Deliver Quality Service

Go above and beyond for our members and service partners.

Aspire to be agile and efficient to meet challenges.

Invest in the development and advancement of our employees.

Take pride in delivering accurate and beneficial information.

"Our members' questions about retirement are as diverse as the members themselves. Knowing that we are prepared to provide relevant answers to a member during their retirement journey no matter how challenging, is the magic formula. We treat each member like they are family." - Tonda

INVESTMENT

Verus

Investment Consultant's Report

Investment Objectives

The primary financial objective for Oklahoma Public Employees' Retirement System (OPERS) is to earn a long-term return sufficient to avoid deterioration in funded status. The System's actuary estimates this return requirement to be 6.5% while its investment consultant estimates the return requirement to be 4.9% for the fiscal year ended June 30, 2022. It is important to note that Verus uses a 10-year investment horizon whereas actuarial consultants use a much longer time horizon in developing forecasts, typically 30 years.

The secondary goals for OPERS are to outperform the asset allocation-weighted benchmark and to rank in the top fortieth percent of a universe of large public pension funds.

Asset Allocation

The System's Investment Philosophy stresses the following key points:

1. Asset allocation is the key determinant of return. Therefore, commitments to asset allocation targets are maintained through a disciplined rebalancing program.
2. Diversification, both by and within asset classes, is the primary tool for risk control.
3. Passive instruments (index funds) are suitable strategies in highly efficient markets.

ASSET CLASS	6/30/22 ALLOCATION	LOW	TARGET	HIGH	% PASSIVE OR SEMI-PASSIVE
U.S. EQUITY	40.4%	40.4%	40.0%	42.7%	78.1%
FIXED INCOME	32.1%	29.6%	32.0%	32.1%	61.1%
INT'L EQUITY	27.2%	27.2%	28.0%	28.0%	68.5%
REAL ESTATE	0.1%	0.1%	0.0%	0.1%	0.0%
CASH	0.3%	0.3%	0.0%	0.3%	0.0%

Review of Fiscal Year 2022 Investment Environment

Market Environment
The broad story was a tale of two halves over the fiscal year, as global markets delivered mildly positive returns in the latter half of 2021, with below-average volatility, spurred by easy monetary policy, pandemic reopening demand, and a resurgence in economic growth. The reopening story painted a more optimistic picture in advanced economies, while emerging economies struggled due to less access to quality vaccines and more stringent pandemic lockdown measures, specifically within China. However, this optimism began to fade as inflation surged and central banks turned more hawkish.

The first half of 2022 proved to be an incredibly different environment from what was experienced during 2021. The persistence of inflation was a driving narrative, as the supply shocks coming from Russia's invasion of Ukraine and supply chain issues from China's continued zero-covid policy accelerated already fast price growth. Central banks, keen to lower inflation, reacted more aggressively as a result. The quick, but relatively small, tightening cycle hurt both equities and bonds alike. Nearly all asset classes have produced losses year-to-date—a somewhat rare occurrence which left most diversified portfolios materially in the red. The spur of tightening also increased fears of recession and possibly stagflation, as inflation ceased to moderate (U.S. headline CPI hit 9.1% in June—a four-decade high).

U.S. Equity

While the S&P 500 delivered a fantastic 11.7% return in the second half of 2021, the first half of 2022 saw a significant reversal of -20%, qualifying as a technical market correction. In an effort to curb four-decade high inflation within the U.S., the Federal Reserve raised their policy rate by 25 bps, 50 bps, and 75 bps at their respective March, May, and June meetings. It's important to note that although the pace of rate hikes has been rapid compared to most previous tightening cycles, the overall magnitude of tightening has been small.

Investors began recognizing the potential for recession in the second quarter of 2022, as economic data indicated a slowdown alongside Federal Reserve tightening. Persistent inflation in the face of multiple rate hikes impacted company revenues and profits. On the sales front, declines in real purchasing power slashed consumer sentiment and impacted discretionary spending. With regard to corporate profits, higher expenses, particularly for companies unable to pass through prices, have resulted in earnings compression (MSCI U.S. Profit Margins down from 12.9% in December 2021 to 12.2% in June 2022). Ultimately, U.S. equities have faced a tough environment in the first half of 2022, with the S&P 500 falling 20.0% as of June 30th.

Briefly looking at size and style, the Value factor outperformed the Growth factor during the fiscal year (Russell 1000 Value -7.4%, Russell 1000 Growth -19.0%). The Russell 1000 Value Index has declined -12.9% versus -28.1% for the Russell 1000 Growth Index year-to-date. As expected, rising rates inflicted more pain on duration-sensitive growth equities. From a size perspective, small-cap equities underperformed significantly during the fiscal year (Russell 2000 -25.2%, Russell 1000 -13.0%).

International Equity

International developed equities lagged U.S. equities over the fiscal year, as the MSCI EAFE Index returned -17.8% relative to the S&P 500 -10.6% return. Dollar strength hurt U.S. investors with unhedged foreign currency exposure, as the Bloomberg Dollar Spot Index advanced 10.3% during the period. Despite the underperformance over the full fiscal year, both developed and emerging market equities outperformed U.S. shares on a year-to-date basis through June 30th, as the MSCI EAFE and MSCI EM Indices returned -19.6% and -17.6%, respectively.

Emerging market equities underperformance during the fiscal year was primarily due to the large drop in Chinese equities (MSCI China -31.8%), as the country locked down major cities and cracked down on sectors including technology, education, and real estate. This narrative switched gears during the first half of 2022, as news of potential easing of government restrictions and the reopening of several large cities boosted share prices of the largest country constituent in the MSCI EM Index (35.4%). While being the worst performer over the full fiscal year, emerging market equities ended the first half of 2022 as the best performing market.

Developed economies faced a similar equity environment to that of the United States. Positive performance in the second half of 2021 due to reopening growth was reversed in the first half of 2022, as rising inflation was amplified by Russia's invasion of Ukraine in late February. Ensuing sanctions against Russian petroleum exports from the West squeezed energy prices upward, forcing the Bank of England and European Central Bank to shift gears in terms of monetary policy. The MSCI EAFE Index fell -19.6% over the year-to-date, wiping out the 2.3% gain seen during the second half of 2021. International developed equities continue to be challenged, as the energy crisis escalates, and consumer strength remains less resilient than that of the U.S.

Fixed Income

Core fixed income suffered losses of -10.3% over the full fiscal year (BBgBarc U.S. Aggregate), though losses occurred in the first half of 2022. All eyes have been on inflation, which has forced central bankers to tighten conditions while attempting to avoid pushing their economies into recession. Rate hikes and forward guidance from central banks have hammered equity and bond markets alike, created a rare environment of sharp losses across both asset classes.

