INVESTMENT

QUALITY IN SERVICE DELIVERY

We approach our work with consistency, efficiency, and sustainability to provide the highest quality service possible to our members. We embrace opportunities to change and improve ourselves and our services by being agile and adaptable.

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 7.00% while its investment consultant estimates the return requirement to be 6.35% for the fiscal year ended June 30, 2018. 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	6/30/18 ALLOCATION	LOW	TARGET	HIGH	% PASSIVE OR SEMI-PASSIVE
U.S. EQUITY	42.0%	34.4%	40.0%	45.6%	68.3%
FIXED INCOME	29.8%	27.5%	32.0%	36.5%	59.4%
INT'L EQUITY	27.8%	25.0%	28.0%	31.0%	64.9%
REAL ESTATE	0.1%	0.0%	0.0%	0.2%	0.0%
CASH	0.2%	0.0%	0.0%	0.0%	0.0%

Review of Fiscal Year 2018 Investment Environment

Important events during fiscal year 2018 included significant U.S. corporate tax reform, the beginnings of an unwind of quantitative easing, and the potential for meaningful changes to U.S. trade policy. Gains in equities were impacted by historically strong earnings growth, driven by both net margin expansion due to corporate tax cuts and top-line revenue growth. U.S. equities posted strong returns over the 12-month period ending in June even after experiencing a 10% drawdown and corresponding spike in volatility in February. International equities underperformed domestic equities, particularly after the sell-off in February. Compared to the second half of 2017, a stronger U.S. dollar, more moderate economic and earnings growth, and uncertainty surrounding U.S. trade policy weighed on both international developed and emerging market equities in the first half of 2018. The European Central Bank signaled it will cut asset purchases to zero by year-end, but also communicated it plans on keeping interest rates unchanged until the latter half of 2019. Short-term Treasury yields rose steadily over the fiscal year and outpaced increases in long-term yields, resulting in a flattening of the yield curve. At the end of the period, the spread between the 10- and 2-year Treasury yields was 33 basis points. The Fed tightened monetary policy further with two rate hikes in March and June of 2018 along with the balance sheet unwind continuing as planned. Fed policy makers indicated the central bank will raise interest rates two more times this year.

The S&P 500 Index returned 14.4% over the period. Equity market appreciation continued to be fueled by growth and momentum factors based mainly in large technology companies, including Apple, Amazon, and Alphabet – the S&P 500 technology sector returned 31.3% over the year. The MSCI EAFE USD and MSCI Emerging Markets USD Indexes returned 6.8% (6.6% local currency) and 8.2% (10.9% local currency), respectively. USD strength during the first half of 2018 and concerns over potential changes to U.S. trade policy weighed on non-U.S. market returns. The BBgBarc U.S. Treasury Index returned -0.6% over the fiscal year as price declines more than offset income returns. Global ex U.S. sovereign yields remained relatively low and the spread between U.S. interest rates and the rest of the developed world widened.

Portfolio Review

The Board adopted a new asset allocation in fiscal year 2017, pursuant to an asset/liability study. In fiscal year 2018, the Board maintained the strategic asset allocation that was created in the prior year.

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, 2018 have been calculated using a time-weighted rate of return methodology based upon market values. As shown in the following table, for the 1, 3 and 5-year annualized time periods ended June 30, 2018; the U.S. Equity asset class performed above the benchmark for the 1-year period, below its respective blended benchmark for the 3-year period and in line with the benchmark for the 5-year period. The Non-U.S. Equity asset class performed below the benchmark for the 1-year period and above its respective benchmark for the 3-year and 5-year annualized time periods. The Fixed Income asset class performed above the benchmark for the 1-year, 3-year, and 5-year annualized time periods ended June 30, 2018.

The Domestic Equity asset class was ranked in the second quartile for the 1-year, 3-year, and 5-year annualized time periods. The Non-U.S. Equity asset class was ranked in the third quartile of its universe for the 1, 3, and 5-year time periods. The Fixed Income asset class ranked in the second quartile of its universe for the 1-year period and in the third quartile of its peer group for the 3-year and 5-year annualized time periods ended June 30, 2018. OPERS' fixed income asset class structure is more conservative than many of its large plan peers.

The total OPERS Plan performed below its Policy Benchmark for the 3-year period and above the Policy Benchmark for the 1 and 5-year periods ending June 30, 2018. The total OPERS Plan ranked in line with its peers for 1 and 3-year time periods ended June 30, 2018 and ranked in the second quartile for the 5-year time period compared to the peer universe of Public Funds greater than $1 Billion, with percentile rankings of 51%, 50%, and 39% respectively.

