE)



Source: MSCI Indices, as of 6/30/25

Emerging market equity

Emerging market equities delivered strong results in Q2 (MSCI EM +12.0%) as markets bounced back from April's selloff and U.S. dollar depreciation boosted the returns of domestic investors with unhedged currency exposure.

Regional markets have arguably shown much less sensitivity to tariffs imposed by the U.S. administration than investors had expected. For example, Mexican equities are up 30.9% year-to-date in U.S. dollar terms despite aggressive trade penalties imposed by the United States. Taiwan and South Korea were two of the top performing markets in Q2, despite receiving some of the highest tariff rates among

other U.S. trading partners. Once more is known around the magnitude of trade policy impact on these economies, this could lead to more market performance differentiation.

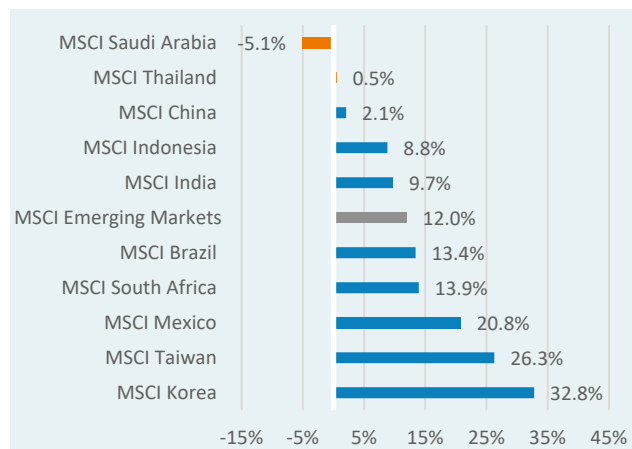
Chinese equities lagged other regions during Q2 (MSCI China +2.1% vs. MSCI EM ex-China +16.5%), marking a change in pace from the recent China comeback story. MSCI China has underperformed other emerging markets by -31% over the past ten years.

EMERGING MARKET EQUITY



Source: MSCI, as of 6/30/25

MSCI EM 2025 Q2 COUNTRY RETURNS (USD)



Source: Verus, Bloomberg, as of 6/30/25

CHINA STILL LAGGING



Source: MSCI, as of 6/30/25

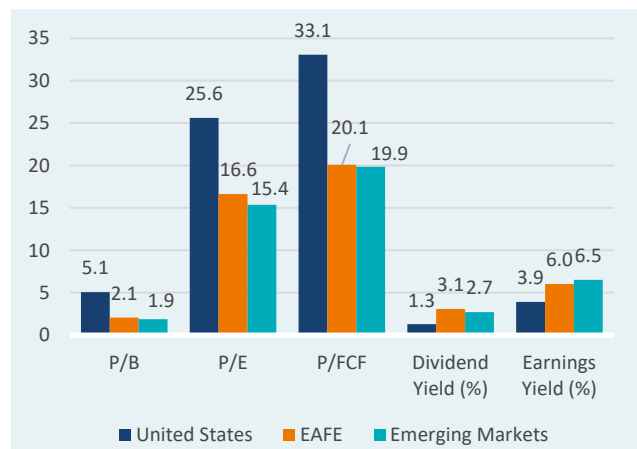
Equity valuations

Following a very strong rebound from the April “Liberation Day” selloff, U.S. equity forward P/E multiples have climbed back to levels near the upper end of the historical range. This full recovery to new all-time-highs has surprised many investors who point to weaker corporate earnings forecasts, slower economic growth, and a variety of new risks on the horizon (tariff-induced inflation and other trade frictions, for example) as reasons that could justify more moderate domestic valuations. However, ongoing earnings momentum—specifically, stellar earnings growth from the Magnificent 7—may allow for a continued march higher despite valuation concerns.

Some in the investor community over recent months have been concerned about a possible ‘buyer’s strike’ on U.S. assets (an intentional divestment from U.S. assets by foreign institutions in protest of the trade war). Three months have passed since “Liberation Day” and there is little evidence of this occurring.

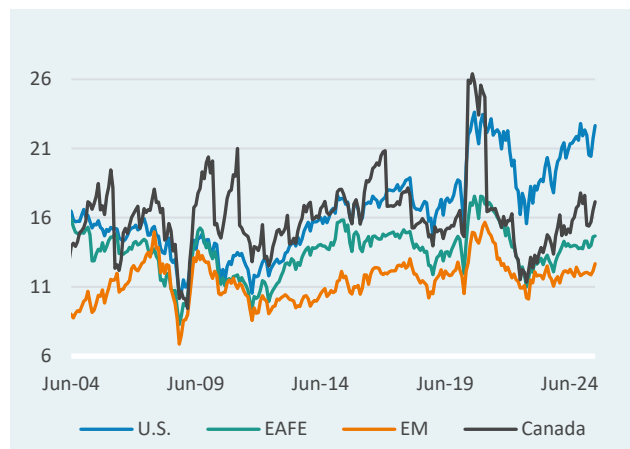
As the U.S. market has become more concentrated in megacap high-growth businesses such as Nvidia, and more exposed to higher growth industry sectors, this has pushed up total index profitability and total index growth forecasts. Overall, U.S. large cap indexes have changed materially in characteristics and behavior, which creates challenges in comparing current valuations to those of the past.

MSCI VALUATION METRICS (3-MONTH AVG)



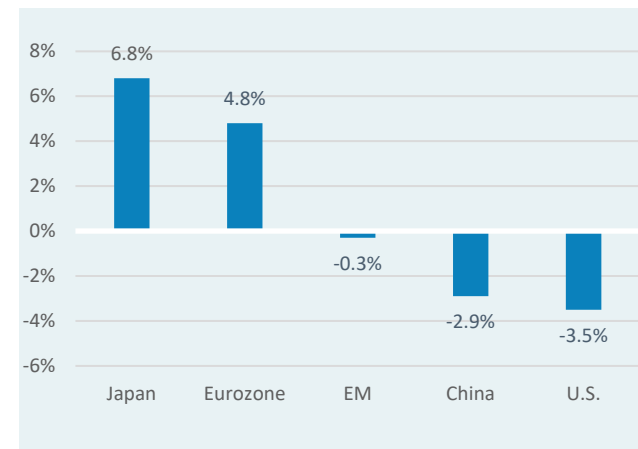
Source: MSCI, Verus, as of 6/30/25 – trailing P/E

FORWARD P/E



Source: MSCI, Canada shown as S&P/TSX, as of 6/30/25

YTD ADJUSTMENT IN EARNINGS FORECASTS



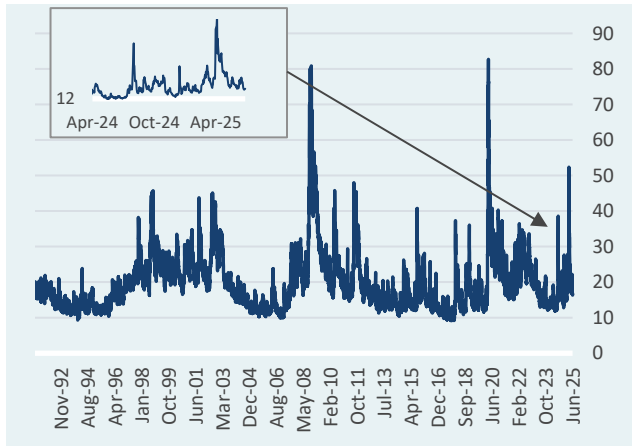
Source: J.P. Morgan, FactSet - all indexes are MSCI other than the U.S. market which is represented by the S&P 500, as of 5/31/25

Market volatility

Market-priced volatility (Cboe VIX Index) spiked above 50 to extreme levels in early April as trade “Liberation Day” shocked markets and led to fears of a trade slowdown and global recession. In some places, bilateral de-escalation of tariffs and punitive trade rules has eased market volatility. In other places, the United States has reached new trade agreements with trading partners. This progress, along with growing evidence that many of the feared *worst-case scenarios* around tariffs (ex: sharp slowdown in consumer spending, spiking inflation, weakening job market) have not come to fruition, has helped bring market volatility back closer to the longer-term average.

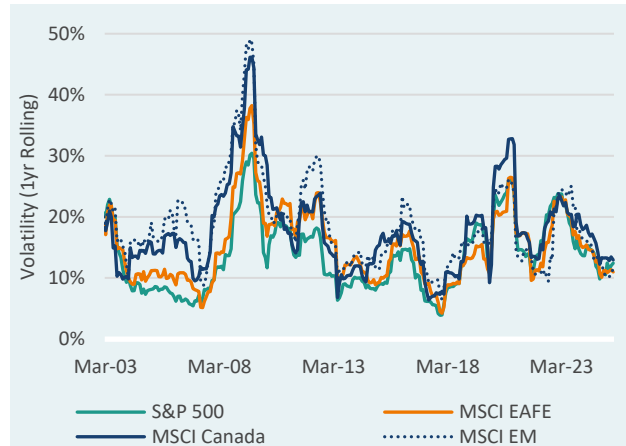
Implied bond market volatility also jumped in the first week of April but has since fallen to the lower-end of the three-year trading range. The risks priced into bond markets are numerous. Fluctuations in foreign demand for U.S. dollars due to radical shifts in the trade policy of the Trump administration many continue to add to jumps in prices. Impacts of the “One Big Beautiful Bill Act” on the U.S. fiscal situation have generated uncertainty around the creditworthiness of the nation.

U.S. IMPLIED VOLATILITY (VIX)



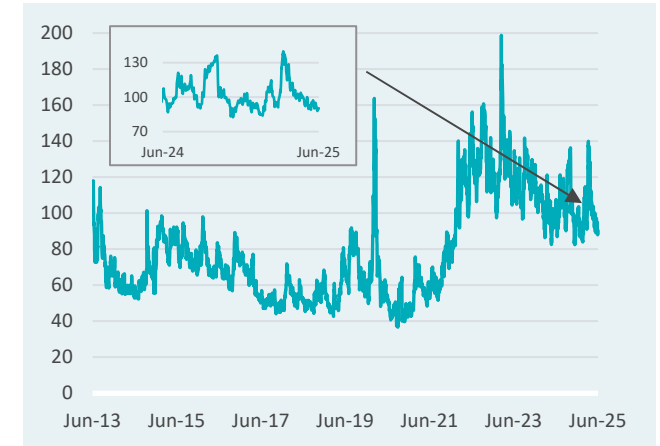
Source: Cboe, as of 6/30/25

REALIZED VOLATILITY



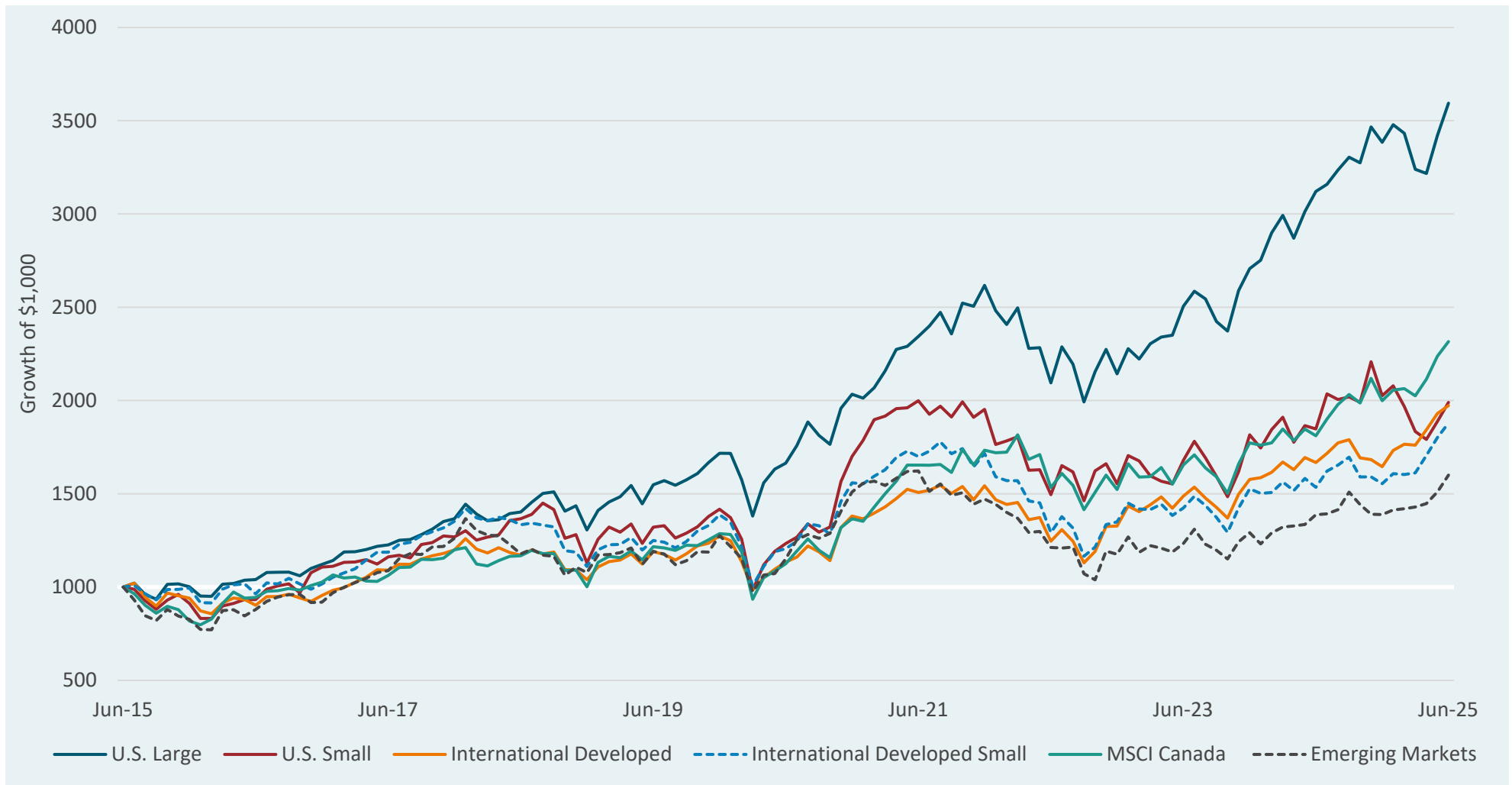
Source: Standard & Poor's, MSCI, Verus, as of 6/30/25

U.S. TREASURY IMPLIED VOL ("MOVE" INDEX)



Source: BofA, as of 6/30/25

Long-term equity performance



Source: Standard & Poor's, FTSE, MSCI, Verus, as of 6/30/25

Other assets

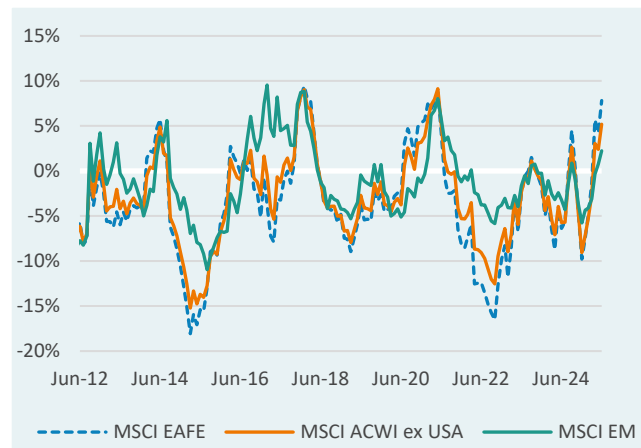
Currency

The U.S. dollar fell materially again during Q2, down -11% since the beginning of the year according to the U.S. Dollar Index (DXY). These large swings in the dollar continue to have significant impacts on performance for U.S. investors who do not have a currency hedging program in place. Tariff and trade fears, downward adjustments to economic growth expectations, and possibly international fund flows have impacted the value of the dollar. These swings will also create some degree of inflation in the U.S., as many imported goods are beginning to rise in price.

Dollar swings raised the portfolio returns of U.S. investors with unhedged foreign currency exposure—a gain of +11.6% from currency moves across international equities (MSCI EAFE) year-to-date.

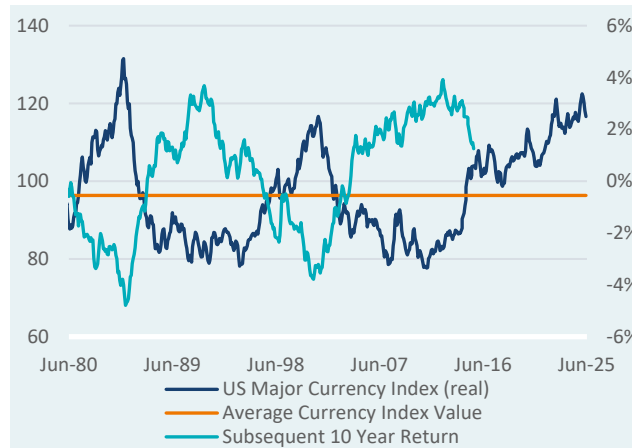
A more thoughtful portfolio approach to currency exposure has provided lower portfolio volatility and higher long-term returns—a rare proposition. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment in the currency market by investing in currencies with higher interest rates, undervalued currencies, and currencies showing positive price momentum. This approach, represented by the MSCI Currency Factor Mix Index, has offered a positive one-year rolling return over most periods with far lower volatility than an unhedged approach, although the past year of currency volatility has resulted in an historically less common environment of Currency Factor Mix underperformance and embedded (unhedged) currency outperformance.

EFFECT OF CURRENCY (1-YEAR ROLLING)



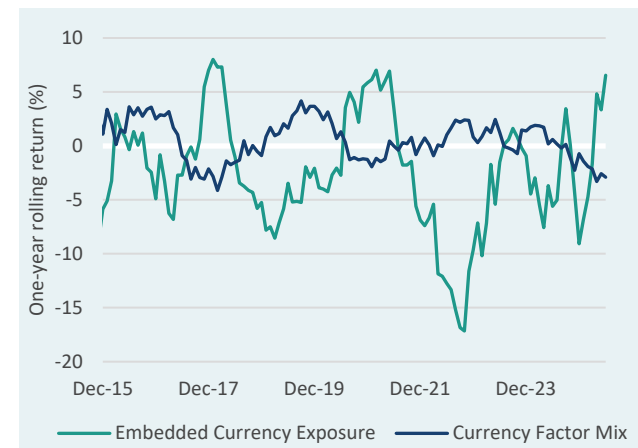
Source: MSCI, Verus, as of 6/30/25

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: FRED, Verus, as of 6/30/25

EMBEDDED CURRENCY VS CURRENCY FACTORS



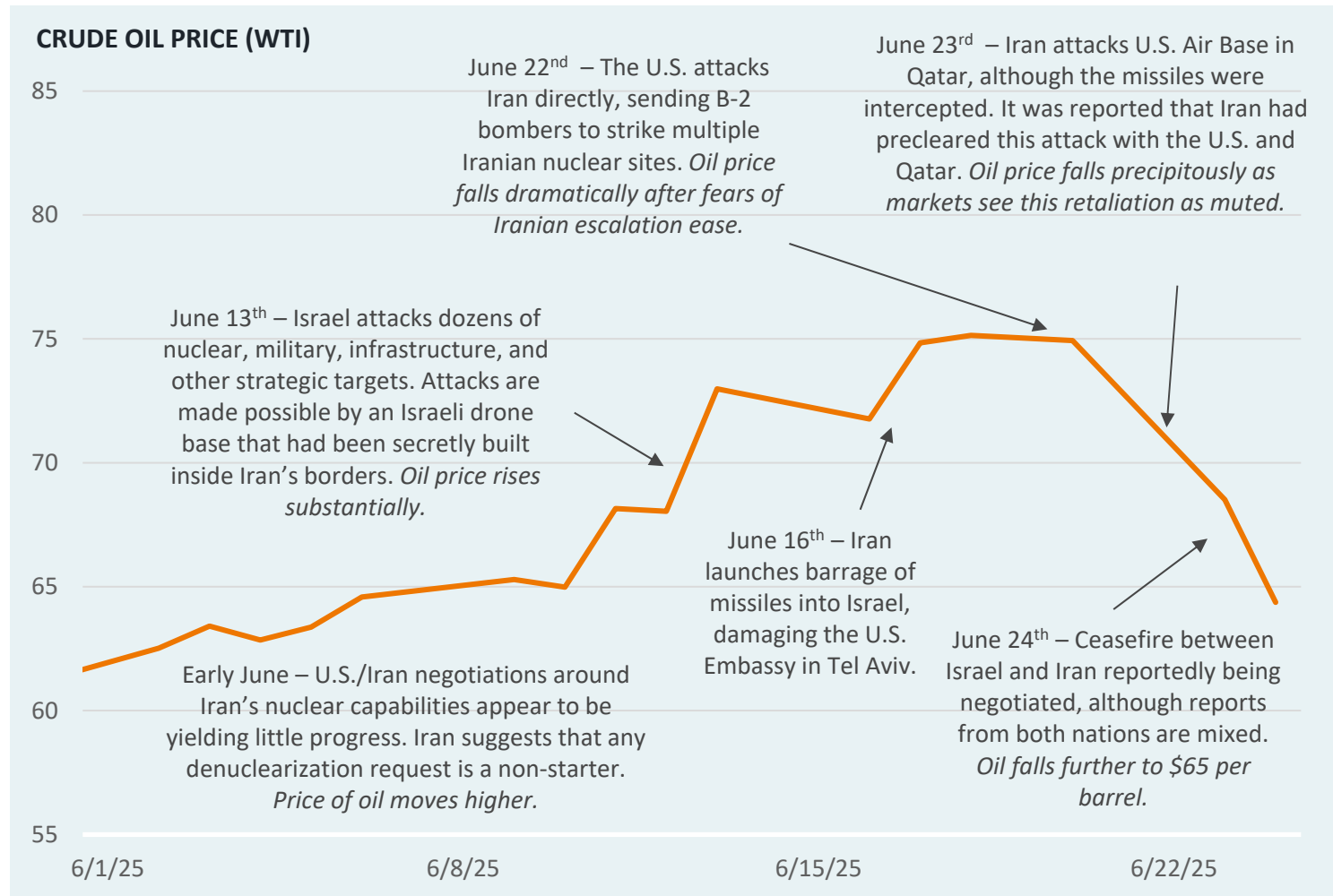
Source: MSCI, Verus, as of 6/30/25 “Embedded Currency Exposure” is the currency return impact from not hedging currency risk

Middle East tensions & energy prices

A wild ride for energy markets

Escalating tensions between Iran and Israel have led to fears of broader military conflict and a possible energy supply shock in the second quarter. Iran produces nearly 5% of the world's oil, and approximately 20% of global oil and gas is shipped through the Strait of Hormuz, which could be quickly blocked by Iran.

A ceasefire between the two nations has been achieved after the United States executed a direct attack on Iranian nuclear facilities which was followed by a muted response from Iran. This ceasefire agreement has held and appears likely to hold, which has sent oil prices tumbling. Uncertainty remains high, however. With energy as an important element of inflation baskets, this may have implications for inflation and interest rates in the medium term.



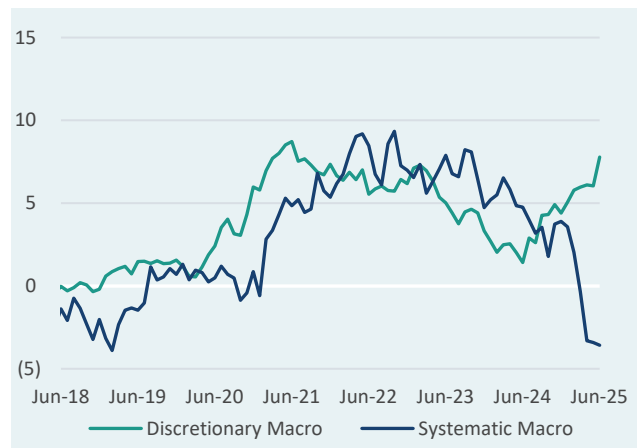
Source: Verus, Bloomberg – West Texas Intermediate (WTI) oil futures price

Hedge funds – macro & event-driven

The gap between machine-driven, systematic macro trading strategies and human driven, discretionary macro funds widened significantly in the first half of 2025. Systematic strategies rely on identifying historical patterns in fundamental, technical, or economic market data to predict future price patterns. Given the rapidly evolving geopolitical dynamics and divergent economic implications, systematic strategies such as ‘trend following’ have been caught offside in multiple asset classes and were whipsawed recently.

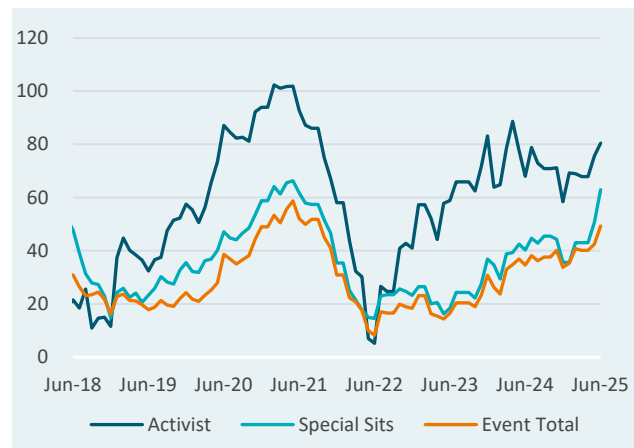
Event driven strategies, such as those focused on mergers, activism, and other special situations investments, have seen greater upside participation in recent quarters. After a slump in corporate activity and M&A following the SPAC bubble bursting in '21-22, the number of deals announced or proposed in the first half of 2025 was the highest since 2021. Strong tailwinds for M&A should support greater upside across a variety of hedge fund strategies, including multi-strategy and ‘pod shop’ funds that make extensive use of both hard catalyst and merger arbitrage trading styles.

3 YR ROLLING RETURNS OF HFRI MACRO



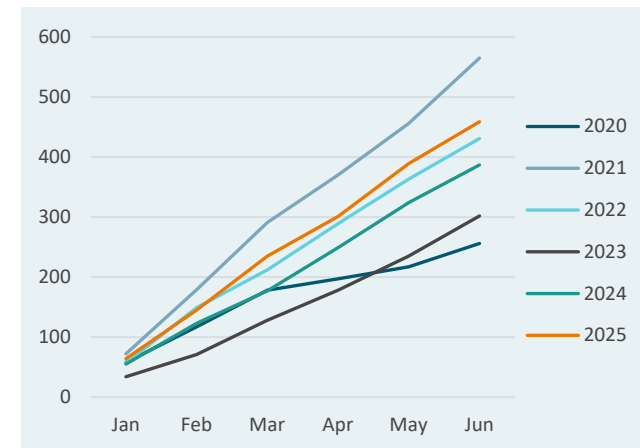
Source: MPI, HFR, as of 6/30/25

12M UP MARKET CAPTURE % VS S&P 500



Source: MPI, HFR, as of 6/30/25

ANNOUNCED STOCK OR CASH DEALS IN H1 2025



Source: Bloomberg, as of 6/30/25

Appendix

Periodic table of returns

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	5-Year	10-Year
International Equity	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	33.4	19.4	18.1	17.0
Emerging Markets Equity	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	9.4	26.5	24.5	15.3	16.3	13.4
60/40 Global Portfolio	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	1.5	18.7	15.2	9.0	13.9	9.2
Large Cap Equity	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-4.7	18.2	14.4	6.1	12.7	7.1
Large Cap Growth	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-7.5	16.9	11.5	6.1	12.5	7.1
Large Cap Value	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	9.9	6.0	11.2	6.7
Commodities	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.0	10.3	14.8	-14.5	14.6	9.5	5.5	10.0	6.5
US Bonds	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-14.5	11.5	8.1	4.0	7.4	6.1
Hedge Funds of Funds	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-17.3	9.8	7.5	3.0	7.4	5.4
Real Estate	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-19.1	6.3	5.4	2.2	6.8	4.8
Cash	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-20.1	5.5	5.3	2.1	6.2	3.8
Small Cap Growth	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-20.4	5.0	3.8	-0.5	3.3	2.0
Small Cap Equity	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	1.3	-1.8	2.7	1.9
Small Cap Value	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-29.1	-7.9	0.4	-3.2	-0.7	1.8

Large Cap Equity

Large Cap Value

Large Cap Growth

Small Cap Equity

Small Cap Value

Small Cap Growth

International Equity

Emerging Markets Equity

US Bonds

Cash

Commodities

Real Estate

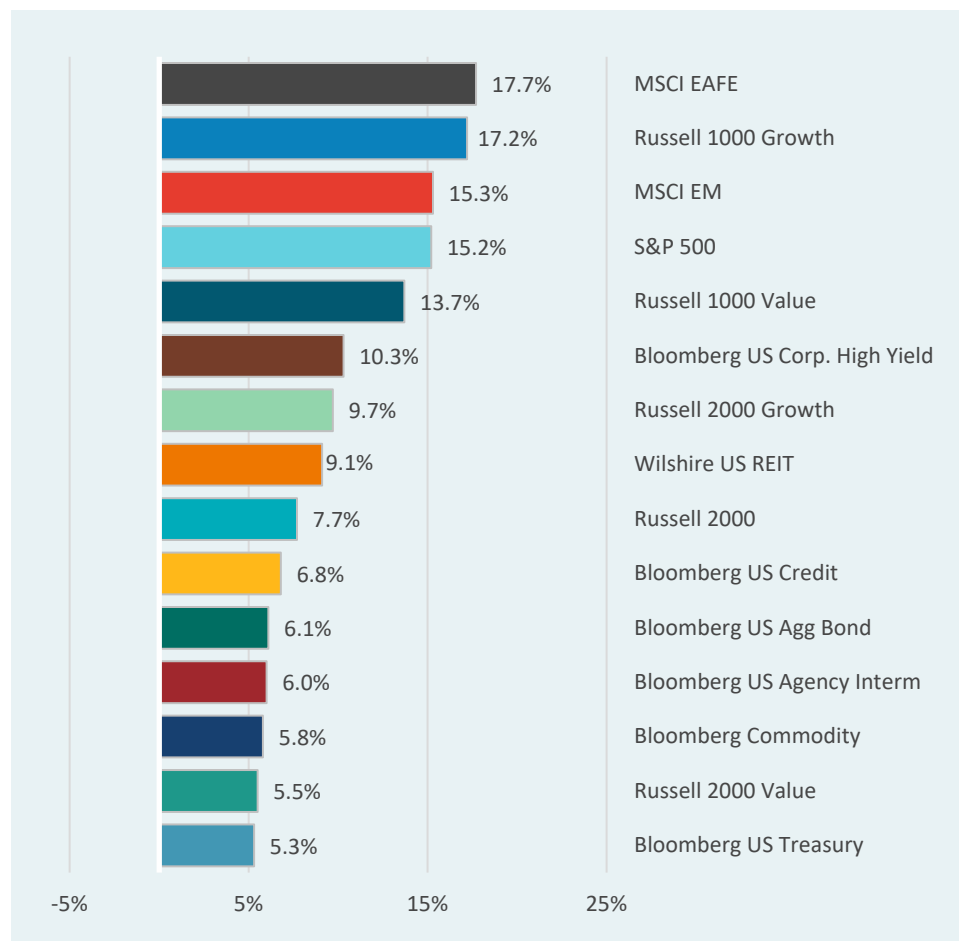
Hedge Funds of Funds

60% MSCI ACWI/40% Bloomberg Global Bond

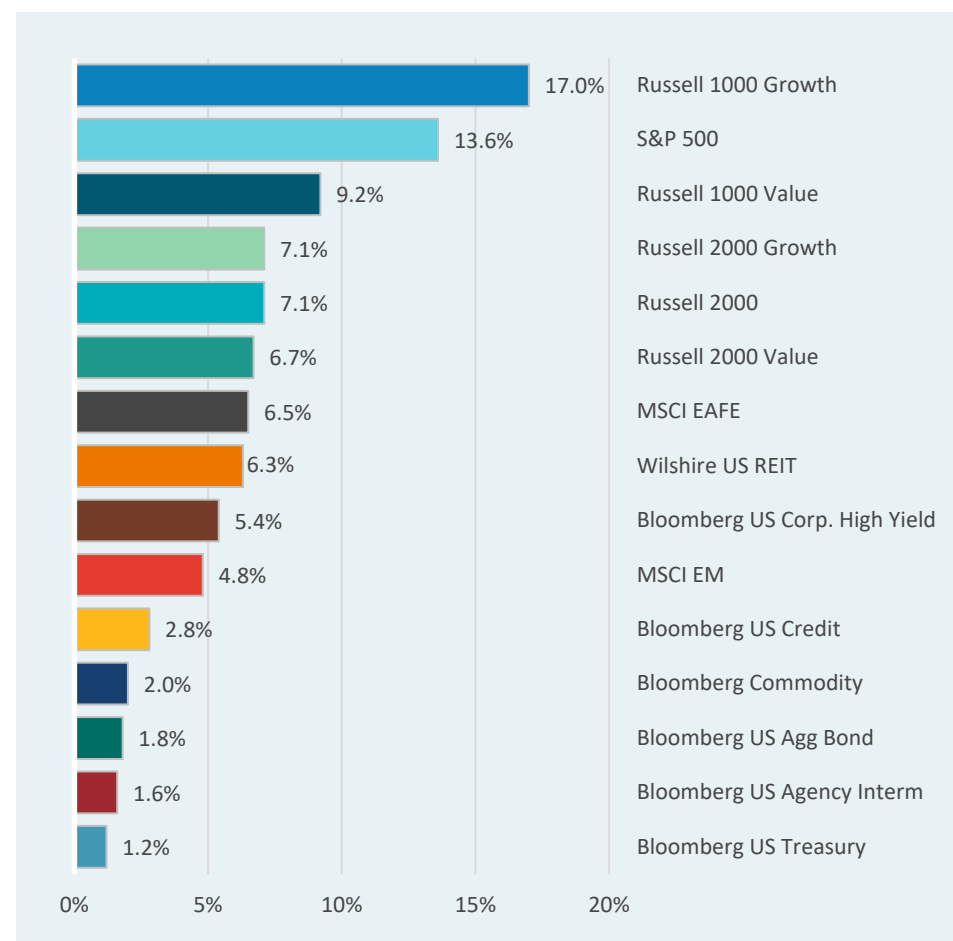
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/25.

Major asset class returns

ONE YEAR ENDING JUNE



TEN YEARS ENDING JUNE



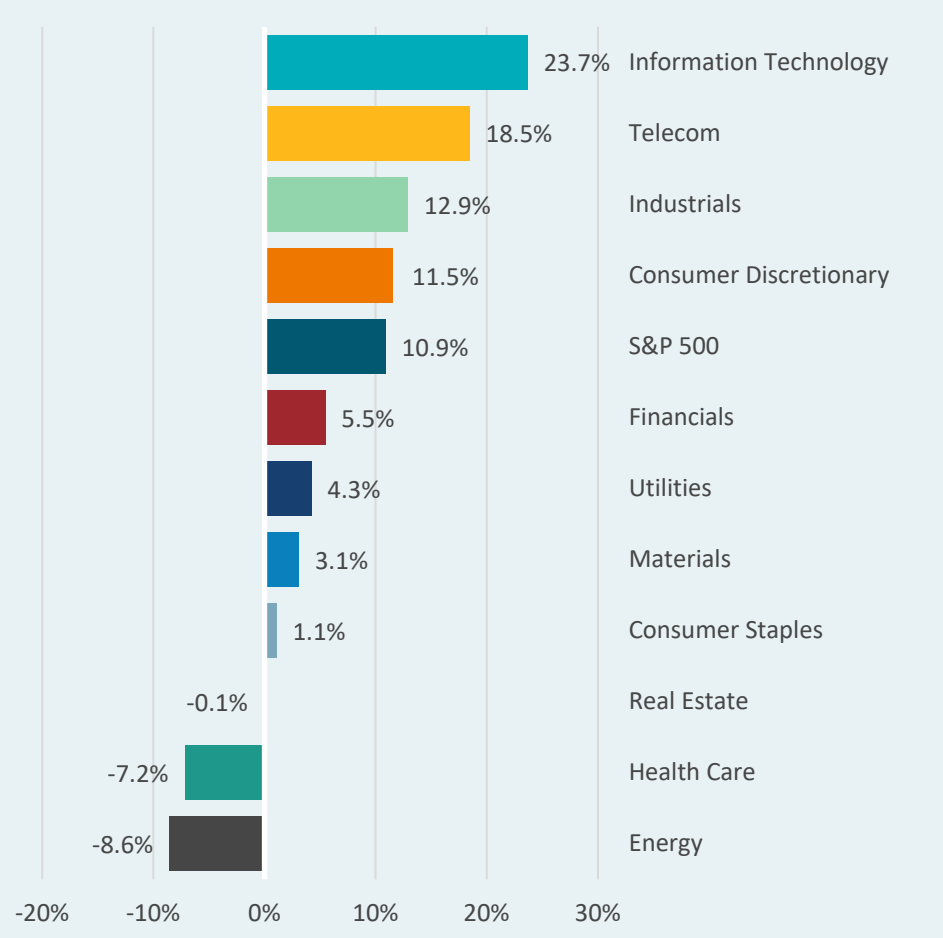
*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 6/30/25

Source: Morningstar, as of 6/30/25

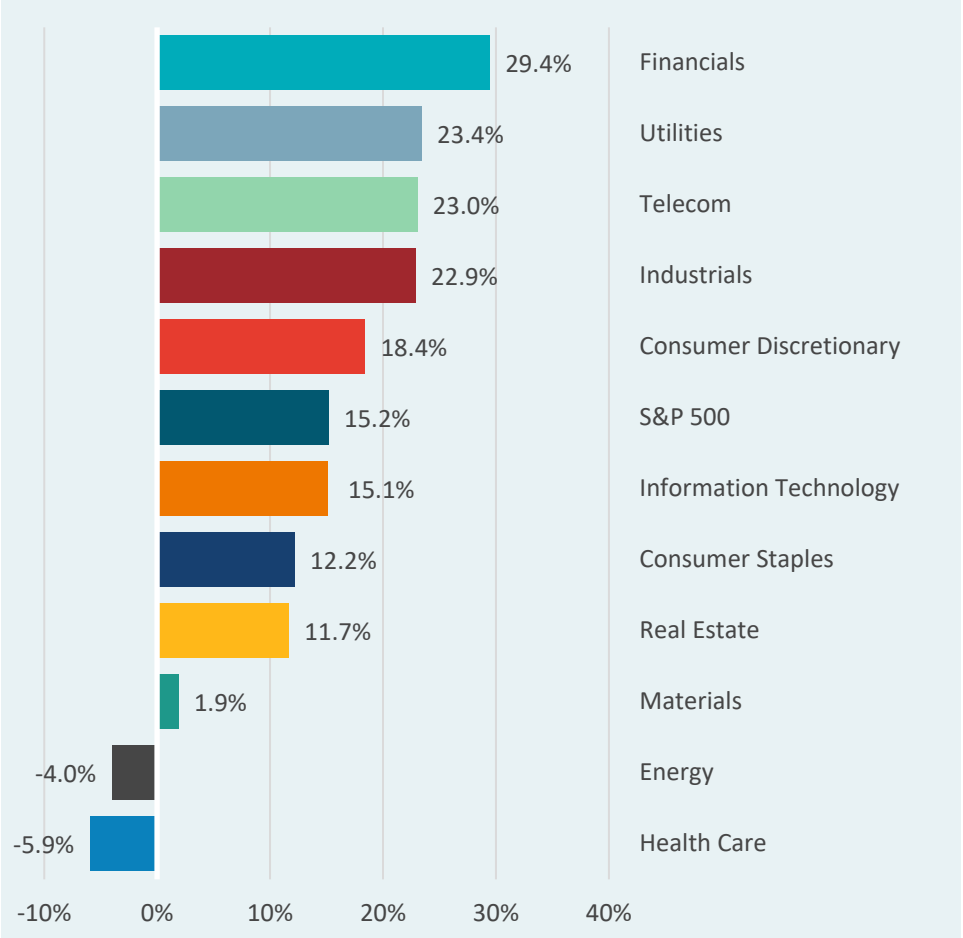
S&P 500 sector returns

QTD



Source: Morningstar, as of 6/30/25

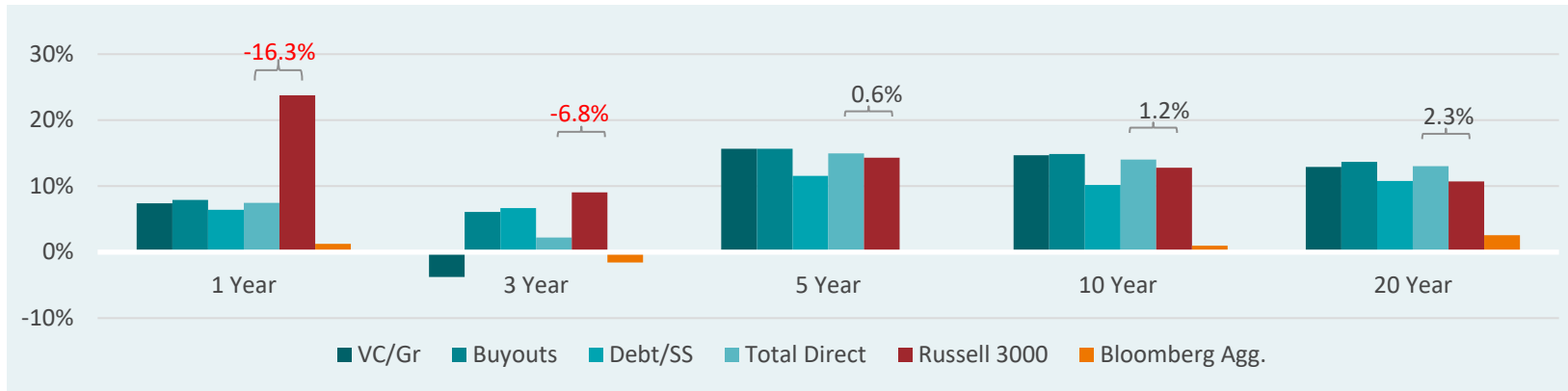
ONE YEAR ENDING JUNE



Source: Morningstar, as of 6/30/25

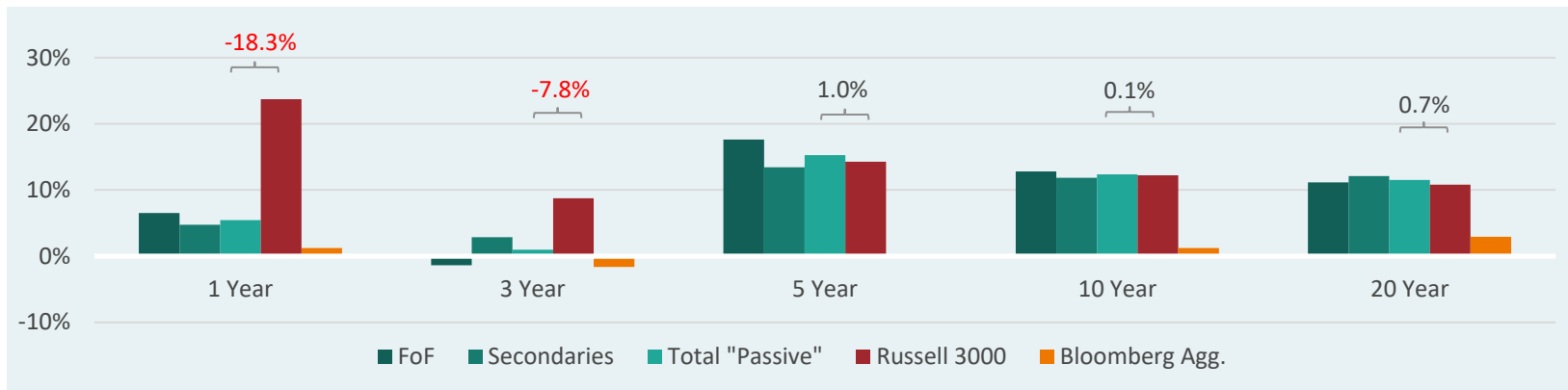
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments vs. public equities has been mixed.

"PASSIVE" STRATEGIES

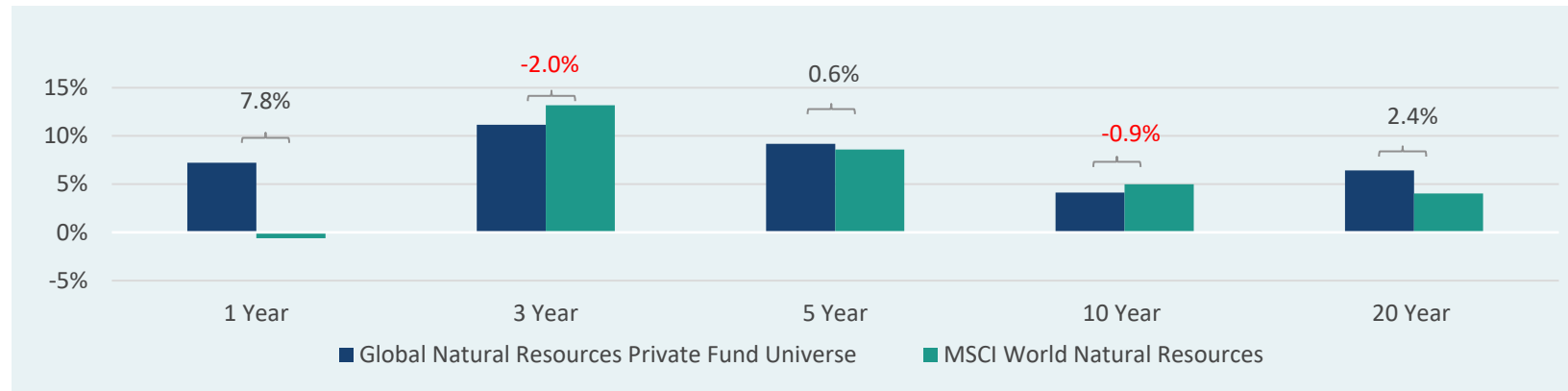


"Passive" strategies vs public equities has been mixed.

Sources: FTSE PME: U.S. Direct Private Equity and "Passive" returns are as of December 31, 2024. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.

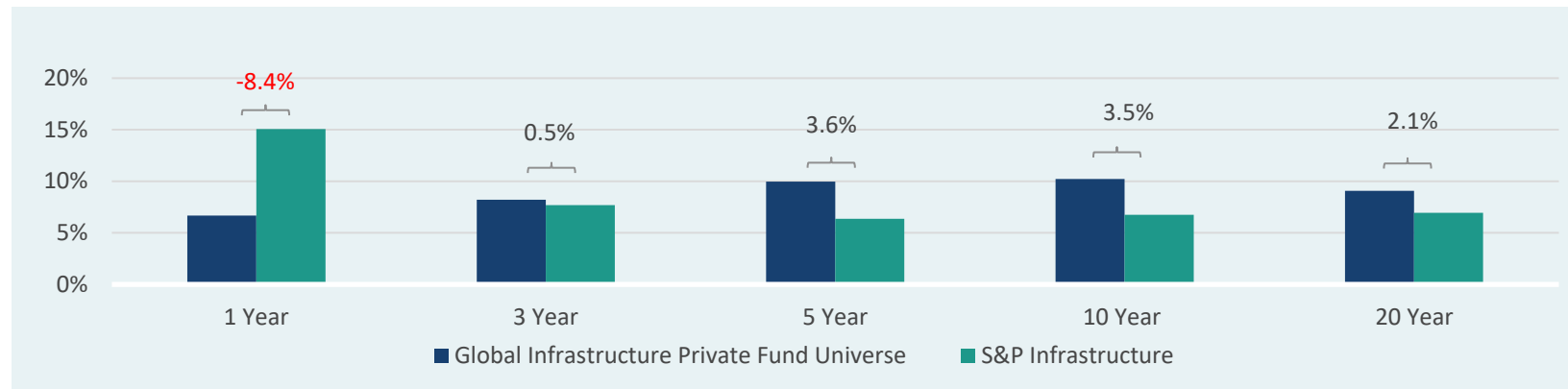
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds vs. the MSCI World Natural Resources benchmark has been mixed.

GLOBAL INFRASTRUCTURE FUNDS

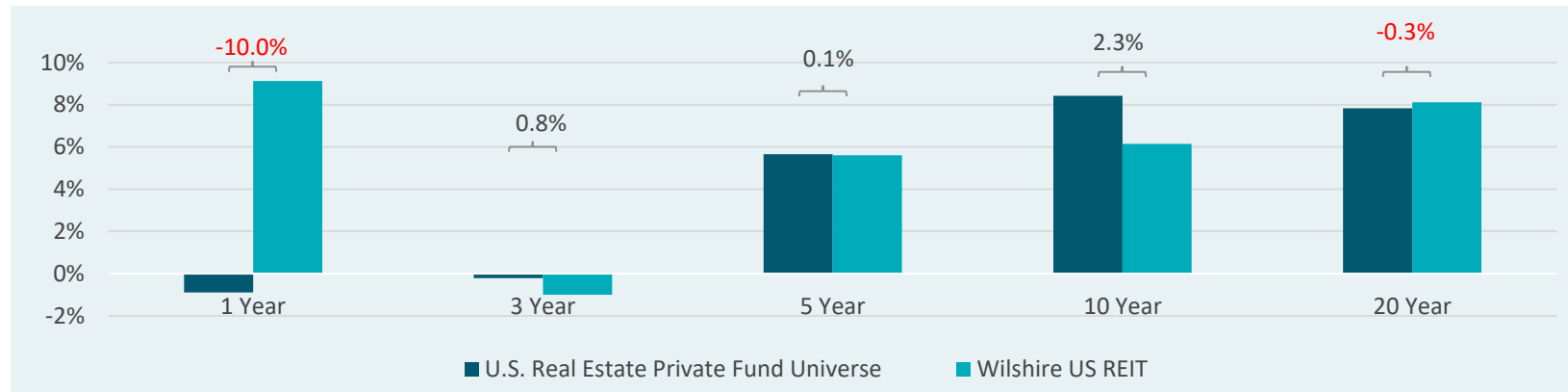


Infra. funds outperformed S&P Infra. over most periods.

Sources: FTSE 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 December 31, 2024. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

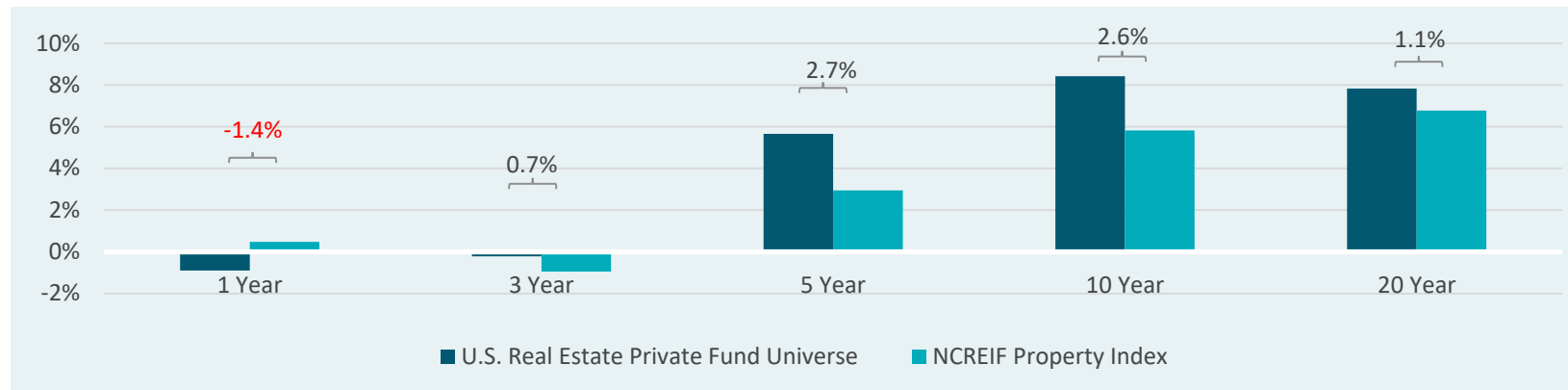
Private vs. liquid and core real estate performance

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



U.S. Private R.E. funds vs. the Wilshire U.S. REIT Index was mixed.

