



change

LASERS

Louisiana State Employees'
Retirement System

| 2020 INVESTMENT REPORT |

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Change is defined by *Webster's Dictionary* as “to make or become different.”

It is one word that completely describes 2020.

Many times, we strive for change, usually in efforts to better processes or perhaps improve ourselves. Other times, however, as is the case with 2020, change is thrust upon us. No one anticipated the change that the last year experienced, but we must remember that change is what creates innovation and creativity and will provide the means to emerge from the latest disruption. This requires a changed approach to living, working, and investing.

Prior to the COVID-19 pandemic, in the United States and most other developed parts of the world, people lived a dramatically different lifestyle. Stopping for drinks after work, having dinner out, or picking up a few groceries at the supermarket on the way home are largely things of the past. For starters, many now work remotely from home while supervising their children's schoolwork; with a well-stocked refrigerator, those groceries delivered right to their door.

In business, world interconnectivity that previously allowed supply chains to obtain raw materials from virtually anywhere around the world became an issue. Companies had to deal with disruptions such as manufacturing halts across the globe, and delivery delays were realized. As a result, many companies were left scrambling to change where and how they obtain the materials and resources needed to operate.

In investments, swings of this magnitude had not been seen since the Great Depression. However, the rapid response and the amount of fiscal and monetary support provided by governments around the world allowed for recovery to begin within a relatively short timeframe. Changes from an investment perspective must include an analysis of which parts of the world are expected to continue recovering more quickly and which types of investments are most appropriate given all of the changing circumstances. As always, the foundation of a successful portfolio is its asset allocation, deciding where and how much to invest.

The purpose of change should be betterment. Opportunity can be found in disruption, if sought in the right place. Now, more than ever, LASERS is committed to seeking opportunity for the betterment of the plan.



Year in review



**93K
Members**



Portfolio Growth
2010 \$7.7B ➤ \$10.7B 2020



**\$306M Invested
in Louisiana**

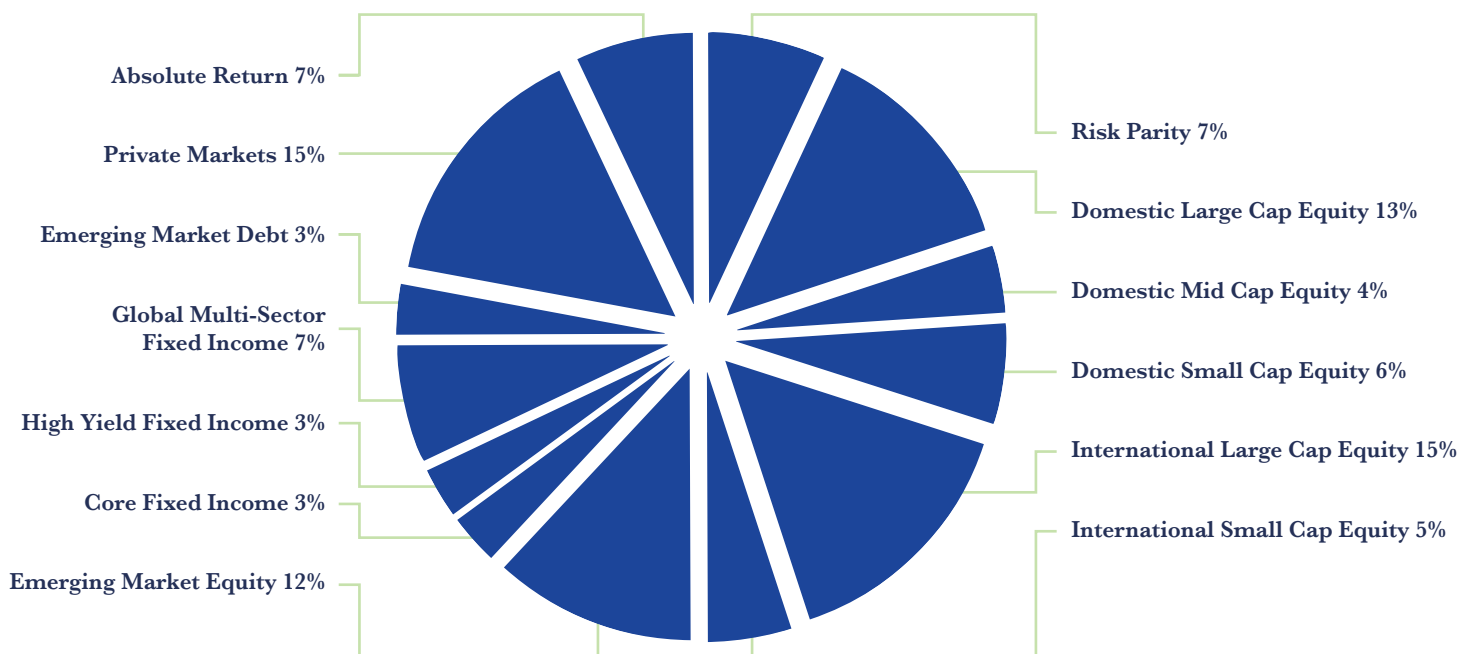


**\$2.8B Internally
Managed Assets**



**\$1.3B
Benefits Paid**

Target Asset Allocation





| TO OUR MEMBERS |

Dear Members,

The Louisiana State Employees' Retirement System (LASERS) earned a -3.8% gross-of-fees, time-weighted return on investments for the fiscal year ended June 30, 2020. As a result, the total gross-of-fee investment value of the fund as of June 30, 2020 exceeded \$10.6 billion. Longer-term annualized rates of return are 4.4% for the five-year period, 6.0% for the seven-year period, and 7.7% for the ten-year period.

While the fiscal year started on a relatively positive note, it was quickly overtaken by the COVID-19 pandemic that reached all corners of the world. After reaching an all-time high on February 19, the S&P 500 Index fell into bear market territory after just twenty-two trading days. The resulting S&P 500 Index return for 1Q 2020 was -19.6%, amongst double-digit negative returns from all other global stock indexes. Meanwhile, prices rose for government bonds as investors moved toward perceived safety. The U.S. Federal Reserve, along with world-wide central banks, took swift and unprecedented action in providing monetary and fiscal stimulus to ensure that economies continued to function. Markets posted strong returns in 2Q 2020 and modest upticks were being seen in economic activity, although it remained well below pre-pandemic levels. Economic uncertainty and heightened volatility across capital markets lingered.

For the fiscal year, the Plan's allocation to Investment Grade Fixed Income posted an 8.9% return, far exceeding any other asset class, and outperforming its benchmark by 20 basis points. Also in the Fixed Income space, the Emerging Market Debt portfolio beat its benchmark by 1.4%. A consistent source of positive returns, the Private Markets portfolio posted 1.4%. Other asset classes struggled. For a number of years, the Plan has benefited from its asset allocation positioning of overweighting both developed international and emerging market equities while underweighting domestic equities relative to its peers. That positioning resulted in LASERS ranking as one of the top ten pension plans in the nation for all years from 2011 through 2015. More recently, contrary to expectations, that positioning began to falter. In response, prior to the COVID-19 pandemic, Investment staff, in conjunction with LASERS Investment consultant, NEPC, began an extensive asset allocation study with the goal of maintaining an appropriate risk-return profile. Following the dynamically changed investment market at fiscal year-end, this study was re-underwritten to capture new expectations and growth projections. Still underway at the writing of this letter, the new allocation will seek to maintain appropriate diversification while balancing risk and return. It will continue to prioritize opportunistic types of investments, both domestically and internationally.

As always, we continue to work diligently to meet long-term goals and objectives and safeguard your retirement.

Sincerely,



Robert W. Beale, CFA, CAIA
Chief Investment Officer

Board of *trustees*

A 13-member Board of Trustees oversees LASERS operations. Six seats are filled by active members, three seats are held by retirees, and four positions are ex officio. Trustees serve four-year terms and are limited to three consecutive terms.

The Board of Trustees is responsible for the total investment program. As such, they approve the investment policy and provide overall direction to the administrative staff in the execution of the investment policy.