PERIODS ENDED 6/30/18	ONE YEAR	THREE YEARS	FIVE YEARS
Domestic Equity	15.5%	11.3%	13.3%
85% Russell 1000 / 15% Russell 2000	15.0%	11.6%	13.3%
Rank*	33	48	35
Non-U.S. Equity	7.3%	5.7%	6.6%
MSCI ACWI ex-U.S.	7.8%	5.6%	6.5%
Rank*	53	52	61
Fixed Income	0.3%	2.2%	2.8%
78% BC Agg./11% Citi 20+ Year Tsy./11% BC U.S. TIPS	-0.1%	2.0%	2.5%
Rank*	48	64	59
Total Fund	8.4%	7.0%	8.3%
*Policy Benchmark***	8.1%	7.1%	8.2%
Public Fund > $1 Billion Median*	8.4%	7.0%	8.2%
Rank*	51	50	39

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* Ranking 1 is best, 100 is worst. Rankings source is 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

In summary, Verus believes that OPERS is managed in a prudent and cost effective manner. The sound and disciplined policies implemented by OPERS are evidenced by its competitive performance compared to relevant benchmarks and its above median total Plan peer ranking over longer time periods.

Yours truly,

Margaret Jadallah

Margaret S. Jadallah
Managing Director

Verus

Chief Investment Officer's Report

Oklahoma Public Employees Retirement System
P.O. Box 53007
Oklahoma City, Oklahoma 73152-3077

800.733.9008 toll-free
405.848.5946 fax

Dear Members:

The Fund's total return for fiscal year 2018 was comfortably ahead of the 7% long-term return target. The equity market in the U.S. again posted strong gains for the fiscal year, reaching new all-time highs during the period. Non-U.S. equity markets registered more modest returns in U.S. dollar terms for the period compared to last fiscal year. The fixed income markets lagged, but the fund managers produced an overall positive nominal return for the asset class. 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 index-related funds. This year's letter, which covers the 2018 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.

<u>Economic Environment</u>

GDP growth, the primary gauge for economic activity in the U.S., entered the tenth year of expansion since the Great Recession ended in 2009. U.S. GDP posted an annual growth rate of 4.1% in the second quarter. While this was the fastest growth rate since 2014, it was just below the consensus expectations of economists. GDP growth was up from an annual rate of 2.2% in the first quarter of 2018 (revised up from 2.0%). Spending by consumers on new cars, healthcare, housing and utilities, and food services drove economic growth. Consumer spending continued to be supported by an even tighter labor market, rising wealth from stock market gains, and favorable consumer sentiment. Business investment rose at a 7.3% annual rate, as spending on structures rose over 13% and spending on equipment and intellectual property remained strong. Housing remained a weak spot in the economy; residential investment contracted for the fourth time in the last five quarters. Economists expect the robust growth to slow in the coming year as the effects from the corporate tax cuts wane, and companies potentially reduce spending based on the expectation of higher tariffs. The U.S. dollar strengthened modestly relative to the rest of the developed world's currencies. Note that a stronger dollar makes U.S. exports more expensive in other countries. Jerome Powell became the new Chair of the Federal Reserve in February. The Federal Reserve raised the Fed Funds rate three times during the fiscal year, and signaled more increases to come as economic activity approached a "normal" level that allows the Fed to play a less active role in stimulating the economy.

Economic activity in the European Union slowed on a year-over-year and quarter-over-quarter basis during the fiscal year. GDP growth for the Eurozone was 0.4% for the second quarter of 2018. Eurozone GDP growth suffered on the potential for a global trade war and reduced exports. Germany was a particular bright spot, as consumer and government spending showed strong gains. The European Central Bank continued its stimulative measures, holding short-term rates at 0% and continuing to implement quantitative easing to lower long-term interest rates. However, The ECB announced its intention to end the quantitative easing program by the end of 2018. The United Kingdom showed weaker economic activity on Brexit uncertainty and a spike in inflation. Outside of Europe, economic activity was steady, but generally below expectations. Japan's GDP contracted at a 0.6% annual pace for the first quarter on a slowdown in factory output and

Chief Investment Officer's Report (continued)