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



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

Sources: FTSE PME: U.S. Real Estate universes as of December 31, 2024. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	5.1	10.9	6.2	15.2	19.7	16.6	13.6
S&P 500 Equal Weighted	3.4	5.5	4.8	12.7	12.8	14.4	10.7
DJ Industrial Average	4.5	5.5	4.5	14.7	15.0	13.5	12.1
Russell Top 200	5.4	11.8	6.5	15.8	21.3	17.3	14.6
Russell 1000	5.1	11.1	6.1	15.7	19.6	16.3	13.4
Russell 2000	5.4	8.5	(1.8)	7.7	10.0	10.0	7.1
Russell 3000	5.1	11.0	5.8	15.3	19.1	16.0	13.0
Russell Mid Cap	3.7	8.5	4.8	15.2	14.3	13.1	9.9
Style Index							
Russell 1000 Growth	6.4	17.8	6.1	17.2	25.8	18.1	17.0
Russell 1000 Value	3.4	3.8	6.0	13.7	12.8	13.9	9.2
Russell 2000 Growth	5.9	12.0	(0.5)	9.7	12.4	7.4	7.1
Russell 2000 Value	4.9	5.0	(3.2)	5.5	7.5	12.5	6.7

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	4.5	11.5	10.0	16.2	17.3	13.7	10.0
MSCI ACWI ex US	3.4	12.0	17.9	17.7	14.0	10.1	6.1
MSCI EAFE	2.2	11.8	19.4	17.7	16.0	11.2	6.5
MSCI EM	6.0	12.0	15.3	15.3	9.7	6.8	4.8
MSCI EAFE Small Cap	4.3	16.6	20.9	22.5	13.3	9.3	6.5
Style Index							
MSCI EAFE Growth	2.7	13.5	16.0	11.4	13.6	7.9	6.7
MSCI EAFE Value	1.7	10.1	22.8	24.2	18.4	14.3	6.1
Regional Index							
MSCI UK	1.4	8.7	19.3	20.0	15.2	14.0	5.4
MSCI Japan	1.7	11.4	11.7	13.9	15.0	8.8	6.1
MSCI Euro	2.5	12.7	26.1	22.2	21.3	13.4	7.3
MSCI EM Asia	6.3	12.4	13.9	14.9	9.4	6.5	5.7
MSCI EM Latin American	6.1	15.2	29.9	13.4	11.6	11.1	3.7

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	1.0	0.5	4.7	5.8	2.3	1.6	2.7
Bloomberg US Treasury Bills	0.3	1.1	2.1	4.8	4.6	2.8	2.0
Bloomberg US Agg Bond	1.5	1.2	4.0	6.1	2.5	(0.7)	1.8
Bloomberg US Universal	1.6	1.4	4.1	6.5	3.3	(0.1)	2.1
Duration							
Bloomberg US Treasury 1-3 Yr	0.6	1.2	2.8	5.7	3.4	1.3	1.6
Bloomberg US Treasury Long	2.5	(1.5)	3.1	1.6	(3.7)	(8.2)	0.1
Bloomberg US Treasury	1.3	0.8	3.8	5.3	1.5	(1.6)	1.2
Issuer							
Bloomberg US MBS	1.8	1.1	4.2	6.5	2.3	(0.6)	1.3
Bloomberg US Corp. High Yield	1.8	3.5	4.6	10.3	9.9	6.0	5.4
Bloomberg US Agency Interm	0.8	1.4	3.4	6.0	3.4	0.8	1.6
Bloomberg US Credit	1.8	1.8	4.2	6.8	4.2	0.1	2.8

OTHER

Index							
Bloomberg Commodity	2.4	(3.1)	5.5	5.8	0.1	12.7	2.0
Wilshire US REIT	(0.6)	(1.2)	(0.2)	9.1	5.7	8.7	6.3
S&P UBS Leveraged Loan	1.4	1.0	1.9	6.7	8.4	7.5	5.0
S&P Global Infrastructure	2.0	10.4	15.5	27.7	12.5	13.1	7.7
Alerian MLP	2.6	(4.9)	7.1	13.9	26.2	28.1	5.2
Regional Index							
JPM EMBI Global Div	2.4	3.3	5.6	10.0	8.9	1.8	3.5
JPM GBI-EM Global Div	2.8	7.6	12.3	13.8	8.5	1.9	2.1
Hedge Funds							
HFRI Composite	2.4	4.4	3.9	8.0	7.5	8.4	5.3
HFRI FOF Composite	1.8	3.4	3.0	7.3	6.5	6.2	3.8
Currency (Spot)							
Euro	3.4	8.7	13.4	9.5	3.9	0.9	0.5
Pound Sterling	1.6	6.2	9.4	8.4	4.1	2.1	(1.4)
Yen	(0.1)	3.5	8.8	11.4	(2.0)	(5.7)	(1.6)

Source: Morningstar, HFRI, as of 6/30/25

Definitions

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

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

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

NAHB Housing Market Index - the housing market index is a weighted average of separate diffusion 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 $\frac{(\text{Good-Poor} + 100)}{2}$ to the present and future sales series and $\frac{(\text{High/Very High-Low/Very Low} + 100)}{2}$ 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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Contra Costa County Employees Retirement Association

Investment Performance Review

Period Ending: June 30, 2025



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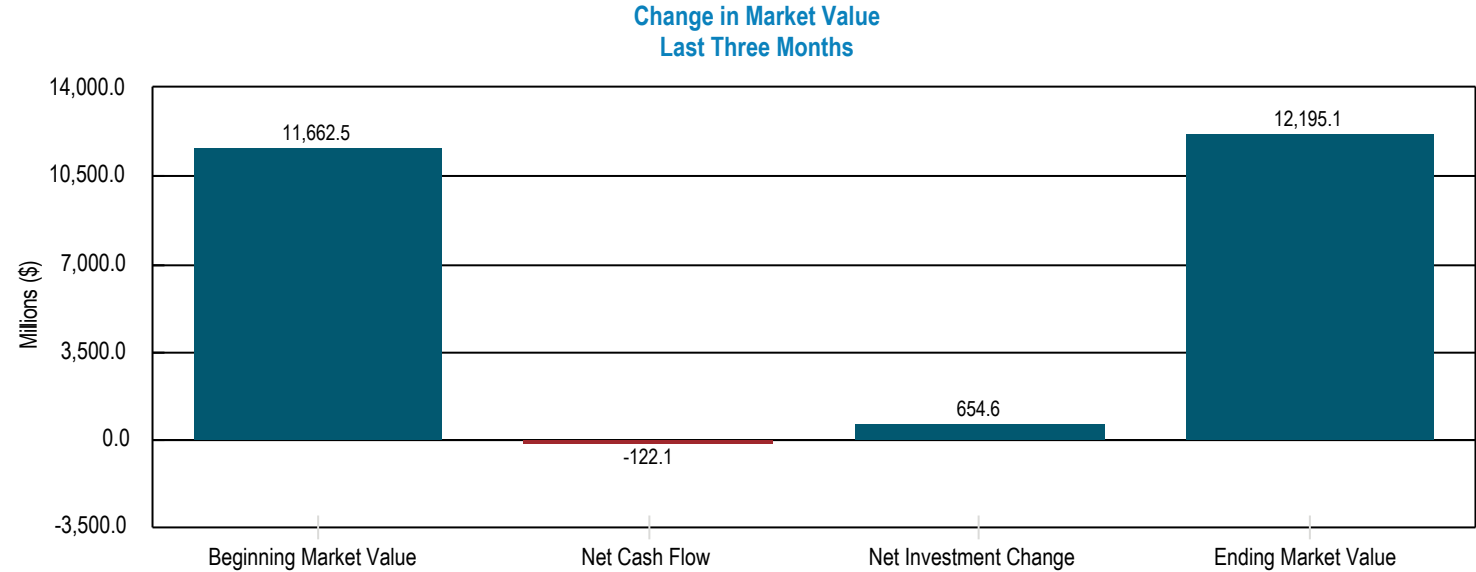
LOS ANGELES 310.297.1777

SAN FRANCISCO 415.362.3484

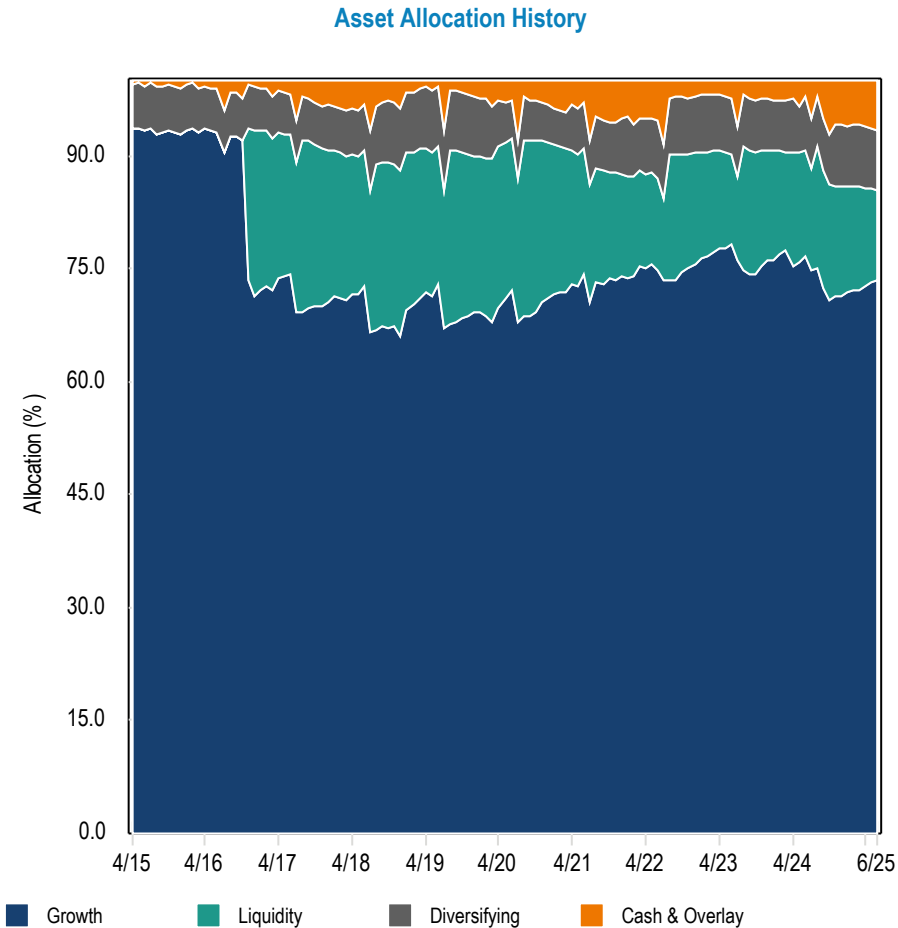
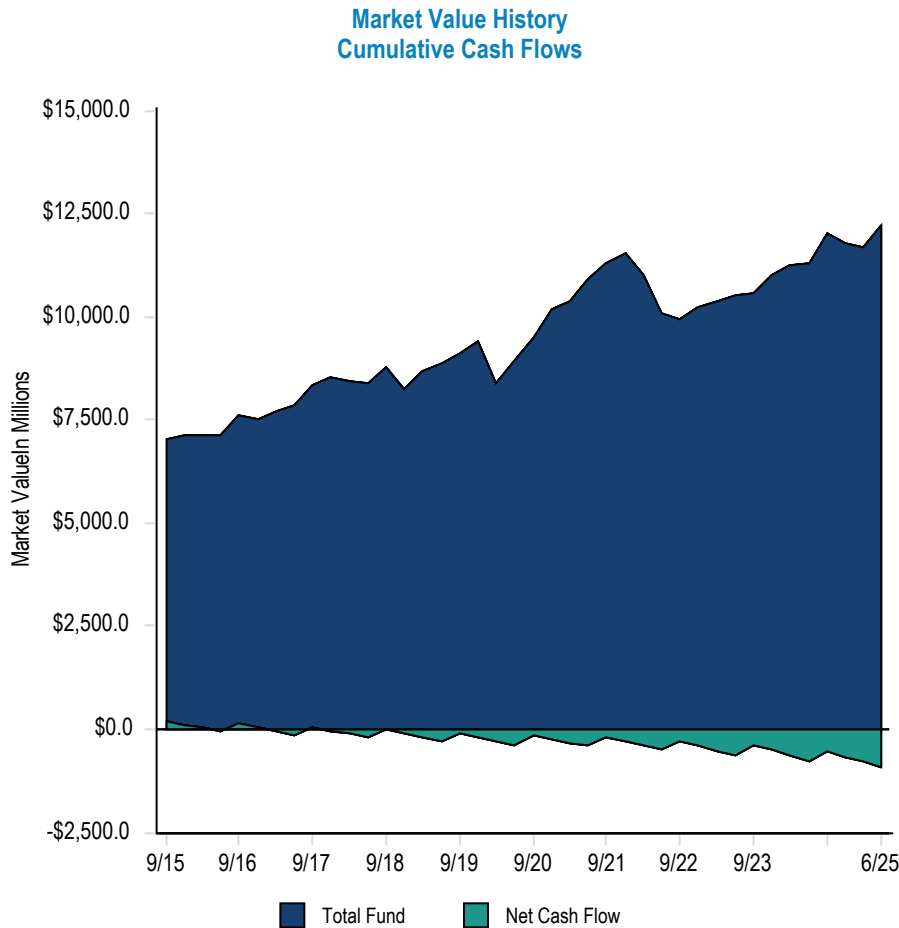
Total Fund
Portfolio Reconciliation

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Portfolio Reconciliation		
	Last Three Months	YTD
Beginning Market Value	\$11,662,487,853	\$11,773,818,113
Net Cash Flow	-\$122,066,566	-\$243,809,254
Net Investment Change	\$654,645,961	\$665,058,390
Ending Market Value	\$12,195,067,248	\$12,195,067,248

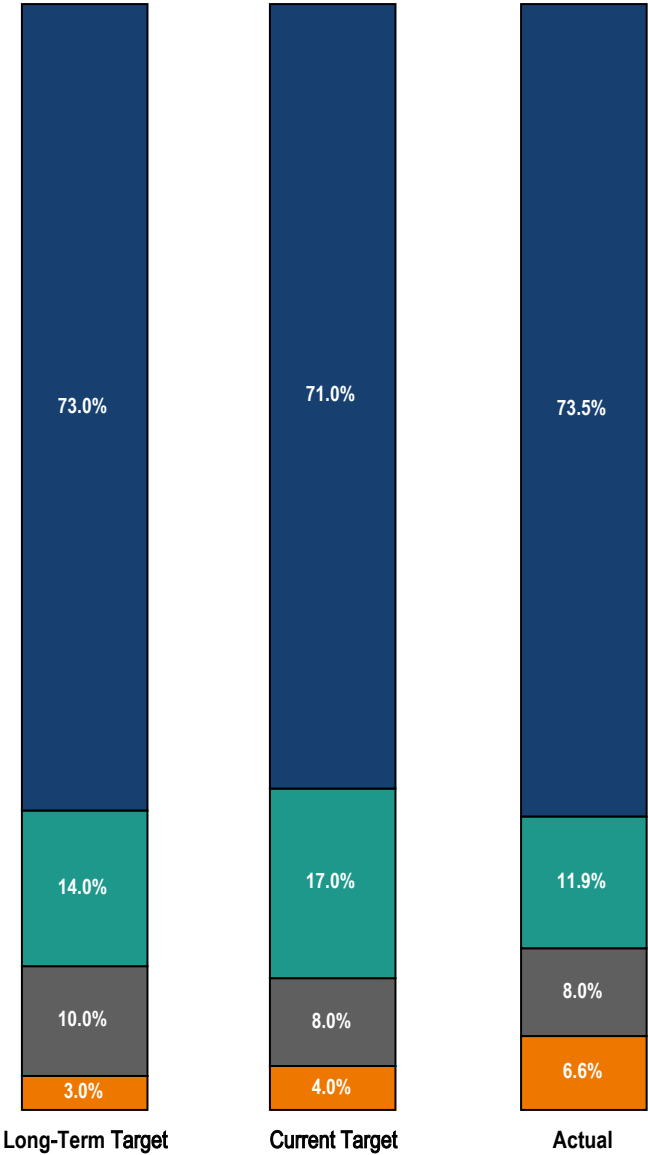


Contributions and withdrawals may include intra-account transfers between managers/funds.



Total Fund
Asset Allocation vs. Policy Target

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



	Allocation vs. Policy Target			
	Current Balance	Current Allocation	Policy Target	Difference
Growth	\$8,966,742,711	73.5	71.0	\$308,244,964
Liquidity	\$1,449,669,094	11.9	17.0	-\$623,492,338
Diversifying	\$972,885,173	8.0	8.0	-\$2,720,207
Cash & Overlay	\$805,770,270	6.6	4.0	\$317,967,580
Total	\$12,195,067,248	100.0	100.0	

	Allocation vs. Long Term Target			
	Current Balance	Current Allocation	Long Term Target	Difference
Growth	\$8,966,742,711	73.5	73.0	\$64,343,619
Liquidity	\$1,449,669,094	11.9	14.0	-\$257,640,321
Diversifying	\$972,885,173	8.0	10.0	-\$246,621,552
Cash & Overlay	\$805,770,270	6.6	3.0	\$439,918,253
Total	\$12,195,067,248	100.0	100.0	

Policy Targets as of 5/1/2025.

Total Fund
Executive Summary (Net of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020
Total Fund	100.0	5.6	5.7	9.3	7.8	7.4	6.3	8.3	9.0	-10.6	13.9	9.2
Policy Index		5.0	5.5	9.4	7.9	8.6	7.3	7.8	9.9	-8.4	15.3	10.8
Implementation Benchmark		5.0	5.5	9.4	7.5	7.6	6.5	7.8	9.0	-8.7	14.2	8.7
Growth	73.5	6.9	6.5	10.6	9.0	9.7	8.0	9.7	10.1	-11.7	19.2	12.0
Custom Growth Benchmark		6.7	6.8	11.0	9.3	11.3	9.2	8.9	11.2	-10.3	21.6	13.8
Diversifying	8.0	0.8	2.0	1.1	0.5	0.3	0.2	-0.3	2.2	-5.7	1.7	-1.7
Custom Diversifying Benchmark		-0.3	1.2	3.5	3.7	2.0	3.0	3.4	7.4	-5.7	1.6	4.7
Liquidity	11.9	1.4	3.2	6.2	4.4	2.1	-	5.0	5.4	-3.5	-0.3	3.4
Custom Liquidity Benchmark		1.3	3.0	5.9	3.7	1.6	-	4.2	4.6	-3.7	-0.5	3.3

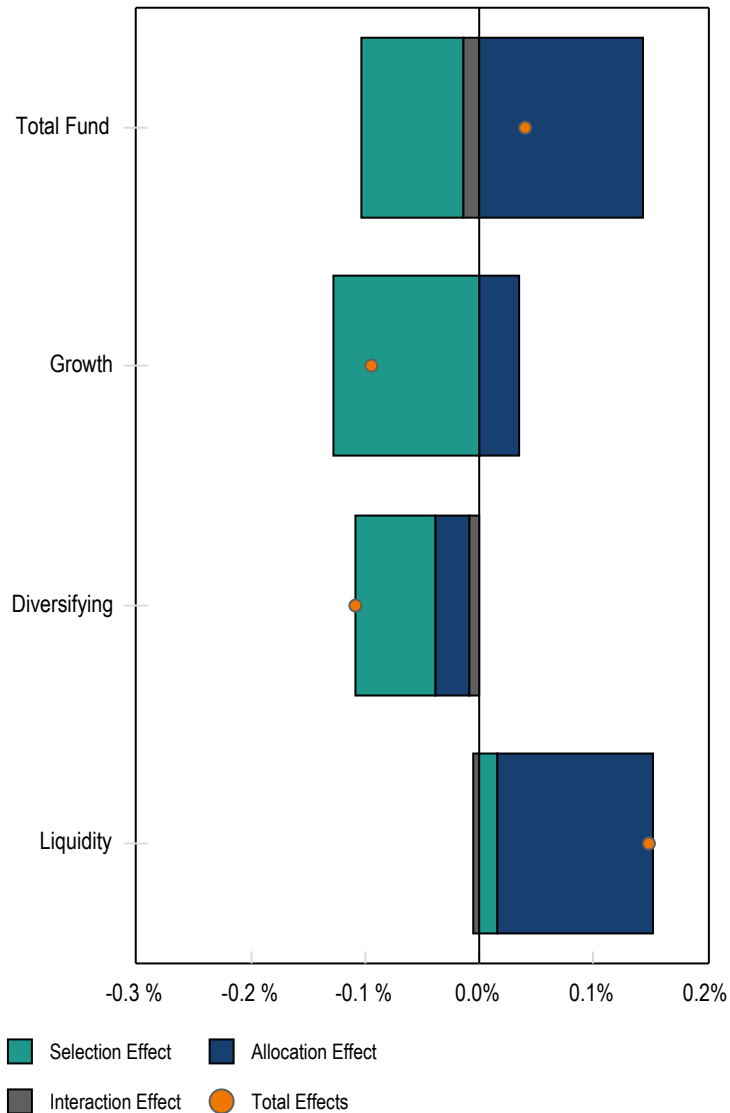
*Correlation between the Growth and Diversifying composites is .52, .58, and .51 over the previous 1, 3, and 5 year periods respectively.

As of 1/1/2024, the Policy Index matched the Implementation Benchmark. The Implementation Benchmark Weights can be found in the Data Sources and Methodology pages.

Total Fund Attribution Analysis - Asset Class Level (Net of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Attribution Effects
3 Months Ending June 30, 2025



Performance Attribution

	3 Mo
Wtd. Actual Return	5.64
Wtd. Index Return	4.98
Excess Return	0.66
Selection Effect	0.55
Allocation Effect	0.10
Interaction Effect	0.01

Attribution Summary
Last 3 Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth	6.9	6.7	0.1	0.4	0.0	0.0	0.1
Diversifying	0.8	-0.3	1.1	0.1	0.0	0.0	0.1
Liquidity	1.4	1.3	0.1	0.1	0.1	0.0	0.1
Cash	1.2	1.1	0.1	0.0	0.0	0.0	0.0
Total Fund	5.6	5.0	0.7	0.6	0.1	0.0	0.7

Performance attribution calculated from benchmark returns and weightings of each component.

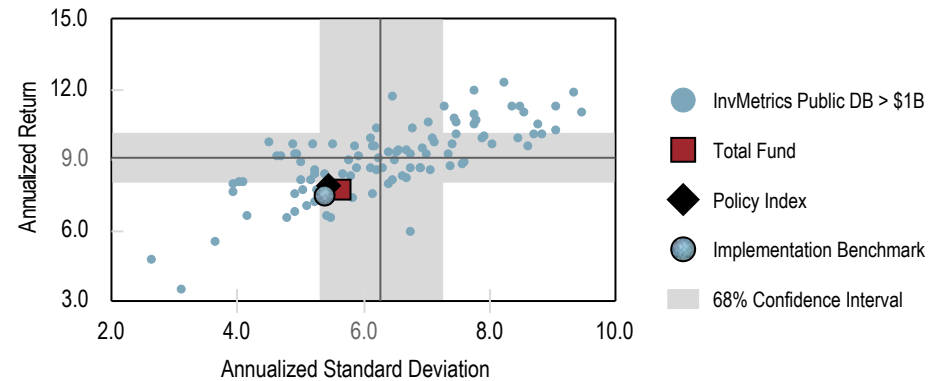
Total Fund Executive Summary (Net of Fees)

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

3 Years

	Anlzd Return	Ann Excess Performance	Anlzd Standard Deviation	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Capture	Down Capture
Total Fund	7.77	0.24	5.63	-0.01	1.03	0.82	0.98	0.59	0.29	103.84	106.17

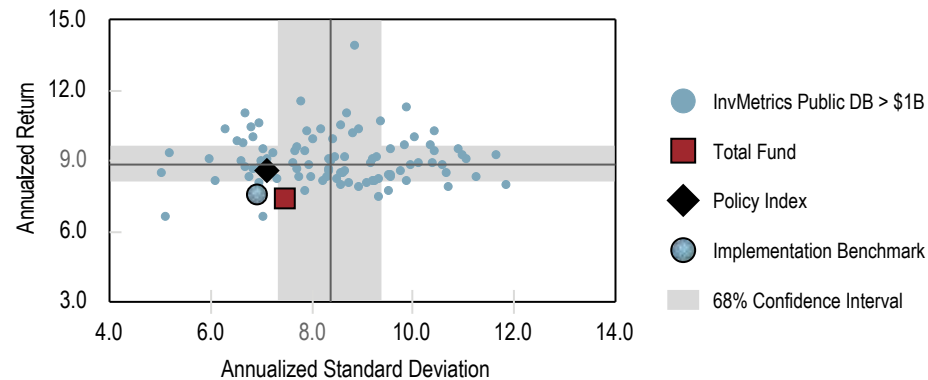
Risk vs. Return



5 Years

	Anlzd Return	Ann Excess Performance	Standard Deviation	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Capture	Down Capture
Total Fund	7.39	-0.22	7.45	-0.68	1.07	1.13	0.98	0.64	-0.15	102.74	115.27

Risk vs. Return



Total Fund
Performance Summary (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Total Fund	12,195,067,248	100.0	5.7	5.8	9.5	8.0	7.6	6.6	8.5	9.2	-10.4	14.2	9.5		
Policy Index			5.0	5.5	9.4	7.9	8.6	7.3	7.8	9.9	-8.4	15.3	10.8		
Implementation Benchmark			5.0	5.5	9.4	7.5	7.6	6.5	7.8	9.0	-8.7	14.2	8.7		
InvMetrics Public DB > \$1B Rank			57	69	75	83	92	80	74	86	53	67	81		
Total Fund ex Overlay & Cash	11,389,296,978	93.4	5.6	5.8	9.4	7.9	7.8	6.7	8.5	9.1	-9.9	14.6	9.7		
Policy Index			5.0	5.5	9.4	7.9	8.6	7.3	7.8	9.9	-8.4	15.3	10.8		
Implementation Benchmark			5.0	5.5	9.4	7.5	7.6	6.5	7.8	9.0	-8.7	14.2	8.7		
InvMetrics Public DB > \$1B Rank			60	72	77	85	88	77	74	88	46	62	77		
Growth	8,966,742,711	73.5	6.9	6.6	10.8	9.2	9.9	8.3	9.9	10.3	-11.4	19.6	12.4		
Custom Growth Benchmark			6.7	6.8	11.0	9.3	11.3	9.2	8.9	11.2	-10.3	21.6	13.8		
Total Domestic Equity	2,316,650,985	19.0	10.3	5.3	13.7	17.4	14.3	11.3	20.7	21.6	-18.3	20.6	22.2		
Russell 3000 Index			11.0	5.8	15.3	19.1	16.0	13.0	23.8	26.0	-19.2	25.7	20.9		
InvMetrics Public DB US Equity Rank			32	38	56	55	78	76	58	79	61	98	12		
BlackRock Russell 1000 Index	1,372,761,132	11.3	11.1	6.1	15.6	19.6	16.3	-	24.5	26.6	-19.1	26.5	21.0	14.1	May-17
Russell 1000 Index			11.1	6.1	15.7	19.6	16.3	-	24.5	26.5	-19.1	26.5	21.0	14.1	
eV US Large Cap Equity Rank			37	52	33	38	40	-	33	34	70	56	35		
Boston Partners	481,218,504	3.9	6.8	7.1	12.7	15.3	17.4	10.8	16.4	14.7	-3.8	31.3	3.0	11.0	Jun-95
Russell 1000 Value Index			3.8	6.0	13.7	12.8	13.9	9.2	14.4	11.5	-7.5	25.2	2.8	9.4	
eV US Large Cap Value Equity Rank			22	33	56	32	18	41	42	40	36	18	64		
Emerald Advisers	259,535,289	2.1	20.7	6.3	16.3	17.3	11.1	9.6	19.7	19.2	-23.8	5.5	39.0	12.7	Apr-03
Russell 2000 Growth Index			12.0	-0.5	9.7	12.4	7.4	7.1	15.2	18.7	-26.4	2.8	34.6	10.2	
eV US Small Cap Growth Equity Rank			7	10	14	13	27	52	28	41	27	76	57		
Ceredex	203,136,060	1.7	2.3	-5.1	1.6	10.4	13.2	7.4	10.2	16.0	-8.5	28.4	2.3	9.6	Nov-11
Russell 2000 Value Index			5.0	-3.2	5.5	7.5	12.5	6.7	8.1	14.6	-14.5	28.3	4.6	9.0	
eV US Small Cap Value Equity Rank			83	76	82	51	72	75	60	61	28	58	70		

Individual closed end funds are not shown in performance summary table.

Total Fund
Performance Summary (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Total International Equity	1,540,135,707	12.6	11.4	13.9	14.6	12.9	9.8	6.3	7.0	15.4	-18.2	8.3	15.8		
MSCI AC World ex USA Index			12.3	18.3	18.4	14.6	10.7	6.6	6.1	16.2	-15.6	8.3	11.1		
MSCI EAFE Index			12.1	19.9	18.3	16.6	11.7	7.0	4.3	18.9	-14.0	11.8	8.3		
InvMetrics Public DB Global ex-US Equity Rank			77	94	85	84	58	70	25	75	64	51	30		
International Equity	982,492,400	8.1	11.3	15.2	15.3	12.7	8.9	6.8	3.7	15.6	-18.1	9.0	19.0		
MSCI AC World ex USA Index			12.3	18.3	18.4	14.6	10.7	6.6	6.1	16.2	-15.6	8.3	11.1		
InvMetrics Public DB Global ex-US Equity Rank			81	84	76	89	83	48	80	69	60	37	14		
Pyrford	504,020,936	4.1	9.0	16.7	18.8	13.0	10.0	6.5	4.0	15.2	-7.0	7.6	4.7	5.8	May-14
MSCI AC World ex USA Value			10.4	19.9	21.4	15.6	13.1	5.7	6.0	17.3	-8.6	10.5	-0.8	4.6	
eV ACWI ex-US Value Equity Rank			91	87	75	92	94	75	61	83	26	82	44		
William Blair	478,471,464	3.9	13.8	13.6	11.8	12.3	7.6	6.9	3.4	16.2	-27.7	10.5	33.3	7.1	Nov-10
MSCI AC World ex USA Growth			13.7	15.9	14.1	12.4	7.1	6.4	5.1	14.0	-23.1	5.1	22.2	5.8	
eV ACWI ex-US Growth Equity Rank			56	73	71	71	67	78	63	59	57	42	35		
Emerging Markets Equity	557,643,307	4.6	11.6	11.6	13.1	13.4	11.3	-	13.1	14.4	-18.4	7.6	11.4		
MSCI Emerging Markets			12.0	15.3	15.3	9.7	6.8	-	7.5	9.8	-20.1	-2.5	18.3		
InvMetrics Public DB Emerging Markets Equity Rank			69	88	61	19	9	-	4	50	38	16	84		
PIMCO RAE Emerging Markets	277,463,370	2.3	10.3	13.7	10.9	17.5	15.8	-	7.5	23.1	-9.7	17.1	2.1	8.1	Mar-17
MSCI Emerging Markets Value			10.0	14.8	12.7	10.2	9.1	-	4.5	14.2	-15.8	4.0	5.5	4.9	
eV Emg Mkts All Cap Value Equity Rank			83	86	88	12	10	-	39	12	33	8	85		
TT Emerging Markets	280,179,938	2.3	13.0	9.6	15.3	9.1	7.0	-	19.1	5.8	-26.4	-0.2	20.8	4.3	Aug-17
MSCI Emerging Markets			12.0	15.3	15.3	9.7	6.8	-	7.5	9.8	-20.1	-2.5	18.3	4.2	
eV Emg Mkts Equity Rank			47	95	58	82	69	-	2	91	90	59	39		
Total Global Equity	1,420,613,161	11.6	9.5	10.8	14.9	16.0	11.4	10.4	14.7	19.0	-18.8	14.1	25.3		
MSCI AC World Index			11.5	10.0	16.2	17.3	13.7	10.0	17.5	22.2	-18.4	18.5	16.3		
InvMetrics Public DB Global Equity Rank			79	72	61	31	89	1	21	79	82	84	2		
Artisan Partners	693,421,162	5.7	11.8	6.9	10.1	16.4	9.7	12.0	16.3	24.5	-29.6	15.0	41.7	12.6	Oct-12
MSCI ACWI Growth NR USD			17.3	9.3	16.7	21.4	13.9	12.3	24.2	33.2	-28.6	17.1	33.6	12.4	
eV Global Growth Equity Rank			67	72	58	39	57	26	36	40	60	57	33		
First Eagle	727,191,999	6.0	7.5	14.7	20.0	15.6	13.0	9.1	13.0	13.7	-5.6	13.0	8.5	9.0	Jan-11
MSCI ACWI Value NR USD			5.8	10.9	15.6	13.1	13.0	7.3	10.8	11.8	-7.5	19.6	-0.3	7.2	
eV Global Value Equity Rank			61	27	21	28	55	20	18	67	24	87	34		

Individual closed end funds are not shown in performance summary table.

Total Fund
Performance Summary (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Private Credit	1,161,535,866	9.5	5.2	5.1	11.4	9.8	10.9	8.9	11.9	9.1	10.5	10.0	4.0		
Total High Yield	175,892,549	1.4	3.6	4.6	8.6	9.3	5.6	4.7	7.0	12.4	-10.6	5.3	5.2		
ICE BofA U.S. High Yield Index			3.6	4.6	10.2	9.9	6.0	5.3	8.2	13.5	-11.2	5.4	6.2		
eV US High Yield Fixed Inc Rank			49	54	80	72	80	88	85	64	74	55	74		
Voya Global Investors	175,892,549	1.4	3.6	4.6	8.6	9.3	5.6	4.7	7.0	12.4	-10.6	5.3	5.2	6.4	May-00
ICE BofA U.S. High Yield Index			3.6	4.6	10.2	9.9	6.0	5.3	8.2	13.5	-11.2	5.4	6.2	6.6	
eV US High Yield Fixed Inc Rank			49	54	80	72	80	88	85	64	74	55	74		
Total Real Estate	931,536,977	7.6	-1.0	0.1	-1.4	-8.3	-2.1	2.1	-9.2	-10.6	-5.2	19.2	-5.9		
Real Estate Benchmark			-1.3	-0.3	-2.7	-8.9	-1.5	2.4	-10.6	-11.3	-4.5	19.3	0.6		
NCREIF-ODCE			1.0	2.1	3.5	-5.4	3.4	5.3	-1.4	-12.0	7.5	22.2	1.2		
NCREIF Property Index			1.2	2.5	4.2	-2.8	3.7	5.2	0.4	-7.9	5.5	17.7	1.6		
Total Core Real Estate	307,049,787	2.5	-0.3	0.7	9.5	4.5	9.0	6.8	7.8	12.8	-24.8	48.3	-4.6		
Adelante	107,974,371	0.9	-0.8	0.2	10.4	6.3	9.7	7.2	10.6	17.2	-26.7	48.3	-4.6	9.5	Oct-01
Wilshire U.S. REIT Index			-1.2	-0.2	9.1	5.7	8.7	6.3	9.1	16.2	-26.8	46.2	-7.9	8.9	
Invesco US Fundamental Beta	122,294,945	1.0	-1.7	-0.6	6.8	2.3	-	-	5.5	9.4	-	-	-	-0.7	Mar-22
Wilshire U.S. REIT Index			-1.2	-0.2	9.1	5.7	-	-	9.1	16.2	-	-	-	0.9	
Real Estate Debt	76,780,471	0.6	2.7	-	-	-	-	-	-	-	-	-	-		
Rialto Credit Opportunities Fund	76,780,471	0.6	2.7	-	-	-	-	-	-	-	-	-	-	2.4	Mar-25
Bloomberg CMBS IG TR USD			1.9	-	-	-	-	-	-	-	-	-	-	2.1	
Total Private Real Estate	624,487,190	5.1	-1.4	-0.3	-5.7	-12.6	-4.7	0.8	-15.2	-17.6	1.3	15.3	-6.1		
Private Equity	1,349,933,265	11.1	2.0	3.7	5.6	0.5	13.1	10.5	2.8	-1.0	-0.5	60.4	8.7		
Private Infrastructure	70,444,200	0.6	-0.2	1.7	-	-	-	-	-	-	-	-	-		

Individual closed end funds are not shown in performance summary table. AQR Global Risk Premium-EL was liquidated of 11/6/2024. PanAgora Risk Parity Multi Asset was liquidated on 4/4/2025.

Total Fund
Performance Summary (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Diversifying	972,885,173	8.0	0.8	2.1	1.4	0.8	0.7	0.6	-0.1	2.6	-5.4	2.0	-1.3		
Custom Diversifying Benchmark			-0.3	1.2	3.5	3.7	2.0	3.0	3.4	7.4	-5.7	1.6	4.7		
Diversifying Fixed Income	273,767,029	2.2	0.9	3.7	5.9	2.5	-0.5	1.1	2.6	5.5	-13.3	-0.7	1.6		
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	1.3	5.5	-13.0	-1.5	7.5		
eV US Core Fixed Inc Rank			100	97	96	93	87	100	19	84	73	32	100		
AFL-CIO	273,741,336	2.2	0.9	3.7	5.9	2.5	-0.5	1.9	2.6	5.5	-13.3	-0.7	6.6	5.2	Jul-91
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	1.3	5.5	-13.0	-1.5	7.5	4.9	
eV US Core Fixed Inc Rank			100	97	96	94	87	97	19	85	73	32	95		
Diversifying Multi-Asset	699,118,144	5.7	0.8	1.5	-0.4	0.1	-	-	-1.1	1.4	-1.9	2.8	-		
Custom Diversifying Multi-Asset Benchmark			1.9	4.7	8.7	6.9	-	-	6.5	8.7	-3.1	4.1	-	4.6	
Sit LLCAR	487,634,444	4.0	2.4	5.3	8.4	5.4	-	-	6.0	6.9	-3.3	-	-	4.5	Apr-21
Blmbg. U.S. Aggregate Index +1%			1.5	4.5	7.1	3.6	-	-	2.3	6.6	-12.1	-	-	0.7	
BH-DG Systematic	211,483,700	1.7	-2.6	-6.2	-16.5	-	-	-	-	-	-	-	-	-16.1	Apr-24
SG Trend Index			-5.2	-7.6	-12.7	-	-	-	-	-	-	-	-	-13.9	
Liquidity	1,449,669,094	11.9	1.4	3.3	6.3	4.5	2.2	-	5.1	5.5	-3.4	-0.2	3.5		
Custom Liquidity Benchmark			1.3	3.0	5.9	3.7	1.6	-	4.2	4.6	-3.7	-0.5	3.3		
eV US Short Duration Fixed Inc Rank			74	52	69	51	54	-	47	46	49	48	73		
DFA Short Credit	331,456,680	2.7	1.3	2.6	5.5	4.7	1.7	-	5.8	5.4	-5.3	-0.4	2.9	2.2	Dec-16
ICE BofA 1-5 Year U.S. Corp/Govt Index			1.5	3.5	6.4	3.8	1.3	-	3.9	4.9	-5.5	-0.9	4.6	2.1	
eV US Short Duration Fixed Inc Rank			87	93	94	40	80	-	21	49	91	69	87		
Insight Short Duration	544,905,567	4.5	1.2	2.7	5.8	4.7	2.7	-	5.4	5.7	-1.1	0.1	3.2	2.8	Dec-16
Bloomberg U.S. Gov/Credit 1-3 Year Index			1.3	2.9	5.9	3.8	1.6	-	4.4	4.6	-3.7	-0.5	3.3	2.0	
eV US Short Duration Fixed Inc Rank			91	92	91	38	29	-	33	35	7	33	83		
Sit Short Duration	573,306,847	4.7	1.6	4.2	7.3	4.3	1.8	-	4.4	5.4	-4.8	-0.3	4.6	2.5	Dec-16
Blmbg. 1-3 Year Govt Index			1.2	2.8	5.7	3.4	1.3	-	4.0	4.3	-3.8	-0.6	3.1	1.8	
eV US Short Duration Fixed Inc Rank			25	3	14	66	77	-	77	52	78	60	31		
Total Cash	636,919,299	5.2	1.2	2.3	5.1	5.1	3.3	2.4	5.6	5.5	2.4	0.4	1.3		
90 Day U.S. Treasury Bill			1.0	2.1	4.7	4.6	2.8	2.0	5.3	5.0	1.5	0.0	0.7		
Cash	636,919,298	5.2	1.2	2.3	5.1	5.3	3.4	2.5	5.6	6.1	2.2	0.4	1.3	16.8	Apr-98

Individual closed end funds are not shown in performance summary table. Effective 3/1/2019 the custodian of record switched from State Street to Northern Trust. Wellington Real Total Return was liquidated 4/30/2020. BH-DG Systematic funded on 4/19/2024. Acadian Multi-Asset Absolute Return Fund liquidated on 5/15/2024. Wellington Real Total Return residual value of \$25,693.62 is included in Total Fund Market Value.

Total Fund Performance Summary (Net of Fees)

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Total Fund	12,195,067,248	100.0	5.6	5.7	9.3	7.8	7.4	6.3	8.3	9.0	-10.6	13.9	9.2		
Policy Index			5.0	5.5	9.4	7.9	8.6	7.3	7.8	9.9	-8.4	15.3	10.8		
Implementation Benchmark			5.0	5.5	9.4	7.5	7.6	6.5	7.8	9.0	-8.7	14.2	8.7		
Total Fund ex Overlay & Cash	11,389,296,978	93.4	5.5	5.7	9.2	7.7	7.6	6.4	8.2	8.9	-10.1	14.3	9.4		
Policy Index			5.0	5.5	9.4	7.9	8.6	7.3	7.8	9.9	-8.4	15.3	10.8		
Implementation Benchmark			5.0	5.5	9.4	7.5	7.6	6.5	7.8	9.0	-8.7	14.2	8.7		
Growth	8,966,742,711	73.5	6.9	6.5	10.6	9.0	9.7	8.0	9.7	10.1	-11.7	19.2	12.0		
Custom Growth Benchmark			6.7	6.8	11.0	9.3	11.3	9.2	8.9	11.2	-10.3	21.6	13.8		
Total Domestic Equity	2,316,650,985	19.0	10.3	5.1	13.5	17.2	14.0	10.9	20.5	21.4	-18.5	20.2	21.8		
Russell 3000 Index			11.0	5.8	15.3	19.1	16.0	13.0	23.8	26.0	-19.2	25.7	20.9		
BlackRock Russell 1000 Index	1,372,761,132	11.3	11.1	6.1	15.6	19.6	16.3	-	24.5	26.6	-19.1	26.5	20.9	14.1	May-17
Russell 1000 Index			11.1	6.1	15.7	19.6	16.3	-	24.5	26.5	-19.1	26.5	21.0	14.1	
Boston Partners	481,218,504	3.9	6.7	7.0	12.4	14.9	17.1	10.4	16.0	14.3	-4.1	31.0	2.6	10.8	Jun-95
Russell 1000 Value Index			3.8	6.0	13.7	12.8	13.9	9.2	14.4	11.5	-7.5	25.2	2.8	9.4	
Emerald Advisers	259,535,289	2.1	20.5	6.0	15.6	16.7	10.4	8.9	18.9	18.6	-24.2	4.9	38.2	12.3	Apr-03
Russell 2000 Growth Index			12.0	-0.5	9.7	12.4	7.4	7.1	15.2	18.7	-26.4	2.8	34.6	10.1	
Ceredex	203,136,060	1.7	2.2	-5.5	1.0	9.9	12.6	6.8	9.7	15.5	-9.0	27.7	1.7	9.0	Nov-11
Russell 2000 Value Index			5.0	-3.2	5.5	7.5	12.5	6.7	8.1	14.6	-14.5	28.3	4.6	9.0	
Total International Equity	1,540,135,707	12.6	11.3	13.7	14.3	12.6	9.4	5.9	6.8	15.1	-18.6	7.8	15.2		
MSCI AC World ex USA Index			12.3	18.3	18.4	14.6	10.7	6.6	6.1	16.2	-15.6	8.3	11.1		
MSCI EAFE Index			12.1	19.9	18.3	16.6	11.7	7.0	4.3	18.9	-14.0	11.8	8.3		
International Equity	982,492,400	8.1	11.2	15.0	14.9	12.3	8.5	6.4	3.4	15.2	-18.4	8.6	18.5		
MSCI AC World ex USA Index			12.3	18.3	18.4	14.6	10.7	6.6	6.1	16.2	-15.6	8.3	11.1		
Pyrford	504,020,936	4.1	8.9	16.5	18.4	12.6	9.6	6.1	3.7	14.7	-7.4	7.1	4.2	5.4	May-14
MSCI AC World ex USA Value			10.4	19.9	21.4	15.6	13.1	5.7	6.0	17.3	-8.6	10.5	-0.8	4.6	
William Blair	478,471,464	3.9	13.7	13.4	11.3	12.0	7.2	6.5	3.1	15.8	-28.0	10.1	32.8	6.8	Nov-10
MSCI AC World ex USA Growth			13.7	15.9	14.1	12.4	7.1	6.4	5.1	14.0	-23.1	5.1	22.2	5.8	
Emerging Markets Equity	557,643,307	4.6	11.6	11.6	13.0	13.2	10.9	-	13.1	14.4	-18.9	7.0	10.7		
MSCI Emerging Markets			12.0	15.3	15.3	9.7	6.8	-	7.5	9.8	-20.1	-2.5	18.3		
PIMCO RAE Emerging Markets	277,463,370	2.3	10.3	13.7	10.8	17.3	15.4	-	7.5	23.0	-10.1	16.5	1.6	7.7	Mar-17
MSCI Emerging Markets Value			10.0	14.8	12.7	10.2	9.1	-	4.5	14.2	-15.8	4.0	5.5	4.9	
TT Emerging Markets	280,179,938	2.3	13.0	9.6	15.3	9.0	6.6	-	19.1	5.8	-26.8	-0.9	20.0	3.9	Aug-17
MSCI Emerging Markets			12.0	15.3	15.3	9.7	6.8	-	7.5	9.8	-20.1	-2.5	18.3	4.2	

Individual closed end funds are not shown in performance summary table. AQR Global Risk Premium-EL was liquidated on 11/6/2024. PanAgora Risk Parity Multi Asset was liquidated on 4/4/2025.

Total Fund
Performance Summary (Net of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Total Global Equity	1,420,613,161	11.6	9.3	10.4	14.1	15.2	10.6	9.6	13.9	18.2	-19.4	13.2	24.4		
MSCI AC World Index			11.5	10.0	16.2	17.3	13.7	10.0	17.5	22.2	-18.4	18.5	16.3		
Artisan Partners	693,421,162	5.7	11.5	6.5	9.3	15.6	8.9	11.2	15.4	23.6	-30.1	14.1	40.6	11.8	Oct-12
MSCI ACWI Growth NR USD			17.3	9.3	16.7	21.4	13.9	12.3	24.2	33.2	-28.6	17.1	33.6	12.4	
First Eagle	727,191,999	6.0	7.3	14.3	19.1	14.7	12.2	8.3	12.2	12.9	-6.3	12.1	7.7	8.3	Jan-11
MSCI ACWI Value NR USD			5.8	10.9	15.6	13.1	13.0	7.3	10.8	11.8	-7.5	19.6	-0.3	7.2	
Private Credit	1,161,535,866	9.5	5.2	5.1	11.4	9.8	10.9	8.7	11.9	9.1	10.5	10.0	4.0		
Total High Yield	175,892,549	1.4	3.5	4.4	8.2	8.8	5.2	4.3	6.5	11.8	-10.9	4.9	4.7		
ICE BofA US High Yield Master II			3.6	4.6	10.2	9.9	6.0	5.3	8.2	13.5	-11.2	5.3	6.1		
Voya Global Investors	175,892,549	1.4	3.5	4.4	8.2	8.8	5.2	4.3	6.5	11.8	-10.9	4.9	4.7	6.2	May-00
ICE BofA US High Yield Master II			3.6	4.6	10.2	9.9	6.0	5.3	8.2	13.5	-11.2	5.3	6.1	6.7	
Total Real Estate	931,536,977	7.6	-1.0	0.0	-1.5	-8.5	-2.2	1.9	-9.4	-10.7	-5.3	19.2	-6.0		
Real Estate Benchmark			-1.3	-0.3	-2.7	-8.9	-1.5	2.4	-10.6	-11.3	-4.5	19.3	0.6		
NCREIF-ODCE			1.0	2.1	3.5	-5.4	3.4	5.3	-1.4	-12.0	7.5	22.2	1.2		
NCREIF Property Index			1.2	2.5	4.2	-2.8	3.7	5.2	0.4	-7.9	5.5	17.7	1.6		
Total Core Real Estate	307,049,787	2.5	-0.4	0.6	9.2	4.1	8.5	6.3	7.5	12.4	-25.1	47.5	-5.2		
Adelante	107,974,371	0.9	-0.9	0.0	9.8	5.7	9.1	6.7	10.0	16.5	-27.2	47.5	-5.2	9.2	Oct-01
Wilshire U.S. REIT Index			-1.2	-0.2	9.1	5.7	8.7	6.3	9.1	16.2	-26.8	46.2	-7.9	8.9	
Invesco US Fundamental Beta	122,294,945	1.0	-1.7	-0.7	6.6	2.2	-	-	5.4	9.2	-	-	-	-0.9	Mar-22
Wilshire U.S. REIT Index			-1.2	-0.2	9.1	5.7	-	-	9.1	16.2	-	-	-	0.9	
Real Estate Debt	76,780,471	0.6	2.7	-	-	-	-	-	-	-	-	-	-		
Rialto Credit Opportunities Fund	76,780,471	0.6	2.7	-	-	-	-	-	-	-	-	-	-	2.4	Mar-25
Bloomberg CMBS IG TR USD			1.9	-	-	-	-	-	-	-	-	-	-	2.1	
Total Private Real Estate	624,487,190	5.1	-1.4	-0.3	-5.7	-12.7	-4.8	0.7	-15.4	-17.6	1.3	15.3	-6.1		
Private Equity	1,349,933,265	11.1	2.0	3.7	5.6	0.5	13.1	10.4	2.8	-1.0	-0.5	60.4	8.7		
Private Infrastructure	70,444,200	0.6	-0.2	1.7	-	-	-	-	-	-	-	-	-		

Individual closed end funds are not shown in performance summary table.