| EX OFFICIO MEMBERS |



*Commissioner
Jay Dardenne*



*Representative
Lance Harris*



*Senator
Edward Price*



*State Treasurer
John Schroder*



Thomas Bickham

Board Chair

*Undersecretary,
Department of Public
Safety and Corrections*



Beverly Hodges

Board Vice Chair

*Retired from the
Department of
Natural Resources*



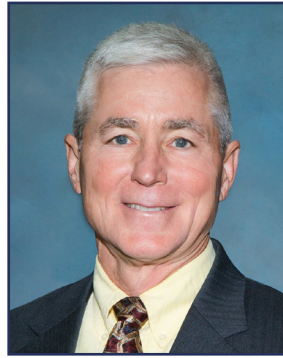
Charles Castille

*Retired from the
Department of Health
and Hospitals*



Virginia Burton

*Retired from the
Department of Revenue*



**Judge William
Kleinpeter**

City Court of Port Allen



Lori Pierce

*Retired from the
Department of Treasury*



Barbara McManus

*Retired from the
Department of Social
Services*



Janice Lancing

*Chief Financial Officer,
Coastal Protection and
Restoration Authority*



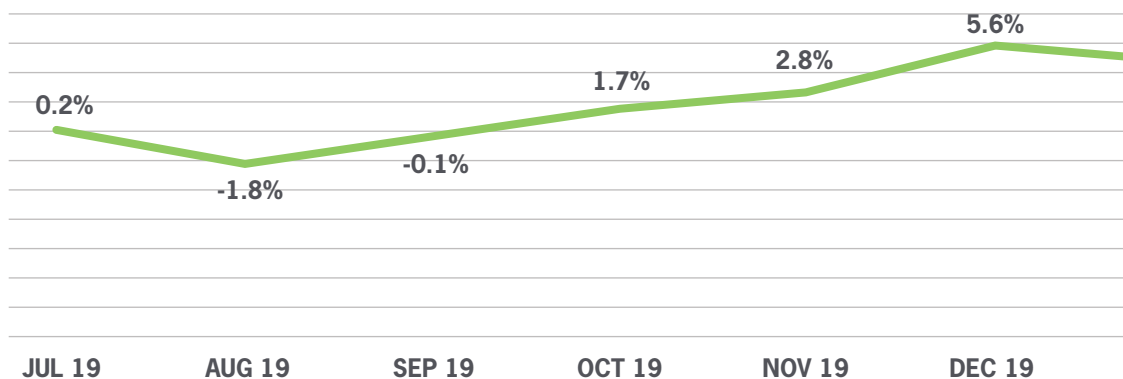
Shannon Templet

*Director of Human
Resources, House of
Representatives*

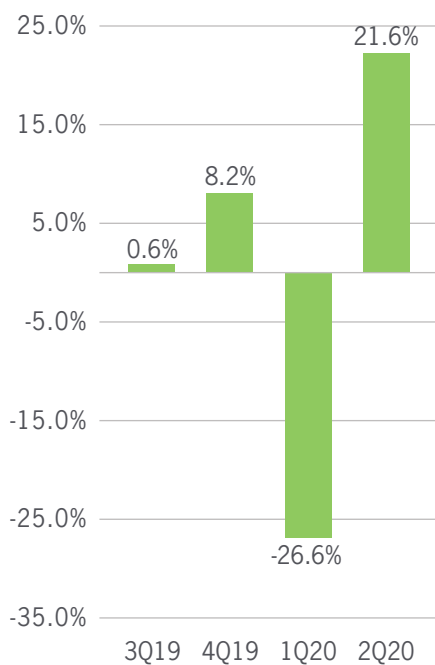


total fund review

2019 - 2020 FYTD Returns by Month

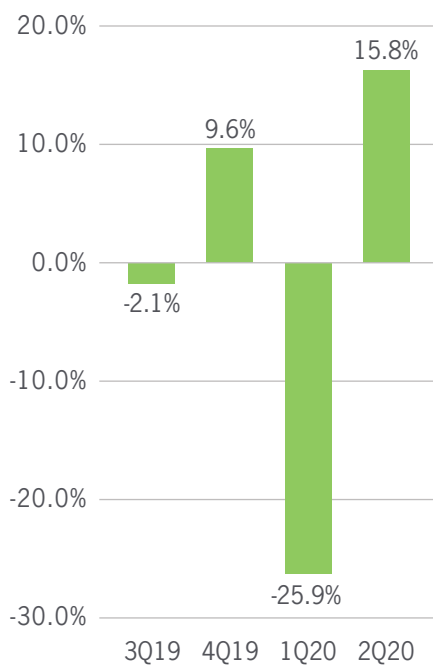


Domestic Equity



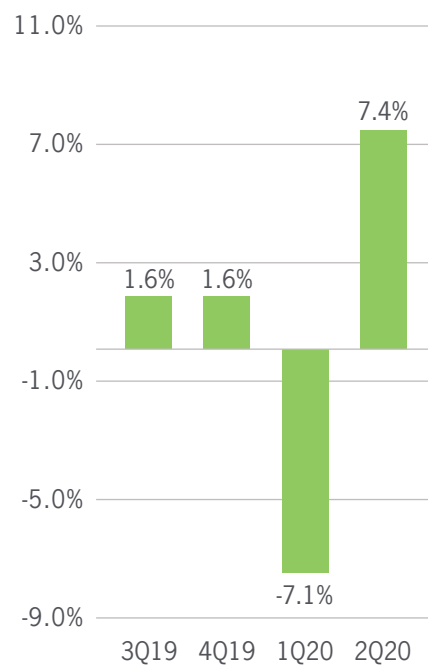
| | |
|--------------------|------------|
| Fiscal Year Return | -2.9% |
| AUM | \$2,190.9m |
| Target Allocation | 23.0% |
| Actual Allocation | 20.6% |
| Active Management | 22.4% |
| Passive Management | 77.6% |

International Equity

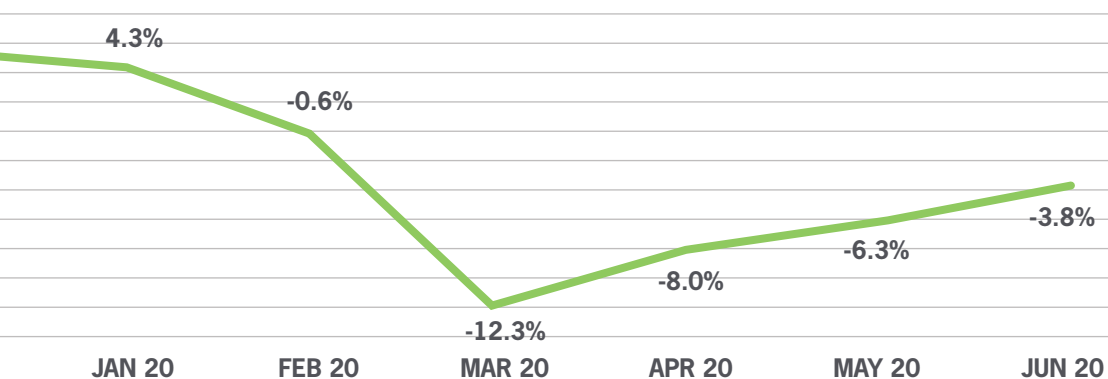


| | |
|--------------------|------------|
| Fiscal Year Return | -8.0% |
| AUM | \$2,888.9m |
| Target Allocation | 32.0% |
| Actual Allocation | 27.1% |
| Active Management | 62.3% |
| Passive Management | 37.7% |

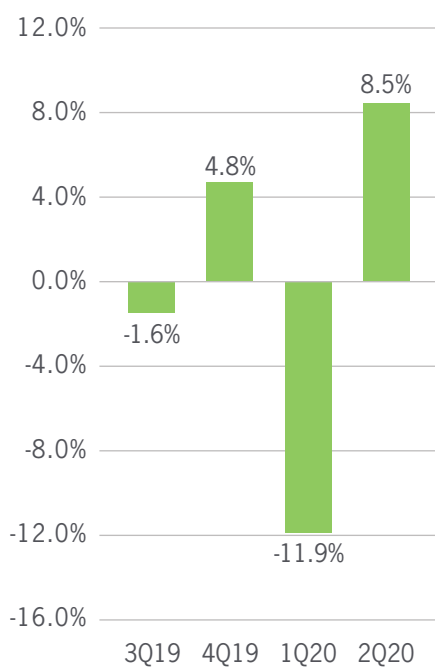
Domestic Fixed Income



| | |
|--------------------|----------|
| Fiscal Year Return | 2.9% |
| AUM | \$584.8m |
| Target Allocation | 6.0% |
| Actual Allocation | 5.5% |
| Active Management | 100% |
| Passive Management | 0% |

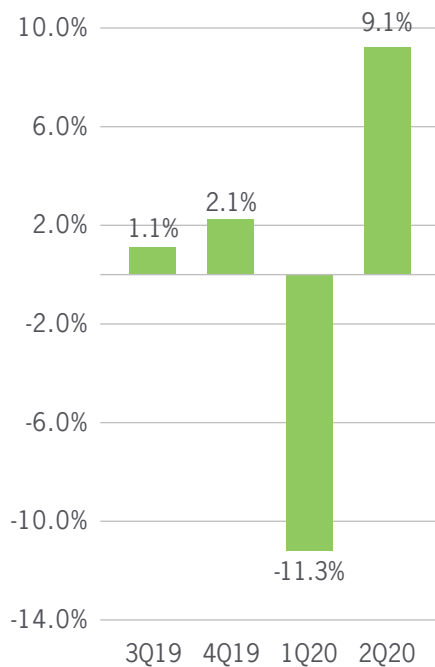


Emerging Market Debt



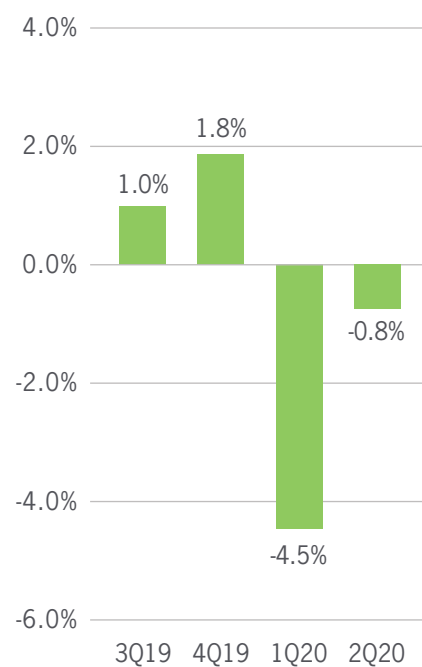
| | |
|--------------------|----------|
| Fiscal Year Return | -1.4% |
| AUM | \$367.0m |
| Target Allocation | 3.0% |
| Actual Allocation | 3.4% |
| Traditional | 54.4% |
| Opportunistic | 45.6% |

Global Multi-Sector Fixed Income



| | |
|--------------------|------------|
| Fiscal Year Return | -0.1% |
| AUM | \$1,108.5m |
| Target Allocation | 7.0% |
| Actual Allocation | 10.4% |
| Traditional | 42.2% |
| Opportunistic | 57.8% |

Alternatives



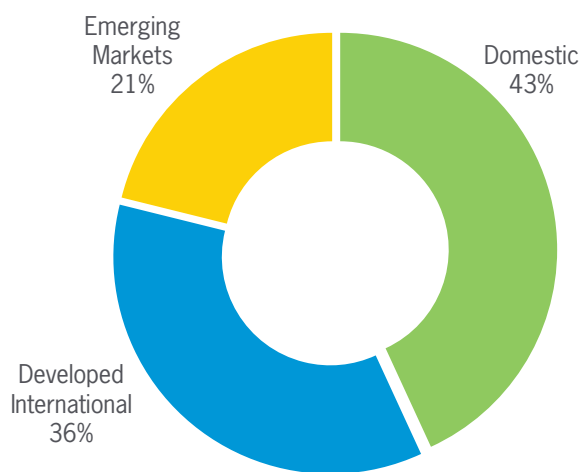
| | |
|--------------------|------------|
| Fiscal Year Return | -2.6% |
| AUM | \$3,028.0m |
| Target Allocation | 29.0% |
| Actual Allocation | 28.4% |
| Private Markets | 63.3% |
| Other | 36.7% |

public equity

Public equity is an asset class where individuals and/or organizations can buy ownership in shares or stock of a company through a public market such as the New York Stock Exchange. The benefits of investing in public equity include liquidity, credibility, and financial flexibility. LASERS invests globally in both Domestic and International equity, including Emerging Markets equity.