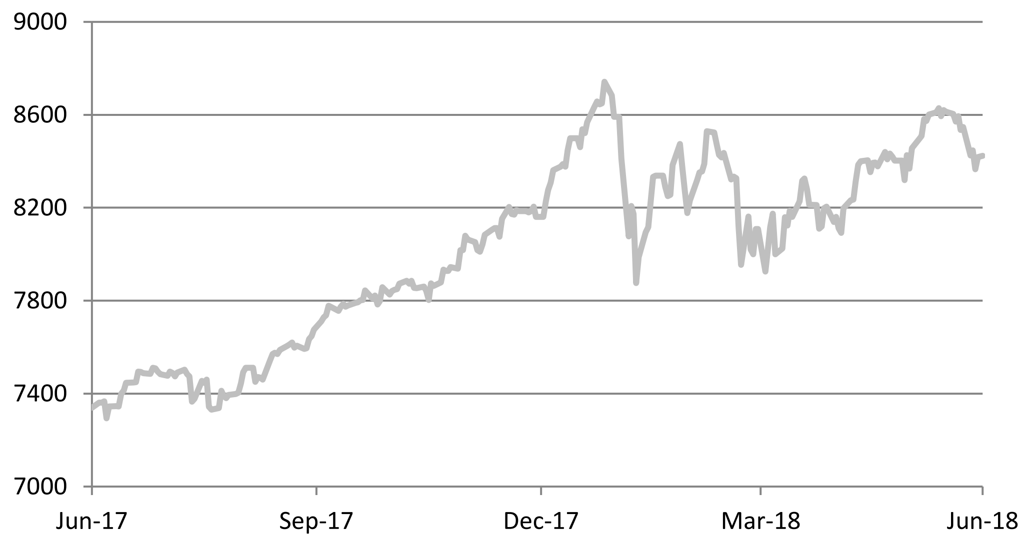
exports, ending eight straight quarters of economic growth. In China, GDP growth was 6.7% annualized for the second quarter, which was just above the official target for GDP growth of 6.5%. The government is on a campaign to deleverage the economy and reign-in local government debt, which has resulted in a slowdown of growth in infrastructure spending and tighter monetary policy. Concerns exist of economic headwinds created by a potential trade war with the U.S. continue to build.

U.S. and Global Stock Markets

The U.S. stock market, as measured by the Russell 3000 Index, continued to perform surprisingly well during the fiscal year. The Russell 3000 Index is one of the broadest equity indices available and a good proxy for the U.S. equity market as a whole. Surging profitability by companies in the U.S. and corporate tax cuts supported the equity market index returns for the period.

Change in the Russell 3000 Index during the fiscal year ended June 30, 2018

Value at 6/30/17 7,339.0
Value at 6/30/18 8,423.6



Source: FTSE Russell

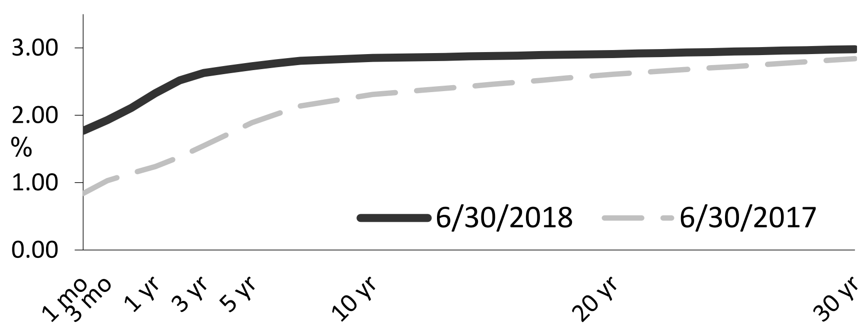
The Russell 3000 ended the one-year period through June 30, 2018 up 14.8%. Equity markets hit all-time highs during the period. The stock markets' strong returns were buoyed by several factors. Corporate profitability growth remained strong. Inflation has ticked up somewhat but remains low and the Federal Reserve seems to have adequately set market expectations for future potential interest rate moves. Leading the U.S. equity market were the stocks within the technology sector, as companies like Apple, Amazon, and Alphabet (Google) drove the tech sector up over 31% for the fiscal year. Small capitalization stocks outperformed large capitalization stocks by almost 3% over the period. The market again rewarded risk-taking during the period. Shares in the most economically sensitive sectors of the economy performed the best for the period. The rest of the developed world registered more modest equity market gains on a U.S. dollar basis. The MSCI All Country World Index ex-U.S. (ACWI ex-U.S. Index), which includes developed and emerging markets, gained 7.3% in U.S. dollar terms for the fiscal year. The U.S. dollar strengthened modestly relative to many other foreign currencies, which detracted from gains experienced by U.S. dollar investors in foreign markets. Emerging market returns in U.S. dollar terms were comparable to non-U.S. developed market returns.