The magnitude of expected rate hikes has jumped materially since late 2021. During December 2021, Fed funds futures contracts suggested the Fed Funds Rate would end 2022 at 0.82% (only three 25 bps rate hikes expected). By the end of March 2022, markets were pricing in a total of *nine* 25 bps rate hikes. This placed the implied Fed Funds Rate at 2.39% by the end of 2022. The trend continued in Q2, as inflation remained persistent. The Federal Reserve pushed through an additional 50 bps hike in May and a 75 bps hike in June (the largest single meeting hike since 1994). Going forward, markets are pricing in an additional seven rate hikes (not including the six previously implemented) by the end of 2022, bringing the year-end implied rate in line with the Fed's expectation of 3.4%. Many countries currently face similar problems, as inflation remains a challenge.

The impact of policy tightening on duration-sensitive assets has been significant. Performance was negative across all fixed income asset classes over the year-to-date, as rates jumped from historically low levels. The Bloomberg Global Treasury Index returned -14.8% in dollar terms over the year-to-date. In the U.S., the Bloomberg Universal Index suffered its worst quarterly loss in Q1 2022—down -6.1%—while the Bloomberg Aggregate Index fell -5.9% (its third worst quarterly loss, dating back to 1976). Performance during Q2 was also negative, with the Universal and Aggregate Indices down -5.1% and -4.7%, respectively. Longer duration assets underperformed. The Bloomberg U.S. Long Treasury Index fell -21.3% year-to-date, compared to the -3.0% decline of the Bloomberg U.S. Treasury 1-3 Year index.

Looking at credit, spreads significantly widened over the course of 2022. Investment grade spreads widened by 63 bps, moving from 0.92% to 1.55% at the end of June. High yield spreads also jumped, starting the year at 283 bps before moving to 569 bps over the same period.

Spread movements widely reflected the risk off tone and growing concerns over a slowing economy. Despite spread expansion, default rates for par weighted U.S. high yield and bank loans ended Q2 at 0.76% and 0.74%—far below the longer-term historical averages of 3.2% and 3.1%.

Commodities
Commodities were the best performing asset class over the fiscal year, with the Bloomberg Commodity Index returning 24.3%. Commodities moved higher in Q3 2021, driven by supply chain imbalances and rising signs of inflation. These gains tailed off towards the end of 2021, as signals of tighter monetary policy crimped global economic growth expectations.

The real story emerged in the first quarter of 2022, specifically following Russia's invasion of Ukraine. Both Russia and Ukraine being large suppliers of energy and grain commodities spiked prices, propelling inflation higher. Natural gas and WTI Crude Oil prices shot up +58.4% and 38.3%, while Wheat and Corn bounced 29.6% and 26.3%, respectively. Despite the sharp tick up in prices, commodities have begun to normalize, as recession fears have cut demand forecasts, shipping costs have moved down, and supply chain pressures have started to ease.

Currency
A strong dollar remained the biggest currency story in 2022, as the dollar continued its 2021 trend. The Bloomberg Dollar Spot Index returned +7.4% over the year-to-date, driven by higher relative interest rates, a relatively strong economic outlook, and safe-haven currency status. The dollar performed well against major pairs, as currency impacts were significant within the international developed equities space.

Outlook
A key question going forward is whether global central banks will be able to bring inflation under control without dragging their respective economies into recession. This task is perhaps more difficult than past inflationary regimes, given the war in Ukraine, lockdowns in China, and acute pandemic-related supply shortages which have led to high prices that perhaps cannot be brought down via traditional central bank policy. Within the U.S, the possibility of a "soft landing" for the economy seems to be off the table, as the economy appears to be in recession, or at least very close to one. Uncertainty remains high, although the recent drawdown of most major asset classes has reversed the "low return environment" dynamic that has been common for nearly a decade. Many asset classes now appear to offer robust yields and prospective returns relative to past years—perhaps a silver lining in an environment which has proved challenging for investors with diversified portfolios.

Portfolio Review

The Board maintained its existing strategic asset allocation in fiscal year 2022 as well as its portfolio structure and manager line up. In the coming fiscal year, OPERS is due to conduct its triennial asset/liability study which may result in modest changes to the Plan.

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Performance Review

At quarterly intervals, the System reviews performance at the total fund, asset class and individual manager levels. At each level, returns are evaluated versus appropriate indexes and peers. Index comparisons have as return objectives various after-fee return premiums with risk (standard deviation) not exceeding 125%-150% of the underlying index. OPERS targets returns within the top fortieth percentile of peer comparisons over longer time periods.

Investment returns achieved through June 30, 2022, have been calculated using a time-weighted rate of return methodology based upon market values. As shown in the following table, for the 1-year time period ended June 30, 2022, the U.S. Equity asset class outperformed its benchmark on a relative basis and outperformed the blended index for the 3 and 5-year annualized periods. For all periods, asset class performance was above median compared to the US equity peer group. The majority of OPERS' active and enhanced index U.S equity managers beat their benchmarks on a relative basis for the fiscal year. The Non-U.S. Equity asset class underperformed the benchmark for fiscal year which negatively impacted 3- and 5-year annualized returns as well. Longer-term annualized time period returns were in line with the benchmark. Non-U.S. Equity ranked as slightly below median versus the peer group for most time periods, which is partially driven by a sizeable passive allocation that is extremely cost effective but tends to lag active international equity returns. The Fixed Income asset class performed below the benchmark for the fiscal year but above the benchmark for all annualized time periods measured as of June 30, 2022. During the fiscal year, bonds lost value as yields rose significantly off of historic lows. The Fixed Income composite was in the bottom quartile of the peer group over the fiscal year and slightly above or below median over annualized periods. OPERS' fixed income structure is more conservative compared to many large plan peers and has dedicated long duration exposure which is atypical and negatively impacted fiscal year returns.

The total OPERS Plan performed slightly above its Policy Benchmark on a relative basis for the 1-year period and at or above the benchmark for annualized time periods ended June 30, 2022. The total OPERS Plan ranked in the bottom quartile of the peer universe of Public Funds greater than $1 Billion for all periods, driven by its asset allocation which is heavier in public markets equity than many peers and lacks exposure to private markets which outperformed public markets asset classes substantially over the fiscal year. Private markets are subject to lagged pricing; thus, peer comparisons may change as pricing is updated through June 30, 2022.