Public Equity: Fiscal Year Summary

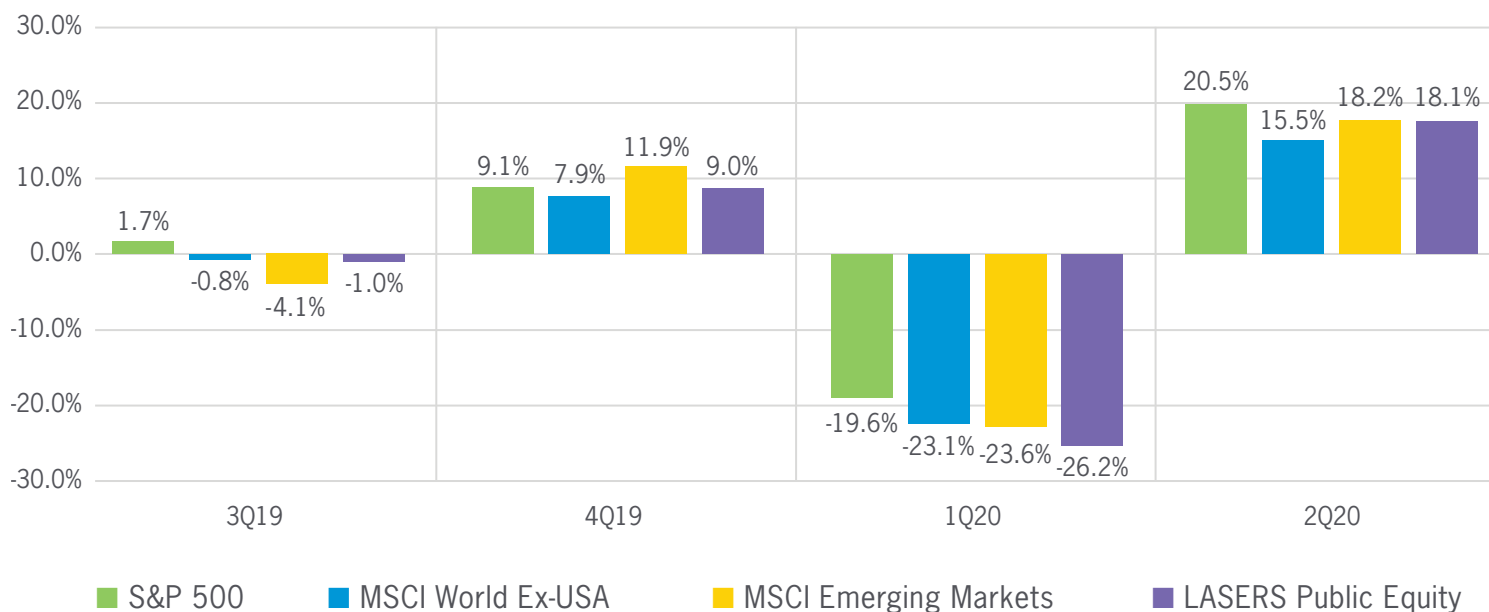
| ALLOCATION |



| ASSETS & RETURNS |

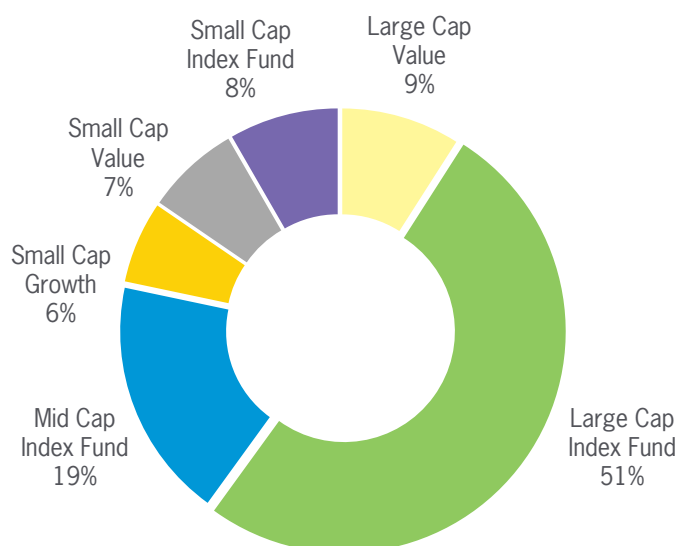
| | Market Value (Millions) | Market Return | LASERS Return |
|----------------------------|-------------------------|---------------|---------------|
| Domestic | \$2,190.9 | 7.5% | -2.9% |
| Developed International | \$1,815.6 | -5.0% | -5.6% |
| Emerging Markets | \$1,073.3 | -3.0% | -11.7% |
| Total Public Equity | \$5,079.8 | | -6.0% |

| QUARTERLY RETURNS |



Domestic Equity: Fiscal Year Summary

ALLOCATION



TOP HOLDINGS

| Security Name | Market Value (Millions) |
|----------------------------|-------------------------|
| Microsoft Corp | \$67.9 |
| Apple Inc | \$63.9 |
| Amazon.com Inc | \$52.2 |
| Facebook Inc | \$23.5 |
| Alphabet Inc – Class A | \$20.0 |
| Alphabet Inc – Class C | \$17.8 |
| Johnson & Johnson | \$17.7 |
| Verizon Communications Inc | \$16.5 |
| Berkshire-Hathaway Inc | \$16.1 |
| Intel Corp | \$15.3 |
| Top Ten | \$311.0 |

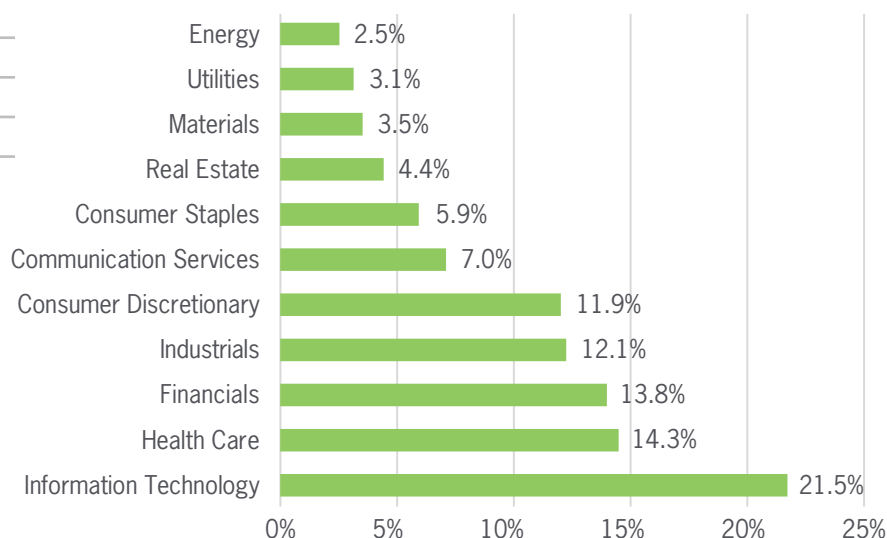
ASSETS & RETURNS

| | Market Value (Millions) | Market Return | LASERS Return |
|------------------------|-------------------------|---------------|---------------|
| Large Cap | \$1,314.3 | 7.5% | 4.7% |
| Mid Cap | \$401.4 | -6.7% | -6.8% |
| Small Cap | \$475.2 | -11.3% | -16.2% |
| Domestic Equity | \$2,190.9 | | -2.9% |

MANAGER & ASSET SUMMARY

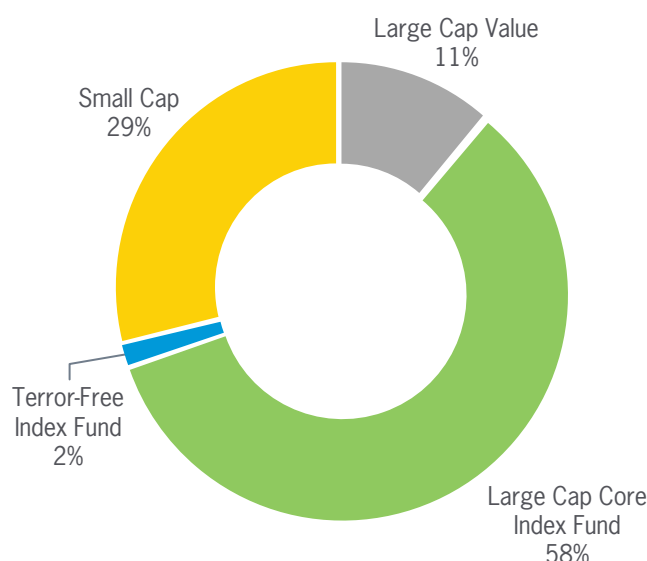
| Manager | Market Value (Millions) | Benchmark |
|-------------------------|-------------------------|----------------|
| AJO | \$198.4 | S&P 500 Value |
| Large Cap Value | \$198.4 | |
| Rice Hall James | \$136.7 | S&P 600 Growth |
| Small Cap Growth | \$136.7 | |
| LSV Asset Management | \$156.2 | S&P 600 Value |
| Small Cap Value | \$156.2 | |
| LASERS S&P 400 Index | \$401.4 | S&P 400 |
| LASERS S&P 500 Index | \$1,115.9 | S&P 500 |
| LASERS S&P 600 Index | \$182.3 | S&P 600 |
| Index Funds | \$1,699.6 | |
| Domestic Equity | \$2,190.9 | |

SECTOR DIVERSIFICATION



International Developed Equity: Fiscal Year Summary

ALLOCATION



TOP HOLDINGS

| Security Name | Market Value (Millions) |
|---------------------|-------------------------|
| Roche Holdings | \$23.3 |
| Novartis | \$21.4 |
| Nestle | \$20.5 |
| Sanofi | \$17.7 |
| Enel | \$14.9 |
| Glaxosmithkline | \$14.4 |
| Allianz | \$14.0 |
| SAP | \$13.0 |
| Takeda Pharm Co Ltd | \$12.3 |
| Sony Corp | \$12.1 |
| Top Ten | \$163.5 |

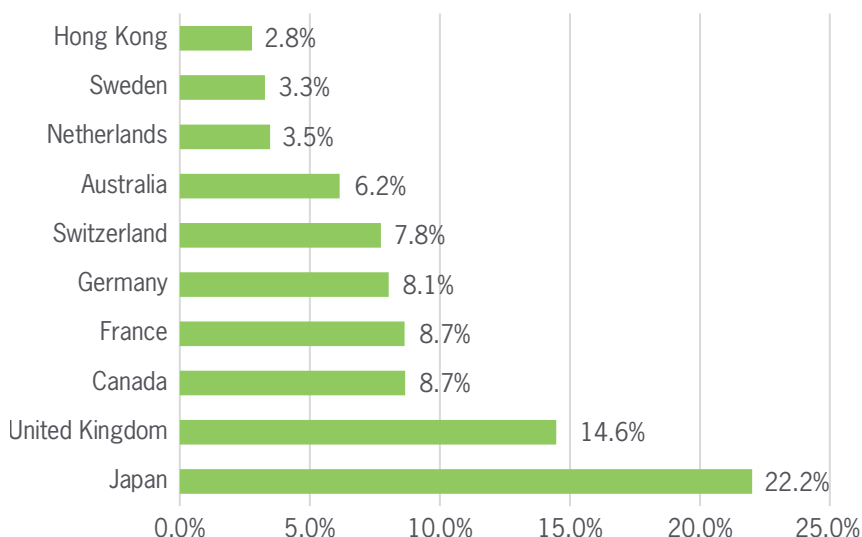
ASSETS & RETURNS

| | Market Value (Millions) | Market Return | LASERS Return |
|-------------------------------|-------------------------|---------------|---------------|
| Large Cap Value | \$202.8 | -14.6% | -10.6% |
| Large Cap Core | \$1,088.9 | -5.0% | -6.1% |
| Small Cap | \$523.9 | -2.9% | -4.1% |
| Int'l Developed Equity | \$1,815.6 | | -5.6% |