Total Fund
Performance Summary (Net of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2024	2023	2022	2021	2020	Inception	Inception Date
Diversifying	972,885,173	8.0	0.8	2.0	1.1	0.5	0.3	0.2	-0.3	2.2	-5.7	1.7	-1.7		
Custom Diversifying Benchmark			-0.3	1.2	3.5	3.7	2.0	3.0	3.4	7.4	-5.7	1.6	4.7		
Diversifying Fixed Income	273,767,029	2.2	0.8	3.5	5.6	2.2	-0.8	0.8	2.3	5.2	-13.5	-1.0	1.2		
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	1.3	5.5	-13.0	-1.5	7.5		
AFL-CIO	273,741,336	2.2	0.8	3.5	5.6	2.2	-0.8	1.5	2.3	5.2	-13.6	-1.0	6.2	4.9	Jul-91
Blmbg. U.S. Aggregate Index			1.2	4.0	6.1	2.5	-0.7	1.8	1.3	5.5	-13.0	-1.5	7.5	4.9	
Diversifying Multi-Asset	699,118,144	5.7	0.7	1.4	-0.6	-0.2	-	-	-1.3	0.9	-2.3	2.4	-		
Custom Diversifying Multi-Asset Benchmark			1.9	4.7	8.7	6.9	-	-	6.5	8.7	-3.1	4.1	-		
Sit LLCAR	487,634,444	4.0	2.3	5.0	8.1	5.0	-	-	5.8	6.5	-3.7	-	-	4.2	Apr-21
Blmbg. U.S. Aggregate +1%			1.5	4.5	7.1	3.6	-	-	2.3	6.6	-12.1	-	-	0.7	
BH-DG Systematic	211,483,700	1.7	-2.6	-6.2	-16.5	-	-	-	-	-	-	-	-	-16.1	Apr-24
SG Trend Index			-5.2	-7.6	-12.7	-	-	-	-	-	-	-	-	-13.9	
Liquidity	1,449,669,094	11.9	1.4	3.2	6.2	4.4	2.1	-	5.0	5.4	-3.5	-0.3	3.4		
Custom Liquidity Benchmark			1.3	3.0	5.9	3.7	1.6	-	4.2	4.6	-3.7	-0.5	3.3		
DFA Short Credit	331,456,680	2.7	1.3	2.5	5.4	4.6	1.6	-	5.7	5.3	-5.4	-0.5	2.8	2.1	Dec-16
ICE BofA 1-5 Year U.S. Corp/Govt			1.5	3.5	6.4	3.8	1.3	-	3.9	4.9	-5.5	-0.9	4.6	2.1	
Insight Short Duration	544,905,567	4.5	1.2	2.6	5.8	4.6	2.6	-	5.3	5.7	-1.2	0.0	3.1	2.7	Dec-16
Bloomberg U.S. Gov/Credit 1-3 Year Index			1.3	2.9	5.9	3.8	1.6	-	4.4	4.6	-3.7	-0.5	3.3	2.0	
Sit Short Duration	573,306,847	4.7	1.6	4.1	7.1	4.1	1.7	-	4.3	5.2	-5.0	-0.5	4.4	2.4	Dec-16
Blmbg. 1-3 Year Govt Index			1.2	2.8	5.7	3.4	1.3	-	4.0	4.3	-3.8	-0.6	3.1	1.8	
Total Cash	636,919,299	5.2	1.2	2.3	5.1	5.1	3.3	2.4	5.6	5.5	2.4	0.4	1.3		
90 Day U.S. Treasury Bill			1.0	2.1	4.7	4.6	2.8	2.0	5.3	5.0	1.5	0.0	0.7		
Cash	636,919,298	5.2	1.2	2.3	5.1	5.3	3.4	2.5	5.6	6.1	2.2	0.4	1.3	16.6	Apr-98

Individual closed end funds are not shown in performance summary table. Effective 3/1/2019 the custodian of record switched from State Street to Northern Trust. Wellington Real Total Return was liquidated 4/30/2020. BH-DG Systematic funded on 4/19/2024. Acadian Multi-Asset Absolute Return Fund liquidated on 5/15/2024. Wellington Real Total Return residual value of \$25,693.62 is included in Total Fund Market Value.

Total Fund Closed End Funds - Investment Summary

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

StepStone Group Analysis (*)												
Closing Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2025 ¹	Total Commitment	Total % Called	Contributed Capital	Current Qtr. Change in Contributed Capital	Current Qtr. Change in Distributed Capital	Total Distributions	Remaining Commitment	Distrib./ Paid-In (DPI) ²	Tot. Value/ Paid-In (TVPI) ³	Latest Valuation
Private Equity, Venture Capital and Infrastructure												
2/11/2004	Adams Street 2007 Direct Fund	\$339,684	\$4,000,000	97%	\$3,896,000	\$0	\$0	\$9,437,169	\$104,000	2.42	2.51	3/31/2025
2/11/2004	Adams Street 2009 Direct Fund	\$931,202	\$5,000,000	98%	\$4,901,000	\$0	\$0	\$8,987,950	\$99,000	1.83	2.02	3/31/2025
2/11/2004	Adams Street 2012 Global Fund	\$24,481,193	\$40,000,000	93%	\$37,155,172	\$0	\$1,797,276	\$53,588,163	\$2,844,828	1.44	2.10	3/31/2025
2/11/2004	Adams Street 2014 Global Fund	\$47,825,511	\$50,000,000	92%	\$46,193,610	\$0	\$1,010,931	\$54,948,698	\$3,806,390	1.19	2.22	3/31/2025
1/15/2009	Adams Street Partners II	\$2,783,847	\$30,000,000	95%	\$28,365,000	\$0	\$250,444	\$45,911,999	\$1,635,000	1.62	1.72	3/31/2025
9/21/2012	Adams Street Partners - Fund 5	\$7,064,969	\$40,000,000	77%	\$30,845,875	\$0	\$1,037,505	\$34,845,894	\$9,154,125	1.13	1.36	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2004 Non-U.S. Fund	-\$154,395	\$3,750,000	95%	\$3,574,125	\$0	\$154,395	\$5,059,837	\$175,875	1.42	1.37	12/31/2024
2/11/2004	Adams Street Partnership Fund - 2004 U.S. Fund	\$74,575	\$11,250,000	95%	\$10,687,500	\$0	\$0	\$16,786,638	\$562,500	1.57	1.58	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2005 Non-U.S. Fund	\$17,747	\$4,500,000	95%	\$4,277,250	\$0	\$0	\$5,759,701	\$222,750	1.35	1.35	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2005 U.S. Fund	\$139,468	\$10,500,000	95%	\$9,969,750	\$0	\$0	\$15,815,927	\$530,250	1.59	1.60	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2007 Non-U.S. Fund	\$71,451	\$14,000,000	95%	\$13,307,000	\$0	\$0	\$21,643,375	\$693,000	1.63	1.63	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2007 U.S. Fund	\$425,234	\$22,000,000	95%	\$20,977,000	\$0	\$0	\$42,068,438	\$1,023,000	2.01	2.03	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2009 Non-U.S. Developed Markets Fund	\$3,419,954	\$15,000,000	89%	\$13,342,500	\$0	\$0	\$22,467,838	\$1,657,500	1.68	1.94	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2009 Non-U.S. Emerging Markets Fund	\$2,195,528	\$5,000,000	92%	\$4,592,500	\$0	\$0	\$6,149,868	\$407,500	1.34	1.82	3/31/2025
2/11/2004	Adams Street Partnership Fund - 2009 U.S. Fund	\$8,018,236	\$25,000,000	92%	\$22,950,000	\$0	\$720,943	\$46,275,064	\$2,050,000	2.02	2.37	3/31/2025
3/31/2016	Adams Street Venture Innovation	\$152,142,004	\$75,000,000	92%	\$69,280,251	\$0	\$0	\$47,882,482	\$5,719,749	0.69	2.89	3/31/2025
5/18/2018	AE Industrial Partners Fund II, LP	\$37,822,013	\$35,000,000	110%	\$38,627,214	\$64,338	\$4,436,230	\$33,234,669	\$5,934,894	0.86	1.84	3/31/2025
11/27/2013	Aether Real Assets III	\$11,687,226	\$25,000,000	108%	\$26,955,520	\$55,062	\$878,505	\$11,122,117	\$657,882	0.41	0.85	3/31/2025
11/30/2013	Aether Real Assets III Surplus	\$32,730,685	\$50,000,000	107%	\$53,733,028	\$0	\$0	\$16,180,833	\$308,464	0.30	0.91	3/31/2025
1/30/2016	Aether Real Assets IV	\$47,193,788	\$50,000,000	104%	\$52,202,670	\$540,852	\$1,646,784	\$15,756,621	\$4,934,949	0.30	1.21	3/31/2025
6/30/2024	Altaris Health Partners VI, L.P.	\$0	\$50,000,000	0%	\$0	\$0	\$0	\$0	\$50,000,000	N/A	N/A	N/A
6/30/2024	Arbor Investments VI, L.P.	\$10,497,182	\$50,000,000	23%	\$11,729,962	\$11,729,962	\$0	\$0	\$38,270,038	N/A	N/A	N/A
6/29/2009	Bay Area Equity Fund II4	\$18,669,912	\$10,000,000	100%	\$10,000,000	\$0	\$0	\$5,011,170	\$0	0.50	2.37	3/31/2025
12/17/2024	BlackFin Financial Services Fund IV	\$4,893,594	\$58,291,444	9%	\$5,252,802	\$0	\$0	\$0	\$53,038,643	N/A	N/A	3/31/2025
1/18/1996	Brinson 1998 Primary/Secondary Int	-\$19,608	\$7,269,204	99%	\$7,229,851	\$0	\$0	\$11,169,279	\$39,353	1.54	1.54	12/31/2024
1/18/1996	Brinson 1999 Primary	\$0	\$6,665,276	96%	\$6,387,427	\$0	\$0	\$8,308,934	\$0	1.30	1.30	3/27/2025
1/18/1996	Brinson 2000 Primary	\$24,781	\$5,304,515	95%	\$5,044,010	\$0	\$0	\$7,787,951	\$260,505	1.54	1.55	3/31/2025
1/18/1996	Brinson 2001 Primary	\$59,168	\$5,946,438	96%	\$5,690,829	\$0	\$0	\$9,112,676	\$255,609	1.60	1.61	3/31/2025
1/18/1996	Brinson 2002 Primary	-\$48,908	\$6,778,776	97%	\$6,565,328	\$0	\$0	\$12,142,753	\$213,448	1.85	1.84	12/31/2024
1/18/1996	Brinson 2003 Primary	\$111,618	\$6,808,039	95%	\$6,456,626	\$0	\$0	\$11,045,056	\$351,413	1.71	1.73	3/31/2025
1/18/1996	Brinson Partnership Fund Trust - 2002 Secondary Fund	\$37,918	\$1,204,071	96%	\$1,153,197	\$0	\$0	\$2,176,033	\$50,874	1.89	1.92	3/31/2025
1/18/1996	Brinson Partnership Fund Trust - 2004 Primary Fund	-\$81,204	\$3,785,244	94%	\$3,573,896	\$0	\$0	\$6,522,350	\$211,348	1.82	1.80	12/31/2024
6/30/2013	Commonfund	\$26,577,267	\$50,000,000	96%	\$48,249,993	\$300,000	\$3,875,513	\$46,442,057	\$1,750,007	0.96	1.51	12/31/2024
12/11/2024	EPIC Fund III, SLP	\$4,478,272	\$58,220,607	9%	\$5,184,551	\$0	\$0	\$0	\$53,036,056	N/A	0.86	3/31/2025
3/31/2023	EQT X, L.P.	\$37,085,571	\$100,000,000	44%	\$44,097,074	\$8,251,828	\$0	\$2,471,665	\$58,231,308	0.06	0.90	12/31/2024
2/21/2019	Genstar Capital Partners IX, L.P.	\$70,398,395	\$50,000,000	101%	\$50,456,587	\$134,655	\$0	\$37,857,951	\$6,299,549	0.75	2.15	3/31/2025
4/1/2021	Genstar Capital Partners X, L.P.	\$45,100,708	\$42,500,000	101%	\$42,917,591	\$960,546	\$123,952	\$1,708,757	\$1,275,701	0.04	1.09	3/31/2025
6/30/2023	Genstar Capital Partners XI, L.P.	\$9,408,767	\$75,000,000	13%	\$9,944,235	\$441,242	\$0	\$867,914	\$65,882,946	0.09	1.03	3/31/2025
6/30/2023	Green Equity Investors IX	\$35,723,866	\$60,000,000	54%	\$32,514,068	\$0	\$0	\$843,456	\$28,329,388	0.03	1.12	3/31/2025
10/27/2020	GTCR Fund XIII, L.P.	\$45,828,584	\$50,000,000	83%	\$41,340,080	\$160,178	\$5,240,860	\$11,996,634	\$9,642,247	0.29	1.40	3/31/2025
6/30/2023	GTCR Fund XIV	\$21,188,523	\$100,000,000	16%	\$16,230,000	\$5,750,000	\$0	\$0	\$83,770,000	N/A	1.31	3/31/2025

* All Data provided by StepStone Group

¹Latest valuation + capital calls - distributions

²(DPI) is equal to (capital returned / capital called)

³(TVPI) is equal to (market value + capital returned) / capital called

⁴Capital has been fully called and fund is in redemption.

Total Fund Closed End Funds - Investment Summary

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

StepStone Group Analysis (*)												
Closing Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2025 ¹	Total Commitment	Total % Called	Contributed Capital	Current Qtr. Change in Contributed Capital	Current Qtr. Change in Distributed Capital	Total Distributions	Remaining Commitment	Distrib./Paid-In (DPI) ²	Tot. Value/Paid-In (TVPI) ³	Latest Valuation
Private Equity, Venture Capital, and Infrastructure												
5/10/2021	Hellman & Friedman Capital Partners X, L.P.	\$71,626,144	\$75,000,000	93%	\$69,516,280	\$5,321,399	\$401,062	\$8,344,608	\$10,158,458	0.12	1.15	3/31/2025
6/30/2024	Hellman & Friedman Capital Partners XI, L.P.	-\$80,738	\$100,000,000	0%	\$0	\$0	\$0	\$0	\$100,000,000	N/A	N/A	3/31/2025
3/31/2023	Jade Equity Investors II, LP	\$6,144,350	\$15,000,000	37%	\$5,529,510	\$0	\$0	\$0	\$9,470,490	N/A	1.11	3/31/2025
11/18/2009	Oaktree PIF 2009	\$275,932	\$40,000,000	87%	\$34,812,560	\$0	\$0	\$47,032,470	\$6,308,961	1.35	1.36	3/31/2025
5/2/2013	Ocean Avenue Fund II	\$13,102,443	\$30,000,000	90%	\$27,000,000	\$0	\$0	\$50,123,249	\$3,000,000	1.86	2.34	3/31/2025
4/15/2016	Ocean Avenue Fund III	\$53,061,074	\$50,000,000	93%	\$46,500,000	\$0	\$0	\$59,459,752	\$3,500,000	1.28	2.42	3/31/2025
11/30/2007	Paladin III	\$3,748,039	\$25,000,000	140%	\$35,078,514	\$0	\$0	\$72,045,990	\$387,482	2.05	2.16	3/31/2025
8/22/2011	Pathway 6	\$17,045,531	\$40,000,000	101%	\$40,433,799	\$307,532	\$2,447,797	\$65,915,847	\$3,099,137	1.63	2.05	12/31/2024
7/10/2013	Pathway 7	\$41,997,861	\$70,000,000	100%	\$70,273,511	\$78,750	\$4,364,419	\$108,296,756	\$5,274,370	1.54	2.14	12/31/2024
11/23/2015	Pathway 8	\$53,822,212	\$50,000,000	100%	\$49,835,131	\$69,027	\$3,372,102	\$57,694,757	\$2,961,806	1.16	2.24	12/31/2024
1/19/1999	Pathway	\$1,192,341	\$125,000,000	102%	\$126,954,525	\$0	\$0	\$191,180,347	\$10,312,294	1.51	1.52	12/31/2024
7/31/2009	Pathway 2008	\$8,284,952	\$30,000,000	101%	\$30,431,984	\$4,838	\$456,038	\$55,359,411	\$2,527,732	1.82	2.09	12/31/2024
6/3/2014	Siguler Guff CCCERA Opportunities	\$66,115,434	\$200,000,000	88%	\$175,483,208	\$0	\$3,060,606	\$276,295,856	\$28,197,500	1.57	1.95	3/31/2025
5/18/2018	Siris Partners IV, L.P.	\$38,935,449	\$35,000,000	117%	\$40,806,206	\$1,114,048	\$373,689	\$14,205,647	\$3,347,992	0.35	1.30	3/31/2025
6/30/2023	Symphony Technology Group VII	\$4,581,427	\$50,000,000	13%	\$6,622,969	\$0	\$0	\$0	\$43,377,031	N/A	0.69	3/31/2025
5/27/2021	TA XIV-A, L.P.	\$51,360,222	\$50,000,000	100%	\$49,989,130	\$0	\$2,250,000	\$5,114,130	\$5,125,000	0.10	1.13	3/31/2025
6/30/2023	TA XV-A, L.P.	\$9,594,271	\$90,000,000	12%	\$10,800,000	\$0	\$0	\$0	\$79,200,000	N/A	N/A	3/31/2025
6/28/2019	TPG Healthcare Partners, L.P.	\$25,831,502	\$24,000,000	100%	\$23,996,258	\$225,397	\$0	\$6,695,016	\$2,755,479	0.28	1.36	3/31/2025
3/31/2023	TPG Healthcare Partners II	\$30,804,354	\$60,000,000	42%	\$25,264,576	\$0	\$0	\$8,201	\$34,759,376	0.00	1.22	3/31/2025
3/31/2023	TPG Partners IX	\$45,201,344	\$65,000,000	61%	\$39,726,432	\$5,396,579	\$508,349	\$535,154	\$25,783,073	0.01	1.15	3/31/2025
9/17/2021	Trident IX, L.P.	\$49,256,194	\$50,000,000	89%	\$44,515,140	\$6,425,731	\$642,240	\$5,534,717	\$11,019,422	0.12	1.23	3/31/2025
5/24/2019	Trident VIII, L.P.	\$48,888,603	\$40,000,000	99%	\$39,748,683	\$103,909	\$1,414,745	\$13,593,122	\$4,321,817	0.34	1.57	3/31/2025
Total Private Equity, Venture Capital and Infrastructure		\$1,349,933,266	\$2,618,057,623	70%	\$1,820,780,826	\$49,792,017	\$26,904,100	\$1,705,649,610	\$908,813,987	0.94	1.68	
% of Portfolio (Market Value)		11.1%										

* All Data provided by StepStone Group

¹Latest valuation + capital calls - distributions

²(DPI) is equal to (capital returned / capital called)

³(TVPI) is equal to (market value + capital returned) / capital called

⁴Capital has been fully called and fund is in redemption.

Total Fund Closed End Funds - Investment Summary

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

StepStone Group Analysis (*)												
Closing Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2025 ¹	Total Commitment	Total % Called	Contributed Capital	Current Qtr. Change in Contributed Capital	Current Qtr. Change in Distributed Capital	Total Distributions	Remaining Commitment	Distrib./ Paid-In (DPI) ²	Tot. Value/ Paid-In (TVPI) ³	Latest Valuation
Infrastructure												
10/31/2024	Altor ACT I	\$1,735,225	\$76,247,826	2%	\$3,498,726	\$676,537	\$0	\$0	\$72,764,257	N/A	N/A	3/31/2025
7/15/2005	EIF US Power Fund II ⁴	\$43,944	\$50,000,000	130%	\$65,029,556	\$0	\$0	\$76,092,655	\$0	1.17	1.17	3/31/2025
5/31/2007	EIF US Power Fund III ⁴	\$206,917	\$65,000,000	110%	\$71,409,097	\$0	\$0	\$96,164,958	\$0	1.35	1.35	3/31/2025
11/28/2011	EIF US Power Fund IV	\$15,159,031	\$50,000,000	130%	\$64,917,547	\$0	\$7,197,437	\$57,919,285	\$4	0.89	1.13	3/31/2025
11/28/2016	EIF US Power Fund V	\$21,468,687	\$50,000,000	143%	\$71,633,870	\$0	\$0	\$82,901,759	\$3,888,697	1.16	1.46	3/31/2025
12/31/2023	EQT Infrastructure VI	\$31,270,296	\$125,000,000	29%	\$38,721,710	\$100,341	\$153,772	\$1,174,376	\$86,697,795	0.03	0.84	12/31/2024
12/8/2015	Wastewater Opportunity Fund	\$560,100	\$25,000,000	126%	\$31,579,656	\$0	\$0	\$31,553,869	\$521,541	1.00	1.02	3/31/2025
Total Infrastructure		\$70,444,201	\$441,247,826	79%	\$346,790,163	\$776,878	\$7,351,209	\$345,806,901	\$163,872,294	1.00	1.20	
% of Portfolio (Market Value)		0.6%										

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¹Latest valuation + capital calls - distributions

²(DPI) is equal to (capital returned / capital called)

³(TVPI) is equal to (market value + capital returned) / capital called

⁴Capital has been fully called and fund is in redemption.

Total Fund
Closed End Funds - IRR Summary

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Private Equity & Venture Capital	Closing Date	Fund Level (G) ²	CCCERA (G)	Fund Level (N) ^{2,3}	CCCERA (N) ³	IRR Date
Adams Street Partners	2/11/2004	-	13.1%	-	11.1%	3/31/2025
Adams Street Partners II	12/31/2008	-	12.9%	-	10.1%	3/31/2025
Adams Street Partners - Fund 5	12/31/2008	-	8.6%	-	6.0%	3/31/2025
Adams Street Partners Venture	1/18/1996	-	25.9%	-	24.2%	3/31/2025
Adams Street Partners - BPF	3/31/2016	-	14.2%	-	11.6%	3/31/2025
AE Industrial Partners Fund II, LP	5/18/2018	25.3%	-	22.5%	-	3/31/2025
Aether Real Assets III ¹	11/27/2013	-1.2%	-	-2.6%	-	3/31/2025
Aether Real Assets III Surplus ¹	11/30/2013	-0.3%	-	-1.3%	-	3/31/2025
Aether Real Assets IV ¹	1/30/2016	5.0%	-	3.5%	-	3/31/2025
Bay Area Equity Fund II ⁹	11/26/2003	11.7%	11.7%	8.0%	8.0%	3/31/2025
CommonFund ¹	6/30/2013	-	-	-	6.7%	12/31/2023
Energy Investor Fund II ⁹	7/15/2005	5.6%	5.3%	2.9%	2.6%	9/30/2024
Energy Investor Fund V	11/28/2016	18.0%	-	13.1%	-	3/31/2025
Genstar Capital Partners IX, L.P.	2/21/2019	-	-	29.7%	-	3/31/2025
Genstar Capital Partners X, L.P.	8/1/2021	-	-	8.1%	-	3/31/2025
Genstar Capital Partners XI, L.P.	10/1/2023	-	-	5.1%	-	3/31/2025
Oaktree PIF 2009	2/28/2010	6.8%	-	6.5%	-	3/31/2025
Ocean Avenue II ¹	8/15/2013	-	-	17.9%	-	3/31/2024
Ocean Avenue III ¹	4/15/2016	-	-	23.2%	-	3/31/2024
Paladin III	11/30/2007	19.6%	-	-	-	3/31/2025
Pathway 6	8/22/2011	16.1%	16.1%	13.3%	13.3%	3/31/2025
Benchmark ¹		14.2%	-	-	-	3/31/2024
Pathway 7	7/10/2013	17.3%	17.3%	14.7%	14.7%	3/31/2025
Benchmark ¹		14.7%	-	-	-	3/31/2024
Pathway 8	11/23/2015	18.5%	18.5%	16.6%	16.6%	3/31/2025
Benchmark ¹		15.6%	-	-	-	3/31/2024
Pathway Private Equity Fund	1/19/1999	10.8%	10.8%	8.3%	8.3%	3/31/2025
Benchmark ¹		10.3%	-	-	-	3/31/2024
Pathway Private Equity Fund 2008	7/31/2009	16.7%	16.7%	13.6%	13.6%	3/31/2025
Benchmark ¹		13.2%	-	-	-	3/31/2024
Siguler Guff CCCERA Opportunities	6/3/2014	17.0%	17.7%	16.4%	15.3%	3/31/2025
Siguler Guff Secondary Opportunities ⁹	8/31/2013	55.3%	118.4%	49.5%	69.0%	9/30/2020
Siris Partners IV, L.P. ¹	5/18/2018	13.0%	-	9.0%	-	12/31/2024
TPG Healthcare Partners, L.P.	6/28/2019	-	-	-	10.0%	6/30/2025
Trident VIII, L.P. ¹	5/24/2019	14.0%	-	-	12.8%	12/31/2023
Wastewater Opportunity Fund ¹	12/8/2015	-	-	3.7%	-	9/30/2023

¹Manager has yet to report IRR figure.

²Fund level data includes CCCERA and all other fund investors.

³Net IRR calculated after deductions of management fees and carried interest to the General Partner.

⁴Private iQ global all private equity median pooled return for vintage years 2011-2014, as of September 30, 2022.

⁵Private iQ global all private equity median pooled return for vintage years 2012-2016, as of September 30, 2022.

⁶Private iQ global all private equity median pooled return for vintage years 2015-2018, as of September 30, 2022.

⁷Private iQ global all private equity median pooled return for vintage years 1999-2011, as of September 30, 2022.

⁸Private iQ global all private equity median pooled return for vintage years 2008-2014, as of September 30, 2022.

⁹Capital has been fully called and fund is in redemption.

Total Fund Closed End Funds - Investment Summary

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

StepStone Group Analysis (*)												
Closing Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2025 ¹	Total Commitment	% Called	Contributed Capital	Current Qtr. Change in Contributed Capital	Current Qtr. Change in Distributed Capital	Total Distributions	Remaining Commitment	Distrib./ Paid-In (DPI) ²	Tot. Value/ Paid-In (TVPI) ³	Latest Valuation
Private Credit												
8/31/2015	Angelo Gordon Energy Credit Opp. ⁴	\$325,331	\$16,500,000	114%	\$18,750,000	\$0	\$0	\$22,874,616	\$2,319,783	1.22	1.24	3/31/2025
12/18/2017	StepStone CC Opportunities Fund, LLC - Series A	\$260,497,172	\$620,000,000	60%	\$373,022,373	\$10,212,402	\$10,204,590	\$200,455,530	\$276,615,707	0.54	1.24	12/31/2024
12/18/2017	StepStone CC Opportunities Fund, LLC - Series B	\$348,713,257	\$350,000,000	55%	\$193,470,200	-\$14,989,658	\$11,289,171	\$41,845,637	\$176,529,800	0.22	2.02	3/31/2025
12/18/2017	StepStone CC Opportunities Fund, LLC - Series C	\$202,988,482	\$200,000,000	91%	\$182,349,797	\$0	\$0	\$92,000,716	\$77,150,203	0.50	1.62	3/31/2025
12/18/2017	StepStone CC Opportunities Fund, LLC - Series D	\$233,791,246	\$200,000,000	76%	\$151,667,902	\$3,874,660	\$13,625,514	\$13,631,282	\$48,332,098	0.09	1.63	3/31/2025
12/18/2017	StepStone CC Opportunities Fund, LLC - Series E	\$112,336,075	\$150,000,000	55%	\$82,689,286	\$0	\$0	\$920,000	\$67,310,714	0.01	1.37	3/31/2025
6/30/2025	StepStone CC Opportunities Fund, LLC - Series F	-\$825,102	\$200,000,000	0%	\$0	\$0	\$0	\$0	\$200,000,000	NA	NA	3/31/2025
8/1/2012	Torchlight IV	-\$28,525	\$60,000,000	141%	\$84,866,971	\$0	\$695,331	\$112,075,465	\$0	1.32	1.32	3/31/2025
3/12/2015	Torchlight V	\$3,737,930	\$75,000,000	80%	\$60,000,000	\$0	\$3,528,449	\$74,988,663	\$15,000,000	1.25	1.31	3/31/2025
Total Private Credit		\$1,161,535,866	\$1,871,500,000	61%	\$1,146,816,528	-\$902,596	\$39,343,055	\$558,791,909	\$863,258,306	0.49	1.50	
% of Portfolio (Market Value)		9.5%										

*All Data provided by StepStone Group

¹Latest valuation + capital calls - distributions

²(DPI) is equal to (capital returned / capital called)

³(TVPI) is equal to (market value + capital returned) / capital called

⁴Capital has been fully called and fund is in redemption.

Total Fund Closed End Funds - Investment Summary

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Verus Internal Analysis												
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2025 ¹	Total Commitment	Total % Called	Capital Called	Current Qtr. Capital Called	Current Qtr. Distributions	Total Distributions ⁸	Remaining Commitment	Distrib./Paid-In (DPI) ²	Tot. Value/Paid-In (TVPI) ³	Latest Valuation
Real Estate												
1/23/2012	Angelo Gordon Realty Fund VIII ⁴	\$7,653,651	\$80,000,000	94%	\$75,401,855	\$0	\$0	\$101,711,550	\$12,334,302	1.35	1.45	3/31/2025
12/8/2014	Angelo Gordon Realty Fund IX	\$12,701,827	\$65,000,000	93%	\$60,125,000	\$0	\$1,625,000	\$60,937,501	\$7,572,500	1.01	1.22	3/31/2025
10/10/2024	Ares US Real Estate Opportunity Fund IV	\$11,054,246	\$60,000,000	20%	\$12,143,476	\$2,168,478	\$305,755	\$305,755	\$47,856,524	N/A	0.94	3/31/2025
3/24/2023	BlackStone Strategic Partners Real Estate VIII	\$33,917,262	\$80,000,000	37%	\$29,943,176	\$1,984,037	\$1,190,174	\$1,190,174	\$50,056,824	N/A	1.17	3/31/2025
3/24/2023	Blackstone Real Estate Partners X	\$44,201,515	\$100,000,000	41%	\$40,844,117	\$2,010,391	\$695,298	\$3,428,567	\$59,155,883	0.08	1.17	3/31/2025
12/14/2023	Cross Lake RE IV	\$8,595,453	\$60,000,000	15%	\$9,251,735	\$2,407,121	\$135,864	\$135,864	\$50,748,265	N/A	0.94	3/31/2025
6/23/2005	DLJ RECP III	\$5,190,985	\$75,000,000	95%	\$70,968,662	\$0	\$1,304,453	\$79,289,508	\$4,031,338	1.12	1.19	3/31/2025
2/11/2008	DLJ RECP IV	\$26,974,511	\$100,000,000	119%	\$119,160,714	\$0	\$0	\$99,841,735	\$1,876,084	0.84	1.06	3/31/2025
7/1/2014	DLJ RECP V	\$5,695,962	\$75,000,000	147%	\$110,543,034	\$26,940	\$0	\$100,933,448	\$1,248,403	0.91	0.96	3/31/2025
3/19/2019	DLJ RECP VI	\$14,787,343	\$50,000,000	109%	\$54,564,258	\$0	\$0	\$11,369,099	\$0	0.21	0.48	3/31/2025
12/14/2023	EQT Exeter Industrial Value Fund VI	\$25,359,410	\$60,000,000	40%	\$24,000,000	\$0	\$0	\$0	\$36,000,000	N/A	1.06	3/31/2025
N/A	EQT Multifamily Value II	\$0	\$40,000,000	0%	\$0	\$0	\$0	\$0	\$40,000,000	N/A	N/A	N/A
6/30/2014	Invesco Real Estate IV ⁴	\$98,223	\$35,000,000	87%	\$30,546,401	\$0	\$0	\$39,986,504	\$4,453,599	1.31	1.31	3/31/2025
2/20/2019	Invesco Real Estate V	\$58,906,204	\$75,000,000	97%	\$73,118,800	\$0	\$0	\$9,319,462	\$6,581,101	0.13	0.93	6/30/2025
9/27/2022	Invesco Real Estate VI	\$54,445,622	\$100,000,000	65%	\$64,668,619	\$1,906,540	\$0	\$2,230,131	\$35,331,381	0.03	0.88	3/31/2025
9/27/2024	Jadian Real Estate II	\$7,106,454	\$60,000,000	12%	\$7,106,454	\$0	\$0	\$0	\$52,893,546	N/A	1.00	3/31/2025
11/10/2023	KSL Capital Partners VI, L.P.	\$13,571,492	\$50,000,000	39%	\$19,673,719	\$479,847	\$0	\$0	\$30,326,281	N/A	0.69	3/31/2025
7/16/2013	LaSalle Income & Growth VI ⁴	\$8,393,992	\$75,000,000	95%	\$71,428,571	\$0	\$0	\$84,541,423	\$0	1.18	1.30	3/31/2025
2/28/2017	LaSalle Income & Growth VII	\$16,101,218	\$75,000,000	114%	\$85,708,742	\$0	\$0	\$62,880,996	\$0	0.73	0.92	3/31/2025
9/30/2016	Long Wharf Fund V ⁴	\$22,035,772	\$50,000,000	100%	\$50,000,000	\$0	\$0	\$37,701,359	\$0	0.75	1.19	6/30/2025
6/27/2019	Long Wharf Fund VI	\$33,719,376	\$50,000,000	100%	\$49,999,998	\$0	\$0	\$28,543,110	\$2	0.57	1.25	6/30/2025
5/30/2023	Long Wharf Fund VII	\$25,993,875	\$50,000,000	71%	\$35,456,228	\$3,290,633	\$0	\$8,081,415	\$14,543,772	0.23	0.96	6/30/2025
12/31/2011	Oaktree REOF V ⁴	\$50,735	\$50,000,000	101%	\$50,315,673	\$0	\$0	\$79,261,855	\$5,000,000	1.58	1.58	6/30/2025
9/30/2013	Oaktree REOF VI ⁴	\$12,184,137	\$80,000,000	100%	\$80,000,000	\$0	\$0	\$87,690,145	\$18,400,000	1.10	1.25	6/30/2025
4/1/2015	Oaktree REOF VII	\$36,723,975	\$65,000,000	100%	\$65,000,000	\$0	\$0	\$47,054,688	\$18,915,000	0.72	1.29	6/30/2025
11/10/2013	Paulson Real Estate Fund II ⁴	\$13,463,250	\$20,000,000	97%	\$19,345,623	\$0	\$529,845	\$27,164,536	\$654,377	1.40	2.10	3/31/2025
4/28/2022	PCCP IX	\$79,631,964	\$75,000,000	94%	\$70,728,828	\$1,927,265	\$652,265	\$0	\$4,271,172	N/A	1.13	3/31/2025
1/25/2012	Siguler Guff DREOF	\$8,260,366	\$75,000,000	93%	\$69,375,000	\$0	\$306,053	\$111,204,931	\$5,625,000	1.60	1.72	3/31/2025
8/31/2013	Siguler Guff DREOF II	\$9,481,511	\$70,000,000	89%	\$61,985,000	\$0	\$0	\$70,189,026	\$8,015,000	1.13	1.29	12/31/2024
1/27/2016	Siguler Guff DREOF II Co-Inv	\$6,834,117	\$25,000,000	85%	\$21,277,862	\$0	\$810,032	\$15,146,453	\$3,722,138	0.71	1.03	3/31/2025
6/26/2024	Stockbridge Value Fund I	\$21,352,743	\$60,000,000	38%	\$22,992,948	\$0	\$38,119	\$332,308	\$37,007,052	0.01	0.94	3/31/2025
Total Closed End Real Estate		\$624,487,190	\$1,945,000,000	78%	\$1,508,681,547	\$16,201,252	\$7,592,859	\$1,170,471,544	\$516,619,543	0.78	1.19	
% of Portfolio (Market Value)		5.1%										

¹Latest valuation + capital calls - distributions

²(DPI) is equal to (capital returned / capital called)

³(TVPI) is equal to (market value + capital returned) / capital called

⁴Capital has been fully called and fund is in redemption.

⁵Total distributions may include recallable distributions

⁶Remianing commitment includes recallable distributions

Total Fund
Closed End Funds - IRR Summary

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Private Credit	Inception	Fund Level (G) ²	CCCERA (G)	Fund Level (N) ^{2,3}	CCCERA (N) ³	IRR Date
Angelo Gordon Energy Cred Opp. ⁴	9/24/2015	-	-	-	7.8%	3/31/2025
Stepstone CC Opportunities Fund ¹	2/2/2018	-	9.9%	-	9.3%	12/31/2024
Torchlight IV	8/1/2012	10.7%	11.4%	8.6%	9.5%	3/31/2025
Torchlight V	3/12/2015	13.4%	13.5%	9.7%	9.7%	3/31/2025
Real Estate	Inception	Fund Level (G) ²	CCCERA (G)	Fund Level (N) ^{2,3}	CCCERA (N) ³	IRR Date
Angelo Gordon VIII ⁴	1/23/2012	-	-	-	11.5%	3/31/2025
Angelo Gordon IX	12/8/2014	-	-	-	4.8%	3/31/2025
Ares US RE Opportunities IV ¹	10/10/2024	-	-	-	-	N/A
Blackstone Real Estate Partners X ¹	3/24/2023	-	-	-	-	N/A
BlackStone Strategic Partners Real Estate VIII ¹	3/25/2022	-	-	-	-	N/A
Cross Lake RE IV ¹	12/14/2023	-	-	-	-	N/A
DLJ RECP III	6/23/2005	-1.0%	-1.0%	-3.0%	-3.0%	9/30/2023
DLJ RECP IV	2/11/2008	4.0%	4.0%	1.0%	2.0%	9/30/2023
DLJ RECP V	7/1/2014	11.0%	11.0%	5.0%	5.0%	9/30/2023
DLJ RECP VI	3/19/2019	11.0%	11.0%	2.0%	3.0%	9/30/2023
EQT Exeter Industrial Value Fund VI ¹	12/14/2023	19.0%	-	-	-	3/31/2025
EQT Industrial Value VI ¹	12/31/2023	-	-	-	-	N/A
EQT Multifamily Value II ¹	N/A	-	-	-	-	N/A
Invesco Fund IV ⁴	6/30/2014	12.6%	-	10.1%	-	6/30/2024
Invesco Fund V	2/20/2019	1.4%	-	-1.8%	-	3/31/2025
Invesco Fund VI	9/27/2022	-	-	-	-	N/A
Jadian Real Estate Fund II ¹	9/27/2024	-	-	-	-	N/A
KSL Capital Partners VI ¹	11/10/2023	-1.9%	-	-6.5%	-	3/31/2025
LaSalle Income & Growth VI ⁴	7/16/2013	9.6%	9.6%	7.5%	7.6%	3/31/2025
LaSalle Income & Growth VII	2/28/2017	-0.3%	-0.6%	-2.6%	-2.8%	3/31/2025
Long Wharf V ⁴	9/30/2016	6.8%	7.0%	4.2%	4.3%	6/30/2025
Long Wharf VI	6/27/2019	18.0%	18.7%	11.1%	11.4%	6/30/2025
Long Wharf VII	5/1/2023	7.4%	6.2%	-2.0%	-1.7%	6/30/2025
Oaktree REOF V ⁴	12/31/2011	16.6%	-	12.2%	-	6/30/2025
Oaktree REOF VI ⁴	9/30/2013	9.5%	-	5.6%	-	6/30/2025
Oaktree REOF VII	4/1/2015	12.4%	-	7.9%	-	6/30/2025
Paulson ⁴	11/10/2013	-	-	12.0%	-	12/31/2023
PCCP IX	5/27/2021	11.0%	-	8.5%	-	9/30/2024
Siguler Guff I	1/25/2012	-	14.8%	-	11.6%	12/31/2024
Siguler Guff II	8/31/2013	-	8.2%	-	6.6%	12/31/2024
Siguler Guff DREOF II Co-Inv	1/27/2016	-	4.6%	-	3.2%	12/31/2024
Stockbridge Value Fund I ¹	6/26/2024	-	-	-	-	N/A

¹Manager has yet to report IRR figure.

²Fund level data includes CCCERA and all other fund investors.

³Net IRR calculated after deductions of management fees and carried interest to the General Partner.

⁴Capital has been fully called and fund is in redemption.

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

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

3 Years

	Anlzd Return	Anlzd Excess Performance	Anlzd Standard Deviation	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Capture	Down Capture
BlackRock Russell 1000 Index	19.58	-0.01	15.84	-0.01	1.00	0.02	1.00	0.93	-0.58	99.98	100.02
Boston Partners	14.95	2.18	15.39	2.41	0.96	3.13	0.96	0.70	0.60	99.15	87.73
Emerald Advisers	16.70	4.31	22.34	4.27	0.97	5.24	0.95	0.60	0.73	103.55	90.72
Ceredex	9.86	2.41	19.92	3.19	0.85	6.26	0.93	0.35	0.27	91.67	83.22
Pyrford	12.57	-3.05	13.30	-1.29	0.90	4.36	0.90	0.63	-0.64	92.27	104.52
William Blair	11.97	-0.45	16.11	0.25	0.95	4.87	0.91	0.51	-0.09	97.62	98.25
PIMCO RAE Emerging Markets	17.33	7.11	14.79	7.73	0.89	6.01	0.85	0.86	1.04	105.60	68.60
TT Emerging Markets	9.03	-0.68	18.26	-0.46	1.01	6.60	0.87	0.32	-0.06	96.10	95.89
Artisan Partners	15.58	-5.86	16.29	-2.85	0.89	5.56	0.90	0.70	-0.93	83.56	93.97
First Eagle	14.72	1.58	11.64	3.85	0.80	4.49	0.91	0.86	0.25	84.88	63.56
Voya Global Investors	8.80	-1.05	6.70	-0.71	0.97	1.57	0.95	0.63	-0.62	93.28	99.71
Adelante	5.72	-0.01	18.64	0.18	0.95	1.59	1.00	0.15	-0.10	95.78	95.18
Sit LLCAR	4.98	2.43	5.32	3.30	0.63	3.80	0.74	0.10	0.59	80.37	49.24
AFL-CIO	2.21	-0.34	7.00	-0.25	0.97	0.82	0.99	-0.29	-0.42	95.98	98.56
DFA Short Credit	4.55	0.80	1.89	2.70	0.48	1.97	0.59	0.01	0.38	73.25	12.09
Insight Short Duration	4.65	0.90	1.66	2.68	0.52	1.62	0.43	0.07	0.53	80.83	-12.80
Sit Short Duration	4.10	0.66	3.68	-1.26	1.57	1.97	0.82	-0.10	0.35	142.52	185.61

Performance Analysis excludes closed end funds and those funds without 3 years of performance.

Total Fund
Risk Analysis - 5 Years (Net of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

5 Years

	Anlzd Return	Anlzd Excess Performance	Standard Deviation	Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Capture	Down Capture
BlackRock Russell 1000 Index	16.29	-0.01	16.46	-0.01	1.00	0.02	1.00	0.84	-0.64	99.98	100.02
Boston Partners	17.07	3.14	15.97	2.94	0.99	3.20	0.96	0.90	0.87	102.23	87.54
Emerald Advisers	10.42	3.00	21.77	3.27	0.94	5.76	0.93	0.44	0.46	102.97	93.91
Ceredex	12.58	0.11	18.87	2.06	0.82	6.88	0.91	0.58	-0.07	87.12	81.86
Pyrford	9.56	-3.59	13.26	-0.97	0.81	5.41	0.88	0.55	-0.65	84.33	94.09
William Blair	7.17	0.07	17.21	0.02	1.03	5.00	0.92	0.33	0.06	104.30	104.67
PIMCO RAE Emerging Markets	15.43	6.36	16.26	6.19	0.99	6.29	0.85	0.80	0.94	113.48	83.40
TT Emerging Markets	6.63	-0.18	18.56	-0.38	1.08	6.59	0.88	0.29	0.04	108.87	111.41
Artisan Partners	8.89	-4.98	17.39	-3.47	0.93	5.30	0.91	0.42	-0.87	84.30	96.33
First Eagle	12.17	-0.82	11.90	1.95	0.77	4.88	0.91	0.80	-0.22	81.77	72.89
Voya Global Investors	5.18	-0.82	7.28	-0.69	0.99	1.30	0.97	0.36	-0.60	93.84	100.18
Adelante	9.05	0.37	18.43	0.58	0.97	1.41	1.00	0.41	0.16	98.13	96.34
AFL-CIO	-0.80	-0.07	6.02	-0.12	0.94	0.99	0.98	-0.57	-0.09	91.89	93.39
DFA Short Credit	1.62	0.35	2.23	0.77	0.67	1.56	0.68	-0.55	0.22	76.92	56.43
Insight Short Duration	2.64	1.06	1.55	1.71	0.58	1.32	0.56	-0.08	0.78	84.00	17.45
Sit Short Duration	1.65	0.31	3.19	-0.29	1.47	1.62	0.83	-0.34	0.21	145.29	158.85

Performance Analysis excludes closed end funds and those funds without 5 years of performance.

Total Fund Investment Fund Fee Analysis

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Expense Fee (%)
BlackRock Russell 1000 Index	Growth	0.03 % of Assets	\$1,372,761,132	\$411,828	0.03
Boston Partners	Growth	0.50 % of First \$25 M 0.30 % Thereafter	\$481,218,504	\$1,493,656	0.31
Emerald Advisers	Growth	0.75 % of First \$10 M 0.60 % Thereafter	\$259,535,289	\$1,572,212	0.61
Ceredex	Growth	0.85 % of First \$10 M 0.68 % of Next \$40 M 0.51 % Thereafter	\$203,136,060	\$1,137,994	0.56
Pyrford	Growth	0.70 % of First \$50 M 0.50 % of Next \$50 M 0.35 % Thereafter	\$504,020,936	\$2,014,073	0.40
William Blair	Growth	0.80 % of First \$20 M 0.60 % of Next \$30 M 0.50 % of Next \$50 M 0.45 % of Next \$50 M 0.40 % of Next \$50 M 0.30 % Thereafter	\$478,471,464	\$1,850,414	0.39
PIMCO RAE Emerging Markets	Growth	0.75 % of First \$50 M 0.68 % of Next \$50 M 0.50 % of Next \$100 M 0.45 % Thereafter	\$277,463,370	\$1,561,085	0.56
TT Emerging Markets	Growth	0.70 % of First \$100 M 0.65 % of Next \$100 M 0.60 % Thereafter	\$280,179,938	\$1,831,080	0.65
Artisan Partners	Growth	0.75 % of Assets	\$693,421,162	\$5,200,659	0.75
First Eagle	Growth	0.75 % of Assets	\$727,191,999	\$5,453,940	0.75
Voya Global Investors	Growth	0.50 % of First \$50 M 0.40 % of Next \$50 M 0.35 % Thereafter	\$175,892,549	\$715,624	0.41
Invesco US Fundamental Beta	Growth	0.15 % of Assets	\$122,294,945	\$183,442	0.15

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

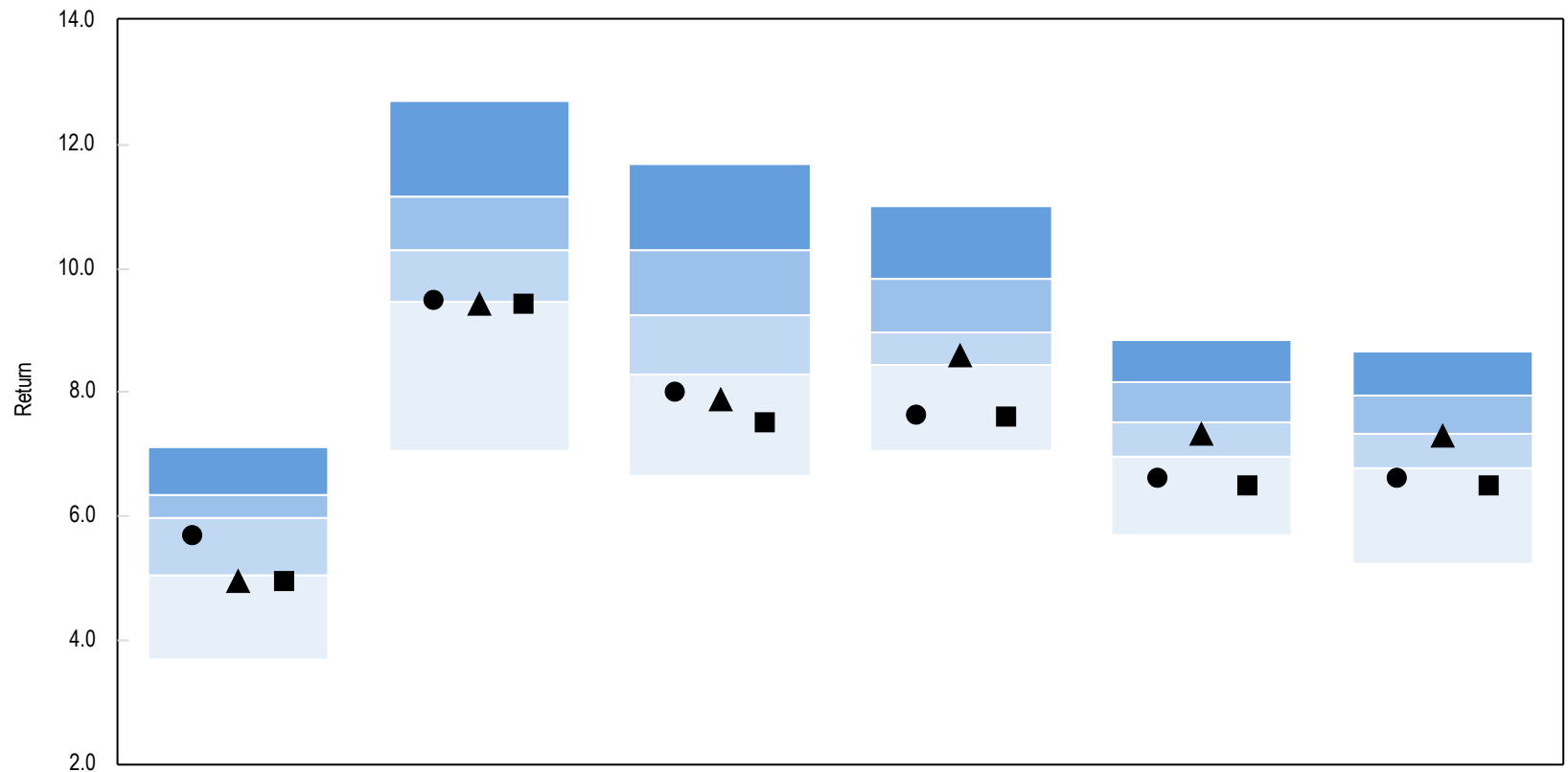
Total Fund Investment Fund Fee Analysis

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Expense Fee (%)
AFL-CIO	Diversifying	0.32 % of Assets	\$273,741,336	\$875,972	0.32
Sit LLCAR	Diversifying	0.39 % of First \$200 M 0.35 % Thereafter	\$487,634,444	\$1,853,011	0.38
DFA Short Credit	Liquidity	0.20 % of First \$25 M 0.10 % Thereafter	\$331,456,680	\$356,457	0.11
Insight Short Duration	Liquidity	0.06 % of First \$500 M 0.05 % of Next \$500 M 0.04 % Thereafter	\$544,905,567	\$322,453	0.06
Sit Short Duration	Liquidity	0.15 % of Assets	\$573,306,847	\$859,960	0.15

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

Total Fund Cumulative Performance vs. InvMetrics Public DB >\$1B Gross

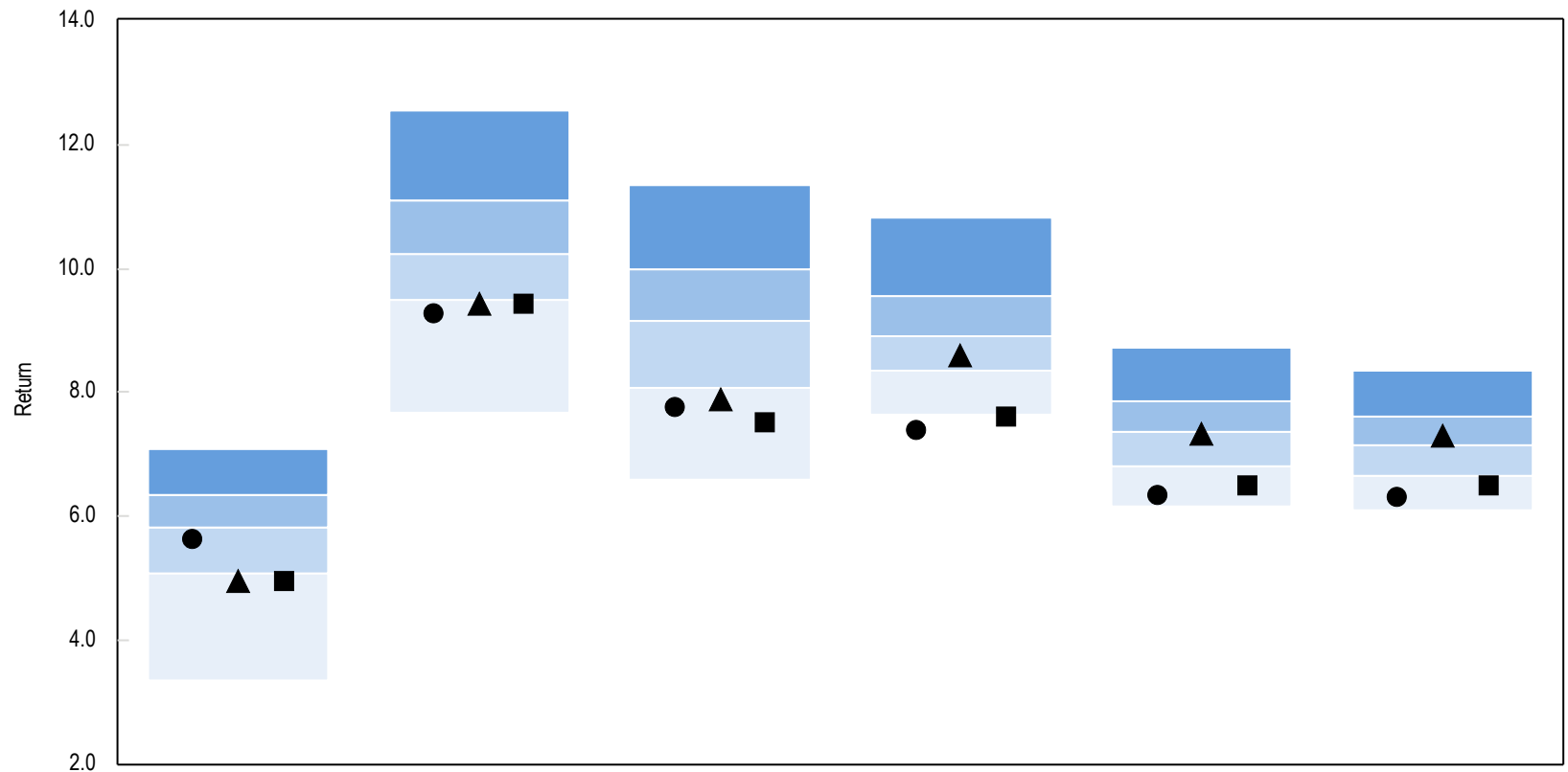


● Total Fund
 ▲ Policy Index
 ■ Implementation Benchmark

	3 Mo	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund	5.69 (57)	9.50 (75)	8.00 (83)	7.64 (92)	6.62 (82)	6.63 (80)
Policy Index	4.97 (77)	9.45 (76)	7.89 (85)	8.59 (71)	7.33 (58)	7.30 (52)
Implementation Benchmark	4.97 (77)	9.45 (76)	7.53 (89)	7.61 (93)	6.52 (85)	6.51 (82)
5th Percentile	7.13	12.69	11.68	11.01	8.85	8.65
1st Quartile	6.35	11.16	10.31	9.83	8.18	7.94
Median	5.99	10.29	9.26	8.97	7.53	7.35
3rd Quartile	5.06	9.48	8.28	8.44	6.95	6.79
95th Percentile	3.69	7.07	6.66	7.07	5.69	5.24
Population	117	117	113	110	108	106

Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation.