PERIODS ENDED 6/30/22	ONE YEAR	THREE YEARS	FIVE YEARS
Domestic Equity	-13.1%	9.9%	10.4%
85% Russell 1000 / 15% Russell 2000	-14.9%	9.3%	10.2%
Rank*	49	14	30
Non-U.S. Equity	-20.8%	1.6%	2.8%
MSCI ACWI ex-U.S.	-19.0%	1.8%	3.0%
Rank*	57	59	35
Fixed Income	-11.0%	-0.1%	1.6%
78% BC Agg./11% Citi 20+ Year Tsy./11% BC U.S. TIPS	-10.7%	-0.7%	1.1%
Rank*	78	57	36

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PERIODS ENDED 6/30/22	ONE YEAR	THREE YEARS	FIVE YEARS
Total Fund	-14.5%	4.6%	5.7%
*Policy Benchmark***	-14.6%	4.4%	5.6%
Public Fund > $1 Billion Median*	-7.4%	6.5%	6.9%
Rank*	97	87	87

* Ranking 1 is best, 100 is worst. Rankings source is Investment Metrics (formerly called InvestorForce).
** Policy Benchmark is:
40% Custom Domestic Equity Benchmark (85% Russell 1000/ 15% Russell 2000)/
32% Custom Fixed Income Benchmark (78% BB U.S. Aggregate/ 11% Citi 20-Year+ Treasury/ 11% BC U.S. TIPS)/28% MSCI ACWI ex-U.S. Index

Verus continues to believe that OPERS is managed in a prudent and cost-effective manner. Despite a very challenging fiscal year, we believe that the sound and disciplined policies that have been implemented by OPERS for decades will continue to enable to Plan to meet its investment objectives over the long term.

Yours truly,

Margaret S. Jadallah
Managing Director

Verus

Chief Investment Officer's Report

Oklahoma Public Employees Retirement System
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Oklahoma City, Oklahoma 73152-3007

800.733.9008 toll-free
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Dear Members:

The Fund's total return for the fiscal year reflected the tumult experienced in the global capital markets, especially in the final two quarters of the fiscal year. The Fund experienced a loss of 14.55% (gross of fees) for fiscal year 2022, compared to a gain of 27.99% for the prior fiscal year. This result was well below the 6.5% long-term actuarial return target. As disappointing as the result was, it did manage to modestly outperform the Policy portfolio return of -14.57% for the period. The recent bull market run of the stock market in the U.S. ended abruptly. The capital markets declined dramatically in the last half of the fiscal year as investor sentiment turned decidedly negative on geopolitical events, intensifying inflationary pressure, and concerns about economic growth. U.S. bond market returns reflected an increasingly hawkish Federal Reserve stance and corresponding actions, as it attempted to orchestrate a "soft landing" for the economy in an effort to tame spiking inflation. Stock market returns outside the U.S. likewise reflected the concerns that negatively impacted U.S. markets. There was simply nowhere to hide in the public capital markets as performance for the fiscal year posted decidedly negative returns for risk-seeking and more risk-averse investors alike.

We endeavor to build a durable portfolio that will weather tumultuous market conditions. Maintaining diversification among asset classes and geographical regions is a critical component of that effort. We also de-emphasize active management in the portfolio, as demonstrated by our large holdings of passive index funds. This year's letter, which covers the 2022 fiscal year, will follow the same format as in years past. First, I will discuss the general economic environment and the performance of various markets throughout the fiscal year. Next, I will focus on the Fund by reviewing the investment performance and the asset allocation. Then, I will offer an investment outlook and discuss recent events at the Fund. Finally, I will review the Fund's investment philosophy and guiding principles because both are critically important to the investment decision-making process.

Economic Environment

Gross Domestic Product (GDP), the primary gauge for economic activity in the U.S., decreased by 0.6% on an annualized basis during the second quarter of 2022 (per the second revision as of the date of this report). This reduction on overall economic activity followed the first quarter 2022 reduction of 1.6% on an annualized basis. These results showed a slowdown in retail and government spending and contrasted sharply with the prior fiscal year's economic activity, which featured a strong rebound in consumer spending as the economy emerged from the pandemic-related malaise. The National Bureau of Economic Research, which is the organization responsible for dating the business cycle, has yet to officially declare the U.S. had experienced a recession as of the writing of this report. While two quarters of consecutive contraction in the economy has been a key component of the official declaration in the past, parts of the economy continue to exhibit strength. Economists have pointed to solid consumer and business spending, rising incomes, and low unemployment as factors that may indicate the economy may not meet the threshold needed to declare an official recession. The labor market remained robust, as the unemployment rate dropped to 3.6% for June 2022, very near levels last seen before the pandemic. However, pandemic-related supply chain issues have continued and were exacerbated by geopolitical events during the fiscal year. Inflationary pressures intensified on everything from food to energy, which negatively impacted consumer sentiment and the general outlook for the economy. The Federal Reserve's rhetoric and actions became increasingly more hawkish towards fighting inflation over the last half of the fiscal year. The Federal Reserve raised rates in May and more aggressively raised rates in June in an attempt to slow inflationary pressures without

Chief Investment Officer's Report (continued)

plunging the economy into recession. The debate on whether the Federal Reserve can orchestrate a "soft landing" for the economy while still taming inflation continues to this day. Given the generally pessimistic economic data and geopolitical concerns regarding the Russian invasion of the Ukraine in February, the U.S. dollar strengthened relative to the basket of non-U.S. developed market currencies. Note that a stronger dollar makes U.S. exports more expensive to other countries and negatively impacts U.S. dollar-based investor returns in foreign markets.