Chief Investment Officer's Report (continued)

Interest Rates

The chart on the next page 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, interest rate yield levels rose across the curve over the period. The Federal Reserve continued on the path towards interest rate normalization and raised the Federal Funds Rate target by a quarter of a percentage point three times during the fiscal year. The Fed Funds Rate stood at a range of 1.75%- 2.0% at the end of the fiscal year. The yield curve flattened over the period, and concerns arose that an inversion of the yield curve (short-term rates are greater than long-term rates) could foreshadow an economic slowdown in the U.S. Jerome Powell succeeded Janet Yellen as Fed Chair in February 2018. Chairman Powell signaled continued Fed actions to normalize the Fed Funds rate, noting that the U.S. economy has been rising "at a solid rate." Unemployment remained low (4.0% for June) and inflation ticked up to 2.1%. Wage growth, however, remained stagnant. Outside of the U.S., yields continued to be low, and even negative in Japan, as central banks continued policies designed to stimulate economic growth. The European Central Bank recently announced plans to curtail its quantitative easing program. However, recent trade tensions with the U.S. have Central Bank officials concerned.

U.S. Treasury Yield Curve



Source: U.S. Treasury

Chief Investment Officer's Report (continued)

Investment Returns Through June 30, 2018

U.S. Equity	**Style**	**1 Year**	**3 Years**	**5 Years**
Russell 3000	Broad U.S. Equity	14.78%	11.58%	13.29%
S&P 500	Large Cap Equity	14.37%	11.93%	13.42%
Russell 1000	Large Cap Equity	14.54%	11.64%	13.37%
Russell 1000 Growth	Large Cap Growth	22.51%	14.98%	16.36%
Russell 1000 Value	Large Cap Value	6.77%	8.26%	10.34%
Russell 2000	Small Cap Equity	17.57%	10.96%	12.46%
Russell 2000 Growth	Small Cap Growth	21.86%	10.60%	13.65%
Russell 2000 Value	Small Cap Value	13.10%	11.22%	1.18%
Oklahoma Public Employees Retirement System	**Broad U.S. Equity**	**15.54%**	**11.34%**	**13.33%**

U.S. Fixed Income	**Style**	**1 Year**	**3 Years**	**5 Years**
ML 3-Month T-Bill	Cash	1.29%	0.62%	0.38%
Barclays U.S. Aggregate	Core Bonds	-0.40%	1.72%	2.27%
Citigroup 20-year Treasury Average	Long Term Bonds	0.08%	3.67%	4.84%
Barclays Corporate High Yield	High Yield Bonds	0.40%	5.53%	5.51%
Oklahoma Public Employees Retirement System	**Domestic Fixed Income**	**0.26%**	**2.19%**	**2.84%**

International Equity	**Style**	**1 Year**	**3 Years**	**5 Years**
MSCI ACWI Ex-US	Broad Non-US Equity	7.28%	5.07%	5.99%
MSCI EAFE	Developed Non-US Equity	6.84%	4.90%	6.44%
MSCI Emerging Market	Emerging Non-US Equity	8.20%	5.60%	5.01%
Oklahoma Public Employees Retirement System	**Non-U.S. Equity**	**7.31%**	**5.67%**	**6.59%**

Oklahoma Public Employees Retirement System	**Total Fund**	**8.39%**	**7.02%**	**8.35%**

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

Investment Performance

Bull market continued

The Fund produced a total return of 8.39% for the period gross of fees (8.26% net of fees) and out-performed the policy benchmark portfolio by 26 basis points for the period. The results from active management this year were mixed. The U.S. equity and fixed income portfolios benefited from their respective active management exposures, however, active results in the non-U.S. equity portion of the portfolio disappointed.

The Fund benefited from robust absolute returns from the U.S. market exposures, and good returns from the non-U.S. equity exposure. These two equity segments of the portfolio returned in excess of 12% for the period, and were the primary drivers of the Fund's overall favorable results. The fixed income asset class produced a small nominal gain that did not contribute meaningfully to overall returns.