MANAGER & ASSET SUMMARY

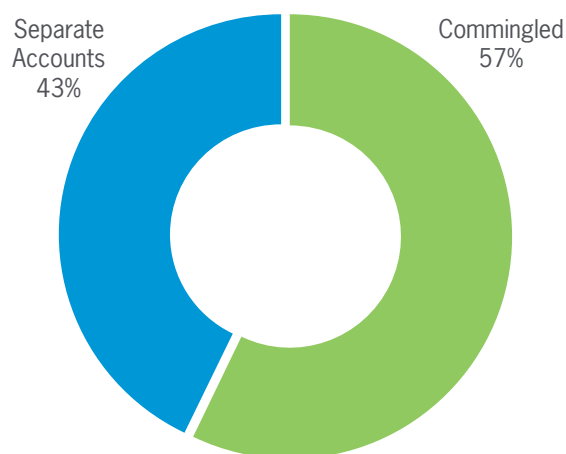
| Manager | Market Value (Millions) | Benchmark |
|-------------------------------|-------------------------|--------------------------|
| Mondrian Inv Ptnrs | \$202.8 | MSCI World Ex-USA Value |
| Large Cap Value | \$202.8 | |
| MSCI Index Fund | \$1,061.2 | MSCI World Ex-USA |
| Terror-Free Fund | \$27.7 | |
| Large Cap Core | \$1,088.9 | |
| Mondrian Inv Ptnrs | \$206.1 | MSCI World Ex-USA Sm Cap |
| Goldman Sachs | \$317.8 | |
| Small Cap | \$523.9 | |
| Int'l Developed Equity | \$1,815.6 | |

TOP COUNTRIES



Emerging Markets Equity: Fiscal Year Summary

ALLOCATION



ASSETS & RETURNS

| | Market Value (Millions) | Market Return | LASERS Return |
|-----------------------------|-------------------------|---------------|---------------|
| Commingled Accounts | \$613.5 | | |
| Separate Account | \$459.8 | | |
| Emerging Mkts Equity | \$1,073.3 | -3.0% | -11.7% |

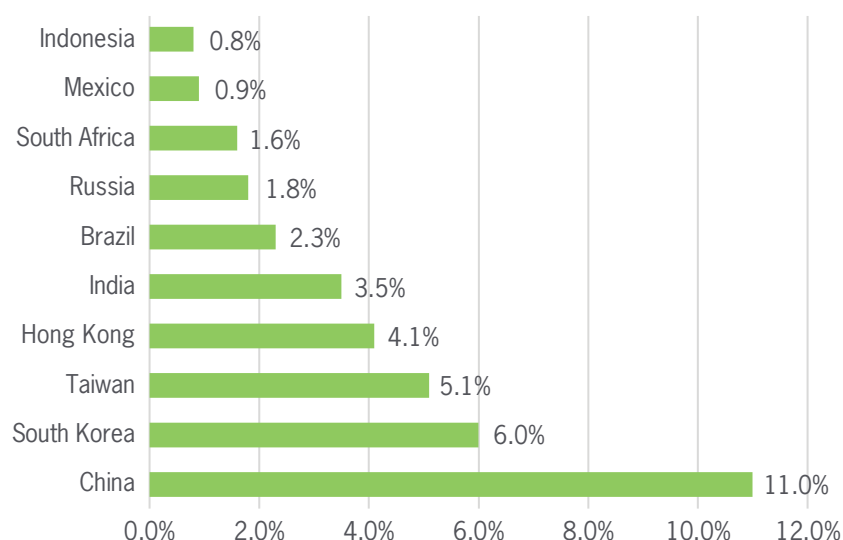
MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) | Benchmark |
|--------------------------------|-------------------------|-----------------------------|
| City of London | \$364.7 | MSCI Emerging Markets Index |
| Westwood Global | \$248.8 | |
| LSV Asset Management | \$459.8 | |
| Emerging Markets Equity | \$1,073.3 | |

SAMPLE HOLDINGS

| Security Name | Market Value (Millions) |
|-------------------------------|-------------------------|
| Samsung Electronics Co Ltd | \$25.0 |
| China Mobile Ltd | \$8.7 |
| Lukoil | \$8.0 |
| China Construction Bank Corp | \$6.8 |
| Hon Hai Precision Industry Co | \$6.1 |
| Baidu Inc | \$5.7 |
| PICC Property & Casualty Co | \$5.5 |
| China Citic Bank Corp Ltd | \$5.4 |
| Grupo Mexico | \$4.7 |
| Vale | \$4.4 |

TOP COUNTRIES

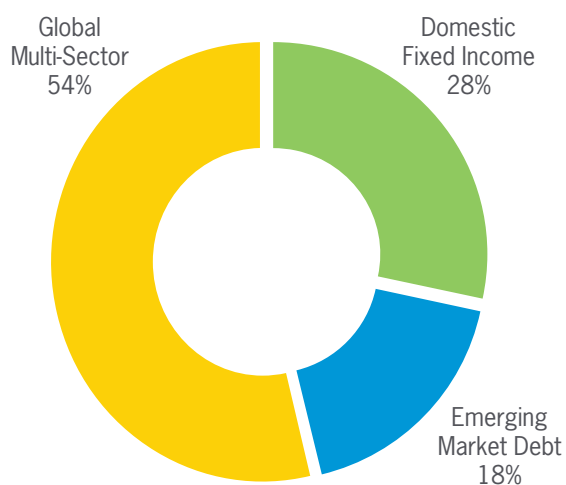


fixed income

Fixed income securities are debt instruments issued by a government, corporation, or other entity to finance and expand their operations. The benefits of investing in fixed income include stability of principal, a steady income stream, and a higher claim to assets. LASERS invests globally in both Domestic and International Fixed income, including Emerging Market Debt and Global Multi-Sector assets.

Fixed Income: Fiscal Year Summary

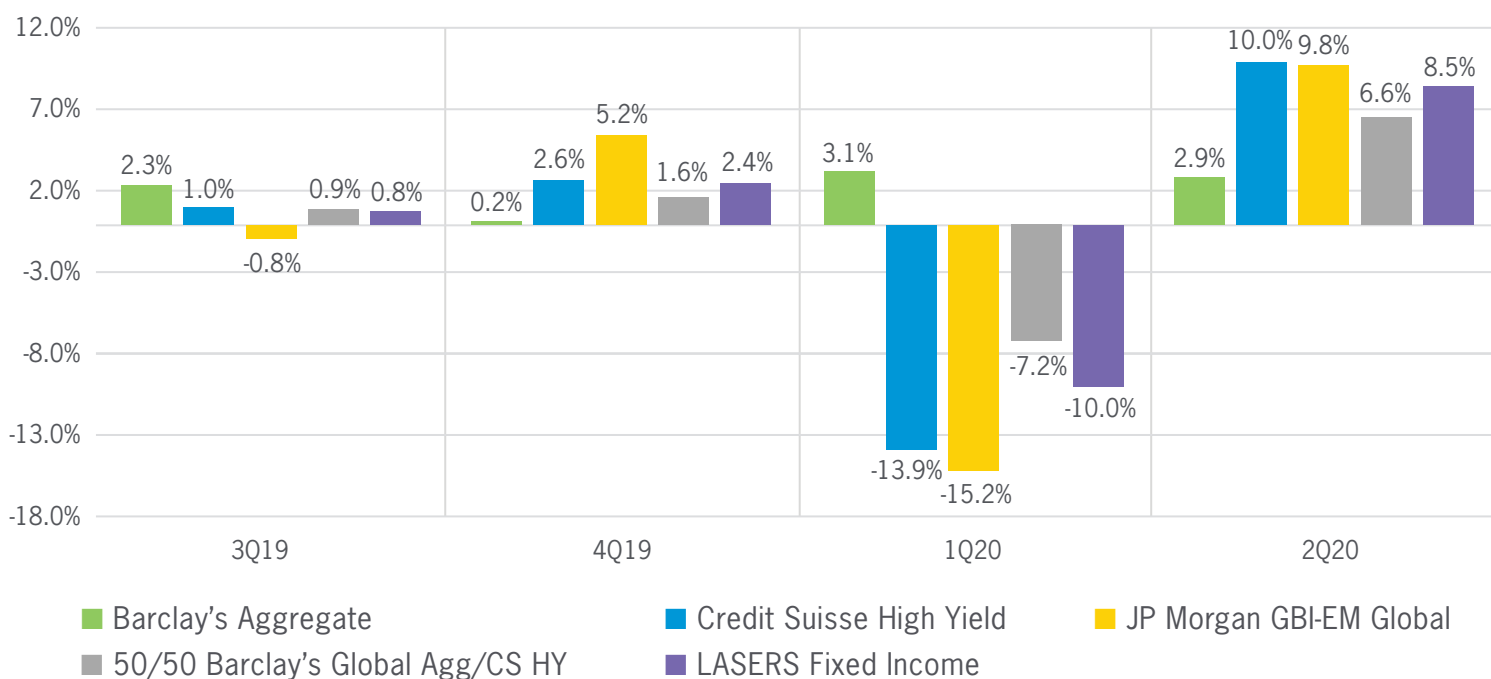
| ALLOCATION |



| ASSETS & RETURNS |

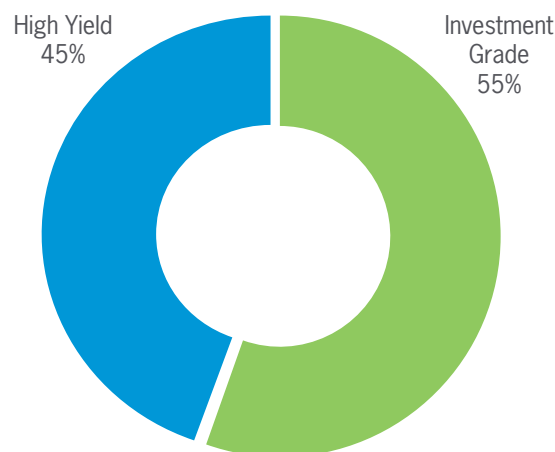
| | Market Value (Millions) | Market Return | LASERS Return |
|---------------------------|-------------------------|---------------|---------------|
| Domestic | \$584.8 | 8.7% | 2.9% |
| Emerging Market Debt | \$367.0 | -2.8% | -1.4% |
| Global Multi-Sector | \$1,108.5 | 1.4% | -0.1% |
| Total Fixed Income | \$2,060.3 | | 0.7% |

| QUARTERLY RETURNS |



Domestic Fixed Income: Fiscal Year Summary

ALLOCATION



ASSETS & RETURNS

| | Market Value (Millions) | Market Return | LASERS Return |
|------------------------------|-------------------------|---------------|---------------|
| Investment Grade | \$324.1 | 8.7% | 8.9% |
| High Yield | \$260.7 | -1.8% | -2.9% |
| Domestic Fixed Income | \$584.8 | | 2.9% |