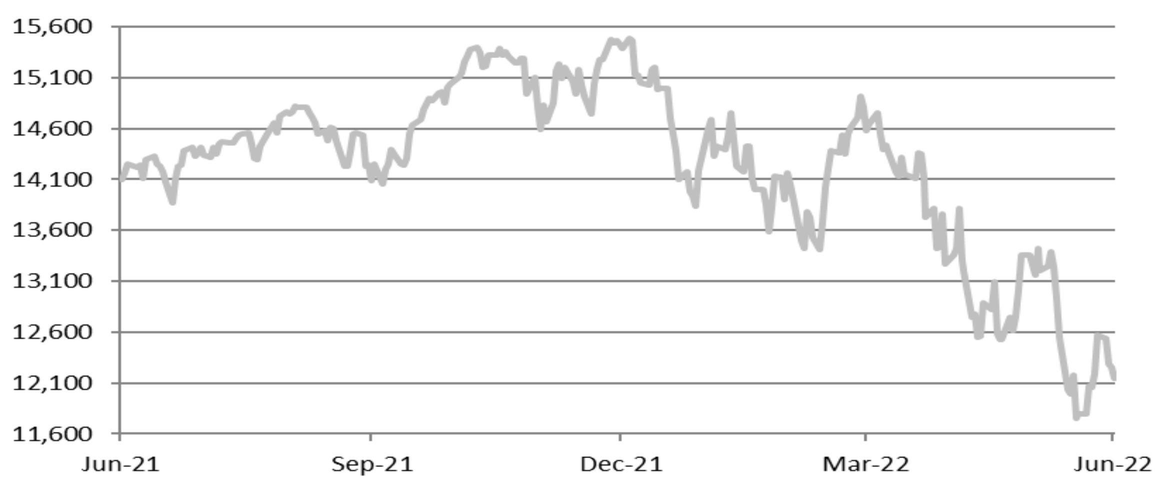
The negative headwinds facing the U.S. economy were not limited by geographic boundaries during the fiscal year. The International Monetary Fund (IMF) downgraded the prospects for global economic growth, but particularly in the world's largest economies. The IMF expects global economic activity to grow by 3.2% this year; a sharp decline from previous estimates due to supply shocks from the war in the Ukraine, surging inflationary pressures, and tighter monetary policy around the world. In the Eurozone, Germany reported a rare trade deficit indicating high energy prices were squeezing manufacturers. In the U.K., inflation rose to a 40-year high on high energy prices that pressured consumers. In the first half of this year, the Chinese economy grew by 2.5%, well below the 5.5% target set by the government, as it experienced months of limited economic activity due to COVID-related lockdowns, a regulatory crackdown on business (especially the tech sector), and pressures in the real estate market.

U.S. and Global Stock Markets

The U.S. stock market, as measured by the Russell 3000 Index, exhibited pronounced volatility during the fiscal year—especially in the second half. The Russell 3000 Index is one of the broadest domestic equity indices available and a good proxy for the U.S. equity market as a whole. The performance of the U.S. equity markets reflected investor concerns regarding geopolitical risk, rising inflation, and rising recessionary forecasts in the U.S.

Change in the Russell 3000 Index during the fiscal year ended June 30, 2022

Value at 6/30/21 14,098.8
Value at 6/30/22 12,143.9



Source: FTSE Russell

The Russell 3000 ended the one-year period through June 30, 2022, down 13.9%, as a result of a remarkable sell-off that intensified with Russia's invasion of the Ukraine in February of 2022. These geopolitical concerns exacerbated investor fears of an economic slowdown, and the greater possibility of a recession in the U.S. Within the Russell 1000 index (used to represent domestic large capitalization stocks), the sectors that generally had been "left behind" by the prior year's rally were the only sectors to post positive returns for the period. The energy sector surged nearly 40% for the one-year period ending June 30, 2022, while the consumer staples and healthcare sectors posted returns of 5.3% and 0.4%, respectively.

Chief Investment Officer's Report (continued)

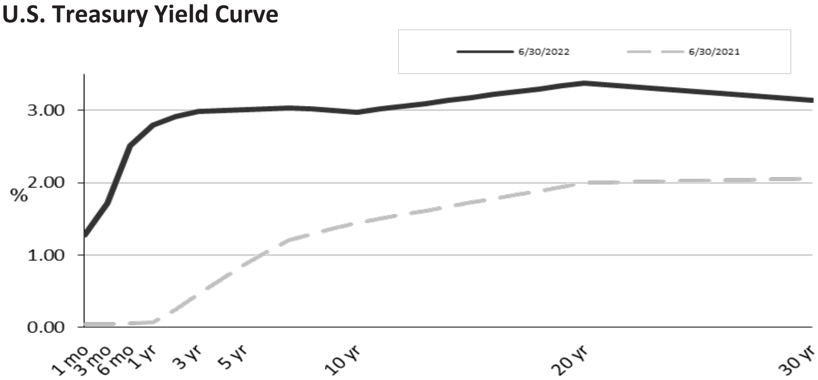
Investors gravitated towards the relative safety of large capitalization stocks during the period, as the small capitalization index, as represented by the Russell 2000 index, lost over 25% for the one-year period ending June 30. Equity style (i.e., market capitalization size, growth, value) leadership favored large capitalization and value-oriented stocks during the fiscal year. The value index handily outperformed the growth index in both large capitalization and small capitalization space. However, assuming equity risk in the markets, except that associated with the energy and healthcare sectors, proved detrimental for diversified portfolio returns for the period.

The rest of the developed world continued to underperform the U.S. equity market on a U.S. dollar basis. The MSCI All Country World Index ex-U.S. (ACWI ex-U.S. Index net), which includes public equities from both developed and emerging markets, lost over 19% in U.S. dollar terms for the fiscal year. The U.S. dollar strengthened considerably relative to many other foreign currencies, which compounded losses experienced by U.S. dollar investors in foreign markets. Returns to the ACWI x-U.S. index outperformed the Russell 3000 index in local currency terms, but dramatically underperformed the U.S. market when translated into U.S. dollars. Emerging market returns in U.S. dollar terms performed worse than non-U.S. developed markets, having lost over 25% for the period. Emerging market local returns underperformed non-U.S. developed markets, but the negative impact of a strong U.S. dollar was less pronounced on the Emerging Markets index. The stock market in China lost almost 32% in U.S. dollar terms, as investors lost confidence due to pandemic-related lockdowns, regulatory tightening on technology companies, and a worsening real estate crisis. The theme for the rest of the world certainly followed that of the U.S. markets, which was that the greater the equity risk assumed by investors, the greater the loss incurred for the period.

Interest Rates

The chart below depicts the U.S. Treasury term structure of interest rates. The yield curve is a graphical representation of yield levels across the spectrum of bond maturities. As shown, yields rose markedly across the entire curve over the course of the fiscal year. The Federal Funds Rate began the fiscal year at a range of 0%-0.25%, where it had been since March of 2020. Prices paid by consumers continued to skyrocket during the fiscal year, as Core CPI, the preferred measure of inflation by the Federal Reserve, accelerated to an annual rate of 5.9% in June. The overall inflation rate, which includes food and energy prices paid by consumers, increased to 9.1% over the year ending June 30, 2022. These levels of inflation reached levels not seen in over 40 years and were driven primarily by rising food and gas prices. The Federal Reserve responded to these rising inflationary pressures with increasingly aggressive monetary policy moves. The Federal Reserve raised rates by 25 basis points in March, 50 basis points in May, and 75 basis points in June. The three-quarters of a percentage point increase by the Federal Reserve in June was the most aggressive since 1994. The Federal Open Market Committee stated it was "strongly committed to returning inflation to its 2% objective" while the economy faced pandemic-related supply and demand imbalances, rising food and energy prices, and broader price pressures. The Federal Funds Rate ended the fiscal year at a range of 1.50%-1.75%. The Federal Reserve is attempting to orchestrate a balancing act with its aggressive moves: containing spiraling inflationary pressures at the risk of curtailing economic activity broadly and deeply. In the Eurozone, the European Central Bank (ECB) signaled that rate hikes were imminent as "inflation is undesirably high and is expected to remain above our target for some time" according to ECB President Christine Lagarde.