U.S. Equity

The Fund used 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. Active U.S. equity management though did enhance the Fund's overall performance for the fiscal year. The advisors added value to the Fund in the large cap, small cap, growth and

Chief Investment Officer's Report (continued)

value areas of the market. For the period, the small cap managers performed the best from a nominal return perspective. There was also very good contribution to returns from the large cap managers as well. The most success from active management on the large cap portion of the portfolio was associated with the value style, and on the small cap portion the success was had in both the value and growth styles. A modest overweight to small cap stocks in combination with value-added from active management resulted in enhanced returns compared to the U.S. equity benchmark.

Fixed Income
The Fund's bond portfolio did not contribute meaningfully to overall results for the fiscal year. As investors sought out the riskier areas of the markets (particularly equities) for enhanced return opportunities, the less risky parts of the markets sold off, including the bond market. Yields increased along the bond maturity curve, which depressed the nominal total returns of the asset class. The Fund's inflation-sensitive portion of the fixed income portfolio produced the greatest nominal returns for the period, as inflation rose from a low level. The two advisors who focus on the broader bond market both out-performed the benchmark. Bonds are maintained in the portfolio for their diversified return pattern when compared with exposure to the equity markets. This fiscal year was once again a challenging performance year for bonds.

Non-U.S. Equity
The non-U.S. equity portfolio contributed positively to the total return of the fund, having gained over 7% in U.S. dollar terms for the period. Much like the U.S. Equity portfolio, a high proportion of these Fund assets are managed in a passive style. Within this segment of the asset allocation, two active managers are used. One of the active managers emphasizes the value area of the international market, and the other manager emphasizes the growth area. Nominal returns were solid for both active managers, but the benchmark-relative results for both advisors disappointed. The manager who focuses on the international value area of the global equity markets had lower nominal returns and under-performed its benchmark. The advisor who emphasizes the growth style had higher nominal returns but also under-performed its benchmark. As such, the non-U.S. equity portion of the Fund underperformed its benchmark.

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 asset allocation during the fiscal year.

Asset Class	Min	6/30/2018	Target	Max
Cash and Real Estate	0.0%	0.3%	0.0%	0.0%
Domestic Fixed Income	27.5%	29.8%	32.0%	36.5%
U.S. Equity	34.4%	42.0%	40.0%	45.6%
Non-U.S. Equity	25.0%	27.8%	28.0%	31.0%
Total Fund		**100%**	**100%**	

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, with respect to different asset classes and within each asset class, a priority. 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.

Chief Investment Officer's Report (continued)

The current global economic environment continues to be driven by economic activity in the U.S. and improvement in the European economies. We are seeing signs that the accommodative policies that many global central banks have implemented are bearing fruit. The Federal Reserve has moved away from actions designed to suppress interest rates by raising short-term rates. Geopolitical risk, especially as the U.K. moves to extricate itself from the European Union, will undoubtedly influence investor risk-taking appetite. More recently, trade tensions have the potential to add to economic uncertainty.

Our largest concern continues to be the prospect of generating and maintaining investment results that match or exceed the actuarial assumed rate of return of 7.00%. This will continue to be a challenging task going forward. Interest rates still remain low, which pressures the long-term return generating capacity of a diversified portfolio. Additionally, with the stock market hitting record levels, equity market valuation levels appear stretched, which reduces prospective returns in the equity markets.

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. The more quickly interest rates rise, the more pressure is exerted on the total return of the fixed income portfolio. Our medium-term expectation for the total return of the broad U.S. fixed income market going forward would more closely reflect current yields, which are around 2%-2.5%. But we could experience another year of poor returns if rates rise more quickly, with the decline in bond value offsetting the yield earned over the period.

Equity

Equity markets are particularly difficult 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 U.S. economy continues to exhibit relatively stable growth. Consumer spending, the biggest driver of the U.S. economy, remains stable as the outlook for employment is satisfactory but wage growth is stagnant. Market sentiment has been buttressed by strong corporate earnings and tax cuts. This year we have a renewed focus on Geopolitical risks, specifically in the form of trade tensions between the U.S. and rest of the world. Should these tensions escalate into full blown trade wars, economic activity will be negatively impacted. Market valuations are stretched, and unbridled optimism is a fuel that can quickly evaporate.

Recent Events

There were no changes to the Fund structure or the managers within the Fund during the year.