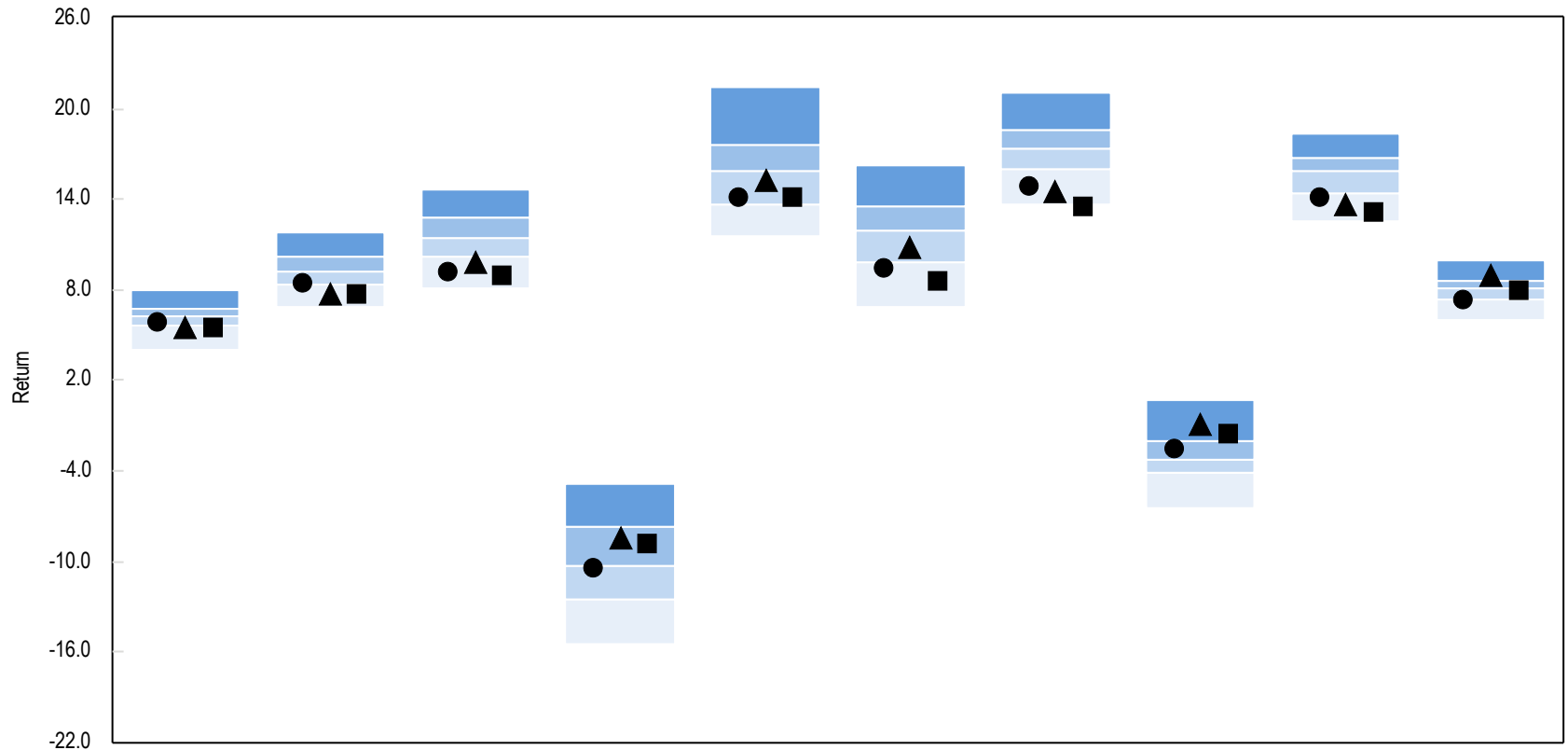
Total Fund Cumulative Performance vs. InvMetrics Public DB >\$1B Net



● Total Fund
 ▲ Policy Index
 ■ Implementation Benchmark

	3 Mo	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund	5.64 (55)	9.29 (81)	7.77 (82)	7.39 (98)	6.36 (92)	6.33 (89)
Policy Index	4.97 (77)	9.45 (77)	7.89 (79)	8.59 (63)	7.33 (53)	7.30 (44)
Implementation Benchmark	4.97 (77)	9.45 (77)	7.53 (88)	7.61 (96)	6.52 (89)	6.51 (86)
5th Percentile	7.08	12.54	11.34	10.81	8.71	8.34
1st Quartile	6.36	11.09	9.99	9.56	7.87	7.62
Median	5.83	10.24	9.14	8.90	7.36	7.16
3rd Quartile	5.08	9.48	8.09	8.36	6.82	6.66
95th Percentile	3.35	7.69	6.61	7.65	6.16	6.10
Population	108	108	104	99	97	94

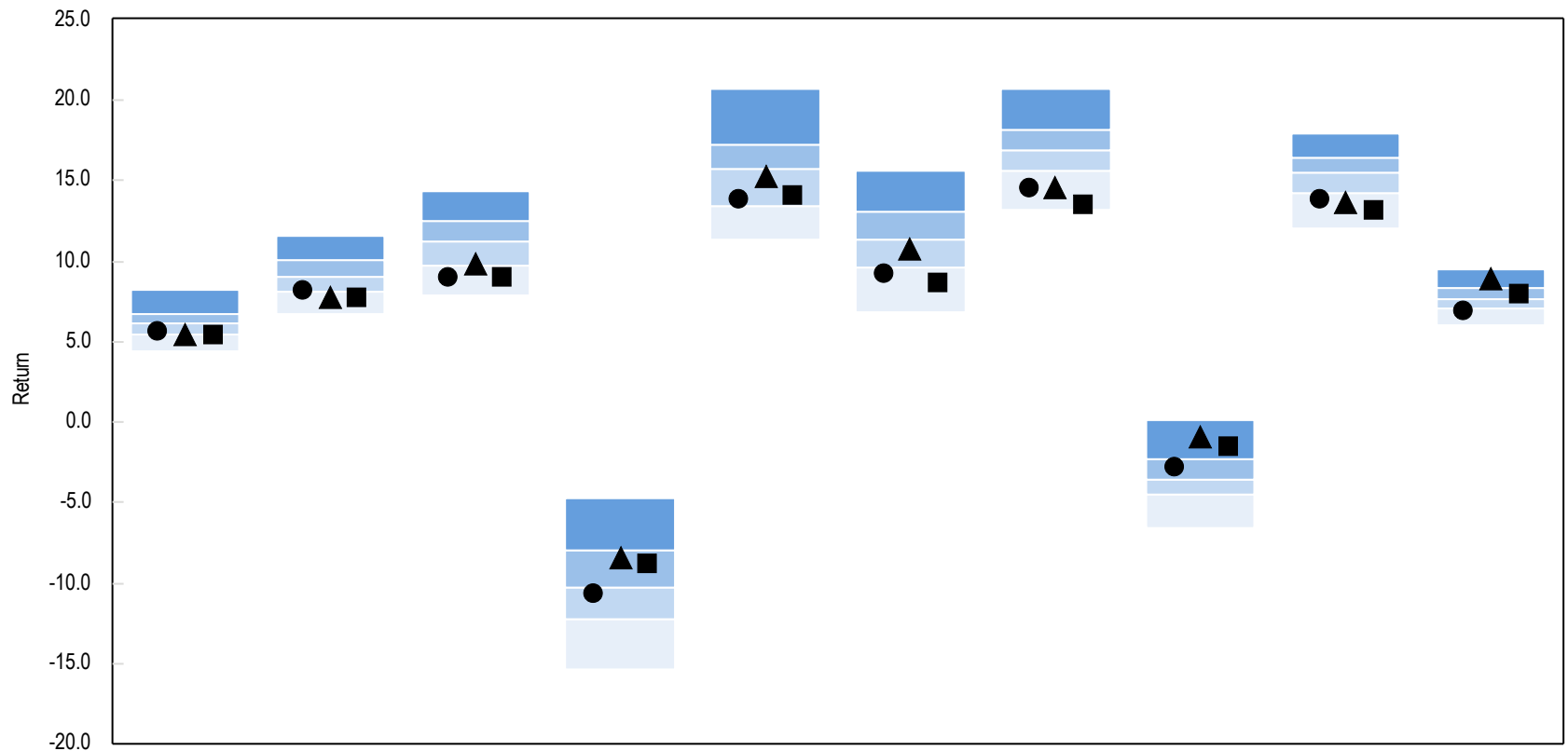
Total Fund Consecutive Periods vs. InvMetrics Public DB >\$1B Gross



	YTD	2024	2023	2022	2021	2020	2019	2018	2017	2016
● Total Fund	5.85 (69)	8.50 (74)	9.23 (87)	-10.39 (52)	14.21 (67)	9.52 (81)	14.92 (87)	-2.46 (33)	14.18 (80)	7.43 (71)
▲ Policy Index	5.49 (80)	7.78 (85)	9.85 (79)	-8.38 (30)	15.29 (57)	10.81 (65)	14.58 (89)	-0.94 (11)	13.69 (88)	8.93 (16)
■ Implementation Benchmark	5.49 (80)	7.78 (85)	8.99 (89)	-8.74 (34)	14.17 (68)	8.66 (90)	13.59 (96)	-1.52 (15)	13.21 (92)	8.00 (53)
5th Percentile	7.93	11.80	14.64	-4.89	21.39	16.27	21.11	0.66	18.36	9.94
1st Quartile	6.81	10.25	12.76	-7.70	17.63	13.54	18.62	-1.96	16.78	8.57
Median	6.25	9.24	11.44	-10.32	15.90	11.94	17.30	-3.19	15.90	8.06
3rd Quartile	5.70	8.30	10.18	-12.45	13.67	9.86	16.00	-4.14	14.37	7.35
95th Percentile	4.03	6.82	8.11	-15.40	11.55	6.83	13.64	-6.44	12.57	5.95
Population	117	179	191	190	222	232	193	170	181	177

Effective 1/01/2017, only traditional asset class (public equity, fixed income, REITs) investment management fees will be included in the gross of fee return calculation.

Total Fund Consecutive Periods vs. InvMetrics Public DB >\$1B Net

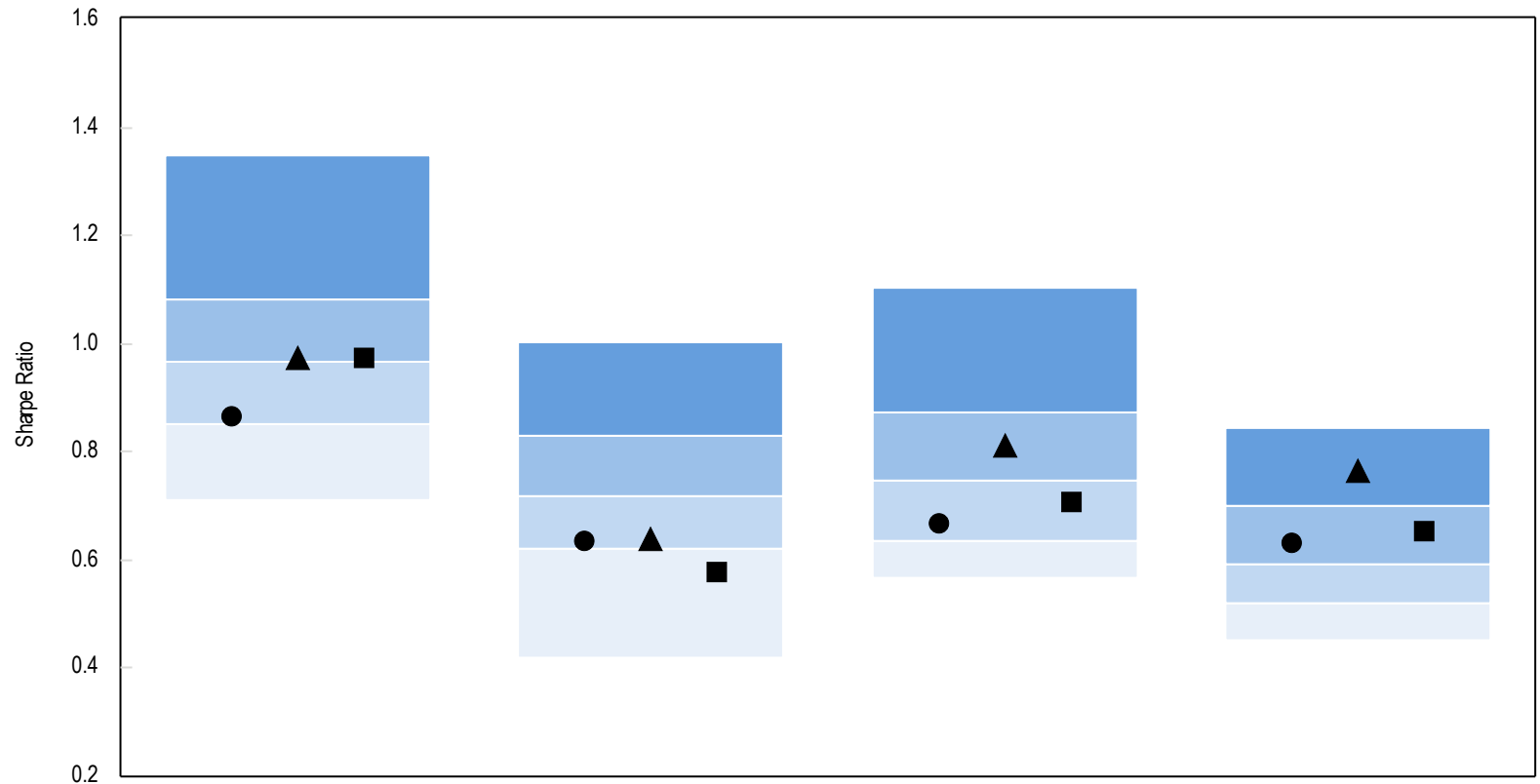


	YTD	2024	2023	2022	2021	2020	2019	2018	2017	2016
● Total Fund	5.74 (65)	8.28 (73)	9.01 (85)	-10.61 (57)	13.90 (67)	9.23 (78)	14.61 (88)	-2.72 (33)	13.86 (82)	6.94 (78)
▲ Policy Index	5.49 (76)	7.78 (83)	9.85 (74)	-8.38 (31)	15.29 (54)	10.81 (61)	14.58 (89)	-0.94 (7)	13.69 (86)	8.93 (11)
■ Implementation Benchmark	5.49 (76)	7.78 (83)	8.99 (85)	-8.74 (32)	14.17 (65)	8.66 (86)	13.59 (93)	-1.52 (13)	13.21 (90)	8.00 (36)
5th Percentile	8.24	11.63	14.37	-4.78	20.70	15.65	20.70	0.07	17.99	9.53
1st Quartile	6.76	10.03	12.54	-7.96	17.23	13.14	18.14	-2.33	16.41	8.29
Median	6.17	9.06	11.29	-10.31	15.73	11.31	16.87	-3.52	15.52	7.62
3rd Quartile	5.51	8.12	9.67	-12.26	13.46	9.63	15.64	-4.50	14.19	7.04
95th Percentile	4.36	6.67	7.90	-15.33	11.31	6.84	13.24	-6.59	12.04	5.98
Population	108	180	192	184	213	223	200	177	188	182

Total Fund
Sharpe Ratio Ranking (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Sharpe Ratio



● Total Fund
▲ Policy Index
■ Implementation Benchmark

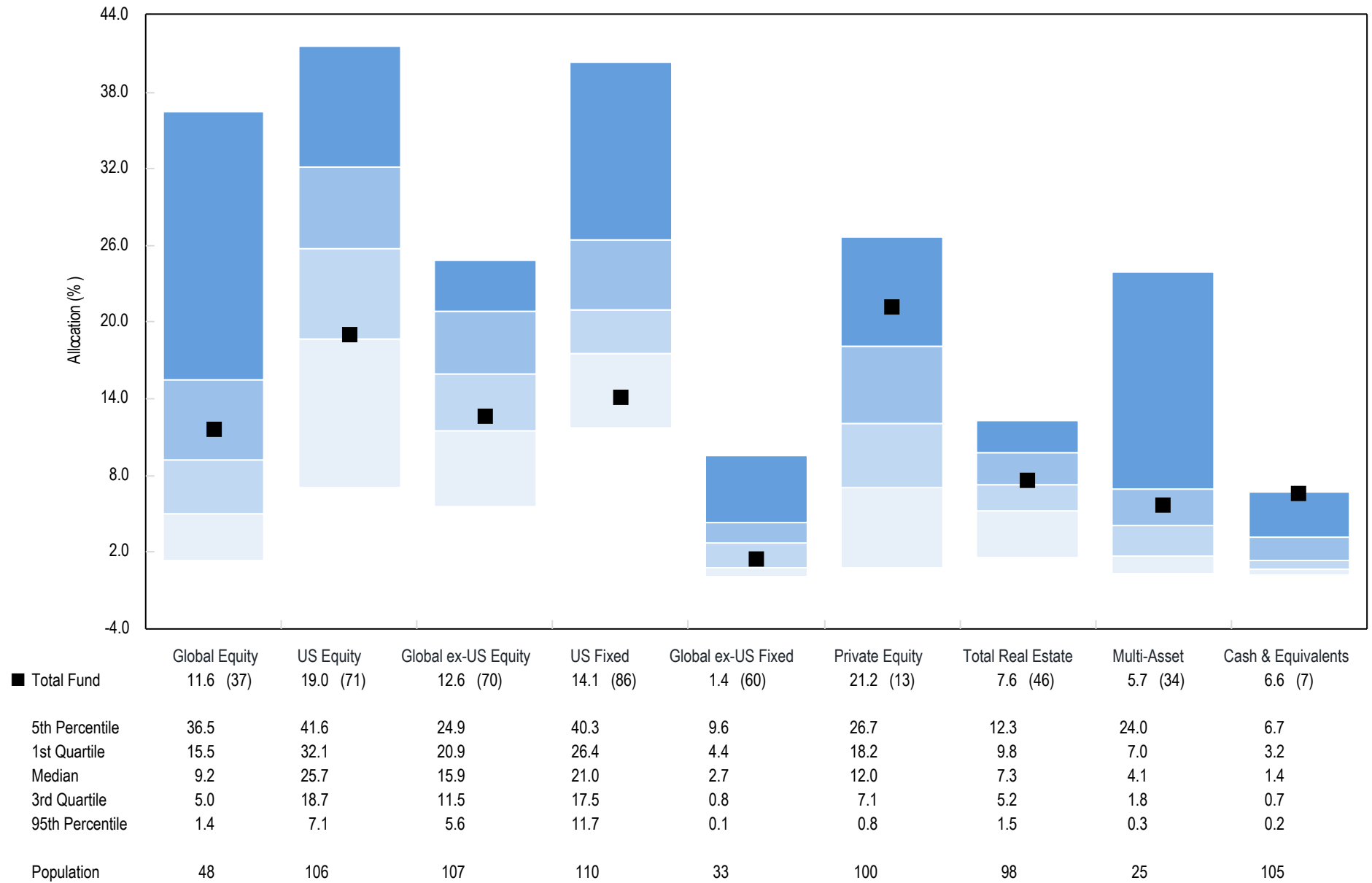
5th Percentile	1.35	1.00	1.10	0.84
1st Quartile	1.08	0.83	0.87	0.70
Median	0.97	0.72	0.75	0.59
3rd Quartile	0.85	0.62	0.64	0.52
95th Percentile	0.71	0.42	0.57	0.45

Population	108	104	99	94
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Total Fund
Peer Universe Comparison: Asset Allocation

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Total Fund vs. InvMetrics Public DB > \$1B



Domestic Equity Managers

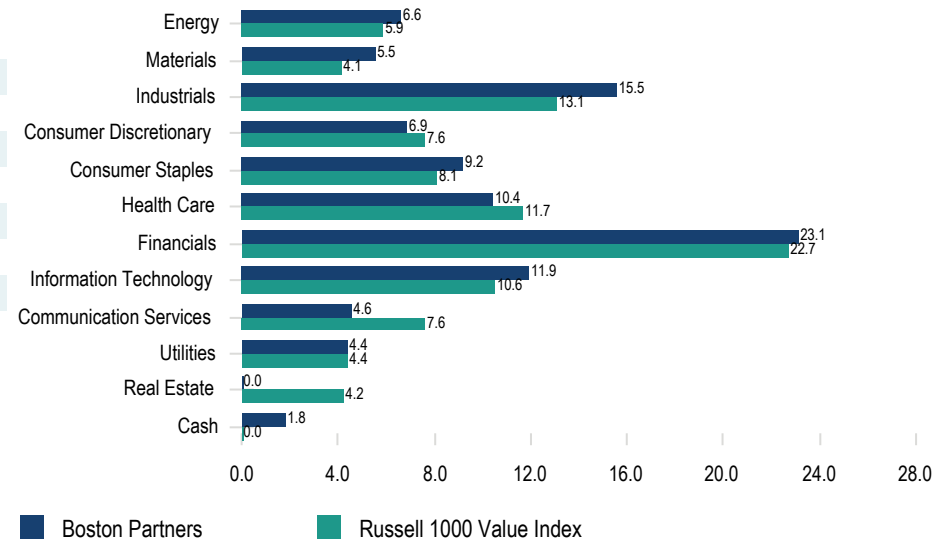
Boston Partners Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	87	874
Wtd. Avg. Mkt. Cap \$M	212,746.55	286,476.97
Median Mkt. Cap \$M	51,010.01	13,720.56
Price/Earnings ratio	20.73	20.25
Price/Book ratio	3.23	2.91
Return on Equity (%)	5.35	3.46
Current Yield (%)	1.67	1.99
Beta (5 Years, Monthly)	0.99	1.00

Sector Allocation (%) vs. Russell 1000 Value Index



Largest Holdings

	End Weight (%)	Quarterly Return (%)
JPMorgan Chase & Co	4.41	18.97
Philip Morris International Inc	2.93	15.60
Amazon.com Inc	2.17	15.31
Uber Technologies Inc	1.99	28.05
US Foods Holding Corp	1.94	17.65
Honeywell International Inc	1.90	10.54
Oracle Corp	1.89	56.96
AMERISOURCEBERGEN	1.85	8.03
Walt Disney Co (The)	1.84	26.17
CRH PLC	1.81	4.76

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
JPMorgan Chase & Co	3.98	18.97	0.76
Oracle Corp	1.29	56.96	0.74
Flex Ltd	1.06	50.91	0.54
Uber Technologies Inc	1.66	28.05	0.47
Micron Technology Inc.	1.05	41.85	0.44
Philip Morris International Inc	2.73	15.60	0.43
Kinross Gold Corp	1.49	24.20	0.36
Dell Technologies Inc	1.00	35.34	0.35
NRG Energy Inc	0.50	68.87	0.34
Microchip Technology Inc	0.72	46.50	0.34

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
UnitedHealth Group	2.65	-40.01	-1.06
AbbVie Inc	2.81	-10.59	-0.30
Schlumberger Ltd	1.53	-18.45	-0.28
Diamondback Energy Inc	1.65	-13.46	-0.22
Conocophillips	1.57	-13.81	-0.22
Kenvue Inc	1.47	-11.95	-0.18
Aon plc	1.48	-10.42	-0.15
Omnicom Group Inc	1.03	-12.40	-0.13
ONEOK Inc	0.72	-16.67	-0.12
T-Mobile US Inc	1.02	-10.34	-0.11

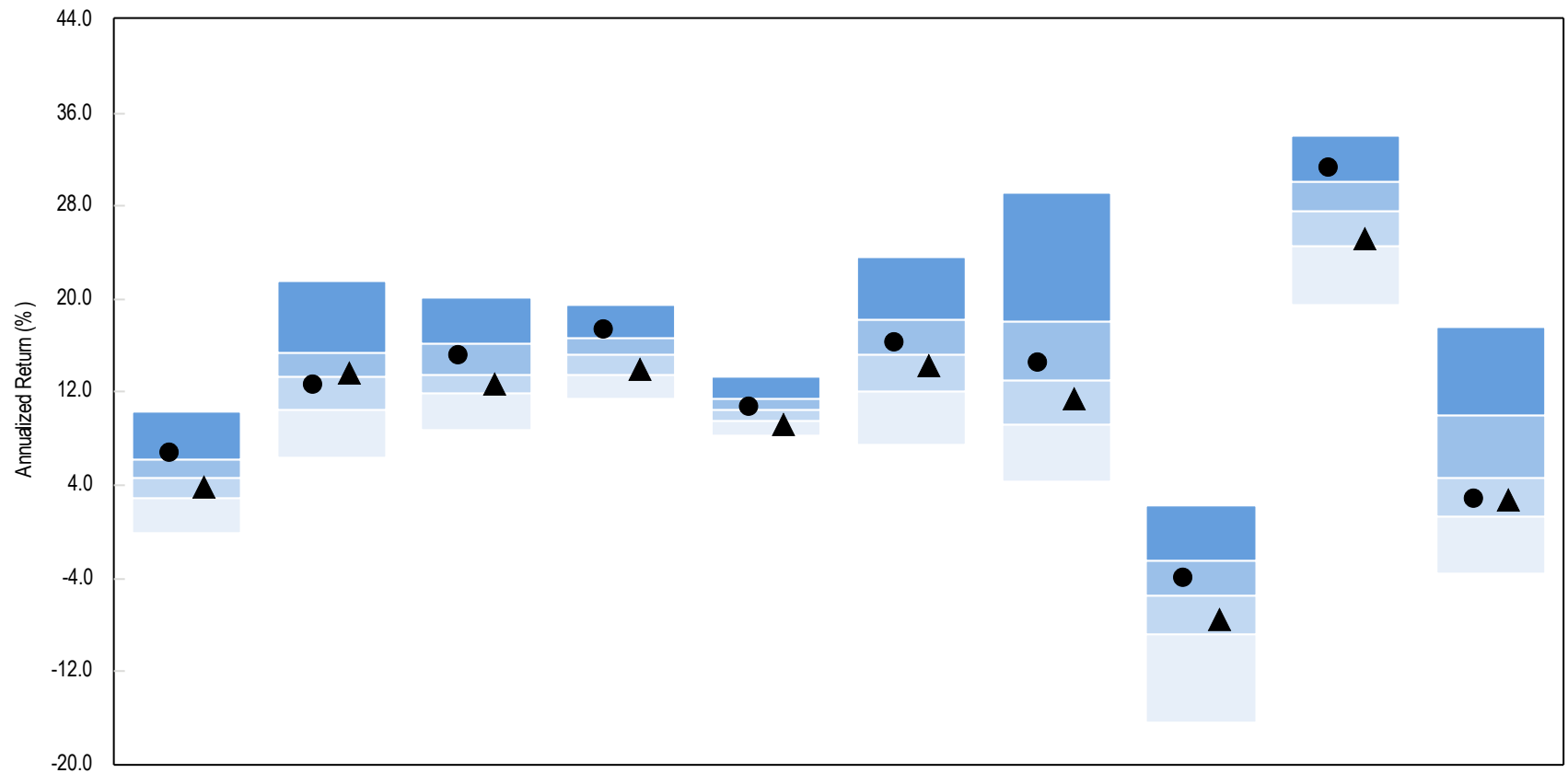
% of Portfolio 15.48 4.76 % of Portfolio 15.93 -2.76

Domestic equity large cap value portfolio exhibiting low turnover in companies with low valuations relative to intrinsic value. Primary personnel include Mark Donovan and David Pyle.

Boston Partners
Manager Performance Comparisons (Gross of Fees)

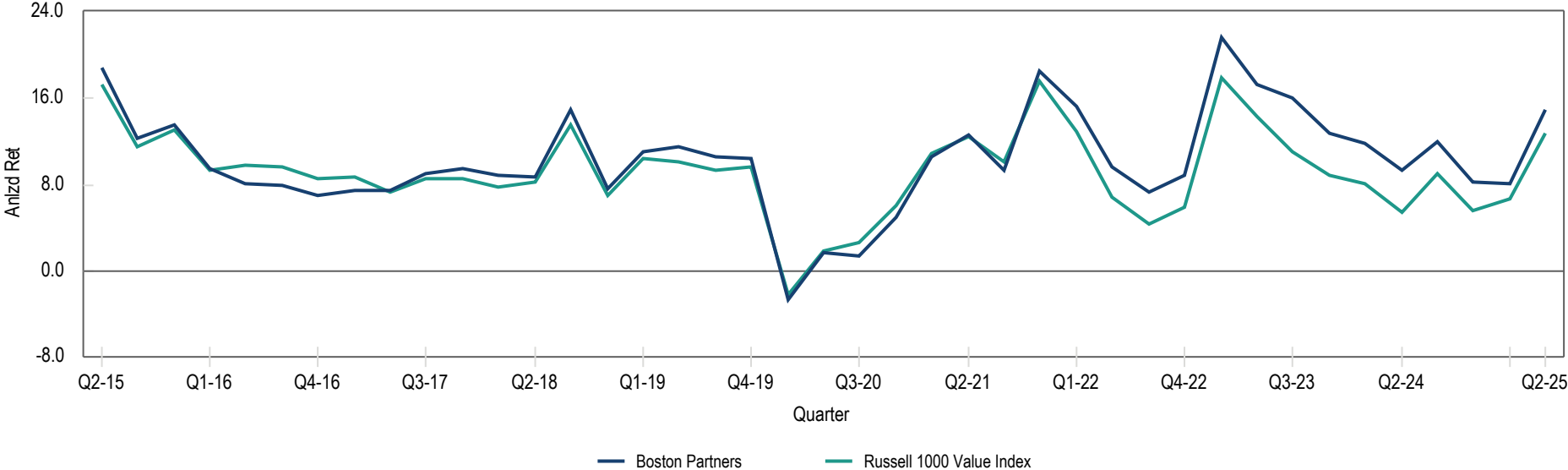
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

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

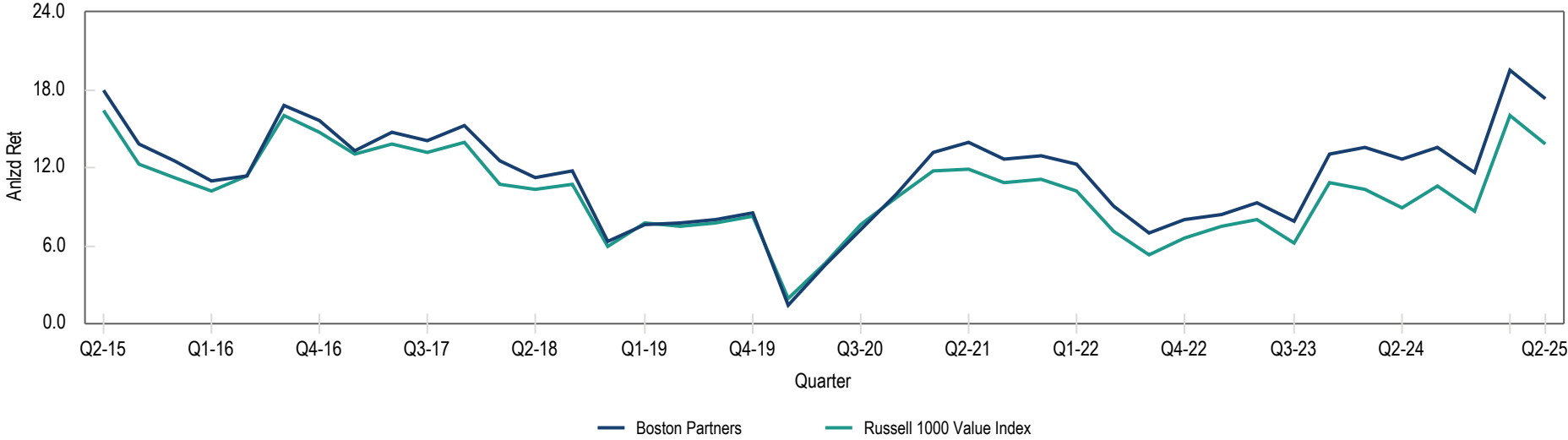


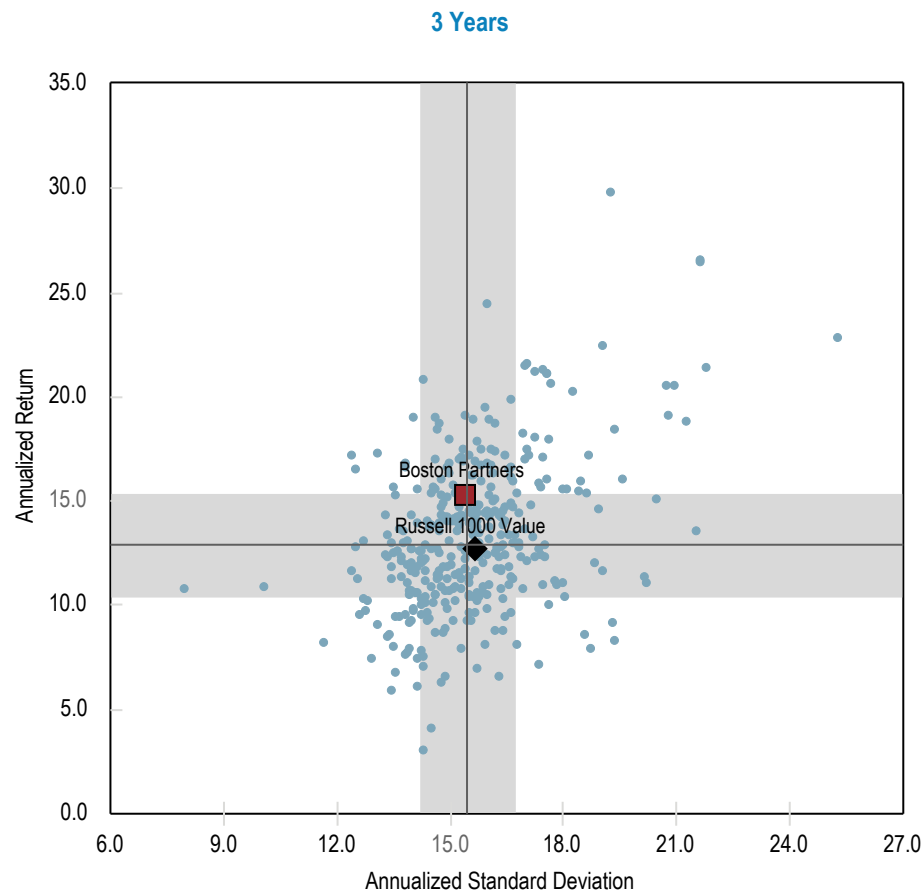
● Boston Partners	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
▲ Russell 1000 Value Index	6.81 (22)	12.71 (56)	15.30 (32)	17.42 (18)	10.78 (41)	16.37 (42)	14.67 (40)	-3.82 (36)	31.34 (18)	2.96 (64)
	3.79 (62)	13.70 (45)	12.76 (63)	13.93 (69)	9.19 (85)	14.37 (56)	11.46 (62)	-7.54 (68)	25.16 (72)	2.80 (64)
5th Percentile	10.39	21.51	20.19	19.43	13.34	23.62	29.19	2.32	34.01	17.56
1st Quartile	6.28	15.42	16.17	16.67	11.41	18.29	18.09	-2.39	30.08	10.06
Median	4.64	13.34	13.54	15.19	10.42	15.29	13.05	-5.48	27.58	4.71
3rd Quartile	2.84	10.49	11.84	13.45	9.54	12.08	9.27	-8.79	24.62	1.34
95th Percentile	-0.02	6.36	8.69	11.38	8.34	7.46	4.36	-16.34	19.43	-3.50
Population	379	378	373	356	319	387	417	426	430	437

Rolling 3 Year Annualized Return (%)

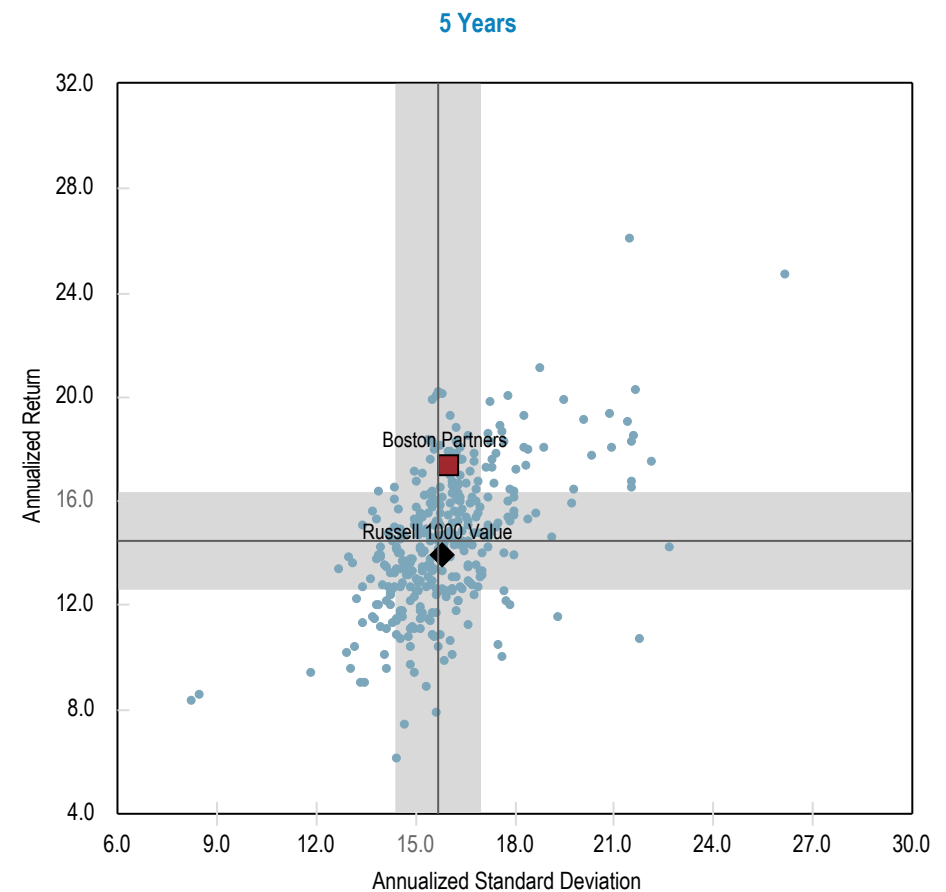


Rolling 5 Year Annualized Return (%)





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Boston Partners	15.3	15.4	0.7
Russell 1000 Value Index	12.8	15.7	0.6
eV US Large Cap Value Equity Median	13.5	15.5	0.6
Population	373	373	373



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Boston Partners	17.4	16.0	0.9
Russell 1000 Value Index	13.9	15.8	0.7
eV US Large Cap Value Equity Median	15.2	15.7	0.8
Population	356	356	356

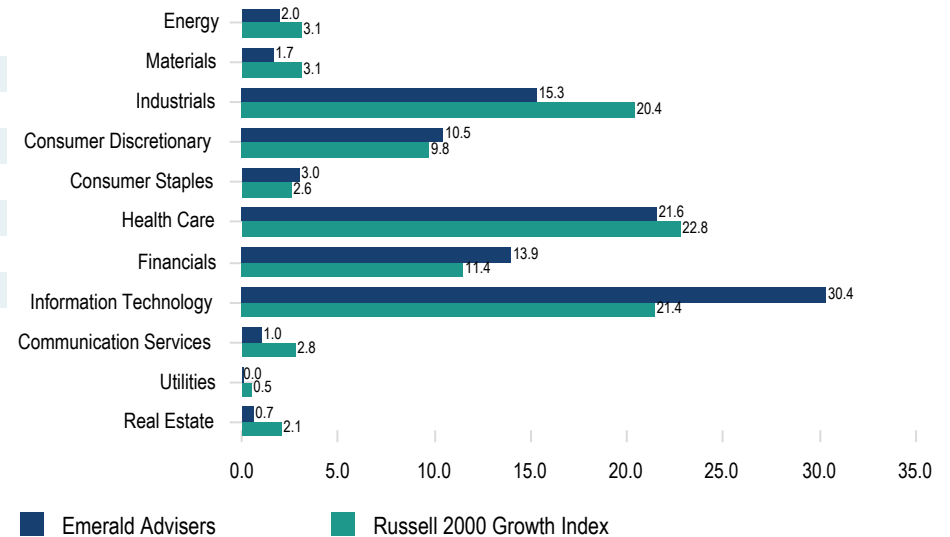
Emerald Advisers Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	116	1,100
Wtd. Avg. Mkt. Cap \$M	5,036.03	4,110.72
Median Mkt. Cap \$M	3,267.01	1,106.69
Price/Earnings ratio	33.33	25.32
Price/Book ratio	4.34	4.26
Return on Equity (%)	-1.75	-2.39
Current Yield (%)	0.32	0.62
Beta (5 Years, Monthly)	0.94	1.00

Sector Allocation (%) vs. Russell 2000 Growth Index



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Credo Technology Group Holding Ltd	3.19	130.55
AeroVironment Inc	2.71	139.07
Kratos Defense & Security Solutions	2.61	56.45
TransMedics Group Inc	2.19	99.18
TTM Technologies Inc	2.17	99.03
Soleno Therapeutics Inc	2.11	17.26
Palomar Holdings Inc	1.85	12.52
Rambus Inc	1.83	23.65
Q2 Holdings Inc	1.82	16.97
Varonis Systems Inc	1.80	25.46

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Credo Technology Group Holding Ltd	2.32	130.55	3.02
AeroVironment Inc	1.24	139.07	1.73
TransMedics Group Inc	1.42	99.18	1.41
TTM Technologies Inc	1.40	99.03	1.39
Kratos Defense & Security Solutions	2.02	56.45	1.14
ATI Inc	1.49	65.94	0.98
Carpenter Technology Corp	1.69	52.72	0.89
Blueprint Medicines Corp	1.71	44.82	0.77
Insmed Inc	2.15	31.92	0.69
National Vision Holdings Inc	0.82	80.05	0.66
% of Portfolio	16.26		12.67

Top Detractors

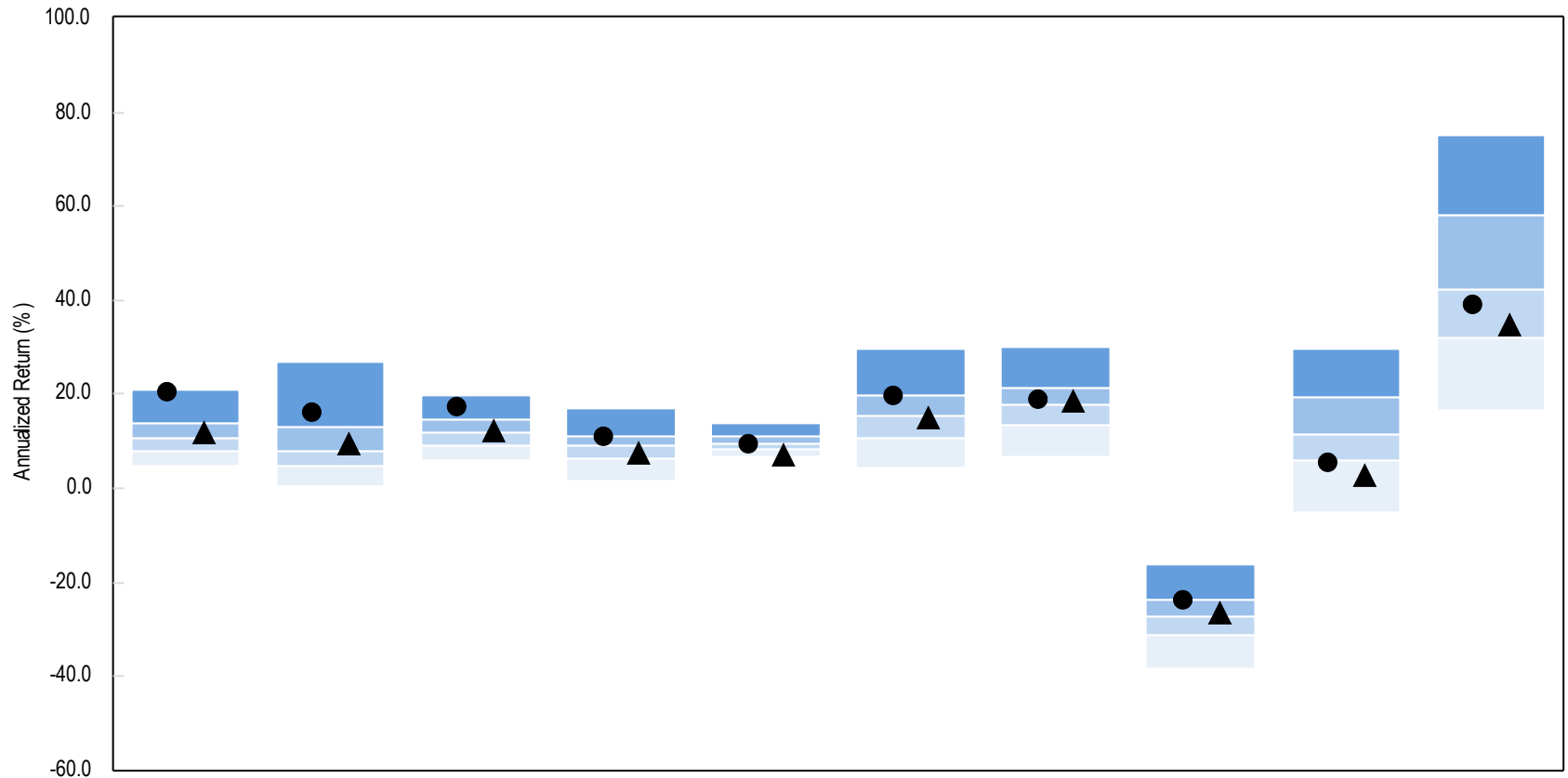
	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Freshpet Inc	1.92	-18.29	-0.35
Traverse Therapeutics Inc	1.76	-17.41	-0.31
Wave Life Sciences Ltd	1.14	-19.55	-0.22
LendingTree Inc	0.84	-26.26	-0.22
Orthofix Medical Inc	0.62	-31.64	-0.20
CVRx Inc	0.34	-51.92	-0.18
Merit Medical Systems Inc	1.47	-11.57	-0.17
Biohaven Ltd	0.40	-41.31	-0.17
Cogent Communications	0.69	-19.64	-0.14
RXO Inc	0.73	-17.70	-0.13
% of Portfolio	9.91		-2.08

Domestic equity small cap growth portfolio of companies with significantly high growth rates. Primary personnel include Kenneth Mertz, Joseph Garner, and Stacey Sears.