U.S. Treasury Yield Curve



Source: U.S. Treasury

Chief Investment Officer's Report (continued)

Investment Returns Through June 30, 2022

U.S. Equity	Style	1 Year	3 Years	5 Years
Russell 3000	Broad U.S. Equity	-13.87%	9.77%	10.60%
S&P 500	Large Cap Equity	-10.62%	10.60%	11.31%
Russell 1000	Large Cap Equity	-13.04%	10.17%	11.00%
Russell 1000 Growth	Large Cap Growth	-18.77%	12.58%	14.29%
Russell 1000 Value	Large Cap Value	-6.82%	6.87%	7.17%
Russell 2000	Small Cap Equity	-25.20%	4.21%	5.17%
Russell 2000 Growth	Small Cap Growth	-33.43%	1.40%	4.80%
Russell 2000 Value	Small Cap Value	-16.28%	6.18%	4.89%
Oklahoma Public Employees Retirement System	**Broad U.S. Equity**	**-13.09%**	**9.89%**	**10.44%**

U.S. Fixed Income	Style	1 Year	3 Years	5 Years
ML 3-Month T-Bill	Cash	0.18%	0.57%	1.05%
Bloomberg Barclays U.S. Aggregate	Core Bonds	-10.29%	-0.93%	0.88%
Citigroup 20-year Treasury Average	Long Term Bonds	-18.61%	-2.88%	0.57%
Bloomberg Barclays Corporate High Yield	High Yield Bonds	-12.81%	0.21%	2.10%
Oklahoma Public Employees Retirement System	**Domestic Fixed Income**	**-10.96%**	**-0.13%**	**1.60%**

International Equity	Style	1 Year	3 Years	5 Years
MSCI ACWI Ex-US (net)	Broad Non-US Equity	-19.42%	1.35%	2.50%
MSCI EAFE (net)	Developed Non-US Equity	-17.77%	1.07%	2.20%
MSCI Emerging Market (net)	Emerging Non-US Equity	-25.28%	0.57%	2.18%
Oklahoma Public Employees Retirement System	**Non-U.S. Equity**	**-20.77%**	**1.63%**	**2.82%**

Oklahoma Public Employees Retirement System	**Total Fund**	**-14.55%**	**4.63%**	**5.67%**

Source: Various index providers, including FTSE Russell, S&P, Bloomberg Barclays, FTSE, and MSCI. OPERS returns were calculated using the BAI Iterative method (as such returns are time-weighted) and are gross of investment fees. International Equity Indices shown are net.

Investment Performance

Investor sentiment changed; brutal market ensued

Given the fear that overwhelmed the capital markets in the last half of the fiscal year, the Fund produced a nominal total return loss of 14.55% for the period gross of fees (-14.68% net of fees). The Fund managed to modestly outperform the policy benchmark portfolio by two basis points (gross of fees) for the period. As shown by the table above, all asset classes in which OPERS invests recorded negative total returns for the fiscal year. The humbling overall results were led downward by the allocation to the international equity asset class. This asset class suffered from broad-based negative local market returns (returns to markets outside of the U.S.) which were then exacerbated by the strong dollar, when translating those returns into U.S. dollar terms. The U.S. equity markets also contributed negatively to overall results, given the sell-off in the U.S. equity markets experienced in the last half of the fiscal year. Lastly, the bond portfolio negatively contributed to the total return of the Fund, due to rising interest rates and the widening of non-government bond spreads over the period.

The Fund performed largely in-line with the Policy portfolio for the fiscal year, having outperformed the Policy by two basis points. The Fund's overweight positioning to U.S. and non-U.S. equities detracted from Policy-relative performance. However, the Fund's active management in the U.S. equity class proved highly beneficial and was able to compensate for

Chief Investment Officer's Report (continued)

the adverse portfolio positioning going into the fiscal year and unfavorable results from active management in other asset classes.

U.S. Equity

The Fund continues to use a mix of passive and active investment management within the domestic equity portfolio structure, with a high proportion of U.S. equity assets managed in a passive style. Equity markets in the U.S. sold off as investor concerns about inflation, recession, and geopolitical risk turned into outright fear. In aggregate, the domestic equity portfolio produced a total return loss of over 13% for the fiscal year. In a year that desperately needed it, active management exposure proved its worth, in both the large capitalization and small capitalization mandates. The managers that emphasized value-oriented factor exposures in the domestic equity portfolio all outperformed their respective indices. Only one U.S. equity manager underperformed its benchmark for the year, and that manager was associated with large capitalization growth exposure. For the fiscal year, the Fund benefited from active exposures associated with the quantitative managers, whose value exposure had been a drag on performance for some time. The Fund's two quantitatively oriented managers both produced returns more than 2.5% versus the Russell 1000 index. The benchmark-relative performance of the small cap managers was striking. All three small capitalization managers outperformed their respective indices. As a group, the small capitalization portion of the portfolio delivered a loss of 17.4% for the fiscal year, which does not sound great, until compared to the Russell 2000 index loss of over 25% for the fiscal year. The active contribution from the Fund's managers, especially stock-picking in small capitalization space, contributed positively to results relative to the Policy benchmark, in what was otherwise a woeful year for nominal returns.

Fixed Income

The Fund's bond portfolio contributed negatively to overall total returns for the period, having lost 10.96% at the asset class level. As mentioned above, the total return of the asset class was negatively impacted by quickly rising interest rates across the yield curve. Compounding these market value losses due to interest rate movements was the general widening of spreads in non-government sectors, which put pressure on active manager returns. From a contribution to total return perspective, the worst performance was associated with the manager who emphasizes long-duration U.S. Treasury securities. This manager lost more than 20% for the period as long-term rates rose 1.4-1.5 percentage points across the longer end of the maturity spectrum (15 years and above). The managers who emphasize the broader areas of the bond market also delivered unfavorable results, due to the general rise in interest rates and the emphasis on non-government sectors (including high yield bond holdings for the core plus manager) that were adversely impacted from widening spreads over the second half of the year. Bonds are maintained in the portfolio for their volatility-dampening effect when combined with exposure to the equity markets. The total return of the bond market in general was surprisingly poor and compounded by the risk aversion that exemplified the capital markets in general in the last half of the fiscal year. Unlike the results in the U.S. equity markets, active management (bond picking and duration positioning) produced unfavorable results for the Fund, causing this portion of the portfolio to underperform the Policy benchmark for the period.