<u>Investment Philosophy and Guiding Principles</u>

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/Investment. 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, 2018, 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 2.625% due 6-30-2023	106,915,000	$106,392,934
U.S. Treasury Bonds 2.5% due 2-15-2046	102,200,000	92,918,196
U.S. Treasury Notes 2.75% due 4-30-2023	75,745,000	75,819,003
U.S. Treasury Bonds 3.125% due 5-15-2048	73,275,000	75,310,067
U.S. Treasury Bonds 2.5% due 5-15-2046	80,560,000	73,202,616
U.S. Treasury Bonds 3.0% due 11-15-2045	64,000,000	64,225,024
U.S. Treasury Notes 2.625% due 3-31-2025	58,300,000	57,635,030
U.S. Treasury Notes 2.375% due 4-15-2021	50,780,000	50,454,703
U.S. Treasury Notes 2.875% due 5-15-2028	38,935,000	39,012,559
U.S. Treasury Bonds Strip Prin Pmt due 11-15-2045	38,020,000	37,714,053

Ten Largest Stock Holdings (By Fair Value):

Security	Shares	Fair Value
Apple, Inc. Common Stock	300,850	$55,690,344
Alphabet Inc. Common Stock	44,392	49,808,772
Amazon.com, Inc. Common Stock	26,185	44,509,263
Facebook, Inc. Class A Common Stock	213,766	41,539,009
Microsoft Corporation Common Stock	408,949	40,326,461
Johnson & Johnson Common Stock	268,109	32,532,346
JP Morgan Chase & Co. Common Stock	265,660	27,681,772
Bank of America Corporation Common Stock	945,394	26,650,657
Pfizer, Inc. Common Stock	623,654	22,626,167
Verizon Communications Common Stock	440,285	22,150,738

Investments in Funds (By Fair Value):

Fund	Units	Fair Value
BlackRock Russell 1000 Index Fund	7,987,155	$1,652,412,024
BlackRock ACWI ex-U.S. Index Fund	51,639,028	1,429,515,094
BlackRock ACWI ex-U.S. Growth Index Fund	18,490,222	319,174,756
BlackRock U.S. TIPS Index Fund	14,017,656	309,268,778

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, 2018, 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	$ 1,507,626	15.1%
Hoisington Investment Management	Interest Rate Anticipation	318,230	3.2%
BlackRock Institutional Trust Company	Index Fund – U.S. TIPS	309,274	3.1%
Metropolitan West Asset Management	Core Plus	1,036,702	10.4%
Total Fixed Income		3,171,832	31.8%
U.S. Equities:			
BlackRock Institutional Trust Company	Index Fund – Russell 1000	1,652,412	16.5%
Mellon Capital Management	Large cap – Enhanced Index	554,060	5.6%
State Street Global Advisors	Large cap – Enhanced Index	572,694	5.8%
Westfield Capital Management	Large cap – Growth	324,672	3.3%
Aronson + Johnson + Ortiz	Large cap – Value	297,644	3.0%
UBS Global Asset Management	Small cap – Growth	224,700	2.3%
Barrow, Hanley, Mewhinney & Strauss, Inc.	Small cap – Value	224,467	2.3%
DePrince, Race & Zollo, Inc.	Small cap – Value	222,917	2.2%
Total U.S. Equities		4,073,566	41.0%
International Equities:			
Baillie Gifford Overseas Ltd.	International Growth	350,623	3.5%
Mondrian Investment Partners, Ltd.	International Value	592,244	5.9%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S. Growth	319,176	3.2%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S.	1,429,518	14.4%
Total International Equities		2,691,561	27.0%
Short-term Investment Funds	Operating Cash	17,872	0.2%
Total Managed Investments		9,954,831	100.0%
Real Estate		12,600	
Securities Lending Collateral		476,470	
Cash Equivalents on Deposit with State		3,550	
Total Investments and Cash Equivalents		$ 10,447,451	
Statement of Fiduciary Net Position			
Cash Equivalents		223,015	
Investments		10,224,436	
Total Investments and Cash Equivalents		$ 10,447,451	

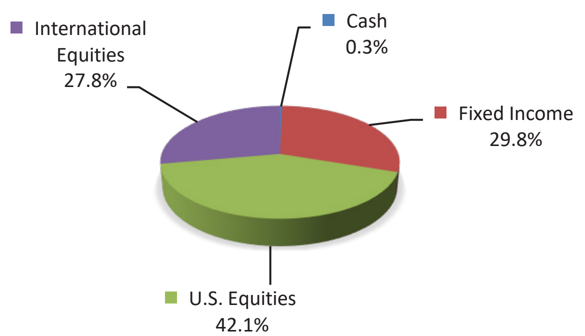
* *Manager fair values include their respective cash and cash equivalents.*