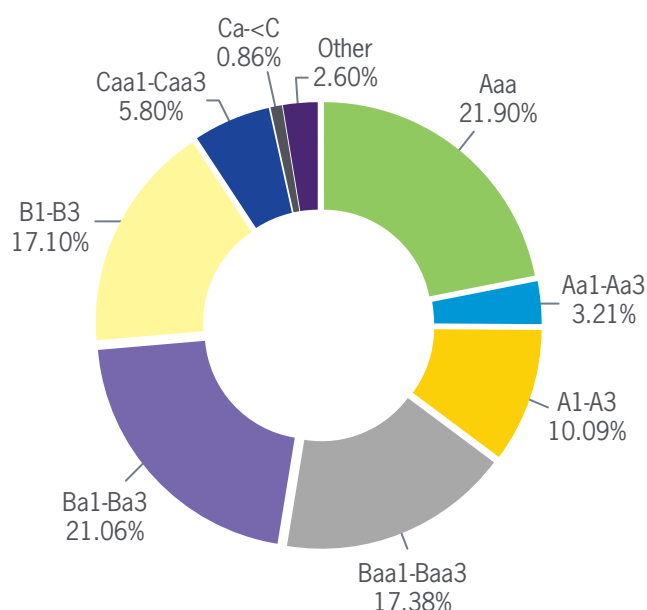
TOP HOLDINGS

| Security Name | Market Value (Millions) |
|--------------------------------------|-------------------------|
| Commit FNMA SFmtg, 2.5% 9/1/2050 | \$7.1 |
| US Treasury Bills, 0% 7/28/2020 | \$5.0 |
| FedEx Corp, 4.9% 1/15/2034 | \$4.8 |
| Valero Energy Corp, 7.5% 4/15/2032 | \$4.8 |
| US Treasury Note, 0.625% 5/15/2030 | \$4.8 |
| Georgia Power Co, 4.3% 3/15/2042 | \$4.6 |
| Amazon.com Inc, 3.8% 12/5/2024 | \$4.5 |
| JP Morgan Chase & Co, 3.9% 7/15/2025 | \$4.5 |
| US Treasury Bond, 2.0% 2/15/2050 | \$4.5 |
| CSX Corp, 3.25% 6/1/2027 | \$4.5 |
| Top Ten | \$49.1 |

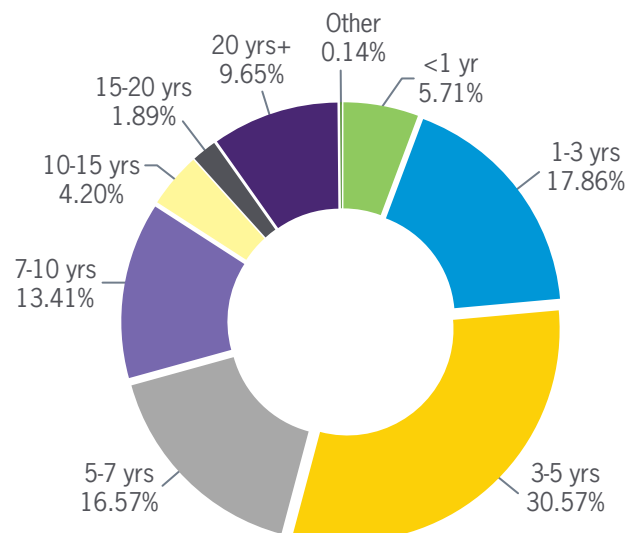
MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) | Benchmark |
|------------------------------|-------------------------|---------------|
| Loomis Sayles | \$187.8 | BB BC |
| Orleans Capital | \$136.3 | US Aggregate |
| Investment Grade | \$324.1 | |
| JP Morgan | \$133.6 | Credit Suisse |
| Nomura | \$127.1 | High Yield |
| High Yield | \$260.7 | |
| Domestic Fixed Income | \$584.8 | |

QUALITY ALLOCATION



MATURITY ALLOCATION



Emerging Market Debt: Fiscal Year Summary

MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) | Benchmark |
|-----------------------------|----------------------------|-------------------|
| Stone Harbor | \$199.7 | JPMorganGBI-EM |
| Gramercy | \$167.2 | GlobalDiversified |
| Emerging Market Debt | \$367.0 | |

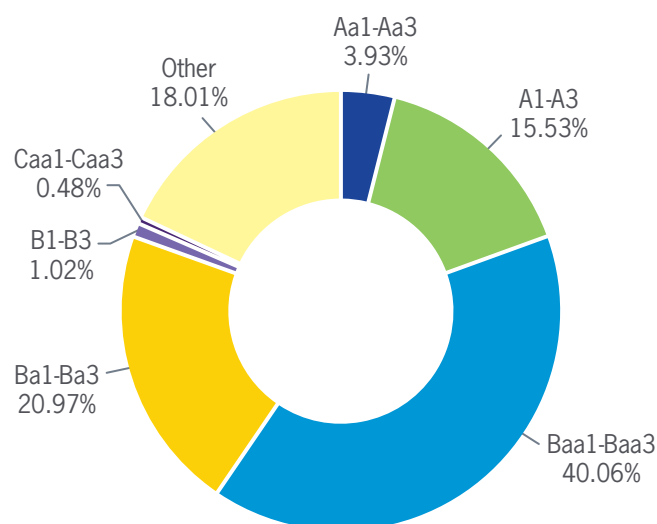
RETURNS

| | Market Return | LASERS Return |
|----------------------|------------------|------------------|
| Emerging Market Debt | -2.8% | -1.4% |

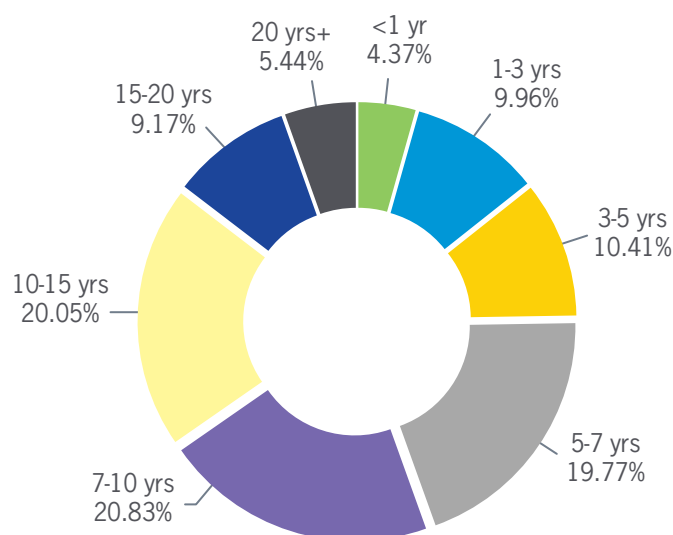
SAMPLE HOLDINGS

| Security Name | Market Value (Millions) |
|--|----------------------------|
| Mexican Bonos, 7.5% 6/3/2027 | \$6.5 |
| Republic of S Africa Govt, 6.25% 3/31/2036 | \$6.4 |
| Indonesia Treasury Bond, 8.375% 3/15/2024 | \$6.3 |
| Republic of S Africa Govt, 10.5% 12/21/2026 | \$5.7 |
| Thailand Govt Bond, 3.775% 6/25/2032 | \$5.3 |
| Colombian TES, 7.5% 8/26/2026 | \$5.3 |
| Brazil Notos do Tesouro Nacion, 10.0% 1/1/2023 | \$4.4 |
| Russian Federal Bond – OFZ, 8.5% 9/17/2031 | \$4.1 |
| Peru Govt Bond, 6.15% 8/12/2032 | \$4.1 |
| JP Morgan Chase Bank NA 144A, 3.13% 11/23/2029 | \$4.0 |

QUALITY ALLOCATION



MATURITY ALLOCATION



Quality and Maturity Allocation charts reflect only traditional manager(s).

Global Multi-Sector Fixed Income: Fiscal Year Summary

MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) | Benchmark |
|----------------------------|----------------------------|--|
| DoubleLine | \$218.9 | 50/50 Bloomberg Barclay's Capital Global Agg/Credit Suisse High Yield |
| GoldenTree | \$249.4 | |
| PIMCO | \$277.6 | |
| Blackstone | \$274.6 | |
| Zais Group | \$88.0 | |
| Global Multi-Sector | \$1,108.5 | |

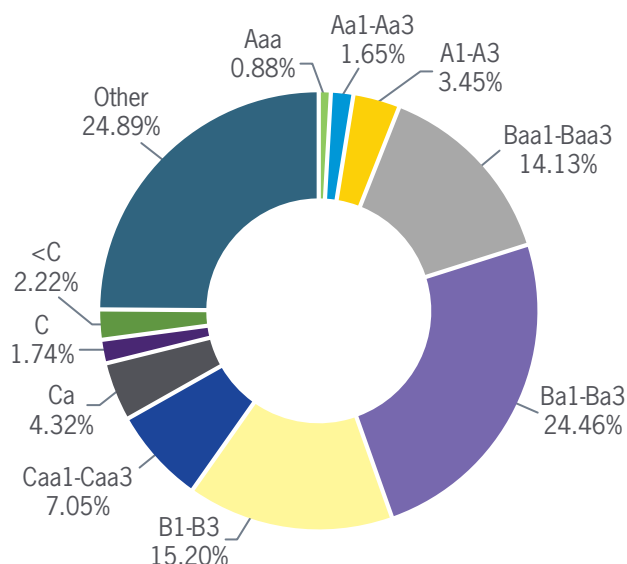
RETURNS

| | Market Value (Millions) | Market Return | LASERS Return |
|---------------------|----------------------------|---------------|---------------|
| Global Multi-Sector | \$1,108.5 | 1.4% | -0.1% |

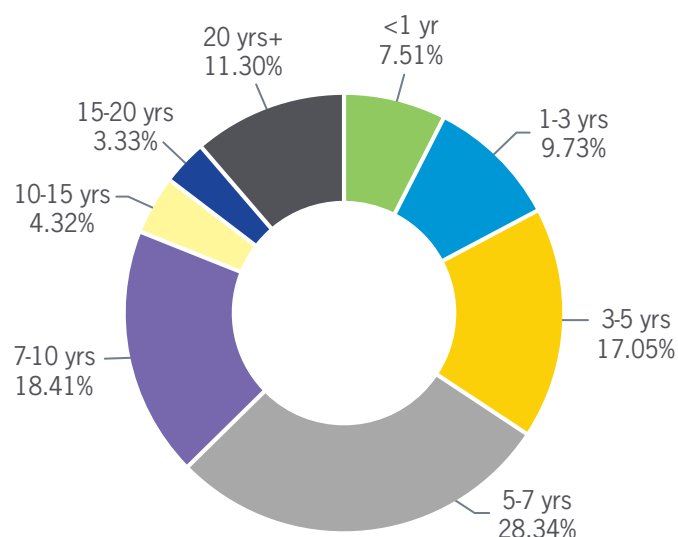
SAMPLE HOLDINGS

| Security Name | Market Value (Millions) |
|--|----------------------------|
| Rali Series 2007 – Q05 TRU Q05 A, Var Rt 8/25/2047 | \$4.8 |
| GSMSC Resecuritizat 3R2B 144A, Var Rt 9/26/2036 | \$3.9 |
| CIM Trust 2017 – 3RR B2 1444A, Var Rt 1/27/2057 | \$3.4 |
| AC Products 2/20 COV-Lite TLB, 0% 2/14/2025 | \$3.3 |
| PNMAC FMSR Issuer T FT1 A 144 A, Var Rt 4/25/2023 | \$3.2 |
| Progress Residential SFR3 E 144A, 3.369% 9/17/2036 | \$3.1 |
| FMC GMSR Issuer TRU GT1 A 144A, Var Rt 5/25/2024 | \$3.0 |
| Puerto Rico Sales Tax Filing COR, 0% 7/1/2046 | \$2.9 |
| Fair Square Financial, 0% 11/19/2020 | \$2.3 |
| Alternative Loan TRU 45T1 1A10, 6.0% 2/25/2037 | \$2.1 |