Non-U.S. Equity

The non-U.S. equity segment was the worst performing asset class on a nominal basis, having lost almost 21% in U.S. dollar terms for the period. The U.S. dollar strengthened relative to many other foreign currencies, which exacerbated losses experienced by U.S. dollar investors in foreign markets. Much like the U.S. equity portfolio, a high proportion of these Fund assets are managed in a passive style. Within the non-U.S. equity segment of the asset allocation, two active managers are used. One of the active managers emphasizes the value area of the international equity market, and the other manager emphasizes the growth area. Unlike the experience in the U.S. equity markets, however, stock picking by both non-U.S. managers detracted from benchmark-relative returns. The manager focusing on the international value area of the equity markets underperformed its benchmark; the benchmark itself was down over 12.1% in U.S. dollar terms for the period. The advisor who emphasizes the growth style more dramatically underperformed its benchmark, as the stocks that fueled the rally in fiscal year 2021 fell back to Earth. With both active managers having underperformed their respective indices due to adverse stock picking results, and particularly poor active results associated with the growth style of investing, this portion of the portfolio underperformed the Policy benchmark for the fiscal year.

Chief Investment Officer's Report (continued)

Asset Allocation

Diversification Reduces Volatility

Diversification is the most effective defense against the risks associated with any one individual security or asset class. Risks are controlled by allocating the Fund's assets across various asset classes and sectors within asset classes. There were no changes to the Policy asset allocation during the fiscal year.

Asset Class	Min	6/30/2022	Target	Max
Cash and Real Estate	0.0%	0.4%	0.0%	0.0%
Domestic Fixed Income	27.5%	32.1%	32.0%	36.5%
U.S. Equity	34.4%	40.4%	40.0%	45.6%
Non-U.S. Equity	25.0%	27.2%	28.0%	31.0%
Total Fund		**100%**	**100%**	

May not equal 100% due to rounding

Outlook and Recent Events

Outlook

If you've read this report in previous years, you know that I begin this section on a cautionary note regarding the accuracy of forecasted market returns. Correctly and consistently forecasting the market's behavior is impossible and taking any forecast as fact is sheer folly. We build the Fund according to the tenets set forth in our Investment Policy while making diversification a priority with respect to different asset classes and within each asset class. We endeavor to structure the Fund so it may benefit from strong returns in relatively riskier asset classes but are ever mindful to maintain a level of diversification to dampen the return volatility that can result during more volatile periods.

The outlook for the global economic environment turned decidedly sour during the fiscal year, on continued supply chain pressures due to the global pandemic, surging inflation rates (especially energy prices), and geopolitical risks. World-wide economic activity has experienced downward revisions and high inflation has prompted Central Banks in the U.S. and Europe to raise rates in an attempt to tame those pressures. The U.S. has experienced two consecutive quarters of economic contraction as of the writing of this report. While consumer sentiment is low, the employment picture is much more conducive to a healthier economy. The inflationary pressures felt by consumers is significant in the U.S., as energy and food prices continue to climb. Those pressures are magnified in Europe, as energy prices are heavily impacted by the geopolitical risks associated with the invasion of the Ukraine by Russia. The durability of consumers is being tested across the globe. The balancing act that Central Banks around the world face is taking action that will be aggressive enough to curtail inflationary pressures, but not aggressive enough to induce recessions in their respective economies. Last year, I said the timing of the withdrawal of highly successful monetary global programs was the key to the outlook going forward. The timing of the withdrawal of the Federal Reserve's support, and indeed, the more aggressive implementation of restrictive policy measures took the market by surprise. This year, I believe the ability of Central Banks across the world to exhibit meaningful progress towards taming inflation is the key driver of the short-term economic outlook.

My largest concern continues to be the prospect of generating and maintaining long-term investment results that match or exceed the actuarial assumed rate of return of 6.5%. Interest rates have risen dramatically as the Federal Reserve attempts to control inflation, but rates remain relatively low on a historical basis. Returns to a diversified portfolio are ultimately a function of the performance of the markets in which that portfolio is invested. The global equity markets have been roiled and the overall performance of the Fund reflects that fact. Negative total return results for the portfolio from equity exposures have been compounded by a quickly rising interest rate environment, which negatively impacted bond market returns. Rising rates will eventually prove beneficial to the fund, but there will likely be more pain from the riskier and even the less risky asset classes in the short term.

Chief Investment Officer's Report (continued)

Fixed Income

Over a long period of time, the total return of the bond market ***tends*** to resemble the yield of years past. Over short periods, interest rate movements may have a profound impact on the capital gains (or losses) experienced by bond investors. Given the dramatic increase in U.S. Treasury yields (sell-off of bonds) during the fiscal year, the total return of the bond market was negative. Despite this increase in the general level of interest rates, yields in the market continue to be relatively low and unlikely to contribute to portfolio returns at a level that would have a positive impact on the Fund in the short-term. In addition, the Federal Reserve has been increasingly aggressive in raising rates and will continue to do so until a more acceptable level of inflation is attained. The capital losses incurred from a quickly rising rate environment overpowered the yield earned on fixed income investments during the year, leading to negative total returns for the asset class. This dynamic is likely to continue over the course of the next fiscal year, and the expectation for fixed income total returns may well be below the level of current yields, like what we experienced in fiscal 2022. Bonds are a necessary part of a diversified portfolio, but are unlikely to contribute as significantly to the total return of the Fund as the asset class has in the past until rates rise even further from current levels.

Equity

Equity markets are impossible to predict with any type of precision. Over short periods of time, market sentiment and technical factors (buying and selling) have an overwhelming impact on returns experienced by investors. ***Over a long period of time***, the real return from the equity markets can be attributable to three main sources: dividends on stocks, the growth rate of corporate earnings, and changes in the valuation ratios. Generally, the growth rate of earnings depends on the economic environment. The outlook for the global economy has dimmed considerably, given the high inflationary pressures facing the world. Until recently, corporate earnings have been surprisingly strong but inflationary forces will likely continue to pressure corporate earnings. Market volatility continues to remain high and is likely to stay elevated over the foreseeable future as investors struggle with uncertainty caused by geopolitical risks (and the impacts on specific economic sectors), rising inflation rates (and the Central Banks' responses), and continued pandemic-related supply chain issues. Pessimism regarding these economic concerns guided the markets down for this fiscal year from the all-time highs. While the mere suggestion of a market recovery may seem improbable at times like this, it is important to remember the history of equity market returns is one that has survived numerous shocks. This means that maintaining discipline with respect to the Fund's strategic equity exposure is essential for recovering from the losses incurred this fiscal year.