Emerald Advisers
Manager Performance Comparisons (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Emerald Advisers vs. eV US Small Cap Growth Equity Gross Universe

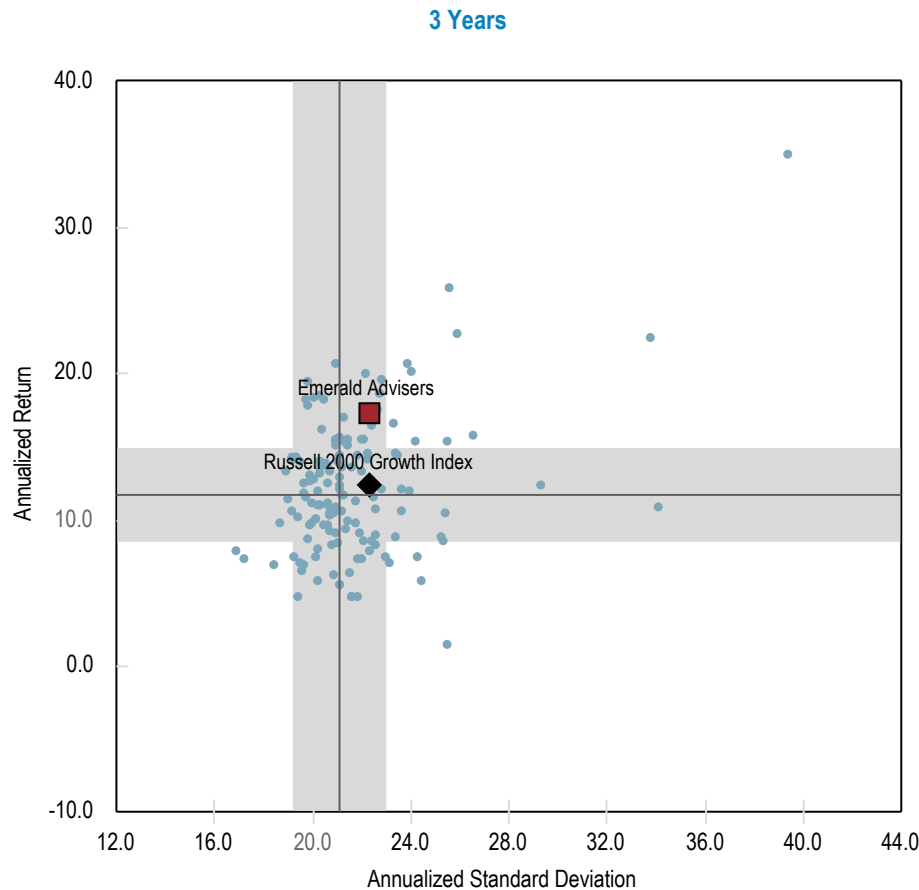


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● Emerald Advisers	20.68 (7)	16.30 (14)	17.35 (13)	11.06 (27)	9.59 (52)	19.67 (28)	19.15 (41)	-23.75 (27)	5.53 (76)	38.96 (57)
▲ Russell 2000 Growth Index	11.97 (40)	9.73 (40)	12.38 (45)	7.42 (65)	7.14 (95)	15.15 (52)	18.66 (45)	-26.36 (44)	2.83 (85)	34.63 (67)
5th Percentile	20.92	27.11	19.93	16.93	14.07	29.79	30.05	-16.24	29.85	74.94
1st Quartile	14.00	12.96	14.51	11.16	11.09	19.93	21.33	-23.58	19.30	58.29
Median	10.86	8.11	11.71	9.11	9.61	15.42	17.67	-27.28	11.51	42.23
3rd Quartile	8.12	4.63	9.11	6.49	8.50	10.69	13.38	-31.28	5.80	31.98
95th Percentile	4.79	0.34	5.85	1.78	6.70	4.51	6.76	-38.39	-4.90	16.54
Population	149	149	147	145	135	156	165	173	183	184

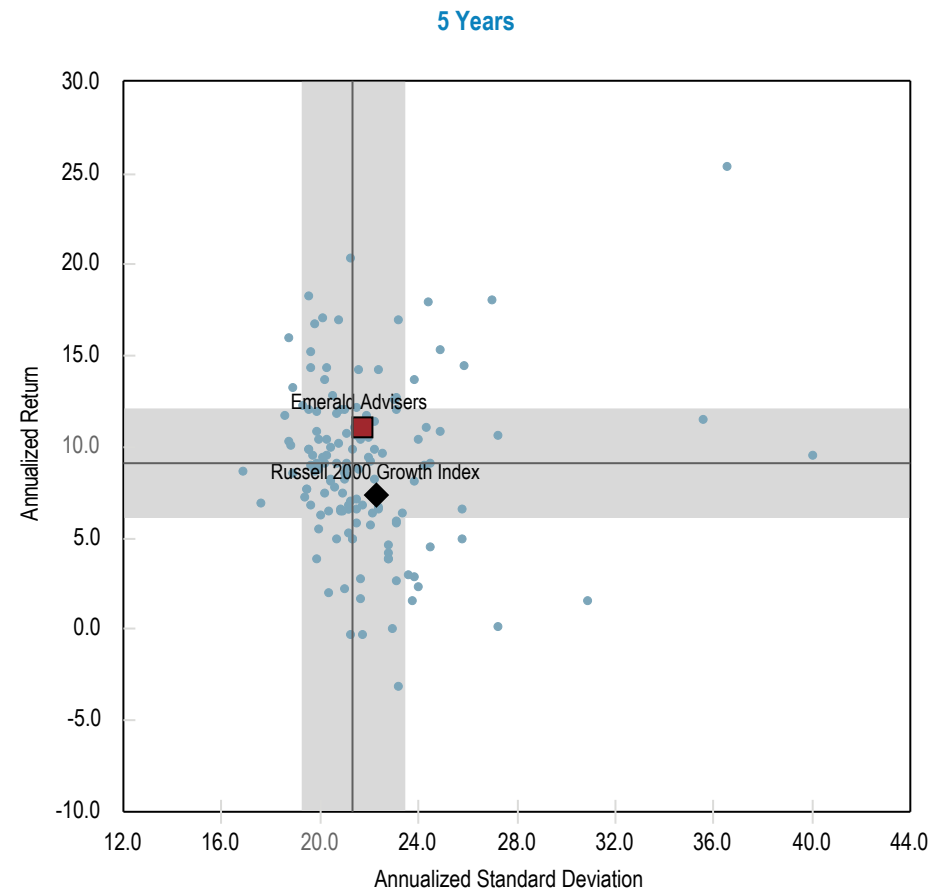


Emerald Advisers
Risk vs. Return 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Emerald Advisers	17.3	22.4	0.6
Russell 2000 Growth Index	12.4	22.3	0.4
eV US Small Cap Growth Equity Median	11.7	21.1	0.4
Population	147	147	147



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Emerald Advisers	11.1	21.8	0.5
Russell 2000 Growth Index	7.4	22.3	0.3
eV US Small Cap Growth Equity Median	9.1	21.3	0.4
Population	145	145	145

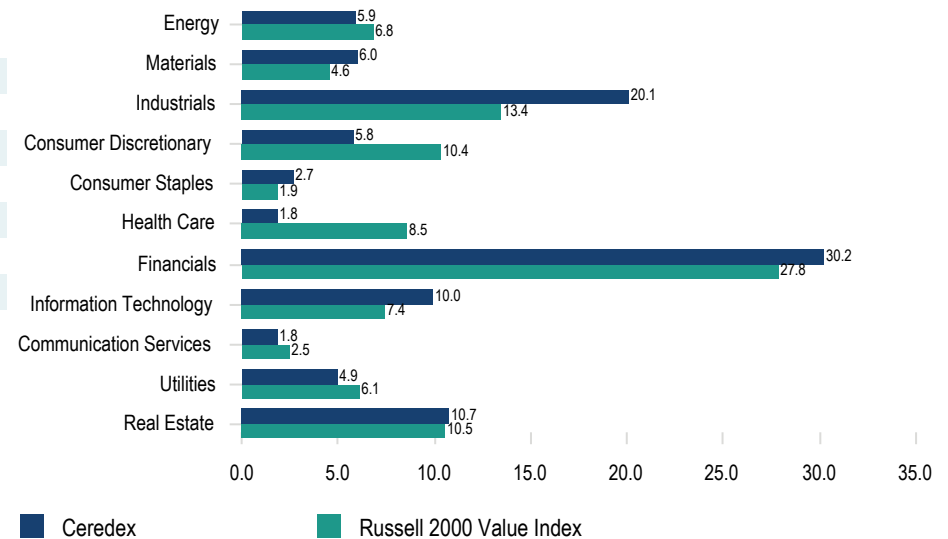
Ceredex Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	74	1,443
Wtd. Avg. Mkt. Cap \$M	6,288.70	2,679.60
Median Mkt. Cap \$M	5,720.66	695.60
Price/Earnings ratio	19.07	14.13
Price/Book ratio	2.02	1.52
Return on Equity (%)	2.13	-0.79
Current Yield (%)	2.32	2.32
Beta (5 Years, Monthly)	0.82	1.00

Sector Allocation (%) vs. Russell 2000 Value Index



Largest Holdings

	End Weight (%)	Quarterly Return (%)
IDACORP Inc.	2.15	0.07
OGE Energy Corp	1.97	-2.47
TD SYNNEX Corp	1.91	31.09
Matador Resources Co	1.81	-5.91
Wintrust Financial Corp.	1.81	10.71
UMB Financial Corp	1.77	4.41
Regal Rexnord Corp	1.76	27.63
Range Resources Corp.	1.74	2.07
Ally Financial Inc	1.73	7.79
Pinnacle Financial Partners Inc	1.71	4.36

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
BWX Technologies Inc	1.08	46.36	0.50
Autoliv Inc	1.34	27.39	0.37
Regal Rexnord Corp	1.32	27.63	0.37
Huntington Ingalls Industries Inc	1.87	19.06	0.36
TD SYNNEX Corp	1.09	31.09	0.34
Evercore Inc	0.92	35.69	0.33
ESCO Technologies Inc.	1.40	20.64	0.29
WESCO International Inc	1.45	19.56	0.28
Belden Inc	1.49	15.56	0.23
Littelfuse Inc	1.47	15.63	0.23

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Patterson-UTI Energy Inc	1.21	-26.81	-0.32
Robert Half Inc	1.07	-23.77	-0.26
Oxford Industries Inc.	0.82	-30.34	-0.25
Fortune Brands Innovations Inc	1.62	-15.03	-0.24
Cogent Communications	0.99	-19.64	-0.20
NOV Inc	1.13	-16.44	-0.19
Walker & Dunlop Inc	1.08	-16.68	-0.18
Flowers Foods Inc.	1.22	-14.68	-0.18
Avient Corp	1.40	-12.35	-0.17
PotlatchDeltic Corp	1.24	-13.97	-0.17

% of Portfolio

13.43

3.29

% of Portfolio

11.78

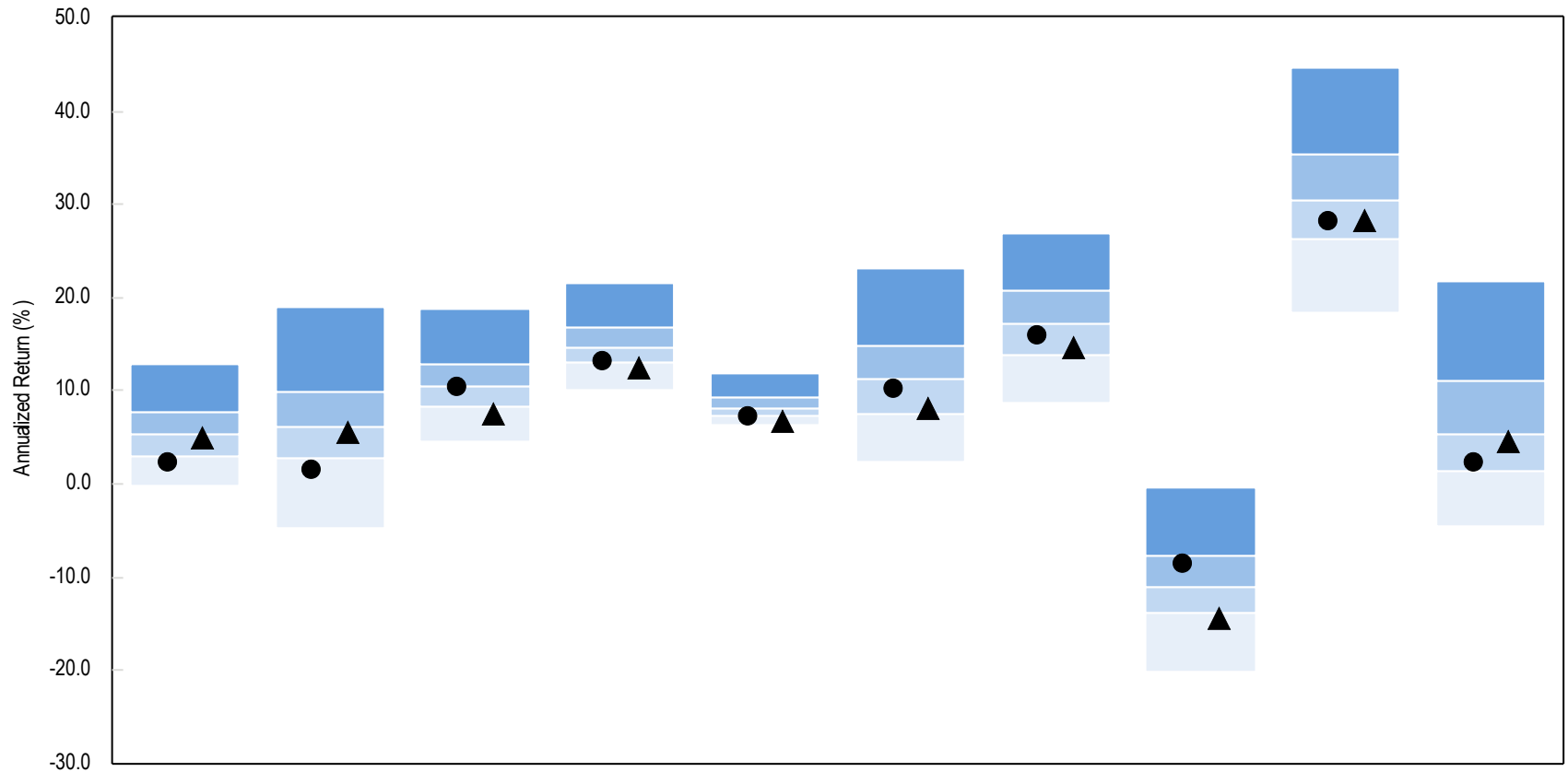
-2.16

Domestic equity small cap value portfolio of companies with dividend yields and low valuations. Primary personnel include Brett Barner and David Maynard.

Ceredex
Manager Performance Comparisons (Gross of Fees)

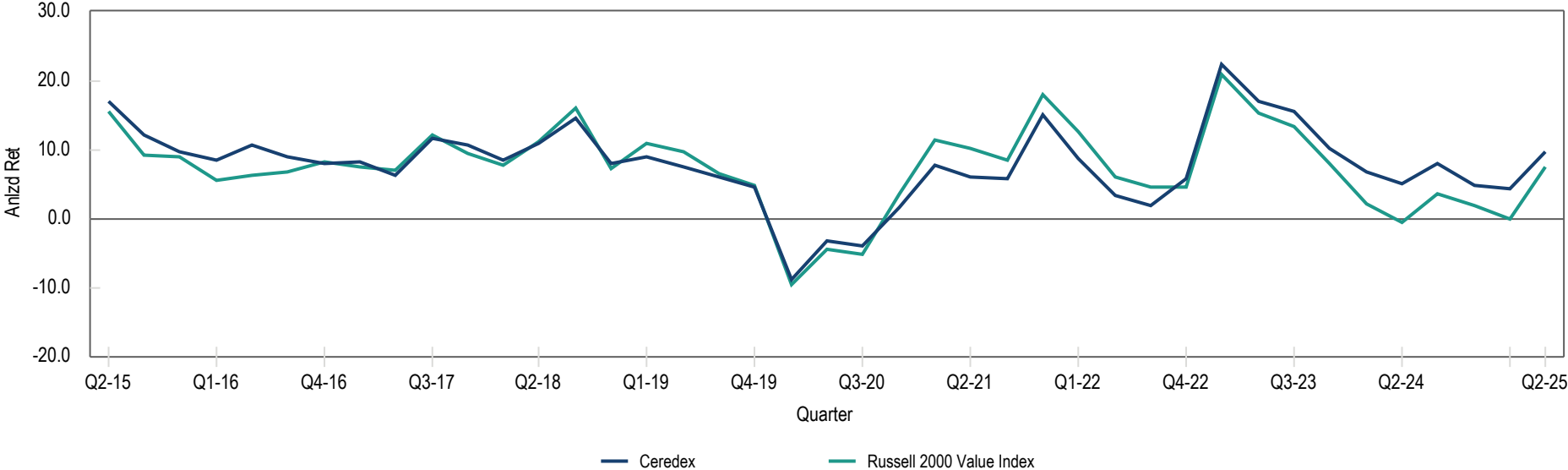
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Ceredex vs. eV US Small Cap Value Equity Gross Universe

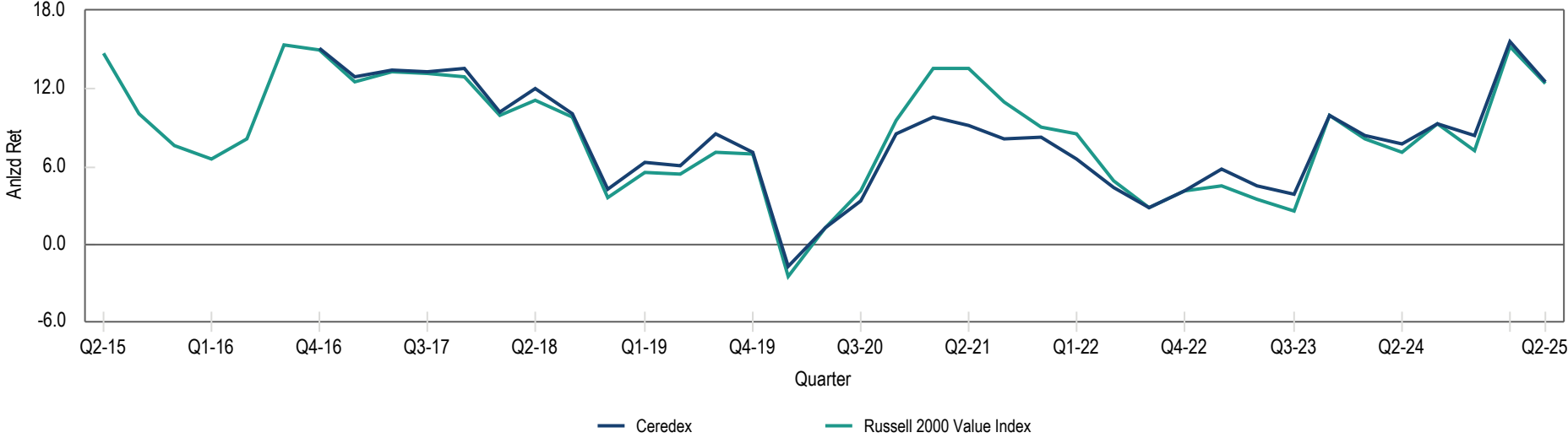


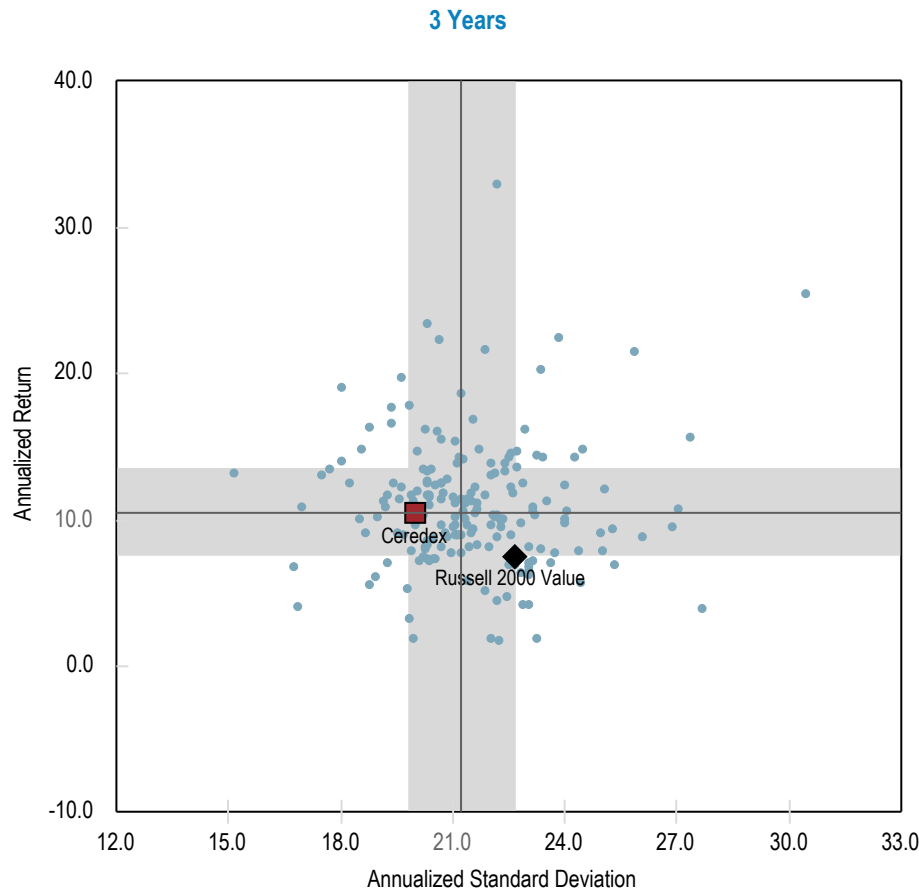
	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● Ceredex	2.32 (83)	1.58 (82)	10.43 (51)	13.19 (72)	7.36 (75)	10.21 (60)	16.02 (61)	-8.46 (28)	28.37 (58)	2.32 (70)
▲ Russell 2000 Value Index	4.97 (54)	5.54 (54)	7.45 (83)	12.47 (82)	6.72 (91)	8.05 (74)	14.65 (71)	-14.48 (79)	28.27 (59)	4.63 (55)
5th Percentile	12.78	18.97	18.84	21.47	11.88	23.18	26.82	-0.41	44.60	21.68
1st Quartile	7.67	9.82	12.85	16.86	9.22	14.90	20.70	-7.73	35.35	11.03
Median	5.34	6.06	10.53	14.65	8.19	11.37	17.29	-10.97	30.40	5.32
3rd Quartile	3.05	2.70	8.31	13.04	7.35	7.57	13.94	-13.87	26.22	1.38
95th Percentile	-0.10	-4.64	4.62	10.05	6.29	2.37	8.80	-20.05	18.39	-4.57
Population	194	194	192	191	166	199	214	221	233	248

Rolling 3 Year Annualized Return (%)

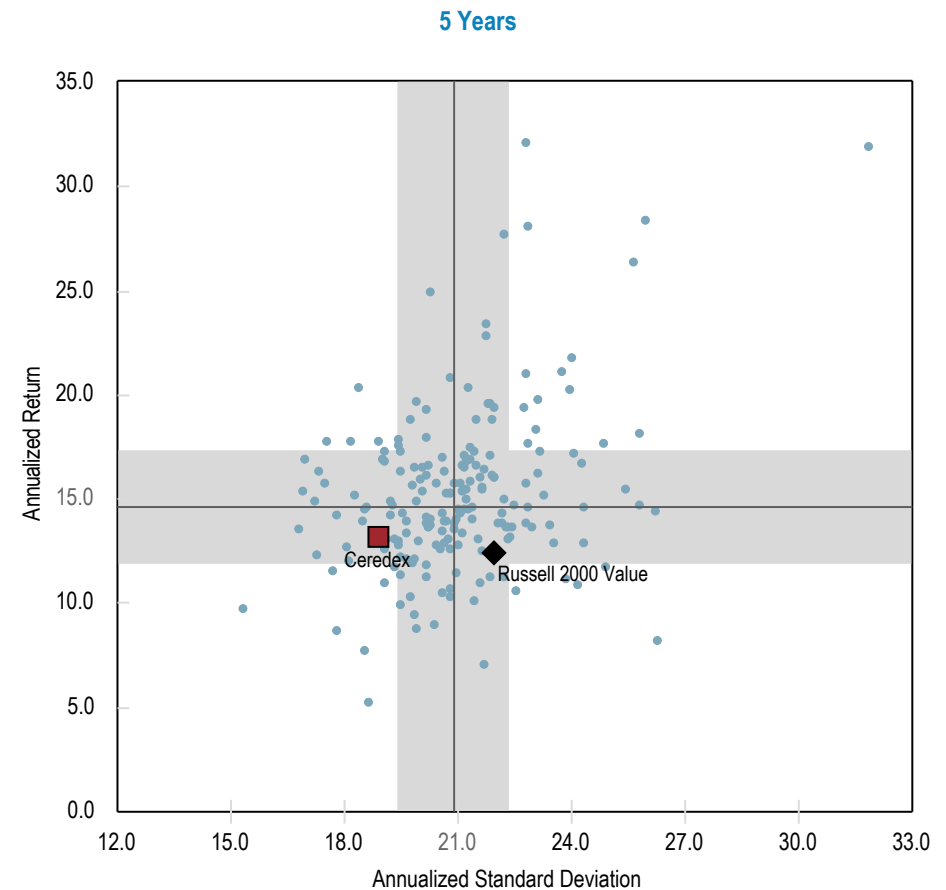


Rolling 5 Year Annualized Return (%)





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Ceredex	10.4	20.0	0.4
Russell 2000 Value Index	7.5	22.7	0.2
eV US Small Cap Value Equity Median	10.5	21.2	0.4
Population	192	192	192



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Ceredex	13.2	18.9	0.6
Russell 2000 Value Index	12.5	22.0	0.5
eV US Small Cap Value Equity Median	14.6	20.9	0.6
Population	191	191	191

International Equity Managers

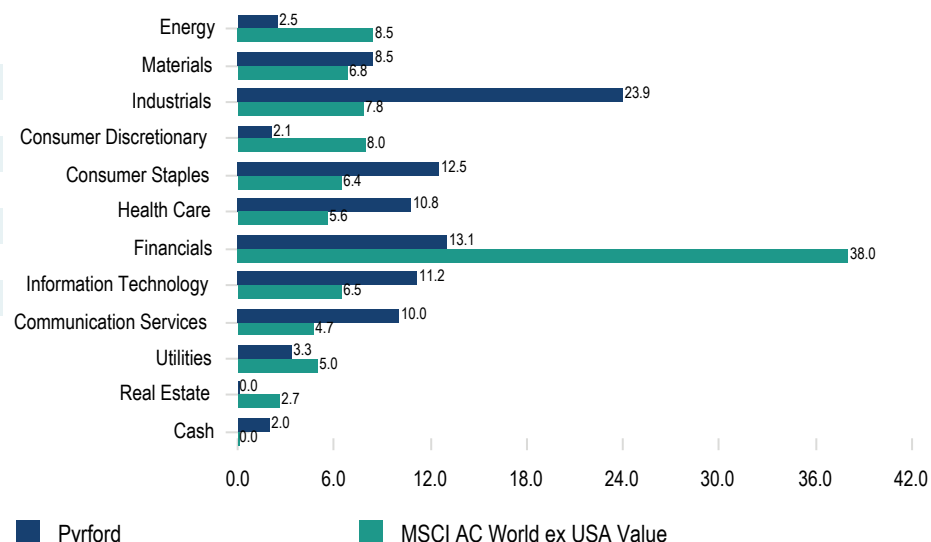
Pyrford Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	77	1,177
Wtd. Avg. Mkt. Cap \$M	75,103.05	82,279.97
Median Mkt. Cap \$M	26,592.44	11,187.50
Price/Earnings ratio	18.40	12.24
Price/Book ratio	2.45	1.76
Return on Equity (%)	4.33	3.33
Current Yield (%)	3.73	4.32
Beta (5 Years, Monthly)	0.81	1.00

Sector Allocation (%) vs. MSCI AC World ex USA Value



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Mitsubishi Electric Corp	2.58	18.41
Brambles Ltd	2.54	22.97
United Overseas Bank Ltd	2.51	3.13
Japan Tobacco Inc	2.46	9.36
Nestle SA, Cham Und Vevey	2.40	1.53
Roche Holding AG	2.36	-1.13
AIA Group Ltd	2.33	21.53
Telenor ASA	2.31	11.91
L'Air Liquide SA	2.24	10.61
Fuchs SE	2.22	17.89

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Brambles Ltd	2.26	22.97	0.52
AIA Group Ltd	2.14	21.53	0.46
Perusahaan Perseroan	1.48	26.59	0.39
Mitsubishi Electric Corp	2.11	18.41	0.39
Taiwan Semiconductor Man.	1.16	32.97	0.38
Fuchs SE	2.12	17.89	0.38
Legrand	1.29	29.44	0.38
Sampo PLC	2.04	16.50	0.34
Nemetschek SE	1.30	25.73	0.33
Infineon Technologies AG	1.13	29.12	0.33

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Nihon Kohden Corp	1.59	-11.33	-0.18
Sanofi	1.60	-8.58	-0.14
Bunzl PLC	0.72	-15.11	-0.11
Sumitomo Rubber Industries Ltd	0.96	-7.88	-0.08
Merck KGaA	1.46	-3.89	-0.06
Essity Aktiebolag	0.96	-3.24	-0.03
Shell Plc	1.00	-2.99	-0.03
Roche Holding AG	2.62	-1.13	-0.03
Rio Tinto Group	1.02	-2.45	-0.03
Vtech Holdings Limited	1.33	-1.15	-0.02

% of Portfolio

17.03

3.90

% of Portfolio

13.26

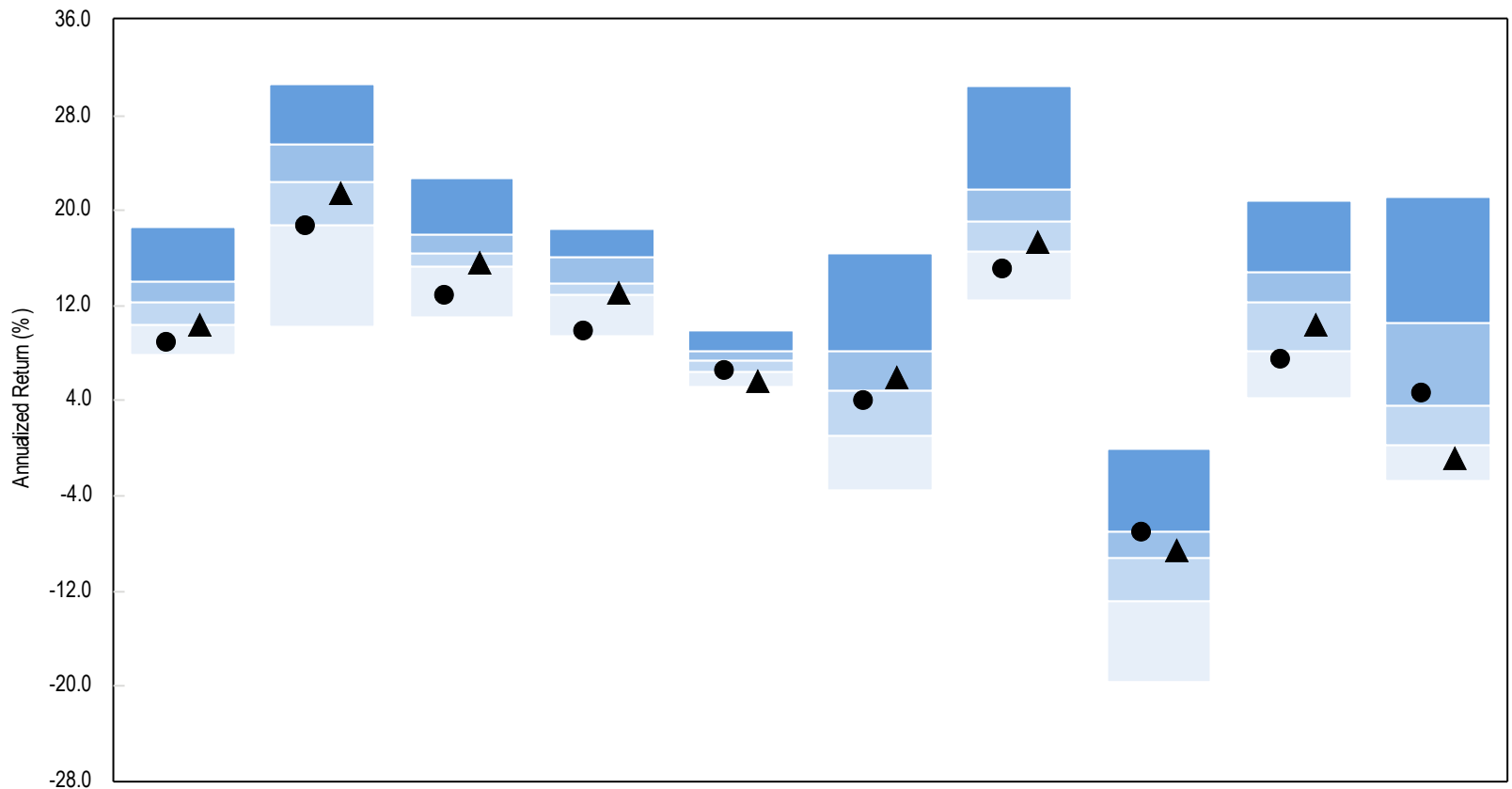
-0.69

International equity value portfolio of non-US companies with low valuations at the country and stock level. Primary personnel include Tony Cousins, Daniel McDonagh, and Paul Simons.

Pyrford
Manager Performance Comparisons (Gross of Fees)

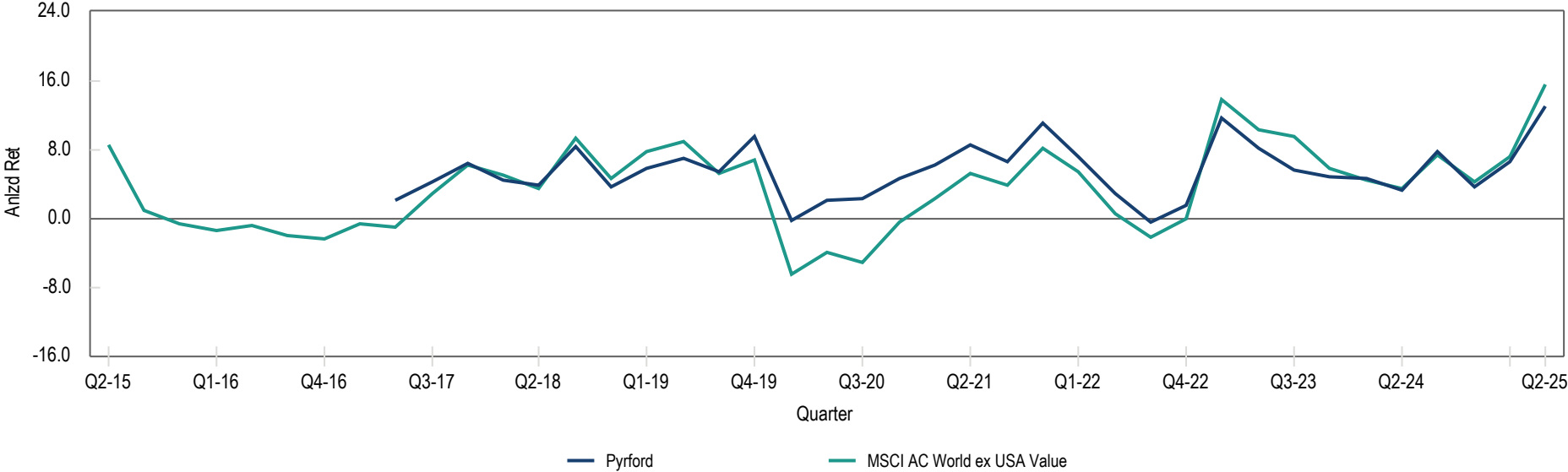
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Pyrford vs. eV ACWI ex-US Value Equity Gross Universe

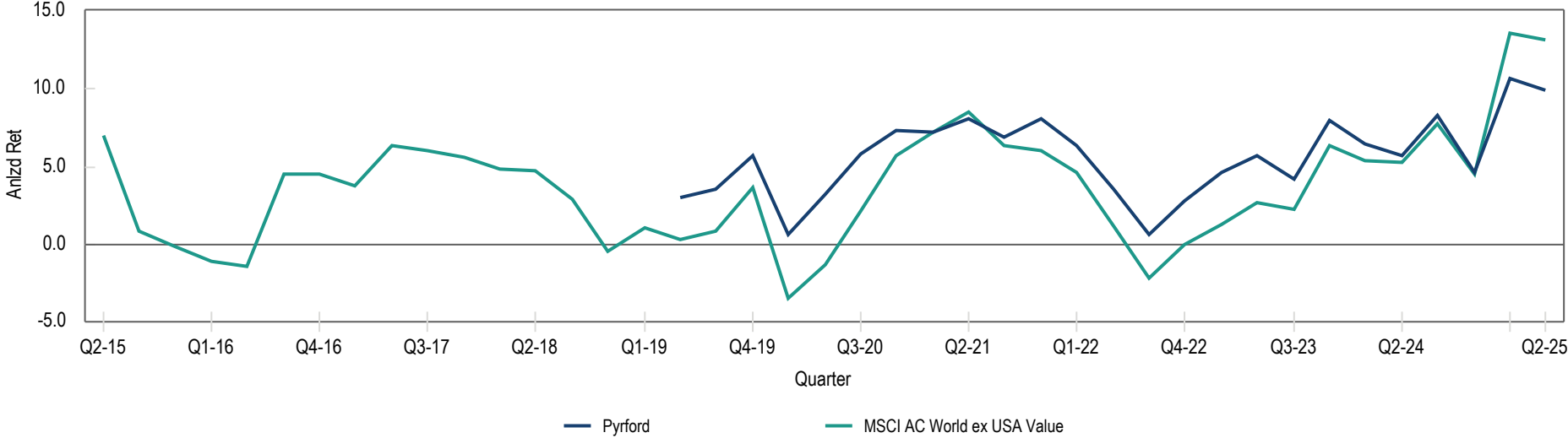


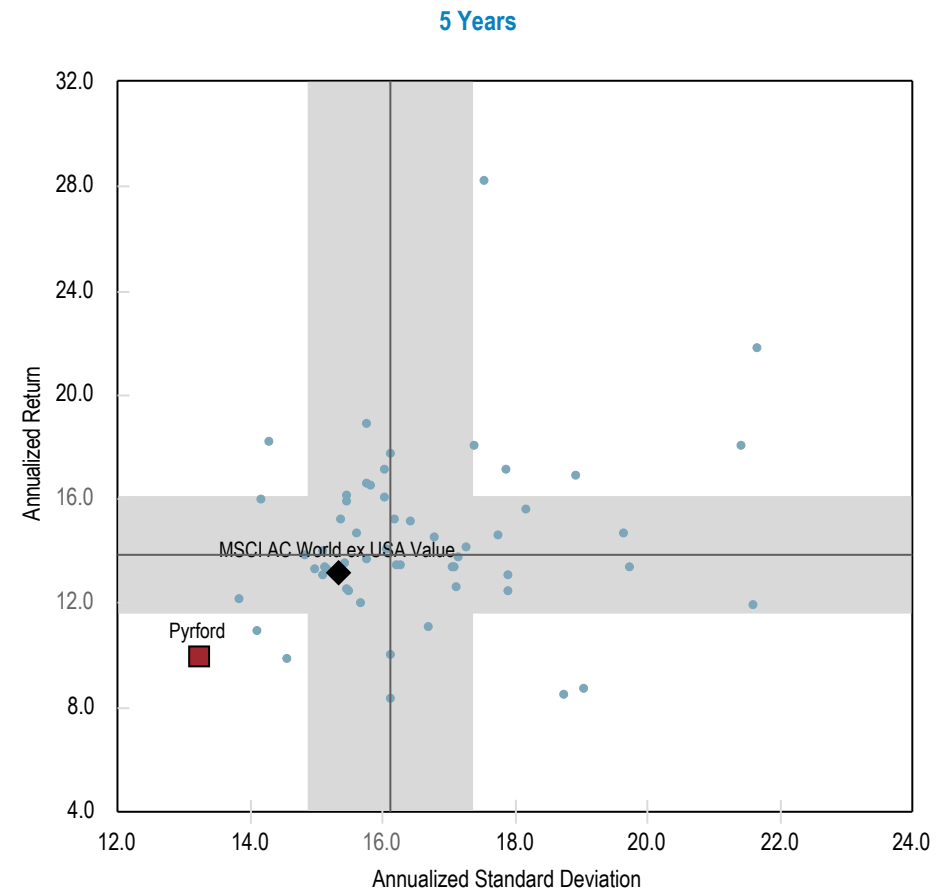
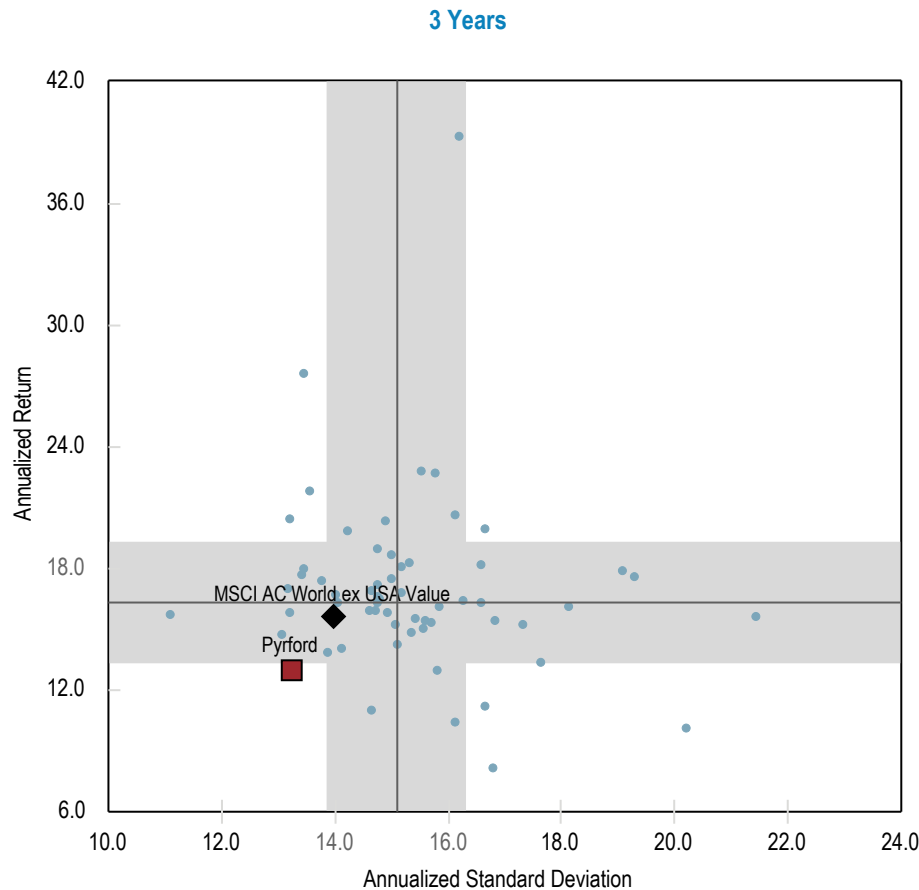
	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● Pyrford	8.98 (91)	18.75 (75)	12.98 (92)	9.98 (94)	6.53 (75)	4.01 (61)	15.17 (83)	-6.97 (26)	7.57 (82)	4.66 (44)
▲ MSCI AC World ex USA Value (Net)	10.42 (75)	21.42 (55)	15.62 (68)	13.15 (72)	5.70 (86)	6.04 (40)	17.30 (67)	-8.59 (43)	10.46 (64)	-0.77 (81)
5th Percentile	18.64	30.70	22.69	18.42	9.91	16.40	30.42	-0.08	20.75	21.10
1st Quartile	14.05	25.51	18.05	16.02	8.18	8.14	21.79	-6.91	14.76	10.48
Median	12.38	22.46	16.34	13.88	7.38	4.81	19.15	-9.23	12.30	3.66
3rd Quartile	10.38	18.74	15.30	12.87	6.46	1.10	16.58	-12.85	8.18	0.31
95th Percentile	7.83	10.30	10.99	9.53	5.23	-3.51	12.43	-19.64	4.27	-2.72
Population	64	64	59	55	39	63	64	65	67	68

Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Pyrford	13.0	13.3	0.7
MSCI AC World ex USA Value (Net)	15.6	14.0	0.8
eV ACWI ex-US Value Equity Median	16.3	15.1	0.8
Population	59	59	59

	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Pyrford	10.0	13.2	0.6
MSCI AC World ex USA Value (Net)	13.1	15.3	0.7
eV ACWI ex-US Value Equity Median	13.9	16.1	0.7
Population	55	55	55

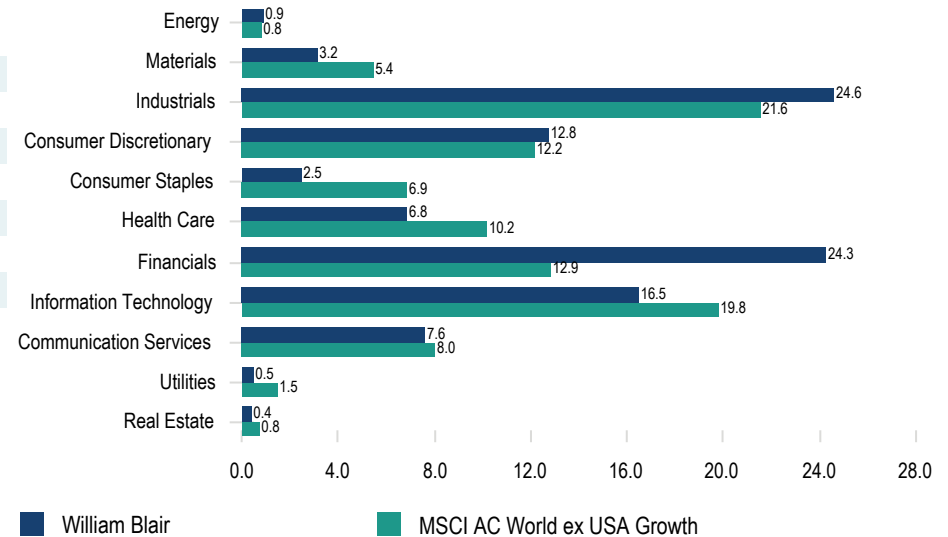
William Blair Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	182	1,083
Wtd. Avg. Mkt. Cap \$M	115,869.63	154,396.50
Median Mkt. Cap \$M	23,234.53	11,720.20
Price/Earnings ratio	22.00	22.69
Price/Book ratio	3.85	3.92
Return on Equity (%)	5.05	4.60
Current Yield (%)	1.77	1.64
Beta (5 Years, Monthly)	1.03	1.00

Sector Allocation (%) vs. MSCI AC World ex USA Growth



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Taiwan Semiconductor Man.	3.48	36.87
Tencent Holdings LTD	2.32	1.20
3I Group PLC	1.83	22.24
SAP SE	1.61	15.83
BAE Systems PLC	1.51	29.97
LONZA GROUP AG	1.34	16.63
UniCredit SpA	1.32	23.67
SK Hynix Inc	1.29	67.36
Sea Limited	1.29	22.57
London Stock Exchange Group	1.23	-0.70

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Taiwan Semiconductor Man.	2.37	36.87	0.87
BAE Systems PLC	1.34	29.97	0.40
3I Group PLC	1.72	22.24	0.38
Spotify Technology SA	0.89	39.51	0.35
SK Hynix Inc	0.50	67.36	0.34
UniCredit SpA	1.27	23.67	0.30
Rheinmetall AG	0.61	48.81	0.30
Dollarama Inc	0.91	31.60	0.29
Halma PLC	0.81	31.63	0.26
SAP SE	1.60	15.83	0.25

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Alibaba Group Holding Ltd	1.77	-13.57	-0.24
Meituan	0.78	-20.29	-0.16
LVMH Moet Hennessy Louis V	0.58	-14.22	-0.08
Yum China Holdings Inc	0.56	-13.65	-0.08
BYD Company Limited	0.97	-6.28	-0.06
Bunzl PLC	0.40	-15.11	-0.06
Astrazeneca PLC	0.97	-4.53	-0.04
Hemnet Group AB	0.31	-11.96	-0.04
Chubb Ltd	0.82	-3.74	-0.03
Arch Capital Group Ltd	0.56	-5.33	-0.03

% of Portfolio

12.02

3.74

% of Portfolio

7.72

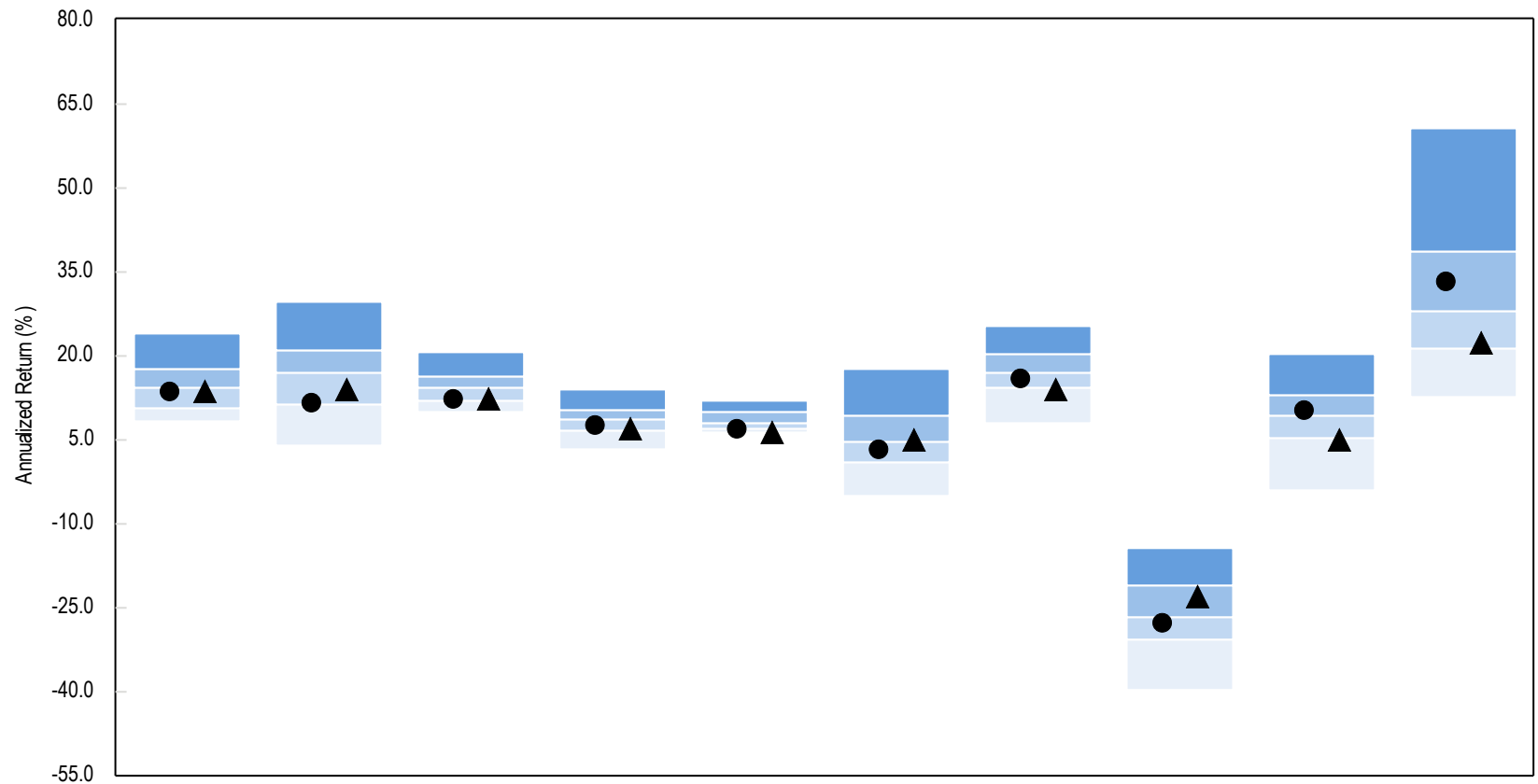
-0.82

International equity growth portfolio of non-US companies with high growth rates constructed from the security level. Primary personnel include Simon Fennell and Kenneth McAtamney.