QUALITY ALLOCATION



MATURITY ALLOCATION



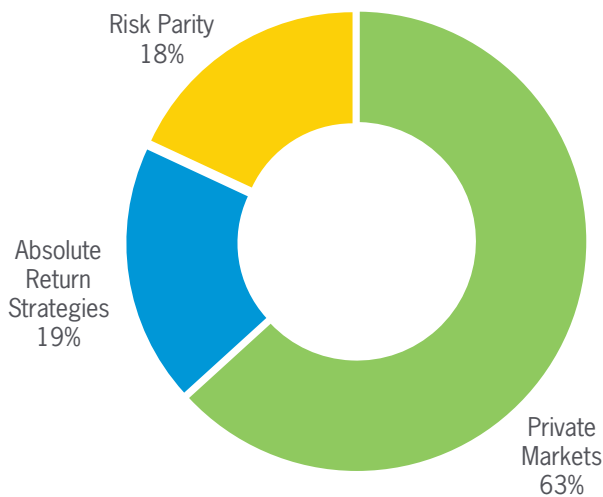
Quality and Maturity Allocation charts reflect only traditional manager(s).

alternatives

Alternative Investments generally refer to institutional blind pool limited partnerships which make private debt and equity investments in privately held companies, as well as hedge funds, and other publicly traded derivatives-based strategies. The benefits of investing in alternatives include increased diversification, inflation hedging, and new exposures/opportunities. LASERS invests in Private Markets, Absolute Return Strategies, and Risk Parity.

Alternatives: Fiscal Year Summary

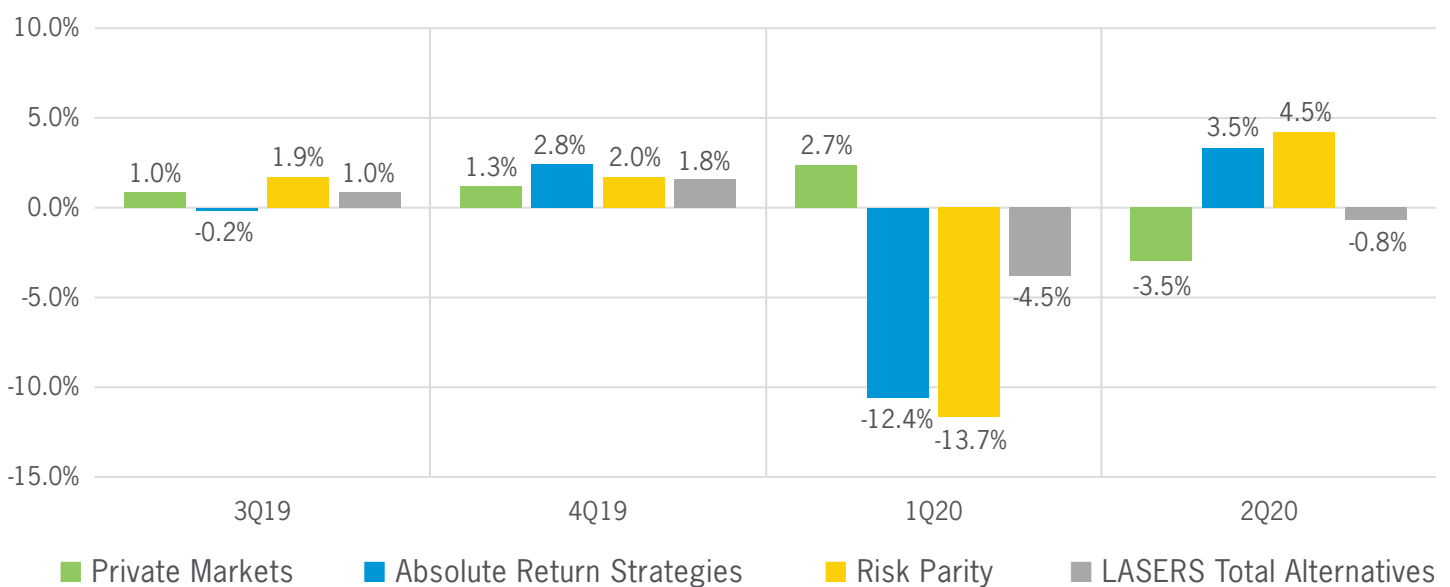
| ALLOCATION |



| ASSETS & RETURNS |

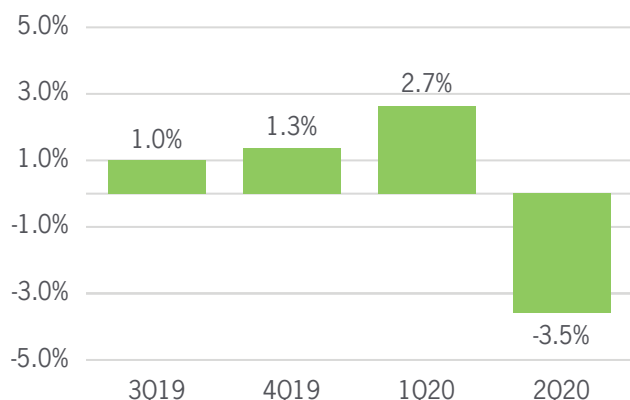
| | Market Value (Millions) | Market Return | LASERS Return |
|----------------------------|-------------------------|---------------|---------------|
| Private Markets | \$1,915.4 | n/a | 1.4% |
| Absolute Return Strategies | \$565.6 | 0.7% | -7.0% |
| Risk Parity | \$547.0 | 8.0% | -6.3% |
| Total Alternatives | \$3,028.0 | | -2.6% |

| QUARTERLY RETURNS |



Private Markets: Fiscal Year Summary

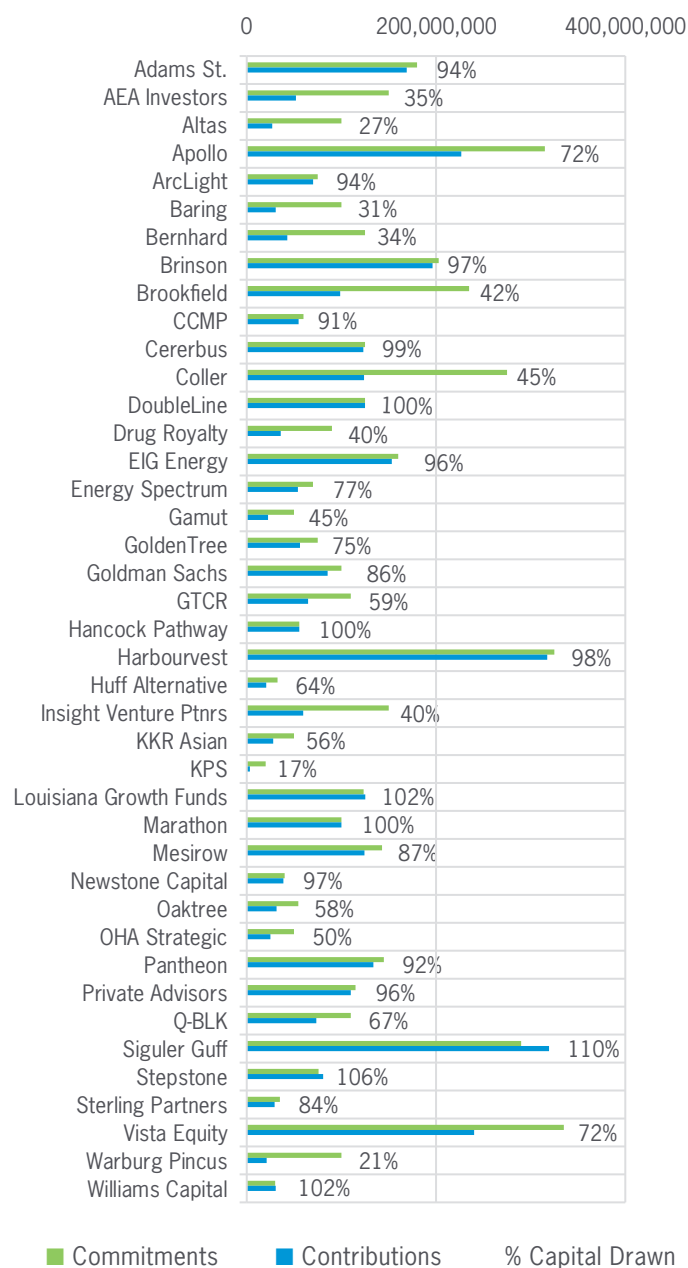
QUARTERLY RETURNS



PROGRAM SNAPSHOT

| | |
|---------------------|-----------------|
| FY Return | 1.4% |
| # of Managers | 41 |
| # of Funds | 80 |
| Total Commitments | \$5,102,524,680 |
| Total Contributions | \$3,781,306,075 |
| Total Drawdown | 74% |
| Total Distributions | \$3,832,936,607 |