Recent Events

There were no changes to the Fund's strategic asset location or managers that comprise the Fund during the fiscal year. It is in years like the one we just experienced, where there were no places to hide (i.e., no "safe" asset classes), that demonstrates the discipline of maintaining the strategic asset allocation is of great importance in achieving the Fund's long-term objectives. As I've mentioned before, we built the portfolio to be able to withstand periods of volatility and tumult, in order to live to fight another day. That's about the best I can say for the Fund's performance in a difficult and ultimately disappointing year.

Investment Philosophy and Guiding Principles

The investment philosophy and the principles that guide the stewardship of the Fund have remained consistent and are listed below. A pension fund has the longest of investment horizons and, therefore, rightly focuses on factors impacting long-term results:

- Asset allocation is the key factor determining long-term results.
- Disciplined rebalancing toward the desired asset allocation maintains diversification and controls risk.
- Diversification within and across asset classes is the most effective tool for controlling risk.
- Passive investment management is commonly the most effective approach in efficient markets; active investment management can succeed in less efficient markets.

Chief Investment Officer's Report (continued)

For a complete discussion of the investment portfolio and policies thereof, please see the Statement of Investment Policy. A copy of the policy is posted on the OPERS website, www.OPERS.OK.gov/Investments. If you have any questions about this report or the management of the Fund's investments, please contact me. Thank you.

Regards,

Brad Tillberg, CFA
Chief Investment Officer

Largest Holdings

The Plan's ten largest fixed income and stock holdings at June 30, 2022, are described in the following schedules. The Plan invests in various index and commingled funds which are separately presented.

Ten Largest Fixed Income Holdings (By Fair Value):

Security	Par		Fair Value
U.S. Treasury notes 2.875% due 06-15-2025	118,395,000	$	117,923,269
FNMA Single Family Mortgage 0% 30 Years Settles July	96,024,100		88,511,924
U.S. Treasury bonds 2.5% due 05-15-2046 REG	80,560,000		68,280,893
U.S. Treasury notes 3.25% 06-30-2027	66,420,000		67,068,632
U.S. Treasury bonds 2% 11-15-2041	83,822,000		66,573,004
FNMA Single Family Mortgag 0% 30 Years Settles August	70,663,129		64,811,124
U.S. Treasury bonds 2.5% due 02-15-2046 REG	72,410,000		61,398,589
U.S. Treasury bonds 1.375% 08-15-2050	89,690,000		59,037,742
U.S. Treasury notes 1.125% 01-15-2025	58,446,000		55,738,307
U.S. Treasury bonds 2.25% due 08-15-2046	58,600,000		47,250,828

Ten Largest Stock Holdings (By Fair Value):

Security	Shares		Fair Value
Apple Inc.Common Stock	771,918	$	105,536,629
Microsoft Corporation Common Stock	358,292		92,020,134
Alphabet Inc. Common Stock	24,746		53,927,968
Amazon.com, Inc. Common Stock	395,860		42,044,291
Tesla Inc Com	42,088		28,342,901
United Health Group Inc Com	51,103		26,248,034
Alphabet Inc. Cap STK	11,894		26,017,530
Meta Platforms Inc	155,169		25,021,001
Visa Inc. Common Stock	125,230		24,656,535
Taiwan Semiconductor Manufacturing Common Stock	295,706		24,173,966

Investments in Funds (By Fair Value):

Fund	Units		Fair Value
BlackRock Russell 1000 Index Fund	5,550,138	$	1,691,106,191
BlackRock ACWI ex-U.S. Index Fund	54,978,272		1,622,064,259
BlackRock U.S. TIPS Index Fund	15,919,931		404,365,667
BlackRock Russell 1000 Value Index Fund	1,859,520		318,243,752
BlackRock ACWI ex-U.S. Growth Index Fund	16,346,801		308,592,676

A complete list of portfolio holdings is available upon request from the OPERS Investment Accounting and Financial Reporting Department.

Investment Portfolio by Type and Manager

At June 30, 2022, the investment portfolio of OPERS was allocated by type and style as follows:

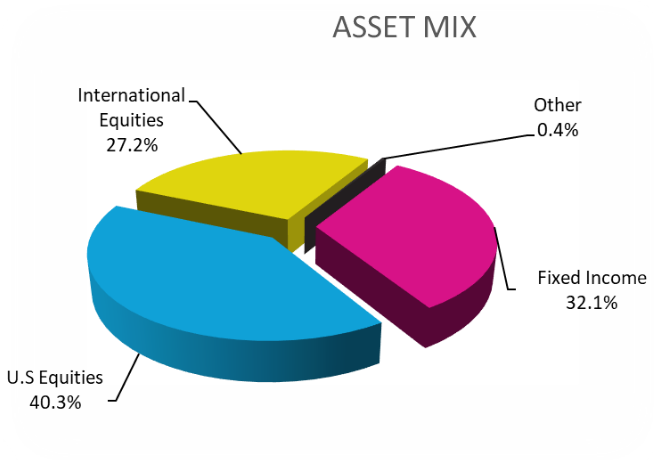
Investment Type and Manager	Style		Fair Value*	Percent of Total Fair Value
			(000's)	
Fixed Income:				
Blackrock Financial Management, Inc.	Constrained Core	$	1,724,094	16.2%
Hoisington Investment Management	Interest Rate Anticipation		304,430	2.9%
BlackRock Institutional Trust Company	Index Fund – U.S. TIPS		404,371	3.8%
Metropolitan West Asset Management	Core Plus		1,198,041	11.2%
Total Fixed Income			3,630,936	34.1%
U.S. Equities:				
BlackRock Institutional Trust Company	Index Fund – Russell 1000 and Value		2,009,350	18.7%
Newton Capital Management	Large cap – Enhanced Index		629,615	5.9%
State Street Global Advisors	Large cap – Enhanced Index		627,173	5.9%
Westfield Capital Management	Large cap – Growth		306,266	2.9%
UBS Global Asset Management	Small cap – Growth		171,989	1.6%
Barrow, Hanley, Mewhinney & Strauss, Inc.	Small cap – Value		212,310	2.0%
DePrince, Race & Zollo, Inc.	Small cap – Value		228,153	2.1%
Total U.S. Equities			4,184,856	39.1%
International Equities:				
Baillie Gifford Overseas Ltd.	International Growth		263,617	2.5%
Mondrian Investment Partners, Ltd.	International Value		621,687	5.8%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S. Growth		308,594	2.9%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S.		1,622,067	15.2%
Total International Equities			2,815,965	26.4%
Short-term Investment Funds	Operating Cash		34,973	0.3%
Total Managed Investments			10,666,730	99.9%
Real Estate			8,650	
Securities Lending Collateral			481,838	
Cash Equivalents on Deposit with State			5,730	
Total Investments and Cash Equivalents		$	11,162,948	
Statement of Fiduciary Net Position				
Cash Equivalents			181,292	
Investments			10,981,656	
Total Investments and Cash Equivalents		$	11,162,948	