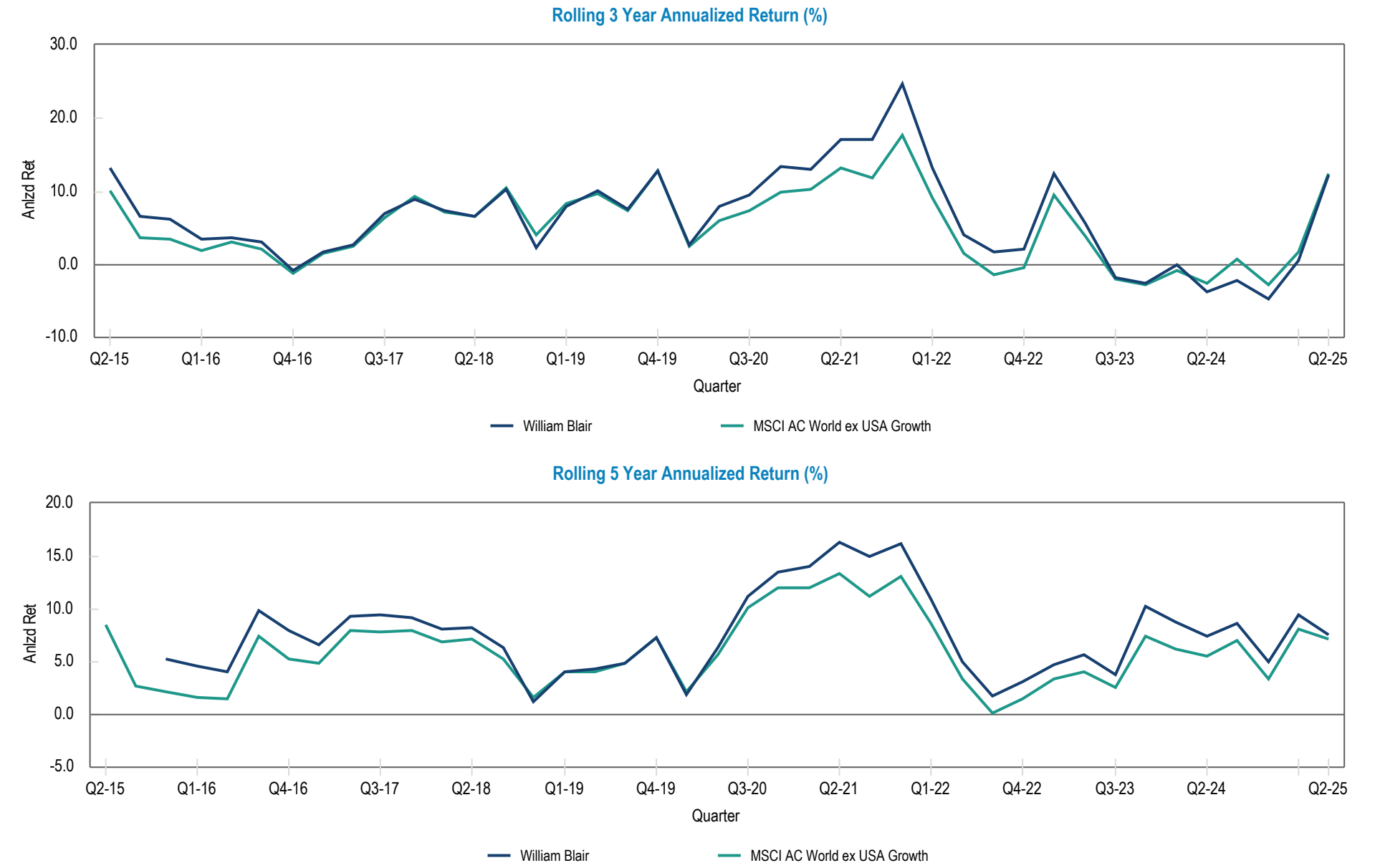
William Blair
Manager Performance Comparisons (Gross of Fees)

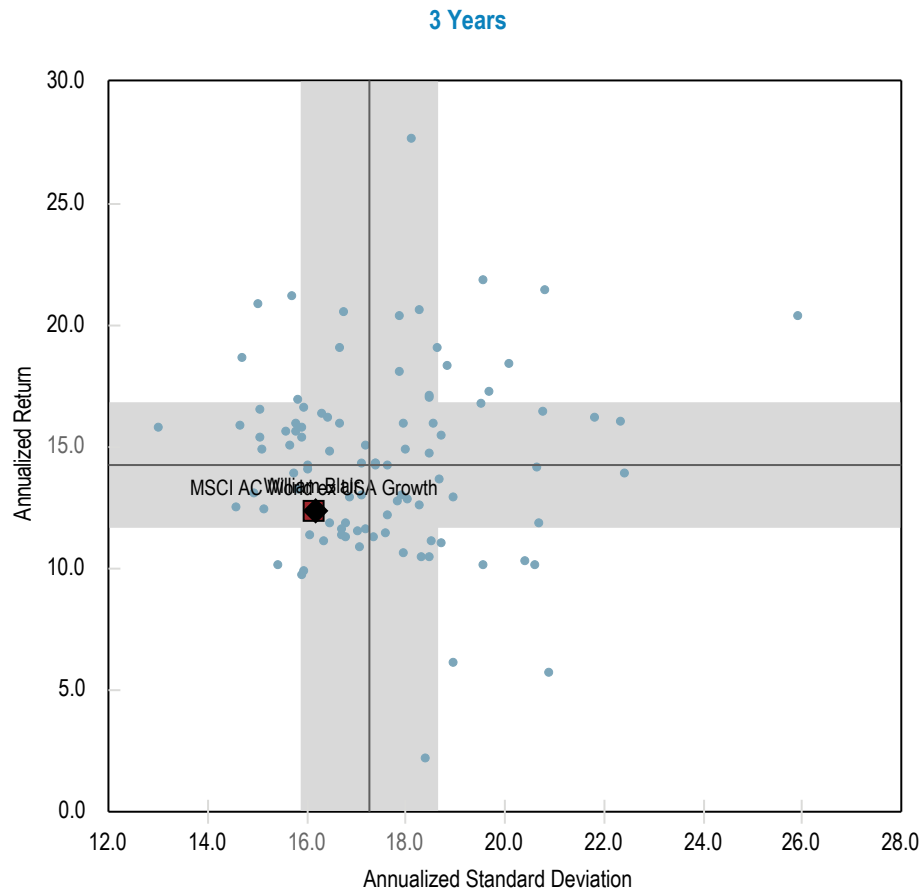
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

William Blair vs. eV ACWI ex-US Growth Equity Gross Universe

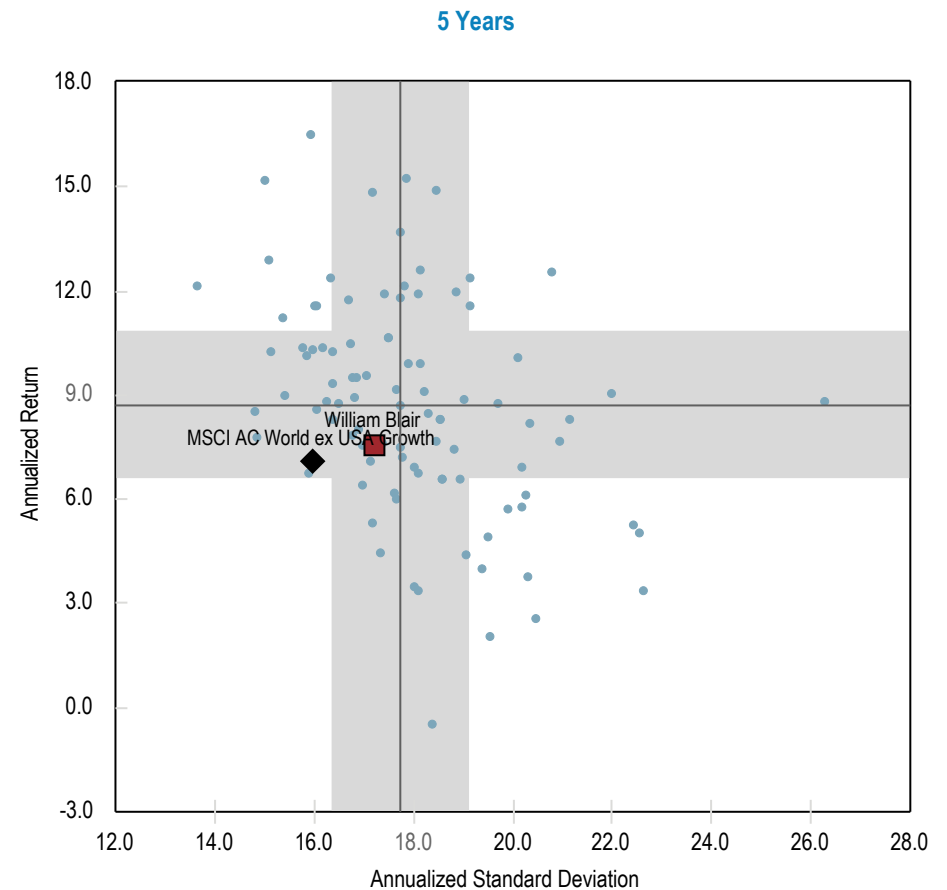


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● William Blair	13.83 (56)	11.76 (71)	12.34 (71)	7.55 (67)	6.93 (78)	3.39 (63)	16.15 (59)	-27.75 (57)	10.48 (42)	33.25 (35)
▲ MSCI AC World ex USA Growth	13.67 (57)	14.15 (57)	12.42 (71)	7.10 (72)	6.35 (95)	5.07 (49)	14.03 (77)	-23.05 (31)	5.09 (77)	22.20 (73)
5th Percentile	23.98	29.70	20.68	13.91	12.13	17.66	25.27	-14.28	20.28	60.69
1st Quartile	17.70	21.16	16.26	10.49	9.84	9.20	20.24	-20.98	13.01	38.51
Median	14.35	16.84	14.27	8.72	8.14	4.54	17.03	-26.65	9.37	28.09
3rd Quartile	10.83	11.43	11.85	6.77	7.10	0.86	14.23	-30.74	5.37	21.24
95th Percentile	8.29	3.93	10.12	3.47	6.26	-5.16	8.03	-39.76	-3.96	12.73
Population	99	99	98	97	73	101	112	116	119	114





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
William Blair	12.3	16.1	0.5
MSCI AC World ex USA Growth (Net)	12.4	16.2	0.5
eV ACWI ex-US Growth Equity Median	14.3	17.3	0.6
Population	98	98	98



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
William Blair	7.6	17.2	0.4
MSCI AC World ex USA Growth (Net)	7.1	16.0	0.3
eV ACWI ex-US Growth Equity Median	8.7	17.7	0.4
Population	97	97	97

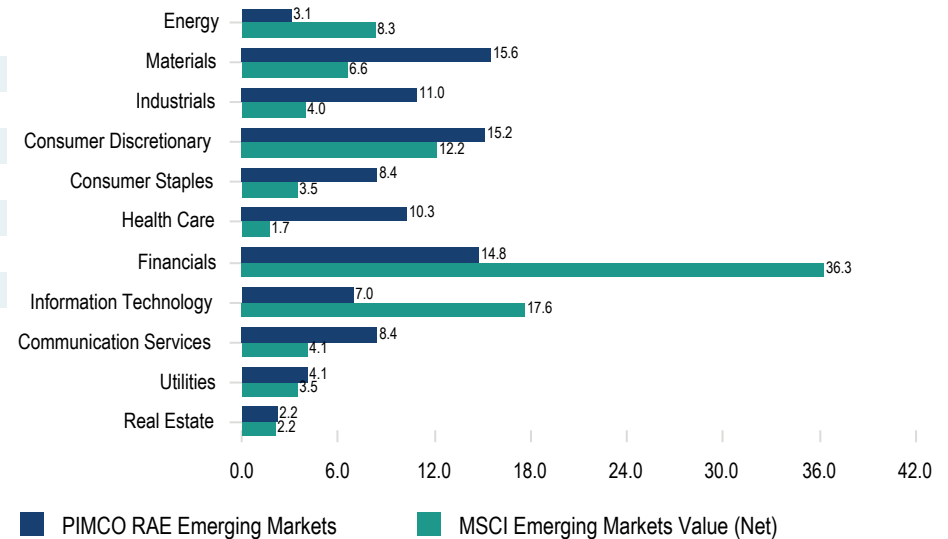
PIMCO RAE Emerging Markets Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	261	712
Wtd. Avg. Mkt. Cap \$M	40,478.74	85,504.50
Median Mkt. Cap \$M	5,672.34	8,575.68
Price/Earnings ratio	12.22	10.94
Price/Book ratio	1.74	2.00
Return on Equity (%)	2.42	3.95
Current Yield (%)	4.59	4.34
Beta (5 Years, Monthly)	0.99	1.00

Sector Allocation (%) vs. MSCI Emerging Markets Value (Net)



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Volkswagen AG	4.36	10.88
Koninklijke Ahold Delhaize NV	4.30	13.90
Roche Holding AG	3.95	-1.13
Vodafone Group Public	3.48	16.20
Japan Post Holdings Co Ltd	3.33	-7.39
Arcelormittal	2.53	11.29
Telefonica SA	2.42	14.94
GSK plc	2.37	2.12
BASF SE	2.32	4.36
NatWest Group plc	2.14	20.17

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Silicon Motion Technology Corp	1.25	50.08	0.62
Vipshop Holdings Limited	82.03	-0.35	-0.29
Lufax Holding Ltd	9.72	-6.06	-0.59
Alibaba Group Holding Ltd	0.00	-	-
HDFC Bank Limited	0.00	-	-
Samsung Electronics Co Ltd	0.00	-	-
Reliance Industries Ltd	0.00	-	-
China Construction Bank Corp	0.00	-	-
SK Hynix Inc	0.00	-	-
Mediatek Incorporation	0.00	-	-

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Alibaba Group Holding Ltd	0.00	-	-
HDFC Bank Limited	0.00	-	-
Samsung Electronics Co Ltd	0.00	-	-
Reliance Industries Ltd	0.00	-	-
China Construction Bank Corp	0.00	-	-
SK Hynix Inc	0.00	-	-
Mediatek Incorporation	0.00	-	-
Lufax Holding Ltd	9.72	-6.06	-0.59
Vipshop Holdings Limited	82.03	-0.35	-0.29
Silicon Motion Technology Corp	1.25	50.08	0.62

% of Portfolio

93.00

-0.25

% of Portfolio

93.00

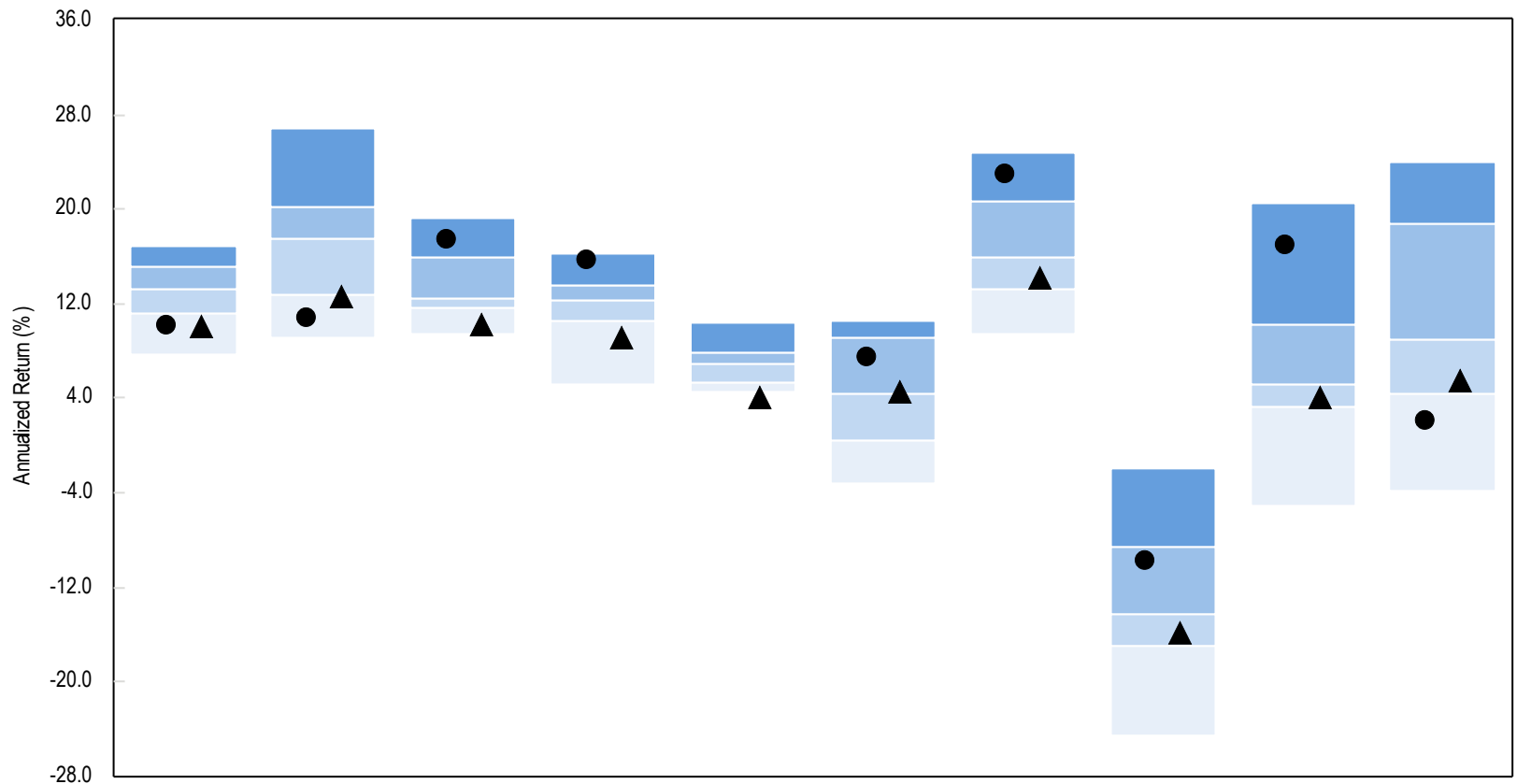
-0.25

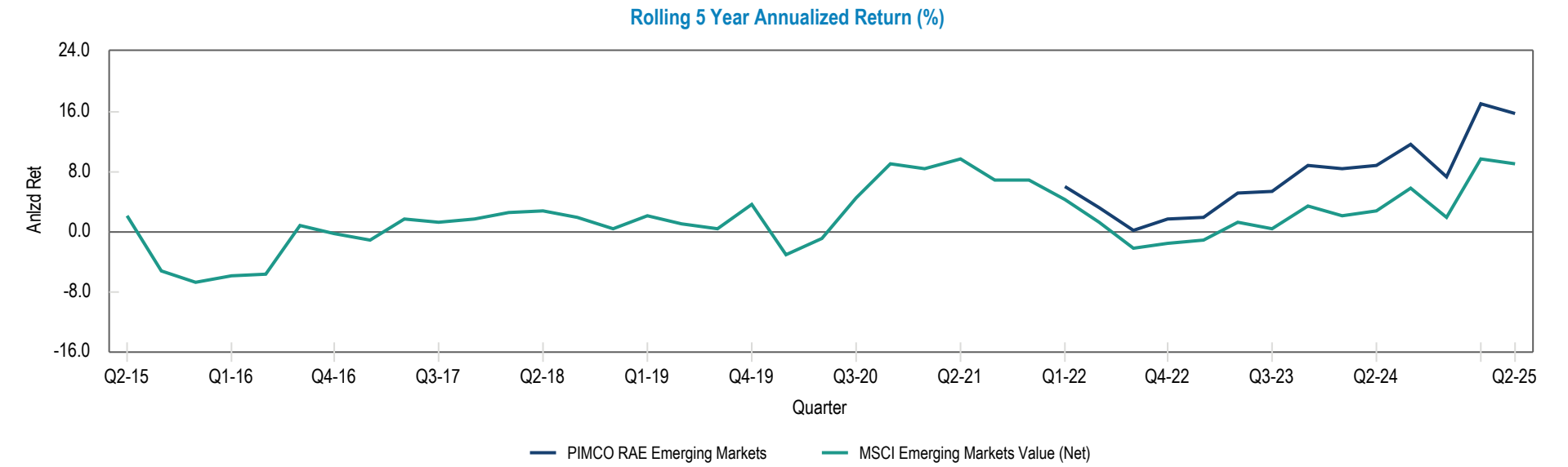
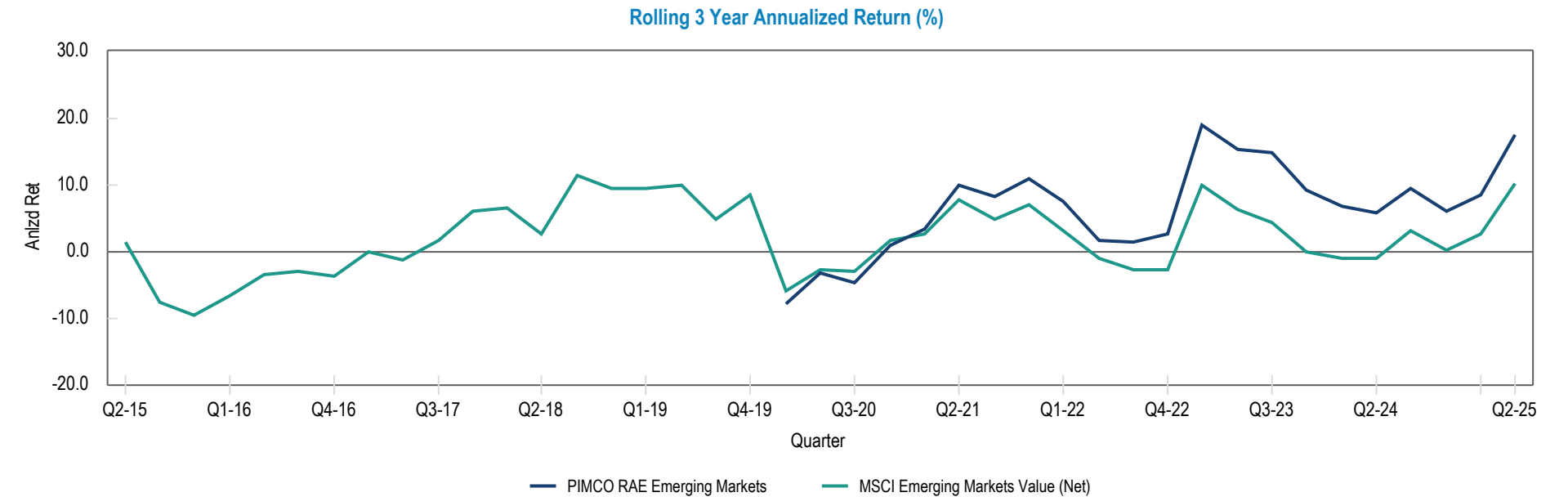
The PIMCO RAE Emerging Markets seeks to invest 80% of its assets in investments that are economically tied to emerging market countries. The portfolio is sub-advised by Research Affiliates, LLC.

PIMCO RAE Emerging Markets
Manager Performance Comparisons (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

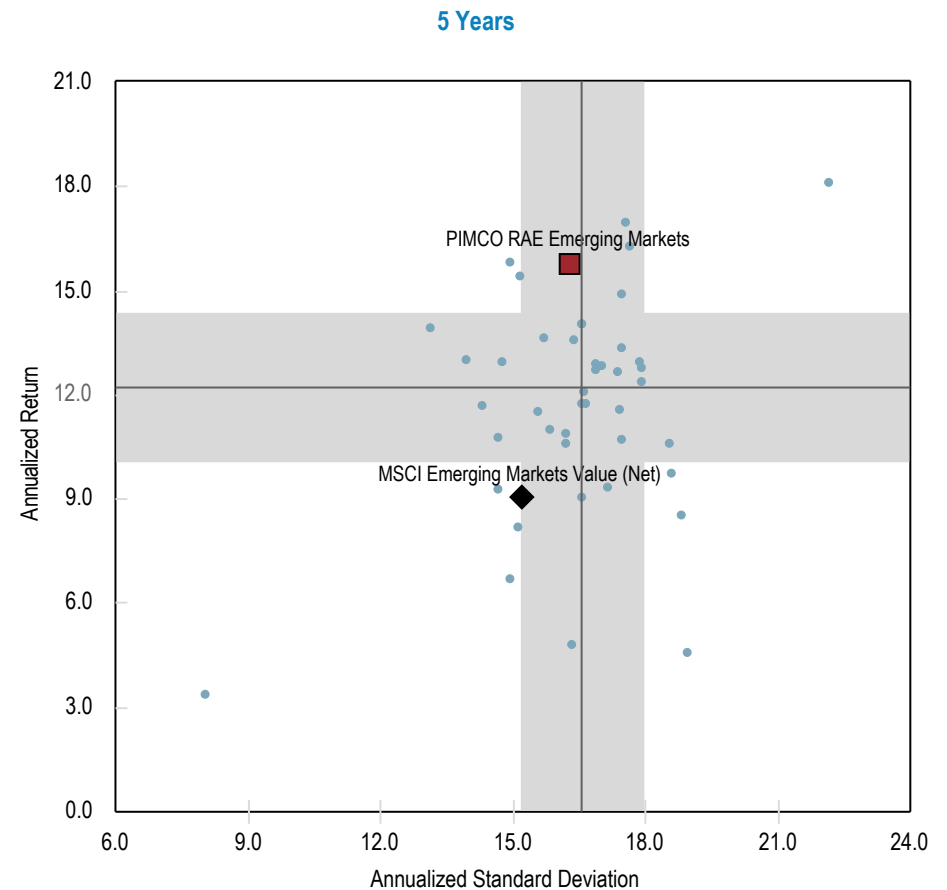
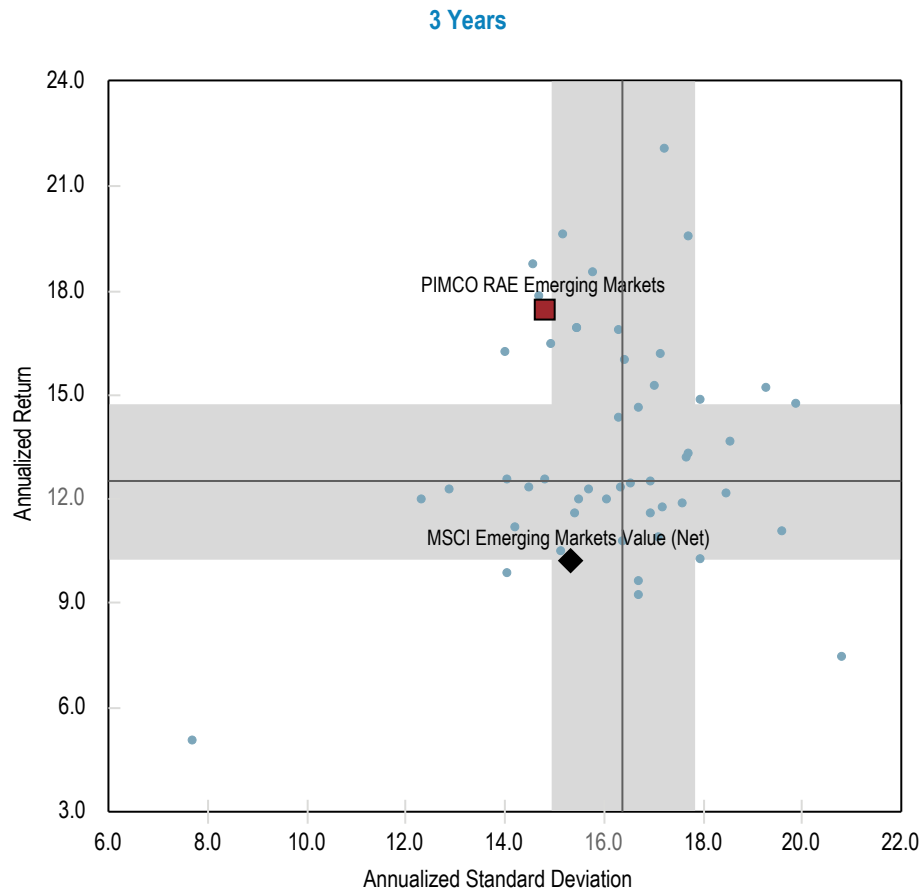
PIMCO RAE Emerging Markets vs. eV Emg Mkts All Cap Value Equity Gross Universe





PIMCO RAE Emerging Markets
Risk vs. Return 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



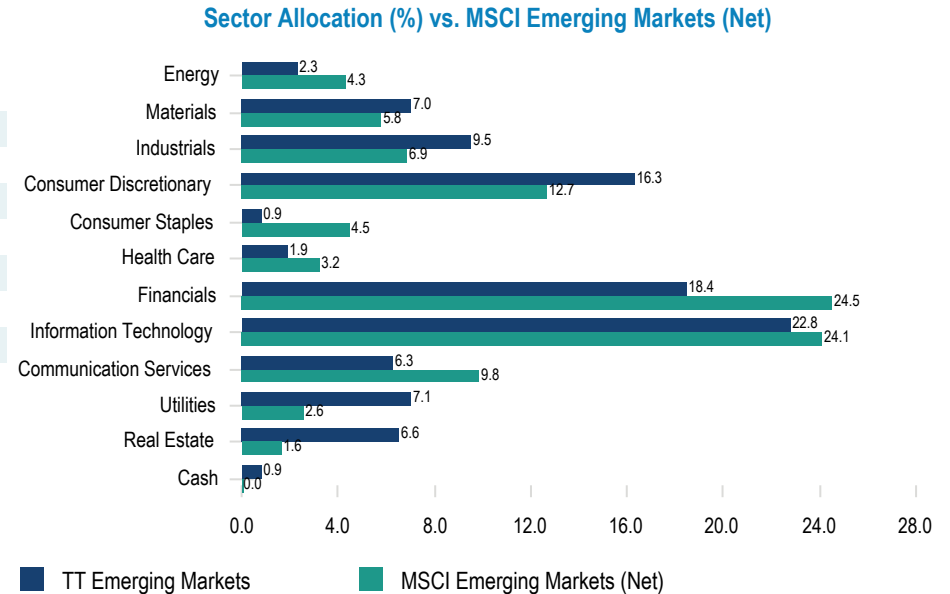
	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
PIMCO RAE Emerging Markets	17.5	14.8	0.9
MSCI Emerging Markets Value (Net)	10.2	15.3	0.4
eV Emg Mkts All Cap Value Equity Median	12.5	16.4	0.5
Population	49	49	49

	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
PIMCO RAE Emerging Markets	15.8	16.3	0.8
MSCI Emerging Markets Value (Net)	9.1	15.2	0.5
eV Emg Mkts All Cap Value Equity Median	12.2	16.6	0.6
Population	44	44	44

TT Emerging Markets Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics		
	Portfolio	Benchmark
Number of Stocks	88	1,203
Wtd. Avg. Mkt. Cap \$M	139,681.16	183,581.11
Median Mkt. Cap \$M	17,951.40	8,662.18
Price/Earnings ratio	15.60	14.02
Price/Book ratio	2.46	2.87
Return on Equity (%)	4.50	5.09
Current Yield (%)	1.63	2.79
Beta (5 Years, Monthly)	1.08	1.00



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Taiwan Semiconductor Man.	7.43	32.97
Emaar Properties	3.54	10.26
Xiaomi Corporation	3.44	20.77
Tencent Holdings LTD	3.25	1.20
Grupo Financiero Galicia Sa, Buenos Aires	3.21	-7.05
MakeMyTrip Ltd	3.03	0.03
Sk Square Co Ltd	2.70	113.77
MercadoLibre Inc	2.52	33.97
Pampa Energia SA	2.43	-10.13
Alpha Bank SA	2.34	49.41

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Taiwan Semiconductor Man.	7.50	32.97	2.47
Sk Square Co Ltd	1.92	113.77	2.18
MercadoLibre Inc	3.01	33.97	1.02
Prestige Estates Projects Ltd	2.06	39.47	0.81
Banco BTG Pactual SA	2.22	31.57	0.70
Prosus NV	3.28	21.16	0.69
Alpha Bank SA	1.28	49.41	0.63
Taiwan Union Technology Corp	0.64	75.08	0.48
Emaar Properties	4.52	10.26	0.46
Samsung Electronics Co Ltd	3.15	12.88	0.41
% of Portfolio	29.58		9.87

Top Detractors

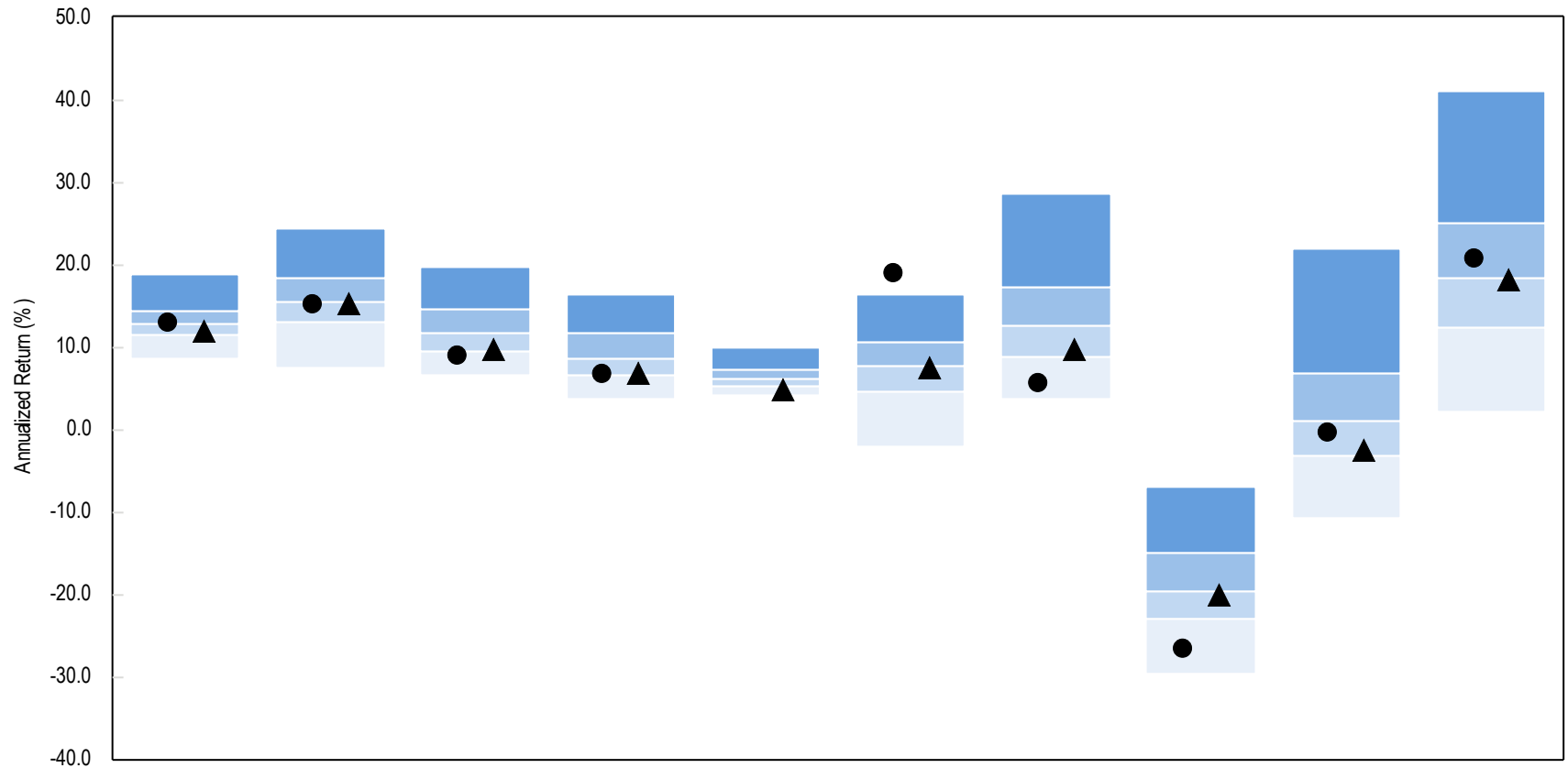
	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Meituan	2.25	-20.29	-0.46
Alibaba Group Holding Ltd	2.67	-13.57	-0.36
Pampa Energia SA	3.43	-10.13	-0.35
Alibaba Group Holding Ltd	2.21	-12.76	-0.28
Grupo Financiero Galicia Sa, Buenos Aires	3.98	-7.05	-0.28
Ningbo Tuopu Group Co Ltd	1.45	-16.30	-0.24
BYD Company Limited	2.16	-10.40	-0.22
JD.com Inc	1.13	-18.74	-0.21
Banco Macro SA	2.67	-7.02	-0.19
PDD Holdings Inc	1.21	-11.57	-0.14
% of Portfolio	23.16		-2.73

The Emerging Markets Unconstrained strategy aims to outperform its benchmark, MSCI Emerging Markets Index by 5% per annum over a three-year rolling period. It targets high returns and long term capital growth by investing in a focused portfolio of primarily equity and equity-related securities traded in the Emerging Markets.

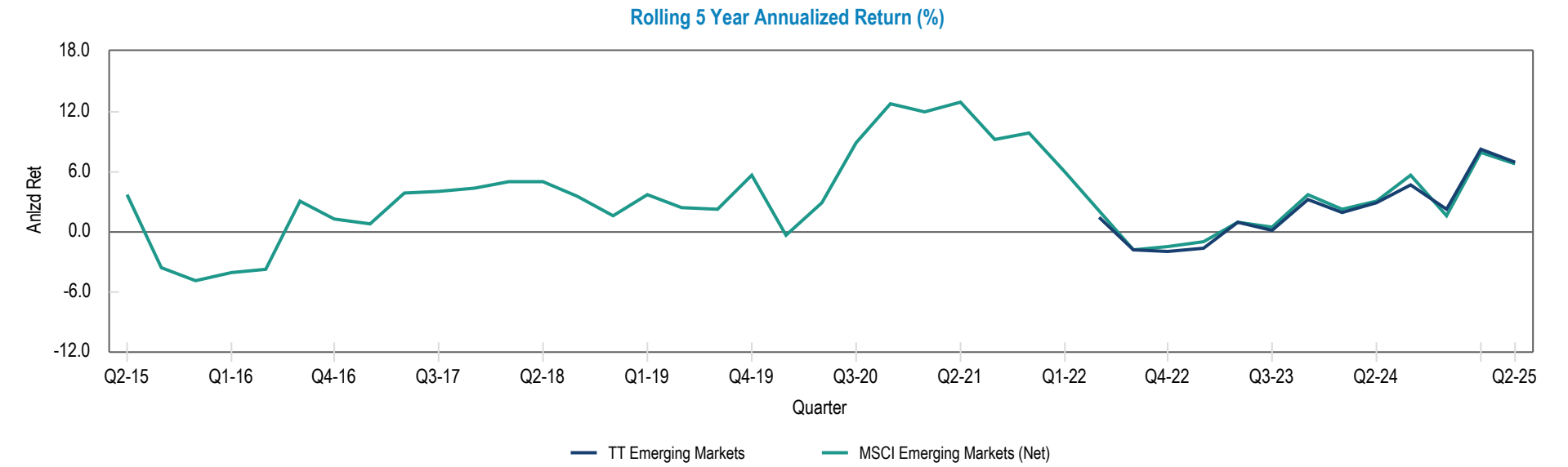
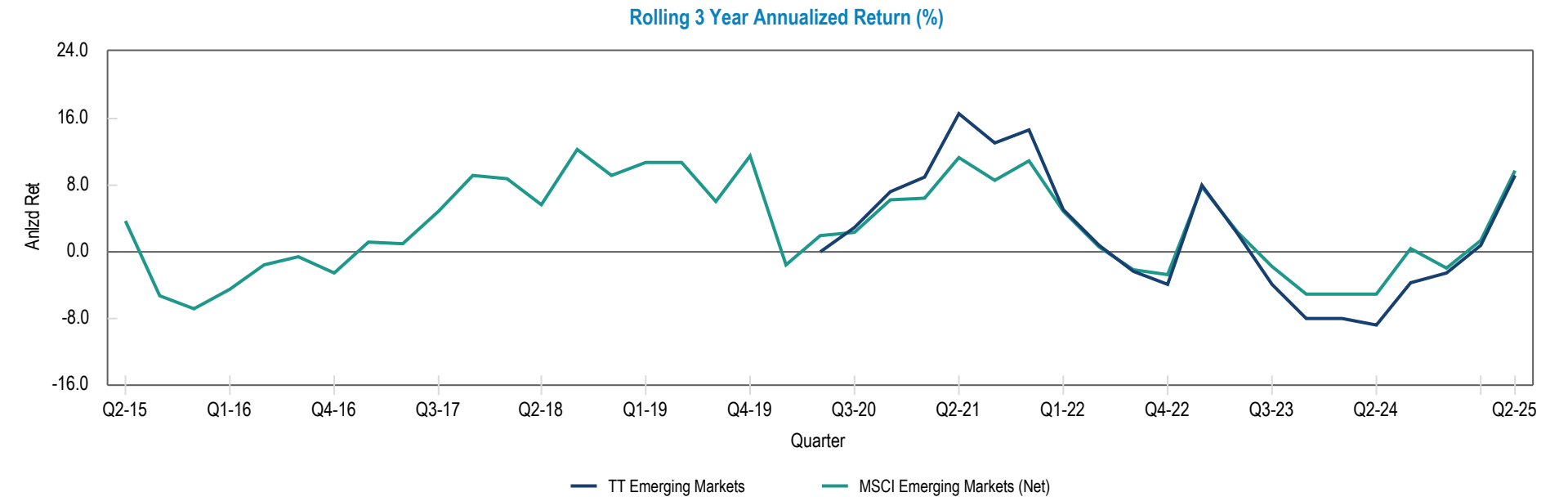
TT Emerging Markets
Manager Performance Comparisons (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

TT Emerging Markets vs. eV Emg Mkts Equity Gross Universe

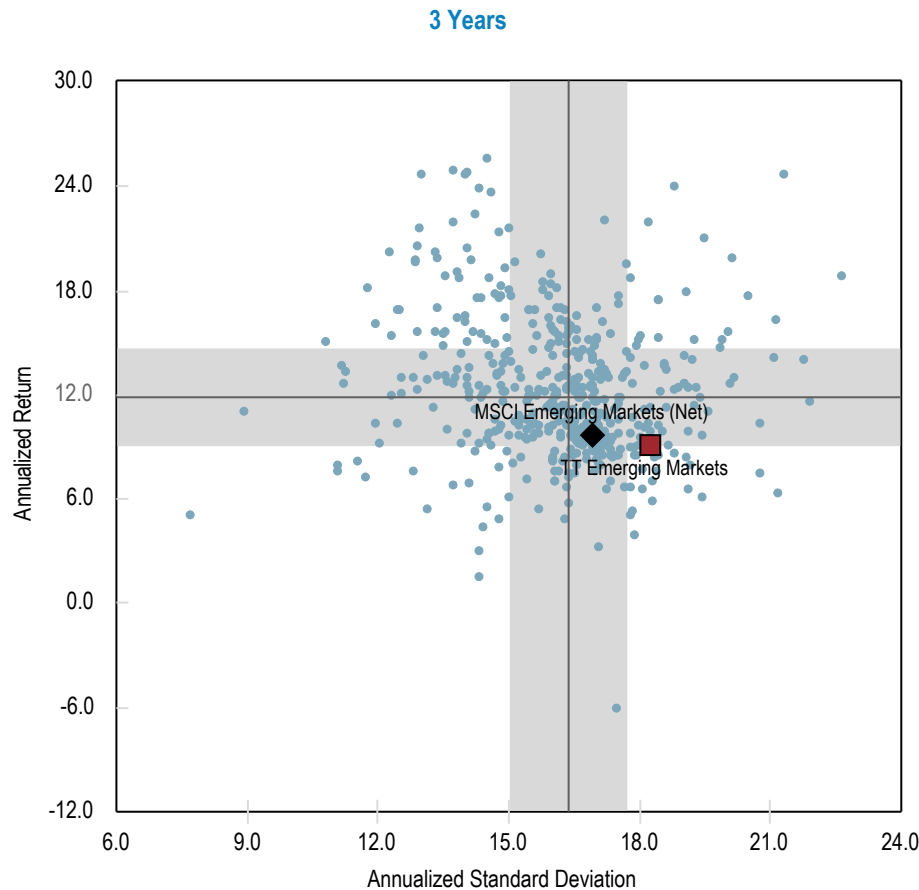


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● TT Emerging Markets	13.00 (47)	15.26 (58)	9.14 (82)	6.97 (69)	-	19.10 (2)	5.80 (91)	-26.36 (90)	-0.23 (59)	20.79 (39)
▲ MSCI Emerging Markets	11.99 (66)	15.29 (58)	9.70 (72)	6.81 (71)	4.81 (86)	7.50 (55)	9.83 (67)	-20.09 (57)	-2.54 (72)	18.31 (51)
5th Percentile	18.82	24.35	19.77	16.54	9.98	16.43	28.66	-6.84	22.07	41.01
1st Quartile	14.53	18.53	14.65	11.76	7.40	10.75	17.37	-14.89	6.85	25.16
Median	12.86	15.64	11.86	8.60	6.28	7.85	12.56	-19.50	1.12	18.36
3rd Quartile	11.53	13.08	9.54	6.57	5.34	4.71	8.96	-22.91	-3.08	12.42
95th Percentile	8.64	7.48	6.74	3.88	4.25	-2.09	3.74	-29.65	-10.70	2.14
Population	510	509	485	439	321	540	556	583	589	585

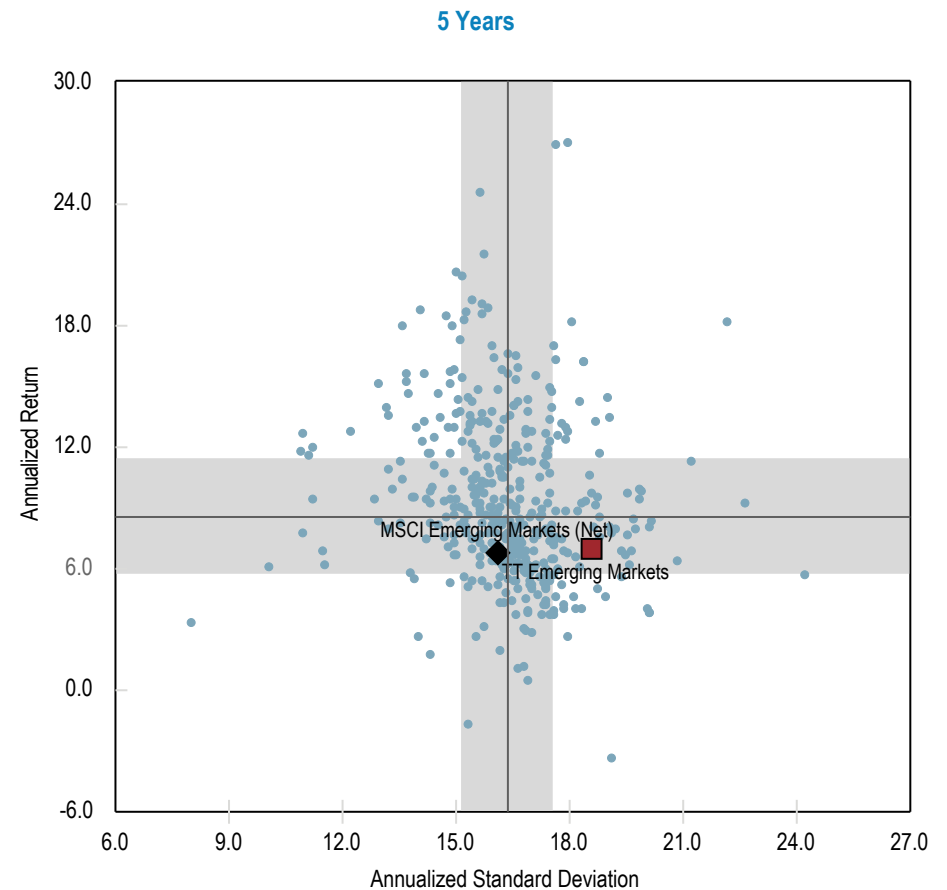


TT Emerging Markets
Risk vs. Return 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
TT Emerging Markets	9.1	18.3	0.3
MSCI Emerging Markets (Net)	9.7	16.9	0.4
eV Emg Mkts Equity Median	11.9	16.4	0.5
Population	485	485	485



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
TT Emerging Markets	7.0	18.6	0.3
MSCI Emerging Markets (Net)	6.8	16.1	0.3
eV Emg Mkts Equity Median	8.6	16.4	0.4
Population	439	439	439

Global Equity Managers

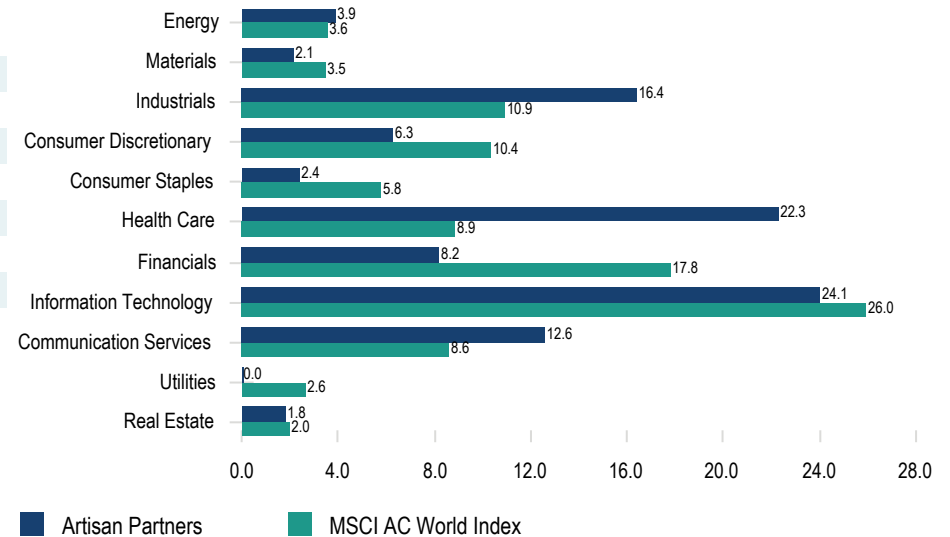
Artisan Partners Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	45	2,528
Wtd. Avg. Mkt. Cap \$M	300,187.75	741,872.32
Median Mkt. Cap \$M	99,092.97	15,015.12
Price/Earnings ratio	36.24	22.27
Price/Book ratio	5.98	3.97
Return on Equity (%)	5.70	8.04
Current Yield (%)	0.80	1.85
Beta (5 Years, Monthly)	1.06	1.00

Sector Allocation (%) vs. MSCI AC World Index



Largest Holdings

	End Weight (%)	Quarterly Return (%)
Netflix Inc	6.36	43.60
Boston Scientific Corp	4.80	6.47
London Stock Exchange Group	4.01	-0.70
Tencent Holdings LTD	3.91	1.20
LONZA GROUP AG	3.90	16.63
Amazon.com Inc	3.82	15.31
BAE Systems PLC	3.75	29.97
Oracle Corp	3.75	56.96
argenx SE	3.68	-6.87
Snowflake Inc	3.37	53.10

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Netflix Inc	5.84	43.60	2.55
GE Vernova Inc	2.12	73.47	1.56
Oracle Corp	2.66	56.96	1.52
Snowflake Inc	2.00	53.10	1.06
BAE Systems PLC	3.06	29.97	0.92
Taiwan Semiconductor Man.	2.02	36.87	0.75
Arm Holdings plc	1.33	51.46	0.69
Advanced Micro Devices Inc	1.59	38.12	0.61
LONZA GROUP AG	3.61	16.63	0.60
Eaton Corporation plc	1.82	31.79	0.58

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Baker Hughes a GE Co	2.59	-12.21	-0.32
Meituan	1.50	-20.29	-0.30
argenx SE	4.39	-6.87	-0.30
Apple Inc	2.86	-7.52	-0.22
Techtronic Industries Co Ltd	2.48	-7.09	-0.18
Vertex Pharmaceuticals Inc	1.84	-8.17	-0.15
Astrazeneca PLC	2.95	-4.53	-0.13
Danaher Corp	2.28	-3.48	-0.08
Atlassian Corporation	1.22	-4.30	-0.05
Starbucks Corp	0.53	-5.92	-0.03

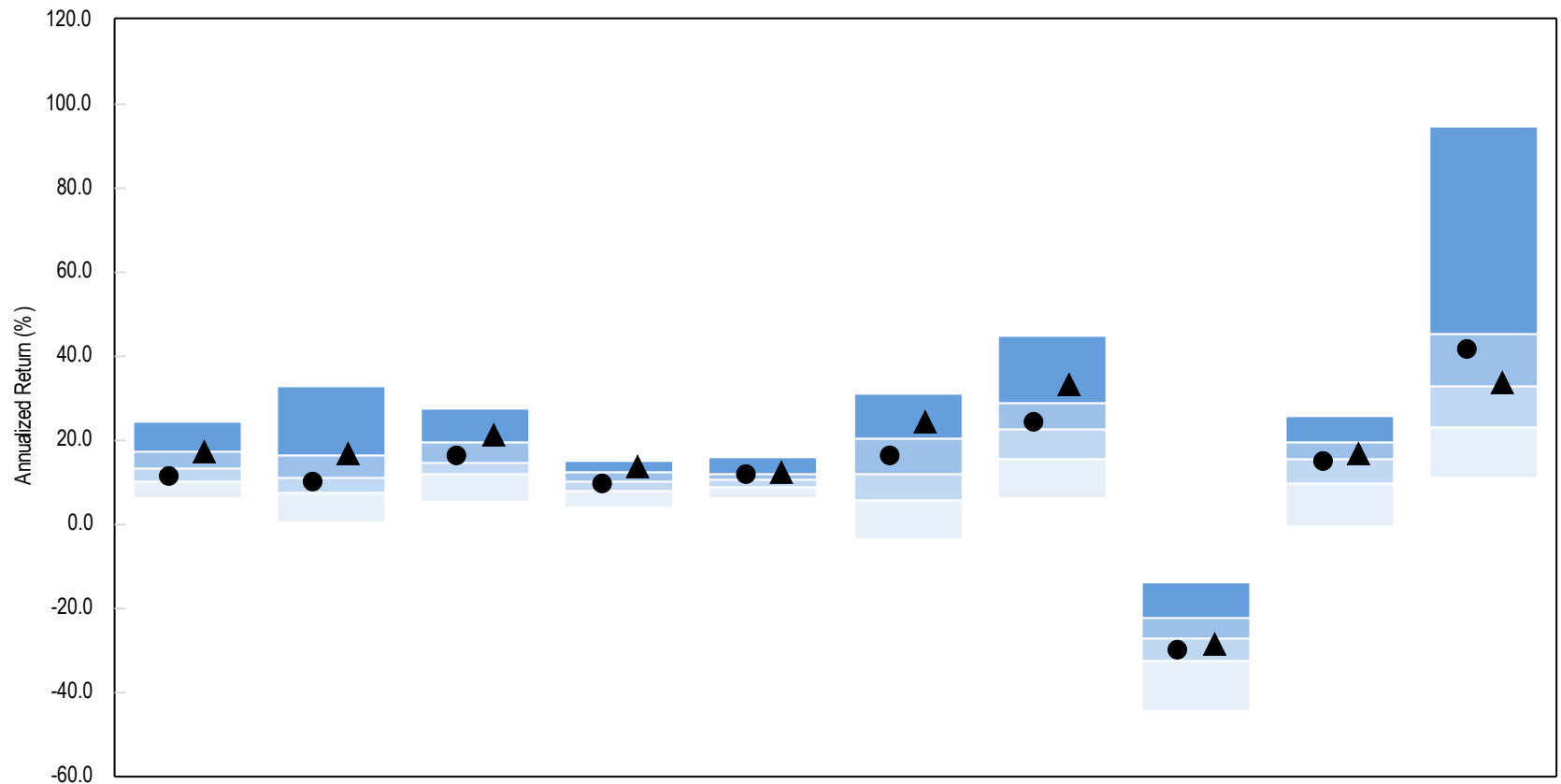
% of Portfolio 26.05 10.82 % of Portfolio 22.64 -1.76

Global equity portfolio of companies that is benchmark agnostic with accelerating profit cycles and a focus on capital allocation. Primary personnel include James Hamel, Craigh Cepukenas, and Matthew Kamm.