COMMITMENTS & CONTRIBUTIONS

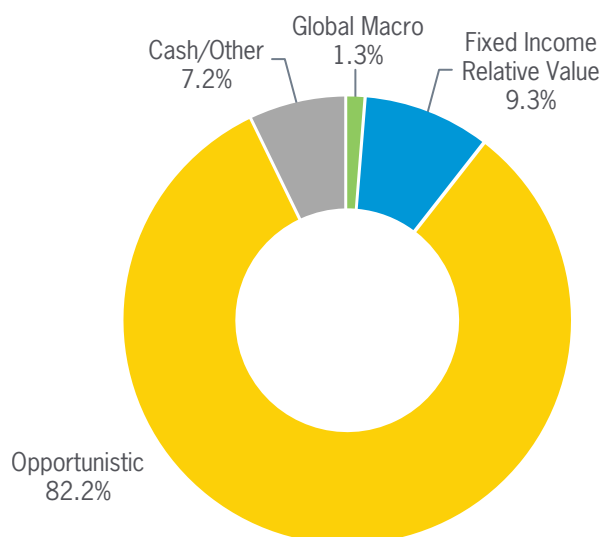


MANAGER & ASSET SUMMARY

| Manager | Mkt Value (Millions) | Manager | Mkt Value (Millions) |
|---------------------------------------|----------------------|--------------------------|----------------------|
| Adams St | \$58.0 | Hancock Pathway | \$0.4 |
| AEA Investors | 66.8 | Harbourvest | 2.0 |
| Atlas Partners | 22.3 | Huff Alternative Fund | 5.0 |
| Apollo | 93.3 | Insight Venture Partners | 65.6 |
| ArcLight Energy | 47.0 | KKR | 31.9 |
| Baring Private Equity | 25.8 | KPS Special Situations | 3.4 |
| Bernhard Capital | 37.8 | Louisiana Growth Funds | 3.2 |
| Brinson | 3.1 | Mesirow | 67.1 |
| Brookfield Capital | 101.3 | Newstone Capital | 4.7 |
| CCMP Capital | 51.7 | Oaktree | 27.7 |
| Cerberus | 126.7 | OHA Strategic | 24.6 |
| Coller Int'l Partners | 98.6 | Pantheon Ventures | 29.2 |
| DoubleLine | 131.0 | Private Advisors | 72.0 |
| Drug Royalty | 4.9 | Quellos-BlackRock | 33.2 |
| EIG Energy | 55.5 | Siguler Guff | 129.0 |
| Energy Spectrum | 8.6 | Stepstone | 13.7 |
| Gamut | 23.0 | Sterling Partners | 12.8 |
| GoldenTree | 57.2 | Vista Equity | 252.7 |
| Goldman Sachs | 22.4 | Warburg Pincus | 21.2 |
| GTCR | 80.2 | Williams Capital | 0.5 |
| Total Private Equity \$1,915.4 | | | |

Absolute Return Strategies: Fiscal Year Summary

ALLOCATION



RETURNS

| | LASERS Return |
|----------------------------|---------------|
| Absolute Return Strategies | -7.0% |

PORTFOLIO CHARACTERISTICS

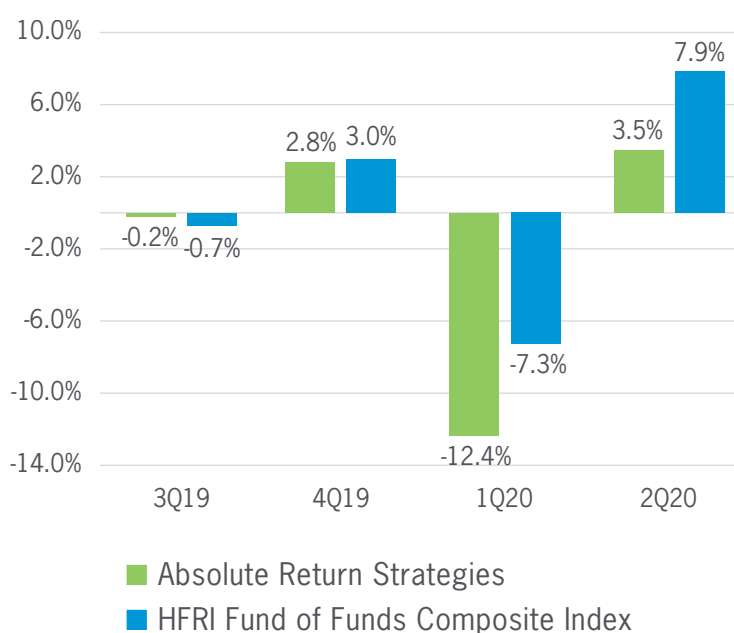
| | HFRI FoF Index | LASERS |
|-----------------------|----------------|---------|
| Analysis Inception | July-08 | July-08 |
| Cumulative Return | 21.05% | 24.93% |
| Annualized Return | 1.60% | 1.87% |
| Information Ratio | 0.29 | 0.34 |
| % Up Months | 63.89% | 66.67% |
| % Down Months | 36.11% | 33.33% |
| Correlation to SP 500 | 0.79 | 0.61 |

MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) |
|------------------------------|-------------------------|
| Bridgewater* | \$7.1 |
| Entrust Capital | \$291.9 |
| PAAMCO* | \$1.2 |
| Prisma Capital | \$263.1 |
| Stark Investments* | \$2.3 |
| Total Absolute Return | \$565.6 |

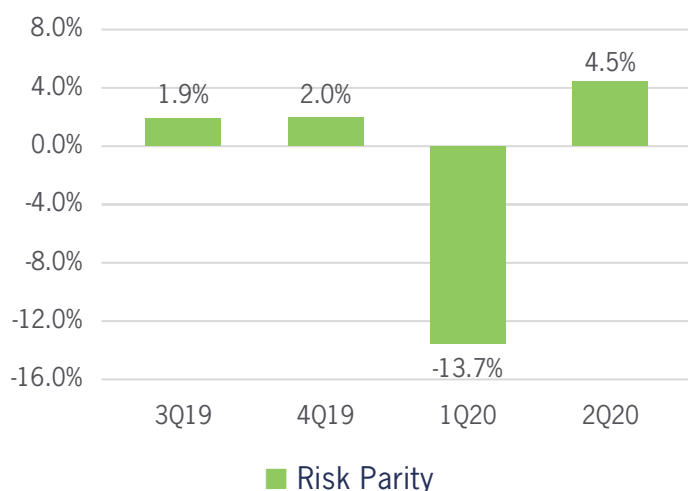
*In redemption status

QUARTERLY RETURNS



Risk Parity: Fiscal Year Summary

QUARTERLY RETURNS



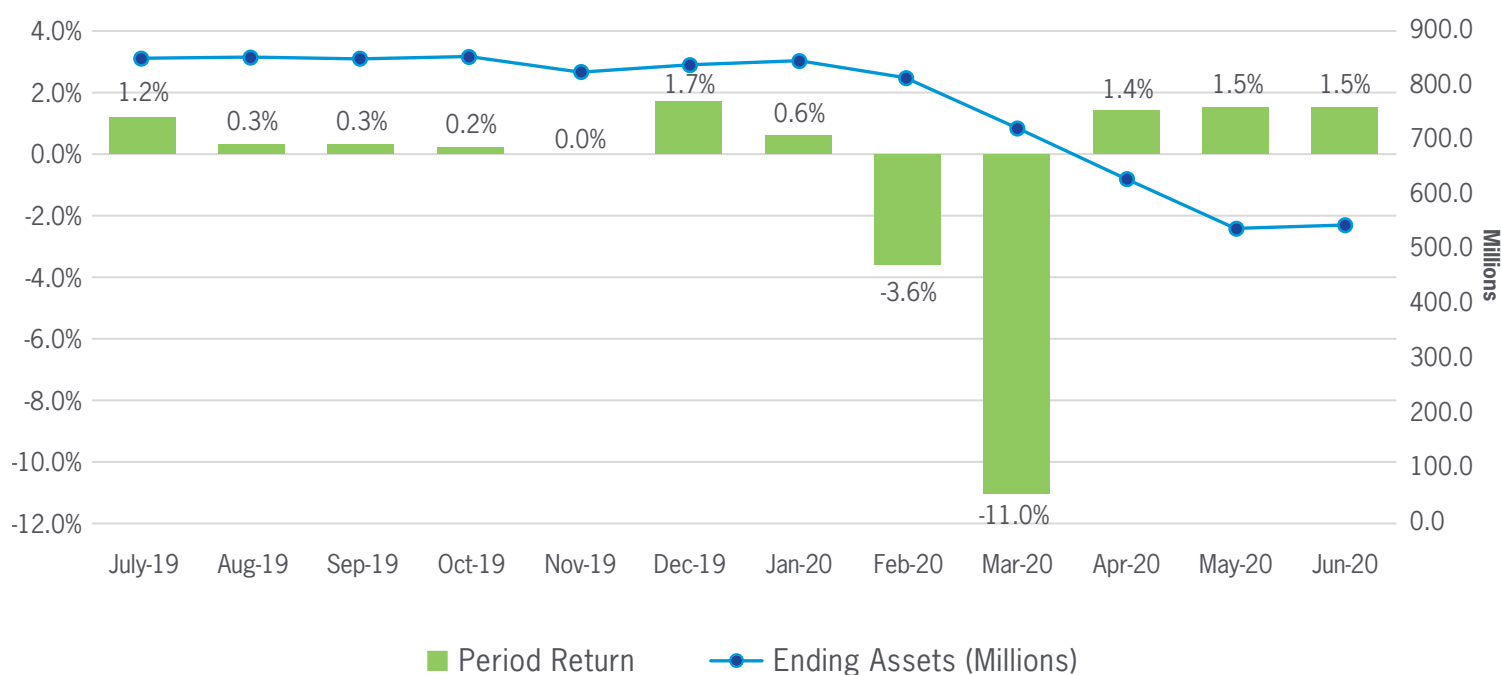
RETURNS

| | LASERS Return |
|-------------|---------------|
| Risk Parity | -6.3% |

MANAGER & ASSET SUMMARY

| Manager | Market Value (Millions) | Benchmark |
|--------------------|-------------------------|------------|
| Bridgewater | \$297.2 | 8% Nominal |
| AQR Capital | \$249.8 | |
| Risk Parity | \$547.0 | |

MONTHLY RETURNS & ASSETS



trading

Efficient trading, or the purchase or sale of securities by LASERS external managers and internal staff, is a pivotal component of portfolio success.

LASERS is committed to monitoring and analyzing execution costs, with the ultimate goal of ensuring best execution. We conduct a thorough annual review of total execution costs that our managers incur, which includes commissions, market impact, and timing costs. Trading activity and costs are also monitored on an ongoing basis; LASERS staff compiles and analyzes trade data internally, in addition to using the services of an outside consultant, Zeno Consulting Group.

| COMMISSION SUMMARY |

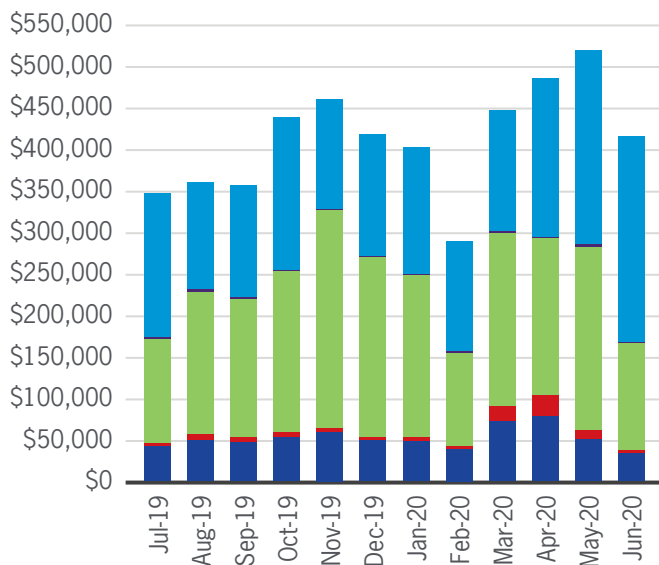
| Brokerage Firm | Commission | Brokerage Firm | Commission |
|-------------------|------------|--------------------------------------|-----------------------|
| Goldman Sachs | \$356,489 | National Financial Services | \$23,804 |
| UBS | \$72,359 | Instinet | \$22,693 |
| Merrill Lynch | \$70,336 | Stifel Nicolaus | \$21,770 |
| JP Morgan | \$53,104 | Morgan Stanley | \$21,412 |
| RBC | \$48,933 | Credit Suisse | \$20,866 |
| Citigroup | \$45,473 | JonesTrading | \$20,819 |
| Robert Baird | \$39,951 | Investment Technology Group | \$15,797 |
| Needham and Co | \$37,751 | Wolfe Trahan | \$12,152 |
| Sanford Bernstein | \$37,285 | D. A. Davidson | \$11,526 |
| Barclays | \$31,405 | Cowen | \$10,836 |
| Jefferies | \$27,382 | SG Americas Securities | \$10,331 |
| Raymond James | \$25,396 | Other Commissions Less than \$10,000 | \$154,326 |
| William Blair | \$24,328 | Total | \$1,158,110.76 |

securities lending

Securities Lending is a practice whereby owners of securities either directly or indirectly lend their securities to primary brokerage firms for a fee, and against which either cash, securities, or a letter of credit is pledged to protect the lender. Securities are borrowed to cover fails of deliveries, cover short sales, provide proper denominations, and enable brokerage firms to engage in arbitrage trading activities.