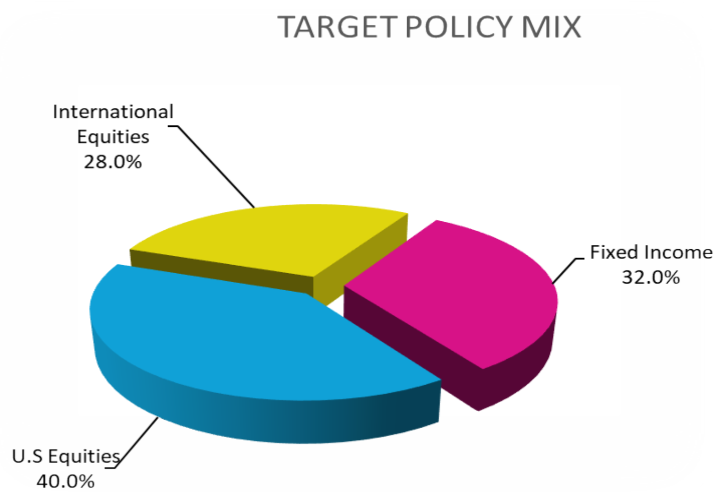
* *Manager fair values include their respective cash and cash equivalents.*

Asset Comparison

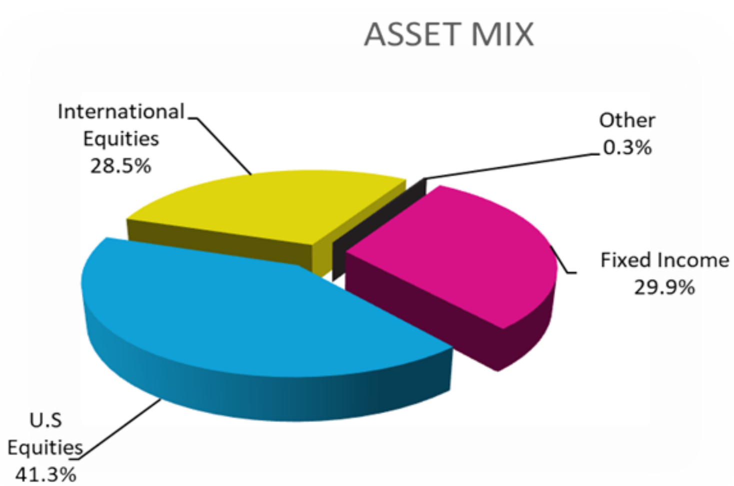
A comparison of the actual investment distribution at June 30, 2022 and 2021, based on the net investment manager holdings, including accrued income, payables and receivables, compared to the target allocation for each year is as follows:

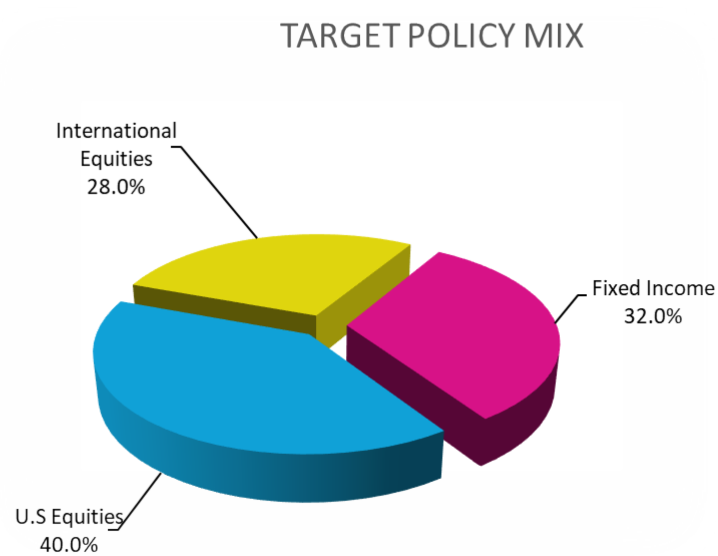
2022





2021





Schedule of Stock Brokerage Commissions Paid

Year Ended June 30, 2022

			Commission	
Brokerage Firm	**Shares Traded**	**Dollar Volume of Trades**	**Dollar Amount**	**Per Share**
Jonestrading Institutional Services	6,393,669	$ 190,561,966	$ 200,904	0.031
Goldman Sachs	8,605,388	622,610,426	114,203	0.013
Stifel, Nicolaus & Company	2,814,890	78,603,017	103,828	0.037
Instinet	4,317,578	141,144,092	94,895	0.022
Morgan Stanley	7,708,598	576,886,495	84,025	0.011
Jefferies	21,775,669	94,354,083	79,008	0.004
Keybanc Capital Markets	1,920,094	65,047,134	75,810	0.039
Bofa	5,853,178	425,208,111	68,601	0.012
Robert W. Baird	1,776,992	57,725,298	64,061	0.036
Credit Suisse	4,551,312	296,640,897	37,965	0.008
J.P. Morgan	4,416,309	169,350,130	34,184	0.008
Raymond James & Associates	810,121	29,287,422	31,560	0.039
Piper Jaffray	905,638	22,192,906	30,911	0.034
Stephens	731,874	28,759,374	28,045	0.038
Merrill Lynch	3,268,756	55,629,843	27,027	0.008
CJS	609,797	13,834,565	21,343	0.035
Oneil	577,398	24,494,785	20,524	0.036
RBC Capital Market	480,850	23,198,282	18,979	0.039
Liquidnet	967,680	51,198,594	18,531	0.019
Loop Capital Markets	1,244,217	88,587,181	17,913	0.014
Other	31,485,594	790,072,093	251,486	0.008
Total	111,215,602	$ 3,845,386,693	$ 1,423,800	0.013