Artisan Partners
Manager Performance Comparisons (Gross of Fees)

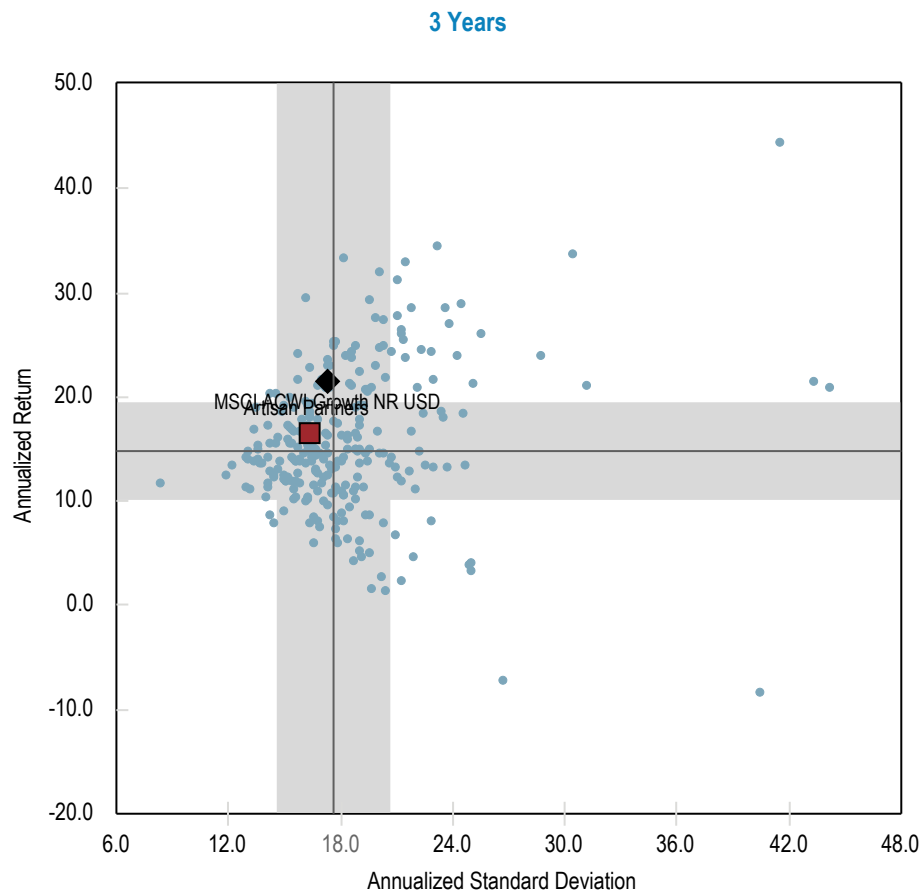
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Artisan Partners vs. eV Global Growth Equity Gross Universe

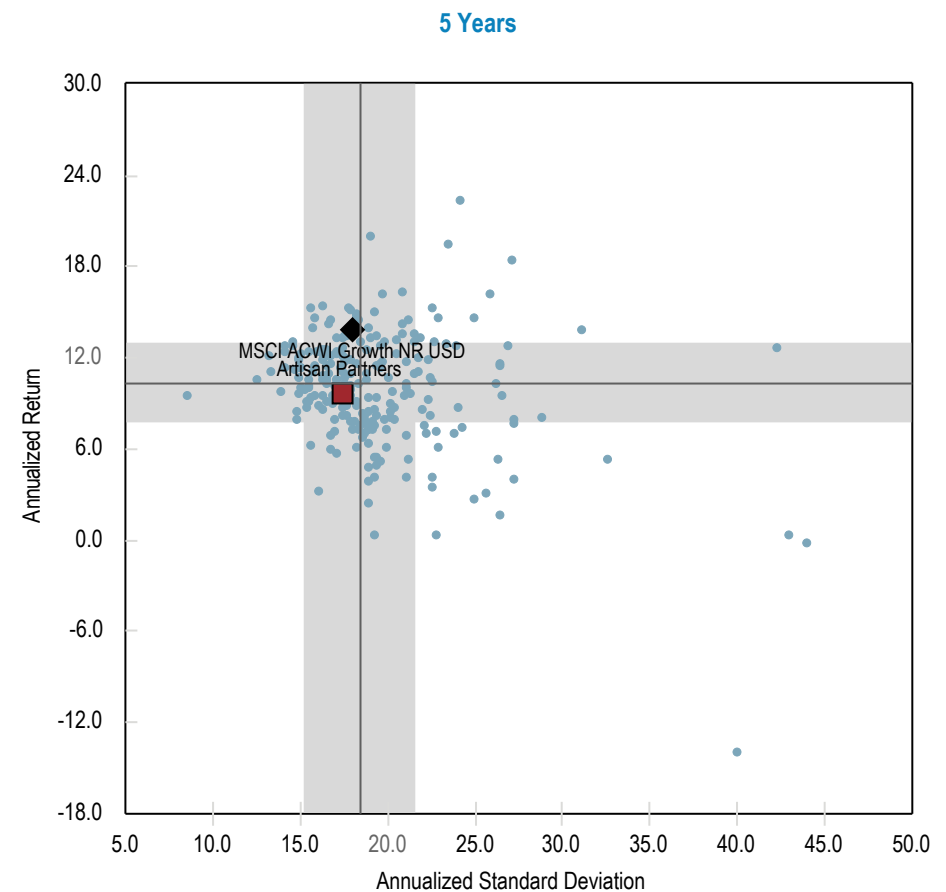


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● Artisan Partners	11.75 (67)	10.09 (58)	16.44 (39)	9.70 (57)	12.01 (26)	16.30 (36)	24.54 (40)	-29.59 (60)	14.99 (57)	41.66 (33)
▲ MSCI ACWI Growth NR USD	17.26 (27)	16.71 (25)	21.44 (18)	13.87 (12)	12.34 (23)	24.23 (16)	33.22 (19)	-28.61 (55)	17.10 (42)	33.60 (49)
5th Percentile	24.59	33.00	27.58	15.06	15.98	30.98	44.82	-13.80	25.97	94.60
1st Quartile	17.48	16.48	19.41	12.42	12.09	20.44	29.10	-22.14	19.77	45.27
Median	13.36	11.28	14.79	10.37	10.51	11.93	22.48	-27.19	15.72	32.85
3rd Quartile	10.39	7.43	11.83	8.02	9.08	5.91	15.34	-32.34	9.95	23.19
95th Percentile	6.04	0.59	5.47	4.06	6.34	-3.70	6.24	-44.61	-0.38	11.15
Population	294	294	266	237	141	306	311	313	298	276





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Artisan Partners	16.4	16.3	0.7
MSCI ACWI Growth NR USD	21.4	17.3	1.0
eV Global Growth Equity Median	14.8	17.6	0.7
Population	266	266	266



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Artisan Partners	9.7	17.4	0.5
MSCI ACWI Growth NR USD	13.9	17.9	0.7
eV Global Growth Equity Median	10.4	18.4	0.5
Population	237	237	237

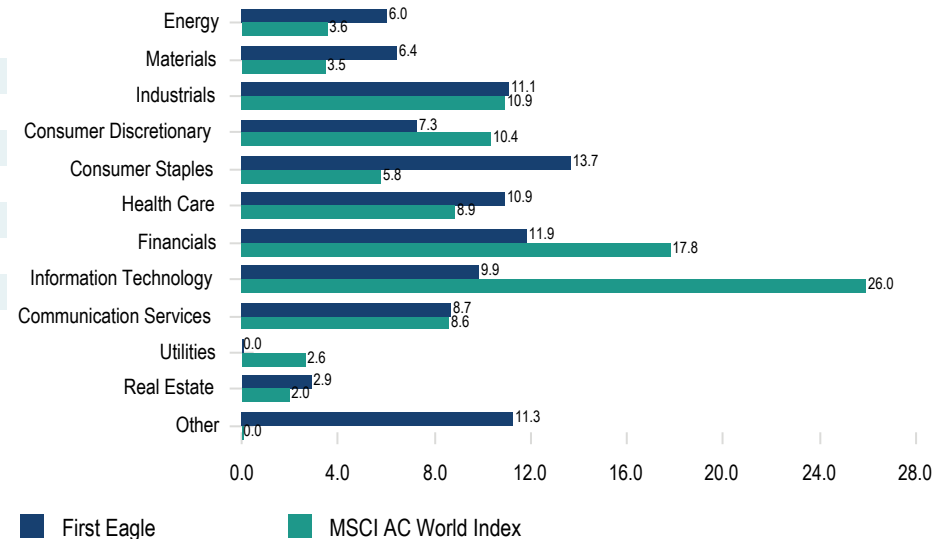
First Eagle Manager Portfolio Overview

Contra Costa County Employees' Retirement Association Period Ending: June 30, 2025

Characteristics

	Portfolio	Benchmark
Number of Stocks	126	2,528
Wtd. Avg. Mkt. Cap \$M	223,433.35	741,872.32
Median Mkt. Cap \$M	35,882.62	15,015.12
Price/Earnings ratio	18.15	22.27
Price/Book ratio	2.53	3.97
Return on Equity (%)	4.38	8.04
Current Yield (%)	2.26	1.85
Beta (5 Years, Monthly)	0.71	1.00

Sector Allocation (%) vs. MSCI AC World Index



Largest Holdings

	End Weight (%)	Quarterly Return (%)
SPDR Gold Trust	11.29	5.79
Meta Platforms Inc	3.13	28.16
Oracle Corp	3.08	56.96
HCA Healthcare Inc	1.95	11.08
Alphabet Inc	1.89	13.68
Becton Dickinson and Co	1.84	-24.35
Philip Morris International Inc	1.70	15.60
Prosus NV	1.67	21.16
British American Tobacco	1.62	17.56
Comcast Corp	1.55	-2.41

Top Contributors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Oracle Corp	2.29	56.96	1.31
SPDR Gold Trust	13.48	5.79	0.78
Meta Platforms Inc	2.68	28.16	0.76
Taiwan Semiconductor Man.	0.91	36.87	0.33
Prosus NV	1.49	21.16	0.32
Philip Morris International Inc	2.00	15.60	0.31
BAE Systems PLC	1.01	29.97	0.30
British American Tobacco	1.51	17.56	0.27
NAVER Corp	0.49	49.95	0.25
Alphabet Inc	1.70	13.68	0.23

Top Detractors

	Portfolio Weight (%)	Quarterly Return (%)	Contribution to Return (%)
Becton Dickinson and Co	1.63	-24.35	-0.40
Schlumberger Ltd	1.62	-18.45	-0.30
Elevance Health Inc	1.85	-10.18	-0.19
Alibaba Group Holding Ltd	1.11	-13.57	-0.15
Willis Towers Watson plc	1.57	-9.03	-0.14
NOV Inc	0.73	-16.44	-0.12
Exxon Mobil Corp	1.28	-8.53	-0.11
Berkshire Hathaway Inc	1.02	-8.72	-0.09
C.H. Robinson Worldwide Inc.	1.44	-5.69	-0.08
LVMH Moet Hennessy Louis V	0.54	-14.22	-0.08

% of Portfolio

27.56

4.85

% of Portfolio

12.79

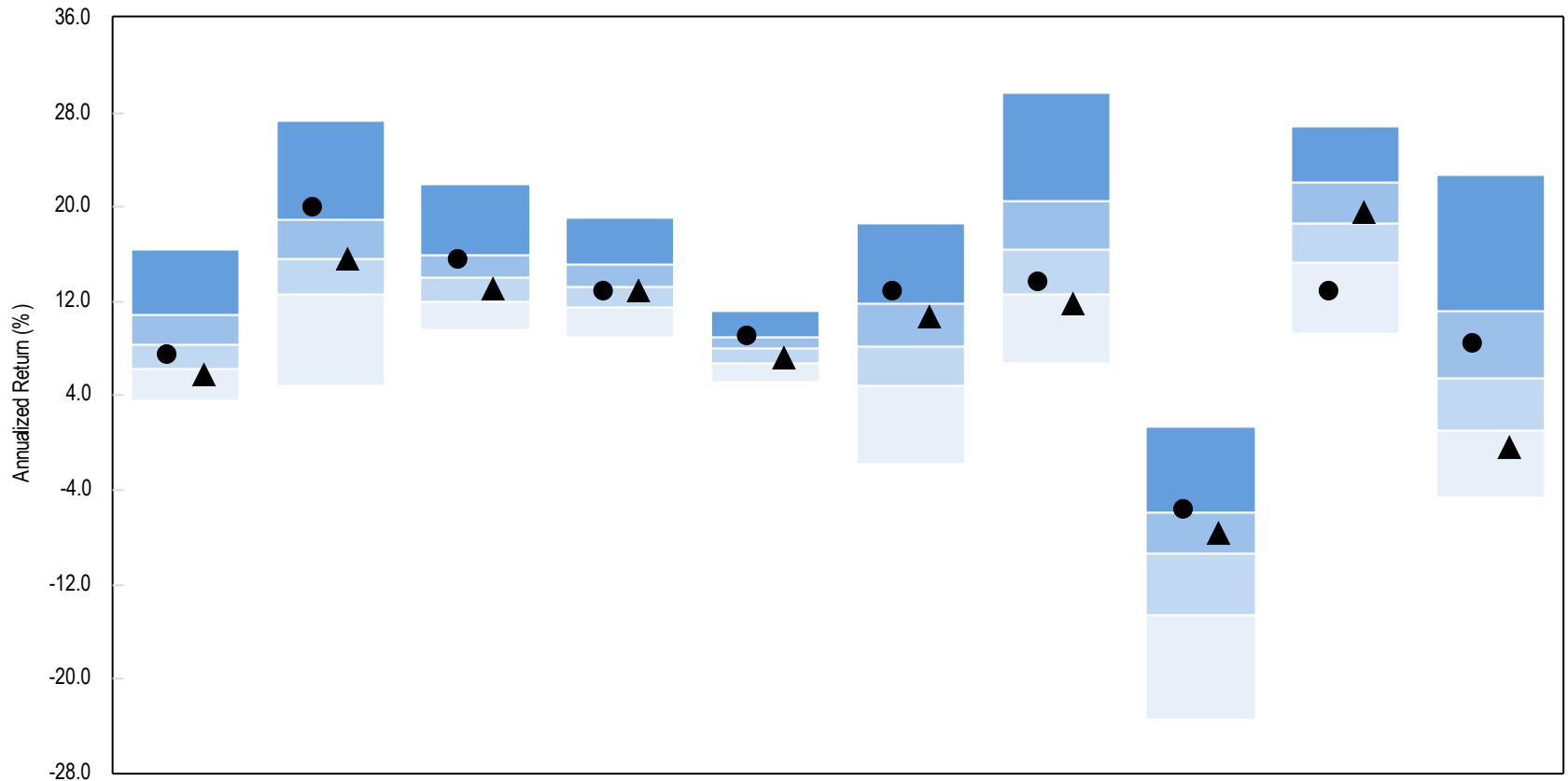
-1.65

Global equity portfolio that is benchmark agnostic comprised of companies with low valuations. Primary personnel include Matt McLennan and Kimball Brooker.

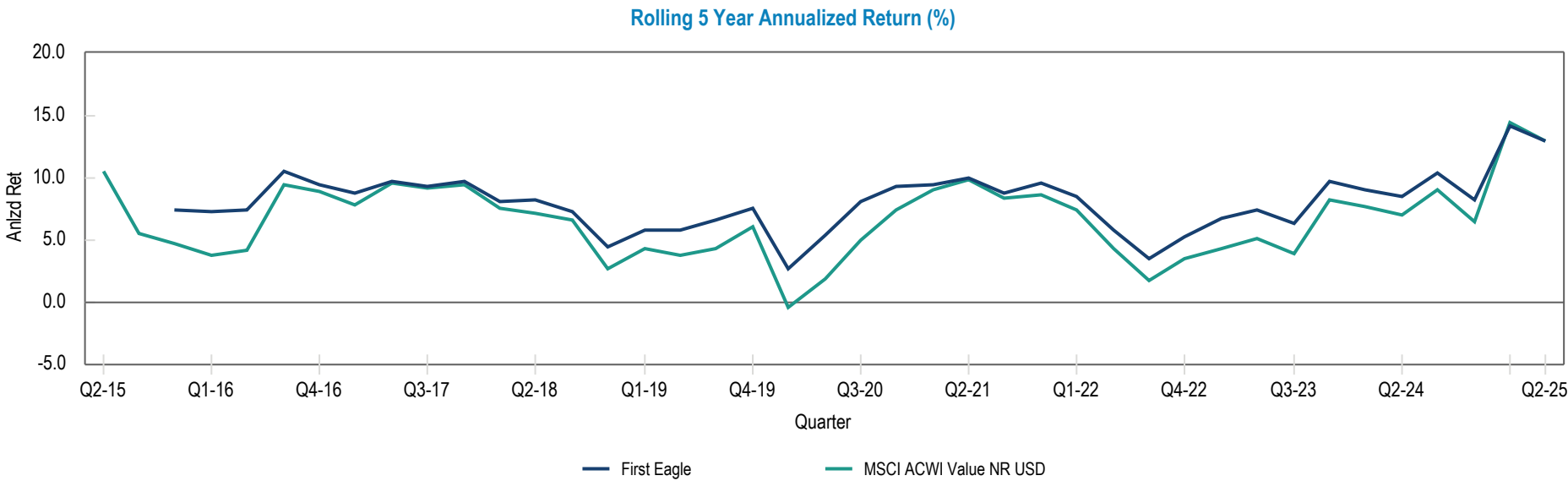
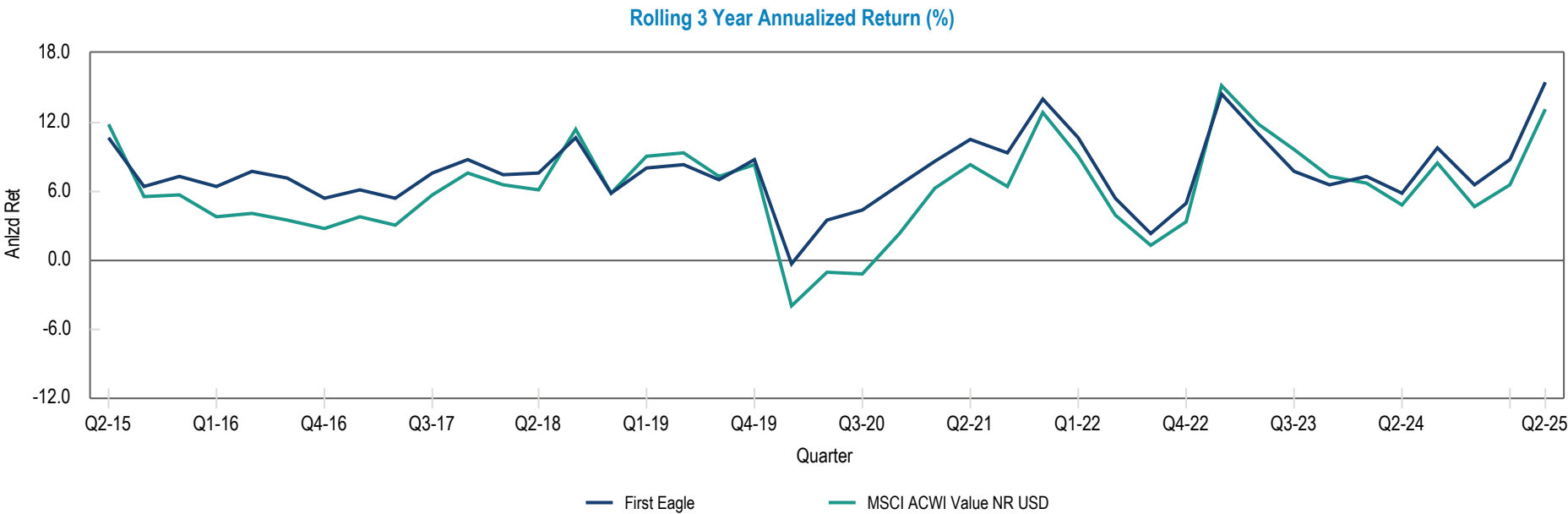
First Eagle
Manager Performance Comparisons (Gross of Fees)

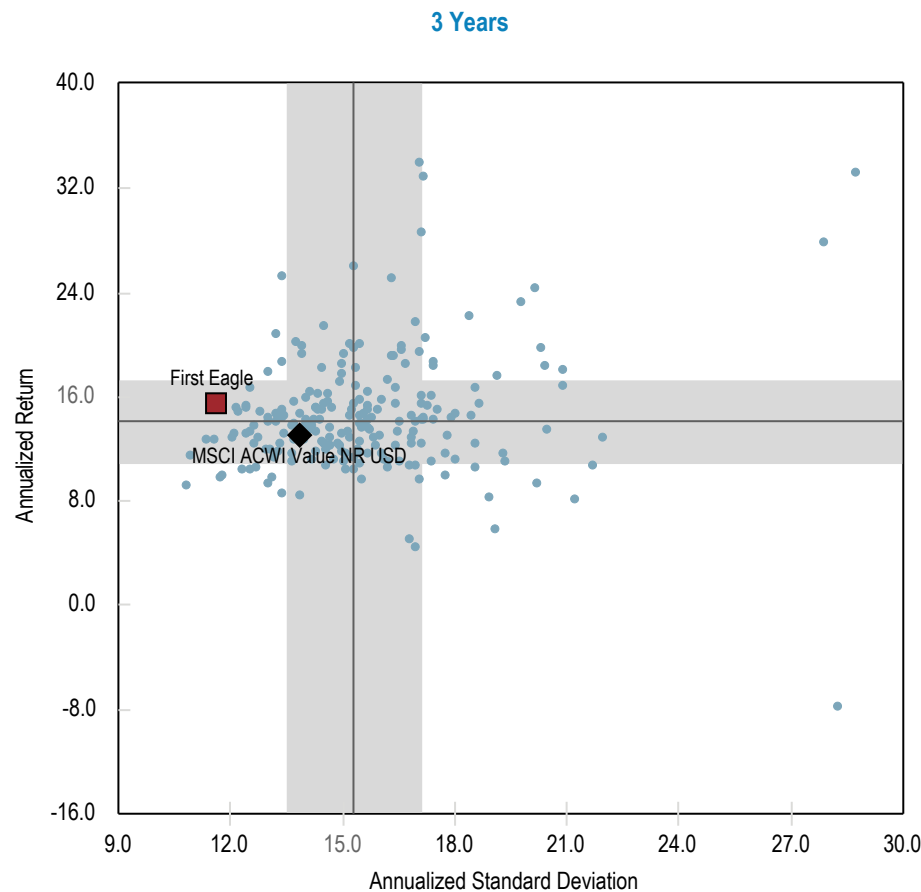
Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

First Eagle vs. eV Global Value Equity Gross Universe

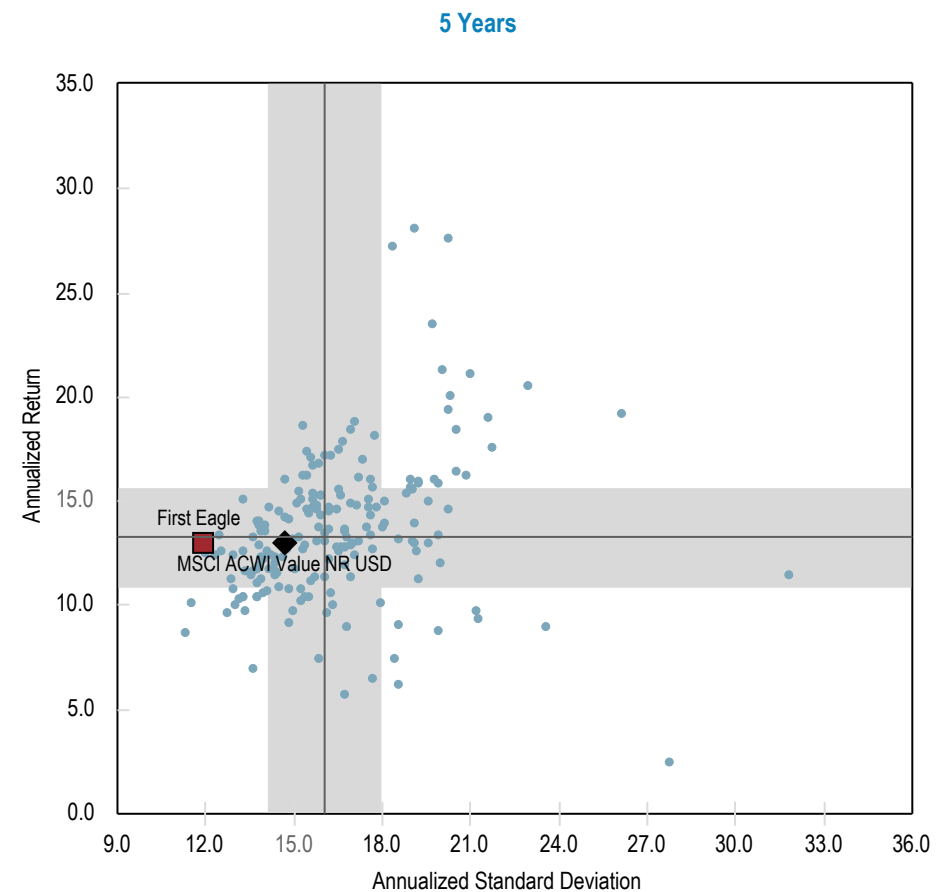


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● First Eagle	7.48 (61)	19.97 (21)	15.56 (28)	12.99 (55)	9.15 (20)	12.98 (18)	13.75 (67)	-5.61 (24)	12.95 (87)	8.47 (34)
▲ MSCI ACWI Value NR USD	5.84 (84)	15.62 (49)	13.14 (62)	12.99 (55)	7.30 (69)	10.76 (33)	11.81 (82)	-7.55 (36)	19.62 (41)	-0.33 (80)
5th Percentile	16.41	27.26	21.92	19.08	11.24	18.69	29.74	1.37	26.78	22.66
1st Quartile	10.86	18.96	15.89	15.15	8.97	11.83	20.50	-5.95	22.07	11.20
Median	8.39	15.54	14.08	13.25	7.96	8.23	16.40	-9.36	18.66	5.53
3rd Quartile	6.33	12.66	12.05	11.48	6.79	4.81	12.59	-14.62	15.34	1.03
95th Percentile	3.60	4.82	9.62	9.01	5.25	-1.75	6.76	-23.34	9.31	-4.62
Population	231	231	215	193	145	243	243	242	240	245





	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
First Eagle	15.6	11.6	0.9
MSCI ACWI Value NR USD	13.1	13.8	0.6
eV Global Value Equity Median	14.1	15.3	0.7
Population	215	215	215



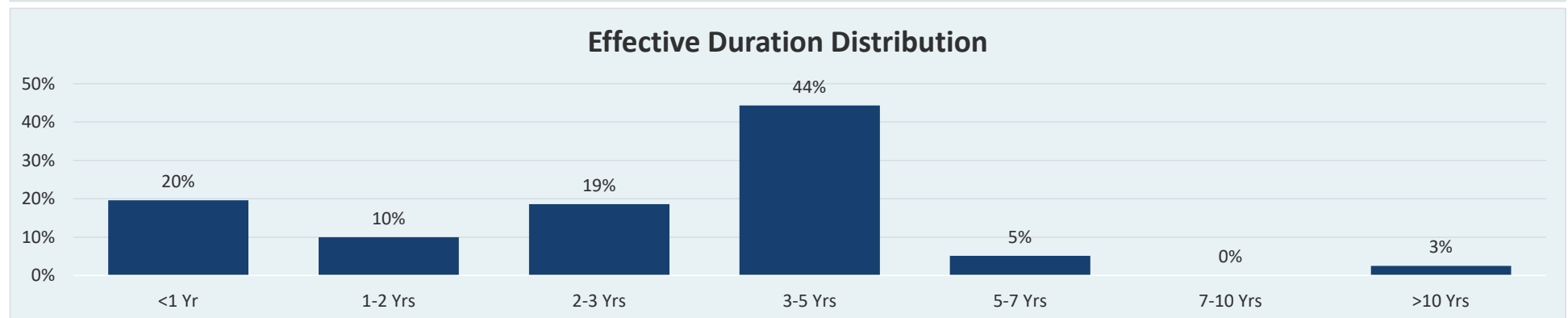
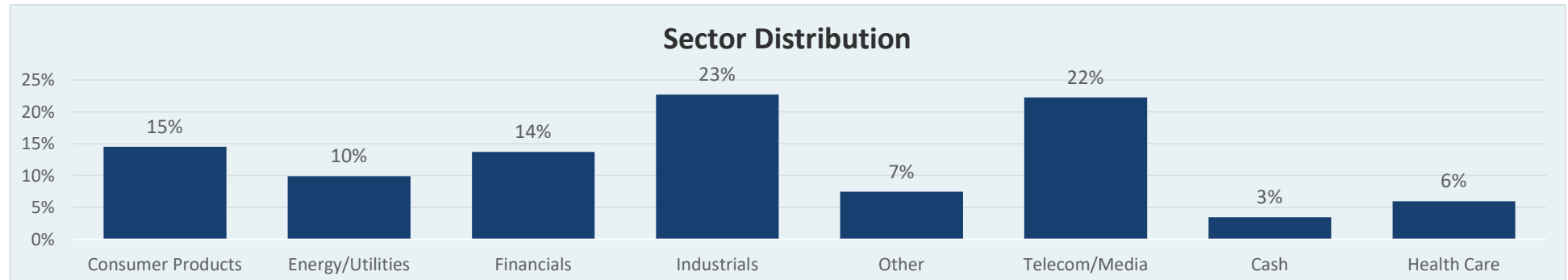
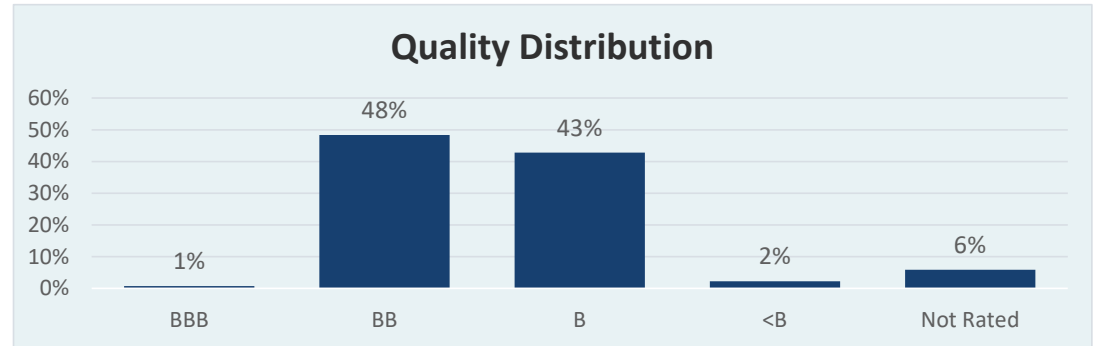
	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
First Eagle	13.0	11.9	0.9
MSCI ACWI Value NR USD	13.0	14.7	0.7
eV Global Value Equity Median	13.2	16.0	0.7
Population	193	193	193

High Yield Managers

Voya Global Investors Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

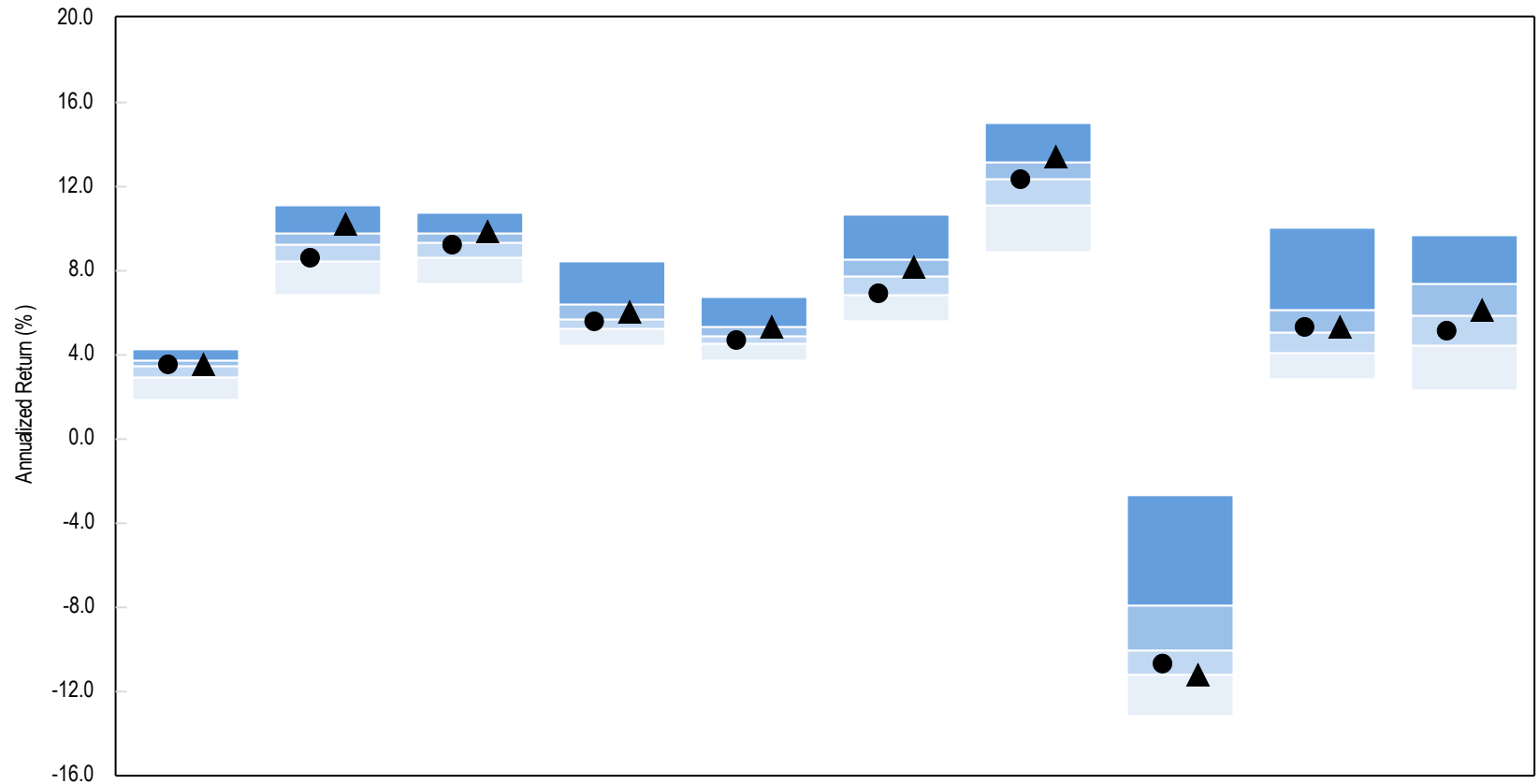
	Voya	ICE BofAML HY Master II
Effective Duration	2.80	2.90
Yield to Maturity	6.3%	7.4%
Average Quality	B1	B1
Average Coupon	6.9%	6.6%



Voya Global Investors
Manager Performance Comparisons (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

Voya Global Investors vs. eV US High Yield Fixed Inc Gross Universe

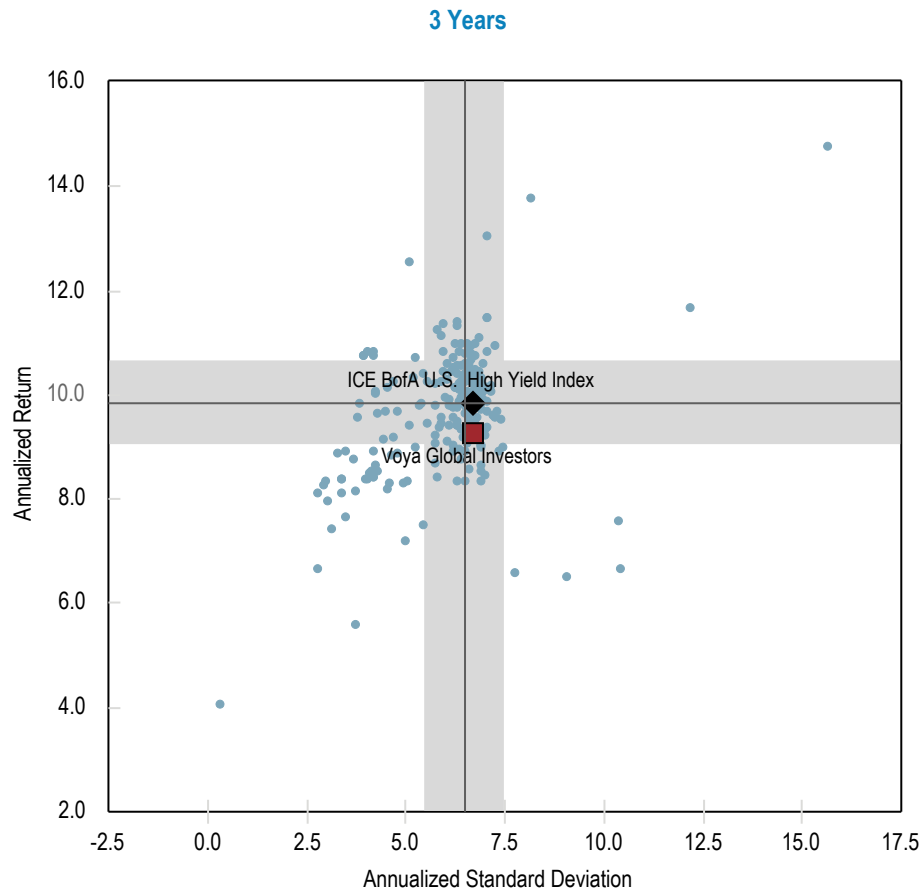


	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● Voya Global Investors	3.56 (39)	8.62 (73)	9.25 (53)	5.62 (56)	4.70 (66)	6.95 (71)	12.39 (49)	-10.64 (63)	5.34 (43)	5.18 (67)
▲ ICE BofA U.S. High Yield Index	3.58 (39)	10.24 (16)	9.85 (21)	6.01 (38)	5.29 (26)	8.20 (33)	13.46 (19)	-11.22 (76)	5.36 (42)	6.17 (43)
5th Percentile	4.26	11.11	10.73	8.41	6.76	10.63	14.99	-2.68	10.08	9.67
1st Quartile	3.77	9.76	9.75	6.42	5.34	8.53	13.17	-7.95	6.12	7.39
Median	3.45	9.22	9.30	5.70	4.92	7.70	12.32	-10.07	5.06	5.89
3rd Quartile	2.94	8.48	8.66	5.20	4.52	6.83	11.15	-11.22	4.09	4.46
95th Percentile	1.83	6.85	7.34	4.43	3.72	5.63	8.90	-13.13	2.86	2.30
Population	244	243	233	219	186	252	260	273	266	268

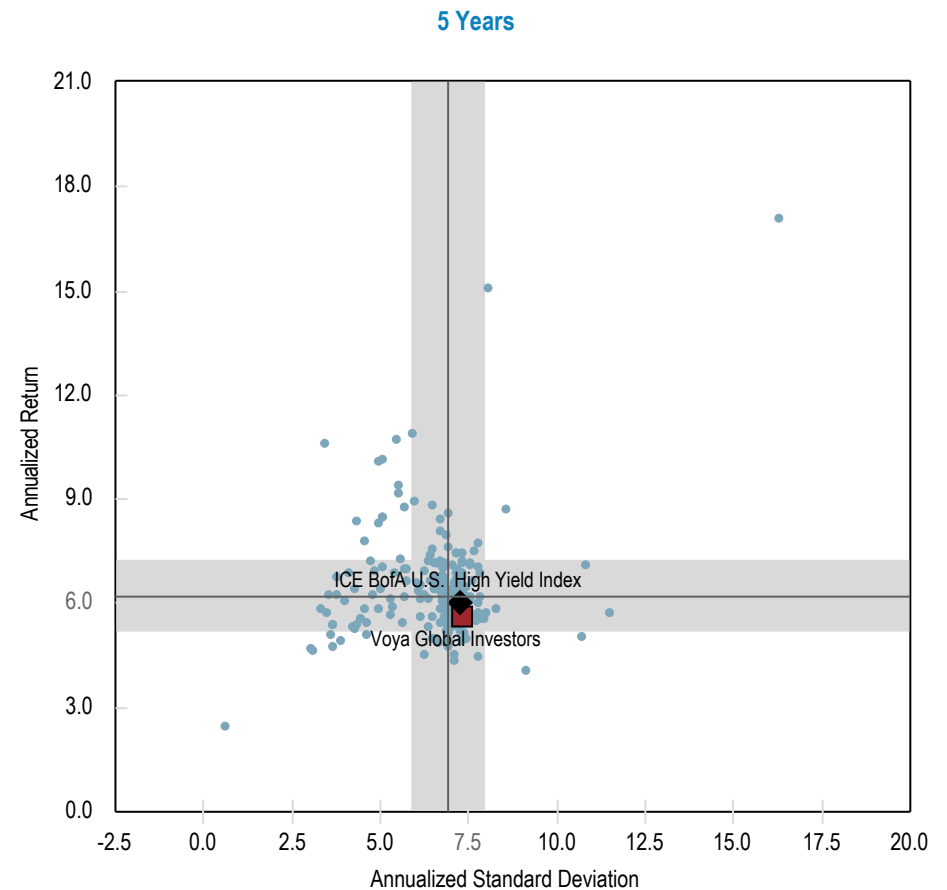


Voya Global Investors
Risk vs. Return 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Voya Global Investors	9.3	6.7	0.7
ICE BofA U.S. High Yield Index	9.9	6.7	0.8
eV US High Yield Fixed Inc Median	9.9	6.5	0.8
Population	239	239	239



	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
Voya Global Investors	5.6	7.3	0.4
ICE BofA U.S. High Yield Index	6.0	7.3	0.5
eV US High Yield Fixed Inc Median	6.2	6.9	0.5
Population	225	225	225

Real Estate Managers

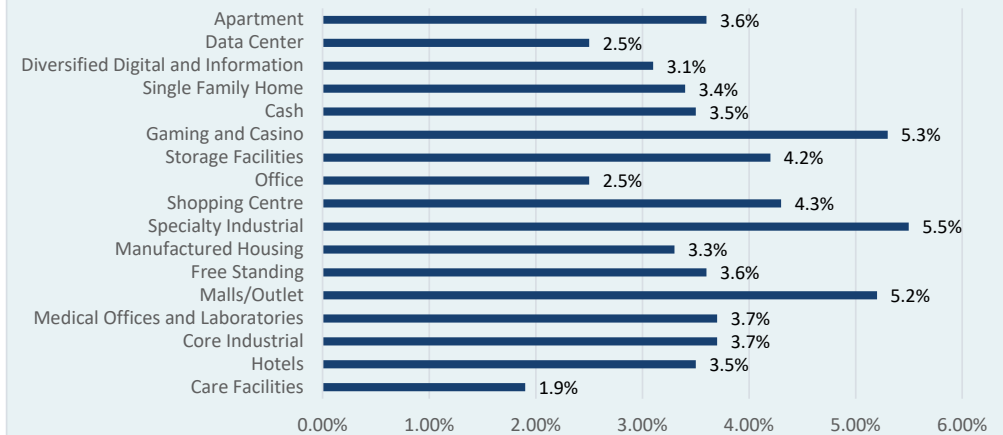
Adelante Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

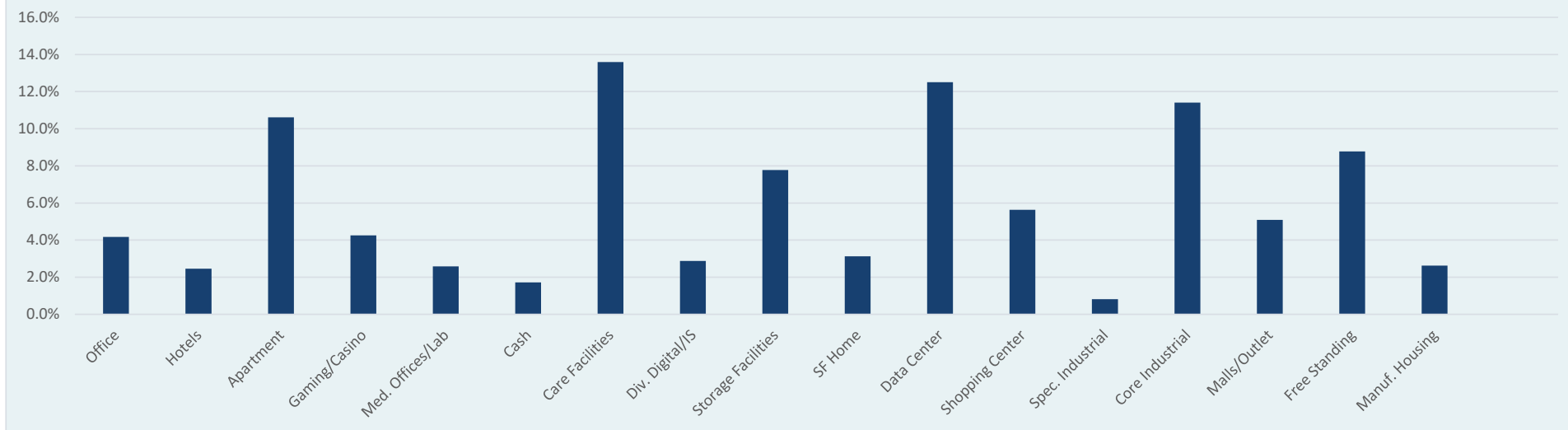
Top Five Holdings

Company	Property Type	Allocation
Welltower Inc.	Healthcare	10.4%
Prologis	Industrial	8.2%
Equinix, Inc.	Industrial Mixed	7.4%
Public Storage	Industrial Mixed	5.3%
Digital Realty	Industrial Mixed	5.2%

Dividend Yield by Property Type



Property Type Allocation

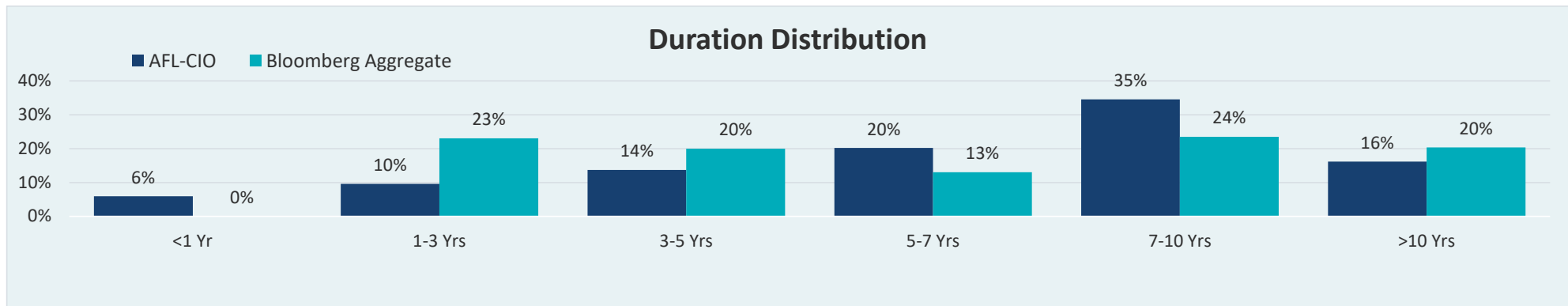
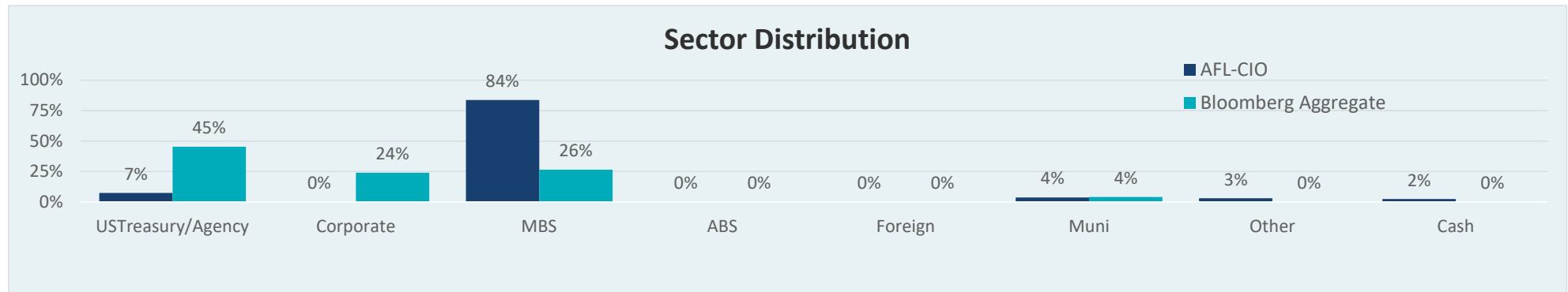
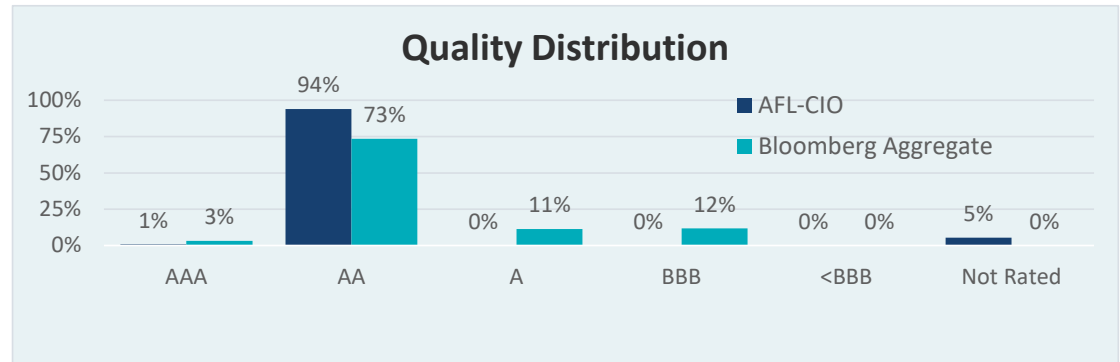