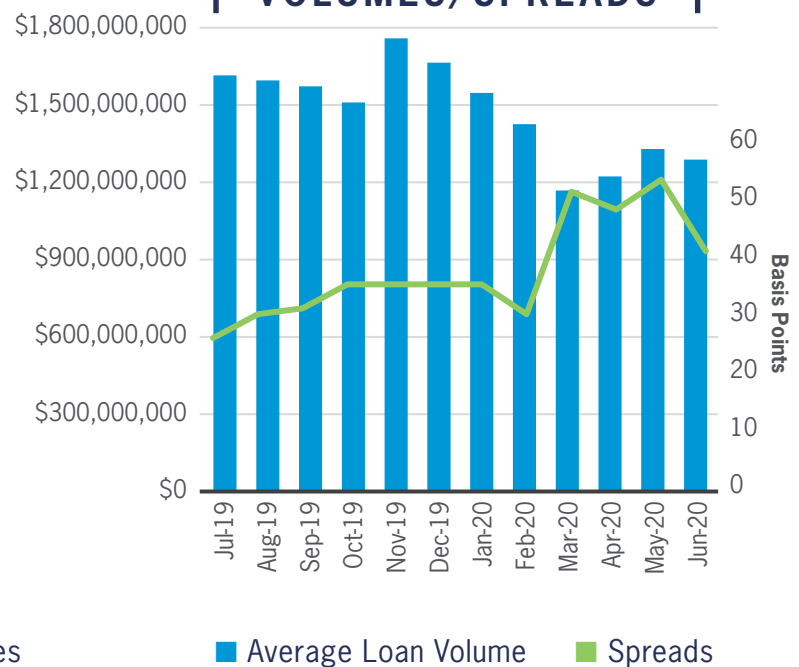
During the fiscal year, LASERS generated \$4,940,499 in revenue through its securities lending program. The lending agreement between LASERS and custodian bank, BNY Mellon, incorporates an 80/20 split on the first \$2.5 million, which LASERS reached in January of 2020; 85/15 revenue split in excess of \$2.5 million up to \$8.0 million; and 90/10 revenue split in excess of \$8.0 million.

| LENDING REVENUE |



■ US Corporates
 ■ US Governments
 ■ US Equities
 ■ Int'l Fixed
 ■ Int'l Equity

| VOLUMES/SPREADS |



■ Average Loan Volume
 ■ Spreads

| LENDING STATISTICS |

| Program | Average Lendable Assets (Millions) | Return from Lending Income (Basis Points) | Lending Income (Thousands) |
|---------------------|------------------------------------|---|----------------------------|
| Treasuries | \$79 | 15 | \$96 |
| Agencies | \$5 | 4 | \$2 |
| MBS | \$98 | 0 | 0 |
| US Corporates | \$742 | 10 | \$627 |
| US Equities | \$2,423 | 11 | \$2,190 |
| Non-US Equities | \$2,559 | 9 | \$2,001 |
| Non-US Fixed Income | \$141 | 2 | \$24 |
| Total | \$6,047 | 10 | \$4,940 |

corporate governance

Corporate governance is the system of rules, practices, and processes by which a company is directed and controlled. Corporate governance essentially involves balancing the interests of a company's many stakeholders.

LASERS Board of Trustees exercises its right to vote as a shareholder in companies held within investment portfolios as an important method to participate in the corporate governance process. As a fiduciary, LASERS is compelled to exercise this right in the best interest of the System's participants and beneficiaries. This is accomplished by voting for shareholders' resolutions that are likely to enhance shareholder value and by opposing resolutions that are likely to dilute or diminish the value.

| PROXY ACTIVITY |

| Category | Proposals | For | Against | Other |
|------------------------------|---------------|---------------|---------------|-----------|
| Management Proposals | | | | |
| Routine/Business | 6,009 | 4,786 | 1,223 | 0 |
| Director Related | 20,085 | 12,144 | 7,941 | 0 |
| Capitalization | 2,295 | 1,886 | 409 | 0 |
| Reorganizations/Mergers | 421 | 377 | 44 | 0 |
| Non-Salary Compensation | 3,727 | 2,752 | 926 | 49* |
| Anti-takeover Related | 307 | 287 | 20 | 0 |
| Other/Miscellaneous | 83 | 54 | 29 | 0 |
| Shareholder Proposals | | | | |
| Routine/Business | 121 | 56 | 65 | 0 |
| Director Related | 402 | 221 | 181 | 0 |
| Corporate Governance | 46 | 24 | 22 | 0 |
| Compensation | 58 | 40 | 18 | 0 |
| Health/Environmental | 96 | 55 | 41 | 0 |
| Social/Human Rights | 53 | 41 | 12 | 0 |
| Other/Miscellaneous | 104 | 73 | 31 | 0 |
| Total | 33,807 | 22,796 | 10,962 | 49 |

*Frequency of Say on Pay – 49 Votes

risk management

Risk Management is the process of identifying, monitoring, and controlling the level of risk taken by each of LASERS managers.

To assess risk, investment division staff assembles the holdings of all managed portfolios to create an aggregate view of LASERS assets and utilizes multiple software systems. Supported by powerful multi-factor models and extensive databases, these software systems assist in quantifying various metrics at the asset level up to the aggregated portfolio level. These tools allow the investment staff to decompose the risk by source and monitor the overall risk in the portfolio based on the manager or asset class that is contributing that risk. Decomposing risks at an aggregated level and at the individual manager level allows the investment staff to better understand and manage the sources of risk in LASERS portfolio.

| RISK MANAGEMENT ASSESSMENT |

| | Assets | Market Value | Weight (%) | Total Risk (%) | Modified Duration | S&P Credit Rating |
|------------------------------|--------------|------------------------|-------------|----------------|-------------------|-------------------|
| Fixed Income Managers | 2,891 | \$1,252,825,860 | 100% | | | |
| Loomis Inv. Grade | 462 | \$187,813,068 | 14.99% | 16.48% | 7.07 | A |
| Orleans Inv. Grade | 125 | \$136,328,554 | 10.88% | 8.51% | 6.34 | A |
| JPMorgan High Yield | 561 | \$133,563,623 | 10.66% | 13.72% | 4.20 | B+ |
| Nomura High Yield | 959 | \$127,104,139 | 10.15% | 16.80% | 4.56 | B+ |
| Stone Harbor | 109 | \$199,739,761 | 15.94% | 23.25% | 6.02 | BBB |
| DoubleLine | 587 | \$218,916,657 | 17.47% | 7.56% | 2.97 | BB- |
| GoldenTree | 88 | \$249,360,058 | 19.90% | 16.68% | 3.87 | B+ |

| | Assets | Market Value | Weight (%) | Total Risk (%) | Tracking Error (%) | Value-At-Risk (%) |
|--------------------------|--------------|------------------------|-------------|----------------|--------------------|-------------------|
| Equity Managers | 3,759 | \$5,041,632,761 | 100% | | | |
| AJO | 111 | \$197,874,062 | 3.92% | 33.87% | 2.83% | 57.07% |
| LASERS S&P 500 | 508 | \$1,115,021,010 | 22.12% | 32.00% | 0.04% | 56.06% |
| LASERS S&P 400 | 401 | \$400,057,532 | 7.94% | 38.38% | 0.17% | 60.39% |
| Rice Hall James | 54 | \$136,623,860 | 2.71% | 35.86% | 6.61% | 55.63% |
| LSV Small Cap | 228 | \$156,106,760 | 3.10% | 45.82% | 4.20% | 65.68% |
| LASERS S&P 600 | 617 | \$183,057,545 | 3.63% | 40.68% | 0.25% | 62.08% |
| Mondrian Large Cap | 46 | \$201,311,038 | 3.99% | 28.86% | 5.25% | 37.25% |
| LASERS MSCI World Ex-US | 709 | \$1,046,352,876 | 20.75% | 29.51% | 1.93% | 38.34% |
| LASERS MSCI Terror Free | 301 | \$27,398,916 | 0.54% | 26.42% | 1.91% | 35.30% |
| Mondrian Small Cap | 98 | \$205,176,695 | 4.07% | 28.04% | 5.14% | 35.71% |
| Goldman Sachs | 364 | \$340,433,115 | 6.75% | 26.71% | 4.66% | 33.18% |
| City of London | 60 | \$358,317,762 | 7.11% | 24.89% | 6.10% | 35.22% |
| LSV Custom Emerging Mkts | 230 | \$446,932,374 | 8.86% | 27.51% | 7.61% | 37.85% |
| Westwood Global | 32 | \$226,969,215 | 4.50% | 27.01% | 8.65% | 40.80% |

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| MANAGEMENT TEAM |

Cynthia Rougeou – *Executive Director*

Bernard “Trey” Boudreaux, III – *Chief of Staff*

Robert Beale, CFA, CAIA – *Chief Investment Officer*

Tina Vicari Grant – *Executive Counsel*

| INVESTMENT TEAM |

Robert Beale, CFA, CAIA – *Chief Investment Officer*

Darren Fournierat, CFA, CAIA – *Assistant Chief Investment Officer*

Laney Sanders, CFA, CAIA, CTP – *Assistant Chief Investment Officer*

Celeste Funderburk, CCM – *Director of Public Markets*

Jacques Brousseau, CFA, CAIA – *Director of Private Markets*

Alisa Lacombe – *Manager of Operations*

Reeves Pearce, CFA, CAIA – *Director of Alternative Assets*

Jennifer Adams – *Administrative Assistant*

| INVESTMENT CONSULTANT |

Rhett Humphreys, CFA – *Lead Consultant, NEPC LLC*

| CUSTODIAN BANK |

BNY Mellon

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