Asset Comparison

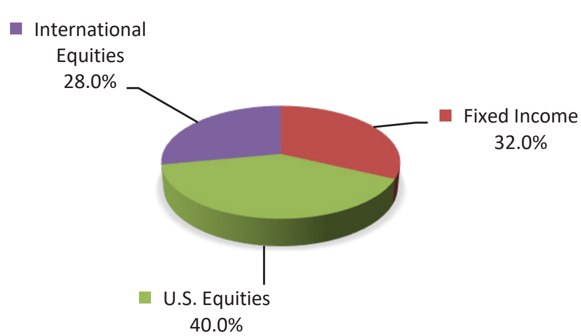
A comparison of the actual investment distribution at June 30, 2018 and 2017, based on the net investment manager holdings, including accrued income, payables and receivables, compared to the target allocation for each year is as follows:

2018

Asset Mix

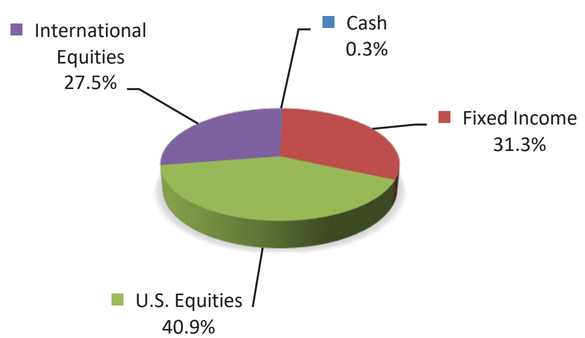


Target Policy Mix

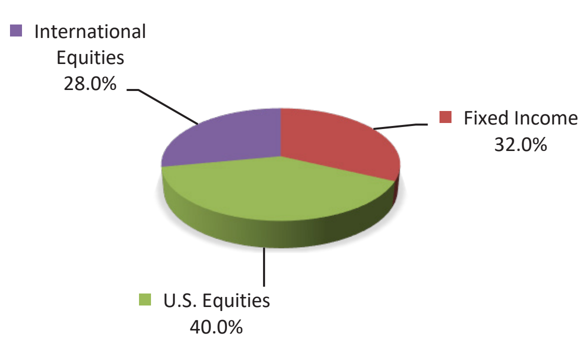


2017

Asset Mix



Target Policy Mix



Schedule of Stock Brokerage Commissions Paid

Year Ended June 30, 2018

			Commission	
Brokerage Firm	**Shares Traded**	**Dollar Volume of Trades**	**Dollar Amount**	**Per Share**
National Financial Services	8,223,768	$ 328,237,582	$ 93,310	0.011
Merrill Lynch	10,308,143	307,739,717	91,268	0.009
Citigroup	10,291,864	267,934,636	69,222	0.007
Instinet	5,916,721	243,337,232	65,304	0.011
Northern Trust Co.	5,646,028	221,434,929	177,425	0.031
J.P. Morgan	9,667,471	182,108,405	52,645	0.005
Credit Suisse	2,986,749	166,214,472	45,172	0.015
Sanford C. Bernstein and Co.	6,362,624	163,593,765	57,945	0.009
Liquidnet, Inc.	2,545,923	155,740,419	41,356	0.016
UBS	7,415,296	123,460,796	33,887	0.005
Barclays Capital	1,401,277	107,576,249	23,604	0.017
Morgan Stanley	3,804,052	87,237,808	39,579	0.010
Deutsche Bank	1,449,333	79,513,416	13,067	0.009
ITG, Inc.	1,145,153	78,542,296	11,880	0.010
Goldman Sachs	1,914,800	65,307,524	30,223	0.016
Rosenblatt	1,358,677	64,230,038	11,651	0.009
JonesTrading	2,510,014	59,417,923	92,109	0.037
Keybanc Capital Markets	1,676,666	52,342,204	65,904	0.039
Stifel Nicolaus	1,527,340	44,675,494	59,816	0.039
Broadcourt Capital	1,608,245	44,301,435	35,350	0.022
Other	33,319,530	588,278,637	363,624	0.011
Total	121,079,674	$ 3,431,224,979	$ 1,474,343	0.012