Diversifying Fixed Income Managers

AFL-CIO Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

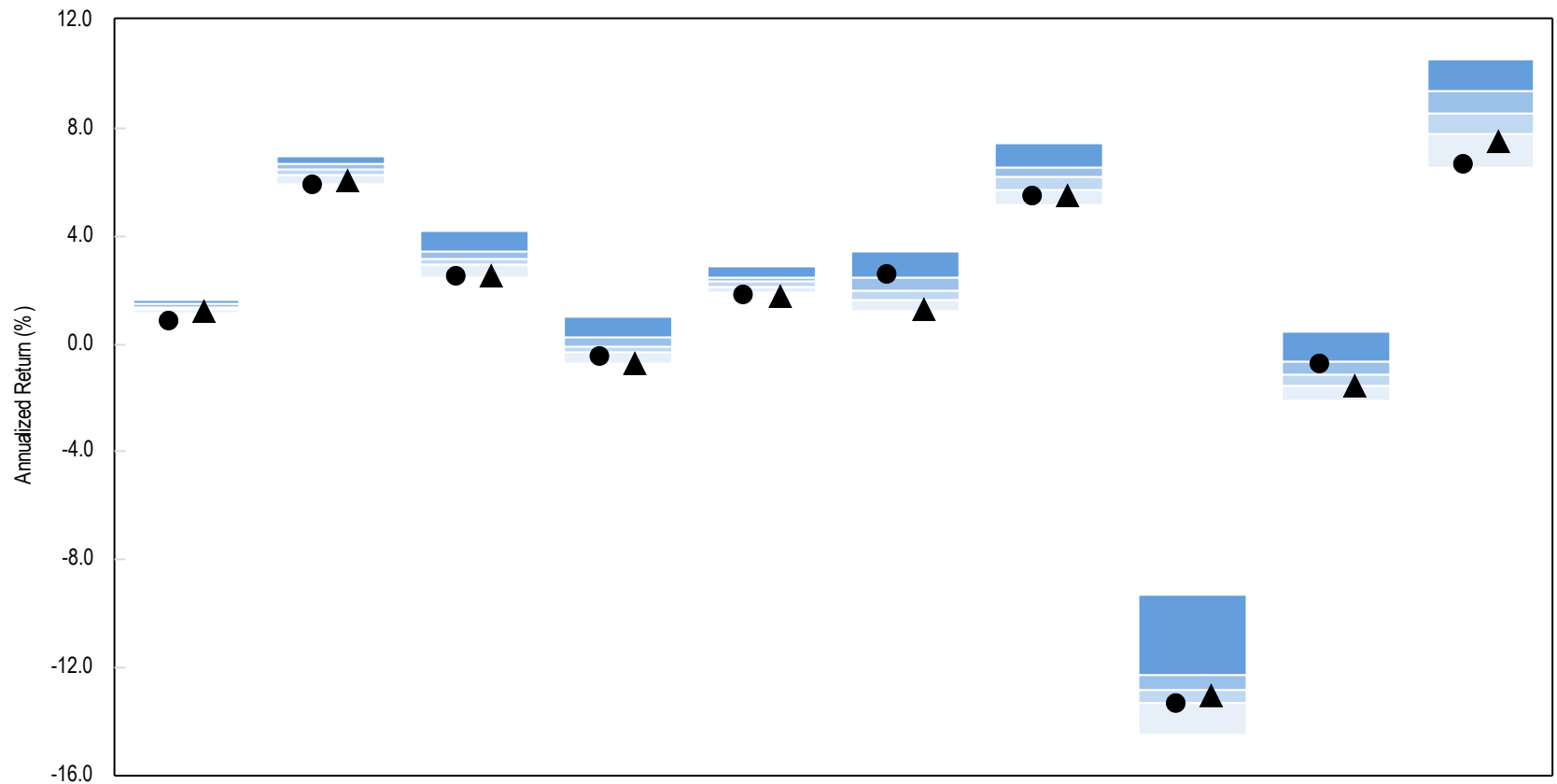
	AFL-CIO	Bloomberg Aggregate
Effective Duration	6.00	6.10
Yield to Maturity	4.1%	4.5%
Average Quality	Aa1	Aa2
Average Coupon	3.8%	3.6%



AFL-CIO
Manager Performance Comparisons (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

AFL-CIO vs. eV US Core Fixed Inc Gross Universe



	Quarter	1 Year	3 Years	5 Years	10 Years	2024	2023	2022	2021	2020
● AFL-CIO	0.90 (100)	5.90 (96)	2.54 (94)	-0.47 (88)	1.85 (97)	2.60 (20)	5.51 (85)	-13.27 (73)	-0.73 (32)	6.65 (95)
▲ Blmbg. U.S. Aggregate Index	1.21 (85)	6.08 (89)	2.55 (94)	-0.73 (98)	1.76 (99)	1.25 (95)	5.53 (83)	-13.01 (62)	-1.55 (77)	7.51 (84)
5th Percentile	1.66	6.98	4.16	0.97	2.85	3.44	7.42	-9.32	0.49	10.57
1st Quartile	1.47	6.64	3.45	0.27	2.49	2.46	6.56	-12.27	-0.64	9.40
Median	1.33	6.45	3.16	-0.12	2.31	1.98	6.17	-12.85	-1.11	8.57
3rd Quartile	1.25	6.28	2.94	-0.32	2.11	1.65	5.74	-13.30	-1.52	7.80
95th Percentile	1.12	5.95	2.49	-0.69	1.87	1.19	5.17	-14.49	-2.10	6.56
Population	208	208	207	199	185	226	239	259	268	269

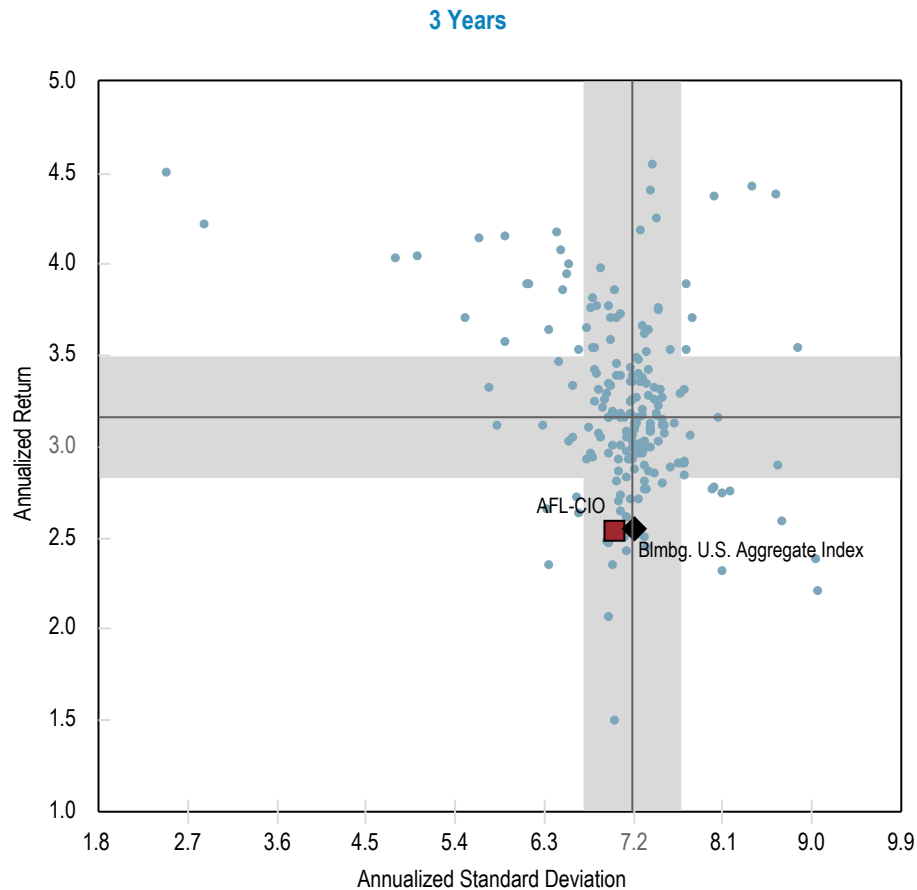
AFL-CIO
Manager Performance - Rolling 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

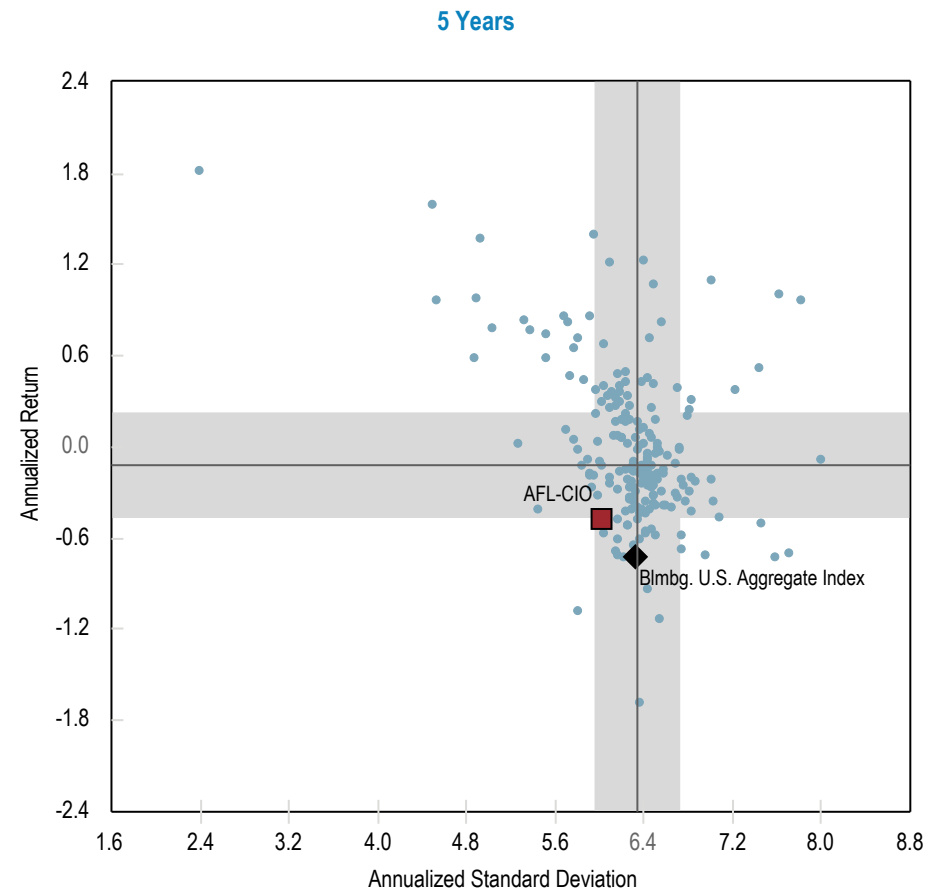


AFL-CIO
Risk vs. Return 3 & 5 Year (Gross of Fees)

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025



	3 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
AFL-CIO	2.5	7.0	-0.2
Blmbg. U.S. Aggregate Index	2.5	7.2	-0.2
eV US Core Fixed Inc Median	3.2	7.2	-0.2
Population	207	207	207



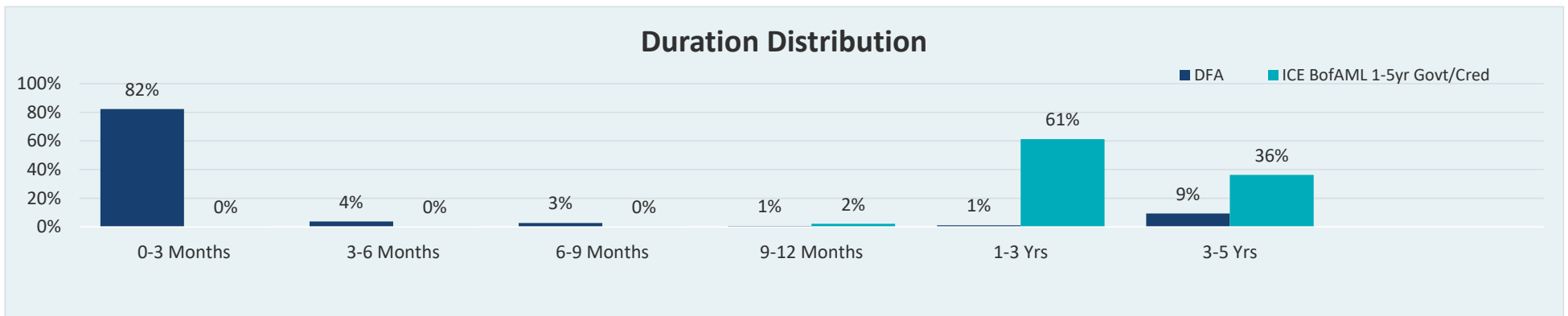
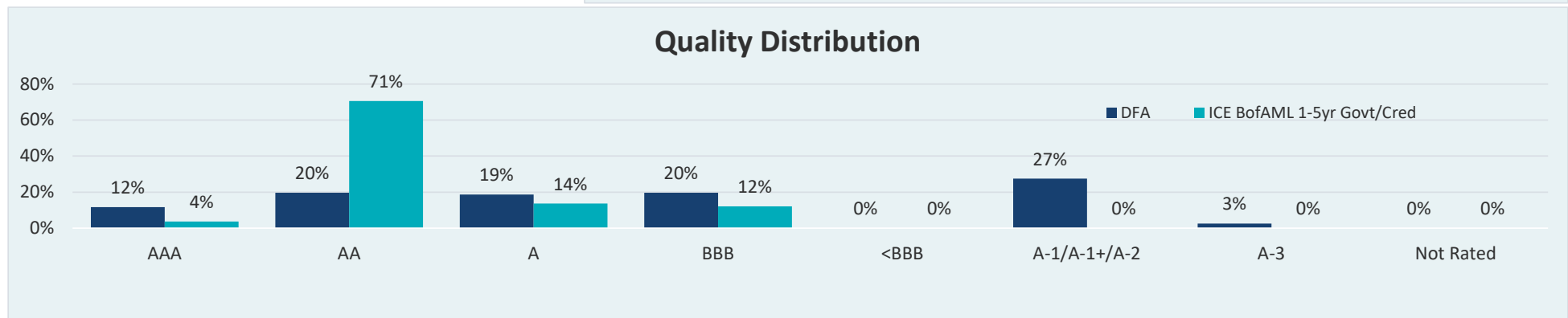
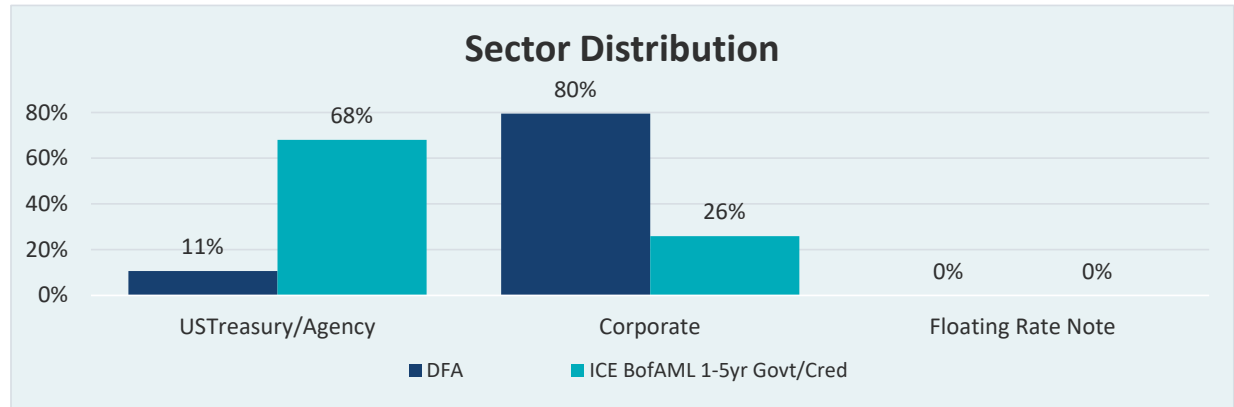
	5 Years		
	Anlzd Return (%)	Anlzd Standard Deviation (%)	Sharpe Ratio
AFL-CIO	-0.5	6.0	-0.5
Blmbg. U.S. Aggregate Index	-0.7	6.3	-0.5
eV US Core Fixed Inc Median	-0.1	6.3	-0.4
Population	199	199	199

Liquidity Managers

DFA Short Credit Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

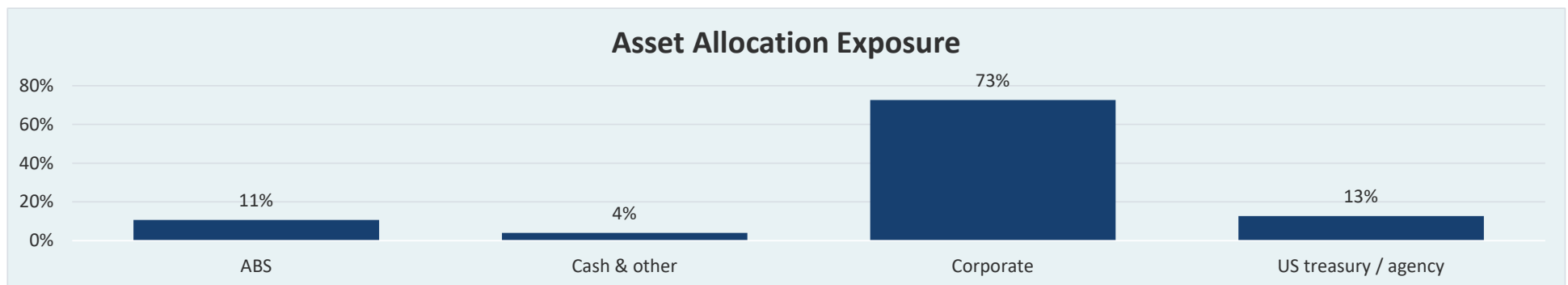
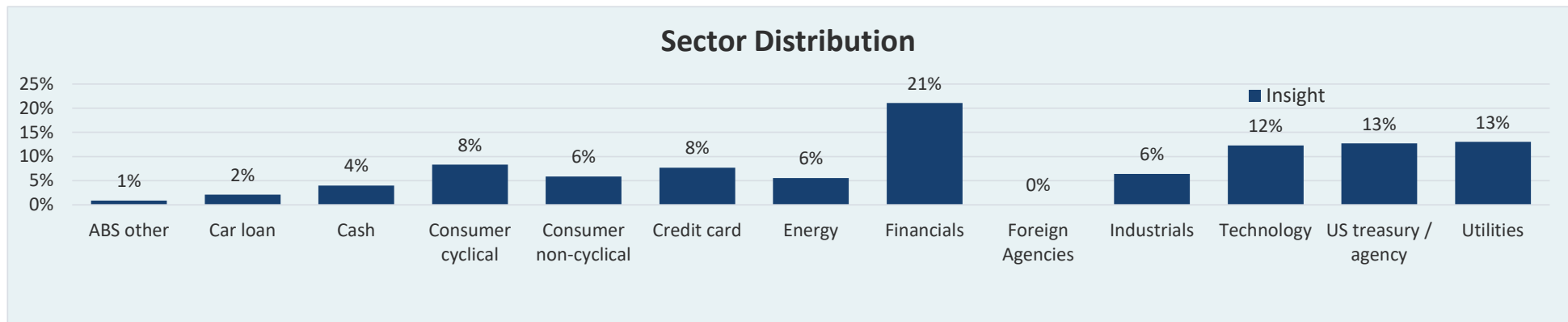
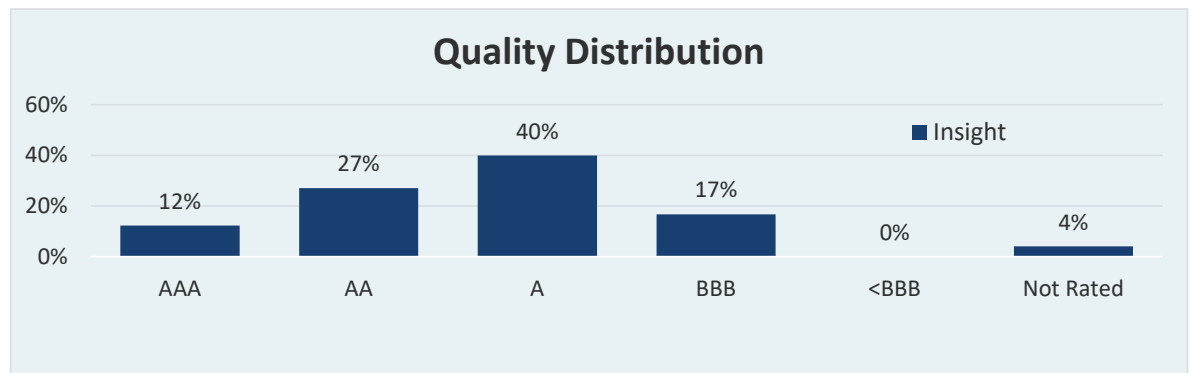
	DFA	ICE BofAML 1-5yr Govt/Cred
Effective Duration	0.44	2.59
Yield to Maturity	4.63	4.01
Average Quality	AA-	Aa2
Average Coupon	3.02%	3.42%



Insight Short Duration Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

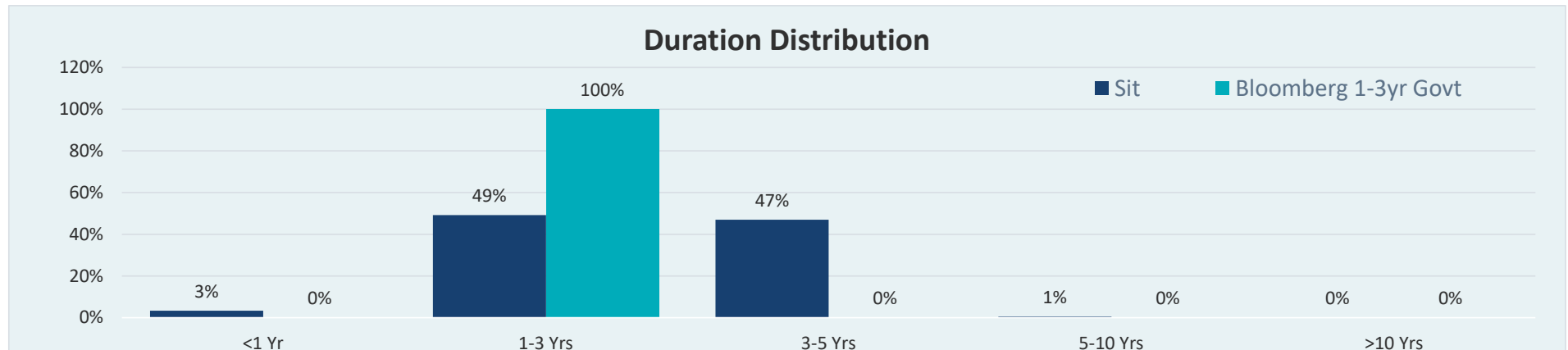
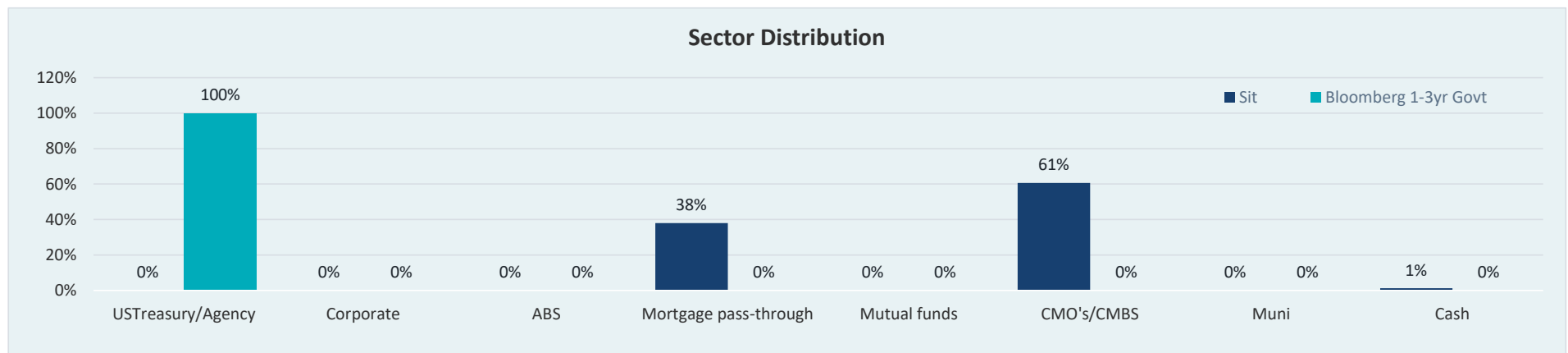
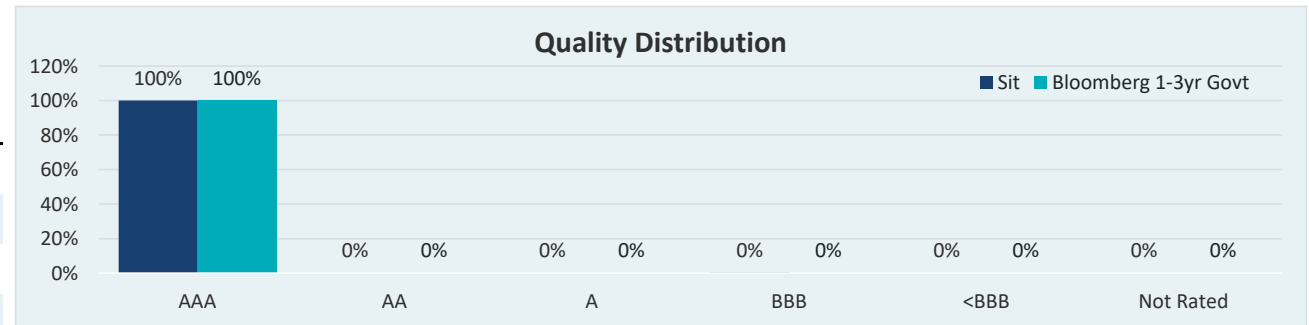
	Insight	Bloomberg 1-3yr Govt
Effective Duration	1.03	1.90
Yield to Maturity	4.40	N/A
Average Quality	A+	AGY/AGY
Average Coupon	3.74%	2.90%



Sit Short Duration Manager Portfolio Overview

Contra Costa County Employees' Retirement Association
Period Ending: June 30, 2025

	Sit	Bloomberg 1-3yr Govt
Modified Duration	2.90	1.90
Yield to Maturity	5.70	N/A
Average Quality	AGY/AGY	AGY/AGY
Average Coupon	6.00%	2.90%



Performance Return Calculations

Performance is calculated using Modified Dietz and for time periods with large cash flow (generally greater than 10% of portfolio value), Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

Data Source

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

Illiquid Alternatives

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

Policy & Custom Index Composition

Policy Index (1/1/2024 - present)	The Policy Index now matches the Implementation Benchmark stated below.
Policy Index (8/1/2023 - 1/1/2024)	16% Russell 3000, 12% MSCI ACWI ex-US (Gross), 10% MSCI ACWI (Net), 2% Wilshire REIT, 8% Private Real Estate composite returns, 2% FTSE 3-month T-bill +5%, 13% Private Equity composite returns, 10% Private Credit composite returns, 2% ICE BofAML High Yield Master II, 17% Bloomberg 1-3 Yr Gov/Credit, 2.5% Bloomberg US Aggregate, 3% 60% MSCI ACWI Net/40% Bloomberg Global Aggregate, 2.5% Bloomberg US Aggregate TR +1%.
Policy Index (7/1/2022 - present)	16% Russell 3000, 15% MSCI ACWI ex-US (Gross), 9% MSCI ACWI (Net), 2% Wilshire REIT, 8% Private Real Estate composite returns, 2.5% FTSE 3-month T-bill +5%, 13% Private Equity composite returns, 8% Private Credit composite returns, 1.5% ICE BofAML High Yield Master II, 17% Bloomberg 1-3 Yr Gov/Credit, 2.5% Bloomberg US Aggregate, 3% 60% MSCI ACWI Net/40% Bloomberg Global Aggregate, 2.5% Bloomberg US Aggregate TR +1%.
Policy Index (7/1/2021 - 6/30/2022)	16% Russell 3000, 16% MSCI ACWI ex-US (Gross), 9% MSCI ACWI (Net), 2% Wilshire REIT, 8% Private Real Estate composite returns, 3% CPI + 4%, 11% Private Equity composite returns, 8% Private Credit composite returns, 2% ICE BofAML High Yield Master II, 18% Bloomberg 1-3 Yr Gov/Credit, 2.5% Bloomberg US Aggregate, 3% 60% MSCI ACWI Net/40% Bloomberg Global Aggregate, 1.5% HFRI EH Equity Market Neutral.
Policy Index (1/1/2021 - 6/30/2021)	9% Russell 3000, 18% MSCI ACWI ex-US (Gross), 11% MSCI ACWI (Net), 1% Wilshire REIT, 8% Private Real Estate composite returns, 1.5% CPI + 4%, 11% Private Equity composite returns, 7% Private Credit composite returns, 1.5% ICE BofAML High Yield Master II, 25% Bloomberg 1-3 Yr Gov/Credit, 3% Bloomberg US Aggregate, 2% Bloomberg Global Aggregate, 2% HFRI EH Equity Market Neutral.
Policy Index (7/1/2020 - 12/31/2020)	9% Russell 3000, 18% MSCI ACWI ex-US (Gross), 11% MSCI ACWI (Net), 1% Wilshire REIT, 1.6% NCREIF Property Index, 6.4% NCREIF ODCE Index, 1.5% CPI + 4%, 11% S&P 500 +4% (Lagged), 7% ICE BofAML High Yield Master II +2%, 1.5% ICE BofAML High Yield Master II, 25% Bloomberg 1-3 Yr Gov/Credit, 3% Bloomberg US Aggregate, 2% Bloomberg Global Aggregate, 2% HFRI EH Equity Market Neutral.
Policy Index (7/1/2019 - 6/30/2020)	10% Russell 3000, 18% MSCI ACWI ex-US (Gross), 11% MSCI ACWI (Net), 1% Wilshire REIT, 1.6% NCREIF Property Index, 6.4% NCREIF ODCE Index, 2% CPI + 4%, 11% S&P 500 +4% (Lagged), 5% ICE BofAML High Yield Master II +2%, 2% ICE BofAML High Yield Master II, 24% Bloomberg 1-3 Yr Gov/Credit, 3.5% Bloomberg US Aggregate, 2% Bloomberg Global Aggregate, 2.5% HFRI EH Equity Market Neutral.
Policy Index (7/1/2018 - 6/30/2019)	11% Russell 3000, 19% MSCI ACWI ex-US (Gross), 11% MSCI ACWI (Net), 1% Wilshire REIT, 1.8% NCREIF Property Index, 7.2% NCREIF ODCE Index, 2% CPI + 4%, 10% S&P 500 +4% (Lagged), 4% ICE BofAML High Yield Master II +2%, 2% ICE BofAML High Yield Master II, 23% Bloomberg 1-3 Yr Gov/Credit, 3.5% Bloomberg US Aggregate, 2% Bloomberg Global Aggregate, 2.5% HFRI EH Equity Market Neutral.
Policy Index (10/1/2017 - 6/30/2018)	16.3% Russell 3000, 18.8% MSCI ACWI ex-US (Gross), 8.6% MSCI ACWI (Net), 1% Wilshire REIT, 1.6% NCREIF Property Index, 6.4% NCREIF ODCE Index, 2.5% CPI + 4%, 10.1% S&P 500 +4% (Lagged), 1.9% ICE BofAML High Yield Master II +2%, 4.3% ICE BofAML High Yield Master II, 25% Bloomberg 1-3 Yr Gov/Credit, 3.5% Bloomberg US Aggregate.
Policy Index (1/1/2017 - 9/30/2017)	22.9% Russell 3000, 11% MSCI ACWI ex-US (Gross), 10.9% MSCI ACWI (Net), 1% Wilshire REIT, 1.7% NCREIF Property Index, 6.8% NCREIF ODCE Index, 3.6% CPI + 4%, 8.1% S&P 500 +4% (Lagged), 1.7% ICE BofAML High Yield Master II +2%, 5.1% ICE BofAML High Yield Master II, 22.4% Bloomberg 1-3 Yr Gov/Credit, 3.2% Bloomberg US Aggregate, 1.6% 91-Day T-Bills.
Policy Index (4/1/2012-12/31/2016)	27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Bloomberg U.S. Aggregate, 5% ICE BofAML High Yield Master II, 4% Bloomberg Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills.

Data Sources and Methodology

Period Ending: June 30, 2025

Policy & Custom Index Composition (continued)

Policy Index (4/1/2011-3/31/2012)	31% Russell 3000, 10.4% MSCI EAFE (Gross), 9.6% MSCI ACWI (Net), 25% Bloomberg U.S. Aggregate, 3% ICE BofAML High Yield Master II, 4% Bloomberg Global Aggregate, 8.4% DJ Wilshire REIT, 3.1% NCREIF, 5% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills.
Policy Index (4/1/2010-3/31/2011)	35.6% Russell 3000, 10.4% MSCI EAFE (Gross), 5% MSCI ACWI (Net), 25% Bloomberg U.S. Aggregate, 3% ICE BofAML High Yield Master II, 4% Bloomberg Global Aggregate, 8.4% DJ Wilshire REIT, 3.1% NCREIF, 5% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills.
Policy Index (7/1/2009-3/31/2010)	40.6% Russell 3000, 10.4% MSCI EAFE (Gross), 25% Bloomberg U.S. Aggregate, 3% ICE BofAML High Yield Master II, 4% Bloomberg Global Aggregate, 8.4% DJ Wilshire REIT, 3.1% NCREIF, 5% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills.
Custom Growth Benchmark (7/1/2021 - present)	21.33% Russell 3000, 21.33% MSCI ACWI ex-US (Gross), 12% MSCI ACWI (Net), 2.67% Wilshire REIT, 10.67% Private Real Estate composite returns, 14.67% Private Equity composite returns, 10.67% Private Credit composite returns, 2.67% ICE BofAML High Yield Master II, 4% 60% MSCI ACWI Net/40% Bloomberg Global Aggregate
Custom Growth Benchmark (1/1/2021 - 6/30/2021)	13.14% Russell 3000, 26.28% MSCI ACWI ex-US (Gross), 16.06% MSCI ACWI (Net), 1.46% Wilshire REIT, 11.68% Private Real Estate composite returns, 16.06% Private Equity composite returns, 10.22% Private Credit composite returns, 2.19% ICE BofAML High Yield Master II, 2.92% Bloomberg Global Bond
Custom Growth Benchmark (7/1/2020 - 12/31/2020)	13.14% Russell 3000, 26.28% MSCI ACWI ex-US (Gross), 16.06% MSCI ACWI (Net), 1.46% Wilshire REIT, 2.34% NCREIF Property Index, 9.33% NCREIF ODCE Index, 16.06% S&P 500 +4% (Lagged), 10.22% ICE BofAML High Yield Master II +2%, 2.19% ICE BofAML High Yield Master II, 2.92% Bloomberg Global Bond
Custom Growth Benchmark (7/1/2019 - 6/30/20)	14.7% Russell 3000, 26.4% MSCI ACWI ex-US (Gross), 16.2% MSCI ACWI (Net), 1.5% Wilshire REIT, 2.4% NCREIF Property Index, 9.4% NCREIF ODCE Index, 16.2% S&P 500 +4% (Lagged), 7.4% ICE BofAML High Yield Master II +2%, 2.9% ICE BofAML High Yield Master II, 2.9% Bloomberg Global Bond
Custom Growth Benchmark (7/1/2018 - 6/30/2019)	16.0% Russell 3000, 27.5% MSCI ACWI ex-US (Gross), 15.9% MSCI ACWI (Net), 1.5% Wilshire REIT, 2.6% NCREIF Property Index, 10.4% NCREIF ODCE Index, 14.5% S&P 500 +4% (Lagged), 5.8% ICE BofAML High Yield Master II +2%, 2.9% ICE BofAML High Yield Master II, 2.9% Bloomberg Global Bond
Custom Growth Benchmark (9/30/2017- 6/30/2018)	23.6% Russell 3000, 27.2% MSCI ACWI ex-US (Gross), 12.5% MSCI ACWI (Net), 1.5% Wilshire REIT, 2.3% NCREIF Property Index, 9.3% NCREIF ODCE Index, 14.6% S&P 500 +4% (Lagged), 2.8% ICE BofAML High Yield Master II +2%, 6.2% ICE BofAML High Yield Master II
Custom Growth Benchmark (1/1/2017-9/30/2017)	32.6% Russell 3000, 15.7% MSCI ACWI ex-US (Gross), 15.5% MSCI ACWI (Net), 1.4% Wilshire REIT, 2.4% NCREIF Property Index, 9.6% NCREIF ODCE Index, 1.6% CPI +4%, 11.5% S&P 500 +4% (Lagged), 2.4% ICE BofAML High Yield Master II +2%, 7.3% ICE BofAML High Yield Master II
Custom Growth Benchmark (Prior to 1/1/2017)	Weighted-average of the benchmarks of the sub-composites that make up the composite.
Custom Diversifying Benchmark (7/1/2021-present)	35.71% Bloomberg US Aggregate, 21.43% FTSE 3-Month T-bill +4%, 21.43% FTSE 3-Month T-bill +5%, 21.43% Bloomberg Barclays US Aggregate +1%
Custom Diversifying Benchmark (8/1/2020 - 6/30/2021)	46.15% Bloomberg US Aggregate, 30.77 FTSE 3-Month T-bill +4%, 23.08 FTSE 3-Month T-bill +5%.
Custom Diversifying Benchmark (7/1/2018 - 7/31/2020)	43.75% Bloomberg US Aggregate, 25% CPI + 4%, 31.25% HFRI EH Equity Market Neutral.
Custom Diversifying Benchmark (10/1/2017 - 6/30/2018)	58.33% Bloomberg US Aggregate, 41.67% CPI + 4%.
Custom Diversifying Benchmark (1/1/2017 - 9/30/2017)	56.1% Bloomberg US Aggregate, 43.9% CPI + 4%.
Custom Diversifying Benchmark (Prior to 1/1/2017)	Weighted-average of the benchmarks of the sub-composites that make up the composite.
Custom Diversifying Multi-Asset Benchmark (current)	50% FTSE 3-Month T-bill +5%, 50% Bloomberg Barclays US Aggregate +1%
Real Estate Benchmark (current)	20% Wilshire REIT, 80% Private Real Estate composite returns.
Real Estate Benchmark (4/1/2012-11/30/2016)	40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-US.

Contra Costa County Employees' Retirement Association

Data Sources and Methodology

Period Ending: June 30, 2025

IMPLEMENTATION BENCHMARK WEIGHTS BY INVESTMENT ALLOCATION RESOLUTION (7/1/18 TO CURRENT)										
Manager	Benchmark	10/1/2017- 6/30/2018	7/1/2018- 6/30/2019	7/1/19- 6/30/202	7/1/2020- 6/30/2021	7/1/2021- 6/30/2022	7/1/2022- 7/31/2023	8/1/2023- 9/30/2024	10/1/2024- 4/30/2025	5/1/2025- Present
BlackRock Index Fund	Russell 1000	1.00%	1.00%	2.00%	2.00%	5.00%	9.00%	10.00%	10%	10%
Boston Partners	Russell 1000 Value	4.50%	3.00%	2.50%	2.00%	4.00%	4.00%	3.00%	3.00%	3.00%
Jackson Square	Russell 100 Growth	4.50%	3.00%	2.50%	2.00%	4.00%	0.00%	0.00%	0.00%	0.00%
Emerald	Russell 2000 Growth	3.30%	2.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Ceredex	Russell 2000 Value	3.30%	2.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Pyrford	MSCI ACWI ex-US Value	5.40%	5.50%	5.00%	5.00%	4.00%	4.00%	4.00%	3.50%	3.50%
William Blair	MSCI ACWI ex-US Growth	5.40%	5.50%	5.00%	5.00%	4.00%	4.00%	4.00%	3.50%	3.50%
Artisan	MSCI ACWI Growth	4.30%	4.00%	4.00%	4.00%	4.50%	4.50%	5.00%	5.50%	5.50%
First Eagle	MSCI ACWI Value	4.30%	4.00%	4.00%	4.00%	4.50%	4.50%	5.00%	5.50%	5.50%
IT Emerging Markets	MSCI Emerging Markets	4.20%	4.00%	4.00%	4.00%	4.00%	3.50%	2.00%	2.00%	2.00%
PIMCO RAE Emerging Markets	MSCI Emerging Markets Value	4.20%	4.00%	4.00%	4.00%	4.00%	3.50%	2.00%	2.00%	2.00%
Torchlight	Private Equity Composite	1.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Opportunistic	Private Equity Composite	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Private Equity	Private Equity Composite	8.20%	10.00%	11.00%	11.00%	11.00%	13.00%	13.00%	10.00%	10.00%
Infrastructure	Infrastructure Composite	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	2.00%
Voya	ICE BofA High Yield Master II	5.00%	2.00%	2.00%	1.50%	2.00%	1.50%	2.00%	3.00%	3.00%
Private Credit	Private Credit Composite	0.00%	4.00%	5.00%	7.00%	8.00%	8.00%	10.00%	10.00%	10.00%
Adelante REIT	Wilshire REIT	1.00%	1.00%	1.00%	1.00%	2.00%	1.00%	1.00%	1.00%	1.00%
INVESCO REIT	Wilshire REIT	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%
Rialto Credit Opps	Bloomberg CMBS IG TR USD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%
Private RE (NPI)	Private RE Composite	1.40%	1.80%	1.60%	1.60%	0.00%	0.00%	0.00%	0.00%	0.00%
Private RE (ODCE)	Private RE Composite	8.20%	7.20%	6.40%	6.40%	0.00%	0.00%	0.00%	0.00%	0.00%
Private RE	Private RE Composite	0.00%	0.00%	0.00%	0.00%	8.00%	8.00%	8.00%	5.00%	5.00%
Risk Parity	60% MSCI ACWI (Net) / 40% Bloomberg Globale Aggregate	0.00%	5.00%	5.00%	5.00%	3.00%	3.00%	3.00%	0.00%	0.00%
Insight	Bloomberg 1-3 Yr Gov/Credit	10.70%	12.00%	12.00%	13.00%	7.00%	6.50%	6.50%	6.50%	6.50%
DFA	ICE BofA 1-5 US Corp/Gov	5.30%	5.50%	6.00%	6.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Sit	Bloomberg 1-3 Yr Gov	6.00%	5.50%	6.00%	6.00%	7.00%	6.50%	6.50%	6.50%	6.50%
AFL-CIO HIT	Bloomberg US Aggregate	3.50%	3.50%	3.50%	3.00%	2.50%	2.50%	2.50%	2.50%	2.50%
Parametric Defensive Equity	CPI + 4%	0.00%	2.50%	2.50%	0.00%	1.50%	0.00%	0.00%	0.00%	0.00%
BH-DG Systematic	SG CTA Index	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	2.00%
Wellington Real TR	Bloomberg Global Aggregate	2.50%	2.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Acadian MAARS	FTSE 3-month T-Bill +5%	0.00%	0.00%	0.00%	1.50%	1.50%	2.50%	2.00%	0.00%	0.00%
SitAR	Bloomberg US Aggregate + 1%	0.00%	0.00%	0.00%	2.00%	1.50%	2.50%	2.50%	3.50%	3.50%
Cash	3-month T-Bill	1.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	4.00%

Contra Costa County Employees' Retirement Association

Data Sources and Methodology

Period Ending: June 30, 2025

Manager Line Up					
Manager	Inception Date	Data Source	Manager	Inception Date	Data Source
BlackRock Russell 1000 Index	4/20/2017	BlackRock	Invesco Real Estate V	9/27/2022	Invesco
Boston Partners	6/1/1995	Northern Trust	Oaktree REOF V	12/31/2011	Oaktree
Emerald Advisors	4/7/2003	Northern Trust	Oaktree REOF VI	9/30/2013	Oaktree
Ceredex	11/6/2011	Northern Trust	Oaktree REOF VII	4/1/2015	Oaktree
Pyrford	4/25/2014	State Street	PCCI IX	4/28/2022	PCCP
William Blair	10/29/2010	William Blair	Siguler Guff DREOF	1/25/2012	Siguler Guff
PIMCO RAE Emerging Markets	2/28/2017	State Street	Siguler Guff DREOF II	8/31/2013	Siguler Guff
TT Emerging Markets	7/27/2017	TT	Siguler Guff DREOF II Co-Inv	1/27/2016	Siguler Guff
Artisan Partners	10/1/2012	SEI Trust	Paulson Real Estate Fund II	11/10/2013	Paulson
First Eagle	1/18/2011	Northern Trust	AE Industrial Partners Fund II	4/8/2019	StepStone Group
Voya	4/25/2000	Northern Trust	Adams Street Partners	3/18/1996	StepStone Group
Adelante	9/30/2001	Northern Trust	Adams Street Partners II	1/16/2009	StepStone Group
Panagora Risk Parity Multi Asset	3/15/2019	Panagora	Adams Street Partners Venture	4/28/2017	StepStone Group
AFL-CIO	6/30/1991	AFL-CIO	Adams Street Partners - BFP	1/18/1996	StepStone Group
Wellington Real Total Return (in Liquidation)	2/26/2013	Wellington	Adams Street Partners - Fund 5	9/21/2012	StepStone Group
BH-DG Systematic Trading Fund L.P. - I	4/19/2024	BH-DG	Aether Real Assets IV	3/16/2016	StepStone Group
Sit LLCAR	4/15/2021	Northern Trust	Aether Real Assets III	11/27/2013	StepStone Group
Sit Short Duration	11/2/2016	Northern Trust	Aether Real Assets III Surplus	11/30/2013	StepStone Group
DFA Short Credit	11/21/2016	Northern Trust	Bay Area Equity Fund	6/14/2004	StepStone Group
Insight Short Duration	11/18/2016	Northern Trust	Bay Area Equity Fund II	12/7/2009	StepStone Group
Parametric Overlay	3/29/2017	Northern Trust	Commonfund	6/28/2013	StepStone Group
Cash	-	Northern Trust	EIF US Power Fund II	8/16/2005	StepStone Group
Angelo Gordon Energy Credit Opp	9/24/2015	StepStone Group	EIF US Power Fund III	5/30/2007	StepStone Group
StepStone CC Opportunities Fund	2/1/2018	StepStone Group	EIF US Power Fund IV	11/28/2011	StepStone Group
Torchlight II	9/30/2006	StepStone Group	EIF US Power Fund V	11/28/2016	StepStone Group
Torchlight IV	7/1/2012	StepStone Group	Genstar Capital Partners IX, L.P.	2/21/2019	StepStone Group
Torchlight V	7/1/2012	StepStone Group	Oaktree PIF 2009	2/28/2010	StepStone Group
Angelo Gordon Realty Fund VIII	1/23/2012	Angelo Gordon	Paladin III	11/30/2007	StepStone Group
Angelo Gordon Realty Fund IX	12/8/2014	Angelo Gordon	Ocean Avenue Fund II	6/11/2014	StepStone Group
Blackstone Real Estate Partners VIII	3/24/2023	Blackstone	Ocean Avenue Fund III	4/15/2016	StepStone Group
DLJ RECP III	6/23/2005	DLJ	Pathway 6	5/24/2011	StepStone Group
DLJ RECP IV	2/11/2008	DLJ	Pathway 7	2/7/2013	StepStone Group
DLJ RECP V	7/1/2014	DLJ	Pathway 8	11/23/2015	StepStone Group
DLJ RECP VI	3/19/2019	DLJ	Pathway	11/9/1998	StepStone Group
LaSalle Income & Growth VI	7/16/2013	LaSalle	Pathway 2008	12/26/2008	StepStone Group
LaSalle Income & Growth VII	2/28/2017	LaSalle	Siguler Guff CCCERA Opps	6/3/2014	StepStone Group
Hearthstone II	6/17/1998	Hearthstone	Siguler Guff Secondary Opps	11/30/2016	StepStone Group
Long Wharf Fund IV	7/3/2013	Long Wharf	Siris Partners IV	3/15/2019	StepStone Group
Long Wharf Fund V	9/30/2016	Long Wharf	TPG Healthcare Partners, L.P.	6/28/2019	StepStone Group
Long Wharf Fund VI	2/5/2020	Long Wharf	Trident VIII, L.P.	5/24/2019	StepStone Group
Long Wharf Fund VII	5/30/2023	Long Wharf	Wastewater Opp. Fund	12/8/2015	StepStone Group
Invesco Real Estate IV	6/30/2014	Invesco	Cross Lake RE IV	12/14/2023	Cross Lake
Invesco Real Estate V	2/20/2019	Invesco	KSL Capital Partners VI, L.P.	11/10/2023	KSL
Stockbridge Value Fund I	6/26/2024	Stockbridge	EQT Infrastructure VI	12/31/2023	StepStone Group
Jadian Real Estate Fund II GP, LLC	9/27/2024	Citco	Altaris Health Partners VI, L.P.	6/30/2024	StepStone Group
Blackfin Financial Services Fund IV	9/30/2024	StepStone Group	Arbor Investments VI, L.P	6/30/2024	StepStone Group
EPIC Fund II, SLP	9/30/2024	StepStone Group	Altor ACT I	9/30/2024	StepStone Group
Rialto Credit Opportunities Fund	2/28/2025	Rialto	Ares US Real Estate Opp. Fund IVV=	9/30/2024	StepStone Group

Other Disclosures

All data prior to 12/31/2014 was provided by previous consultant.
As of 7/1/2018 all Private Equity and Private Credit data is provided by StepStone Group.

Glossary

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

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

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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